Critical Release Notice

Publication number: 297-8021-350
Publication release: Standard 19.05

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

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

Bookmark Color Legend

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

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

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

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

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

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

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

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

Publication History

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

January 2006

Standard release 19.05 for software release SN09 (DMS). Updates made for this release are shown below:

Volume 1-3

No changes

Volume 4

Section Channelized access on LPP/LIS, Datafilling table TRKMEM (Sheet 6 of 6), removed (TBD) from remote unit as required by CR Q01256730.

Volume 5-16

No changes

Volume 17

Section Universal Access to CLASS Features, RESOFC field, note added as required by CR Q01218960.

Section Call Forwarding Remote Activation, Limitations and Restrictions, bullet added as required by CR Q01168869.

Volume 18-25

No changes

September 2005

Standard release 19.04 for software release SN08 (DMS). Updates made for this release are shown below:

Volume 1

Section PRI trunk groups, Datafilling table TRKSGRP, L1Flags description corrected for Q01112597.

Volume 10

Section DMS-100 and Meridian 1 Options 11-81 datafill correlation, Table 15-2, L1Flags description corrected for Q01112597.

Volume 17

Call Forwarding Remote Activation, Speed Calling description corrected for Q01095576.

August 2005

Standard release 19.03 for software release SN08 (DMS). Updates made for this release are shown below:

Volume 9

Documentation correction in Call Forward/Interface Busy. CR Q01038988 was incorrectly referred to as CR Q01038999 in the March 2005 documentation release. This has been corrected in the History section for Call Forward/Interface Busy, and in this Critical Release Notice.

Volume 14

Changes made to Residential Call Hold. "Table flow for Residential Call Hold (RCHD)" amended. (Q01038649)

June 2005

Standard release 19.02 for software release SN08 (DMS). Updates made for this release are shown below:

Volume 14

Changes made to Group Intercom All Call (Q00100917)

Volume 16

Changes made to Automatic Call Distribution (Q01091391)

March 2005

Preliminary release 19.01 for software release SN08 (DMS). Updates made for this release are shown below:

Volume 1-8

No changes

Volume 9

Modified – Call Forward/Interface Busy by CR Q01038988

Volume 10-25

No change

December 2004

Standard release 18.02 for software release SN07 (DMS). Updates made for this release are shown below:

Volume 1-12

No changes

Volume 13
Added Virtual Office Worker (VOW) by A00002011

Volume 14-16
No changes

Volume 17
Universal Access to Call Forwarding (UCFW) changes to AMA billing by CR Q00982215

Volume 18-23
No changes

Volume 24
Added OSSAIN XA-Core Data Messaging Capacity Enhancements by A00005160

Volume 25
No changes

September 2004

Preliminary release 18.01 for software release SN07 (DMS). Updates made for this release are shown below:

Volume 1
Modified – Introduction to trunk tables (ES trunk groups) by CR Q00838215-1

Volume 2-3
No changes

Volume 4
Modified – Datafilling Trunk Signaling (ISUP Hop Counter) by CR Q00760514-10

Volume 5-10
No changes

Volume 11
Modified – Datafilling MDC Minimum (Call Pickup) by CR Q00879738

Volume 12
Modified – Datafilling MDC MSAC (Do Not Disturb) by A00002196

Volume 13-15
No changes

Volume 16
Modified – Datafilling ACD Base (Base automatic call distribution) by CR Q00812364

Volume 17
Modified – Datafilling RES Advanced Custom Calling (900 FP) by CR Q00834222
Modified – Datafilling RES Advanced Custom Calling (CSMI) by CR Q00683891
Modified – Datafilling RES Advanced Custom Calling (CWAS) by CR Q00891675-01
Modified – Datafilling RES Advanced Custom Calling (Enhanced CSMI) by CR Q00683891

Volume 18
No changes

Volume 19
Modified – Datafilling RES Service Enablers (SLE) by CR Q00760256

Volume 20
Modified – Datafilling Emergency Number Services (E911 Wireless ALI Interface) by CR Q00856825

Volume 21-24
No changes

Volume 25
Modified – Datafilling Unbundling (UNBN OPTRANS and EA) by A00002765

March 2004

Standard release 17.03 for software release SN06 (DMS). Updates made for this release are shown below:

Volume 1- 9
No changes

Volume 10
Changes due to CR Q00757372 that clarify the applicability of the AUDTRMT option. The changes are in sections:

- 7 Datafilling NI0 NI-2 PRI, PRI Call Screening
- 8 Datafilling NI0 ISDN PRI Base, Flexible Digit Analysis
- 8 Datafilling NI0 ISDN PRI Base, PRI ISDN Treatments
- 9 Datafilling NI0 ISDN PRI CNAM, PRI SUSP for CNAME

Volume 11-16
No changes

Volume 17
Modified - Call Screening, Monitoring, and Intercept (CSMI) for Q00659151
Modified - RES Simultaneous Ringing for Q00715967
Modified - Usage Sensitive Three-way Calling (U3WC) for Q00703423-03

Volume 18
Changes to Chapter 1 - Datafilling RES Display Functionality and Privacy, Anonymous Caller Rejection (ACRJ) as follows:

- change to description of interaction with Call Forwarding Don't Answer (CFDA) for CR Q00773476
- change to description of interaction with SOC RES00011 for CR Q00735537.

Volume 19
Changes due to CR Q00735537, which shows the interaction of various services with SOC RES00011. The changes are in Chapter 1 – Datafilling RES non-display services, and the affected services are:

- Distinctive Ringing/Call Waiting (DRCW)
- Selective Call Acceptance (SCA)
- Selective Call Forwarding (SCF)
- Selective Call Rejection (SCJ)

Volume 20
Changes due to CR Q00757372, which clarifies the applicability of the AUDTRMT option. The changes are in section:

- 2 Datafilling Emergency Number Services, E911 PRI PSAP Delivery

Volume 21-25
No changes

September 2003

Standard release 17.02 for software release SN06 (DMS). Updates made for this release are shown below:

Volume 1
New - Panther support for third-party RMs
Modified - E911 trunk groups

Volume 2-11
No changes

Volume 12
Modified - Query Functional Station Grouping

Volume 13-14
No changes

Volume 15
Modified - VMX Interface

Volume 16
No changes

Volume 17
Modified - Call Screening, Monitoring, and Intercept (CSMI)
Modified - Enhanced CSMI
Modified - Long Distance Alerting
Modified - Long Distance Alerting Enhancement (LDAE)
Modified - Service Order Simplification for MADN Extension Bridging

Volume 18
Modified - Call Logging (CALLOG) Modified - Universal Voice Messaging
Modified - Voice Mail Easy Access (VMEA)

Volume 19
Modified - CMS AR Screening of Private Calls (CASOP)
Modified - In-Session Activation (ISA)

Volume 20
Modified - DMS Integrated E911 PSAP Functionality
Modified - E911 Incoming Wireless Calls
Modified - E911 Incoming Wireless Calls (MF)
Modified - E911 ISUP Parameter Enhancements
Modified - E911 ISUP Trunking
Modified - E911 Tandem
Modified - E911 Translations Robustness
Modified - VFG Support for E911 (LOC and/or ISUP/ANI Call)

Volume 21-25
No changes

June 2003

Preliminary release 17.01 for software release SN06 (DMS). Updates made for this release are shown below.

Volume 1-25
New Critical Release Notice added. Otherwise, no changes

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297-8021-350

DMS-100 Family

North American DMS-100

Translations Guide Volume 1 of 25

Common Datafill and Miscellaneous Services Part 1 of 3

LET0015 and up Standard 14.02 May 2001

NORTEL NETWORKS™

How the world shares ideas.

DMS-100 Family

North American DMS-100

Translations Guide Volume 1 of 25

Common Datafill and Miscellaneous Services Part 1 of 3

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Contents

Translations Guide Volume 1 of 25
Common Datafill and Miscellaneous Services Part 1 of 3

Multi-Volume Topic Contents

Translations Guide Volume 1 of 25
Common Datafill and Miscellaneous Services Part 1 of 3

Translations Guide Volume 2 of 25
Common Datafill and Miscellaneous Services Part 2 of 3

Translations Guide Volume 3 of 25
Common Datafill and Miscellaneous Services Part 3 of 3

NTP Content Summary

This summarized table of contents defines the category of product information that can be found in each volume of the Translations Guide. Each volume of the Translations Guide contains a detailed listing of the contents of that volume and a multi-volume contents listing if related subject matter spans multiple volumes.

Volume 1 of 25

Common Datafill and Miscellaneous Services Part 1 of 3

10-digit Translations, Trunk Tables

Volume 2 of 25

Common Datafill and Miscellaneous Services Part 2 of 3

Base Services, BAS AMA Cook, BAS Generic

Volume 3 of 25

Common Datafill and Miscellaneous Services Part 3 of 3

BAS Generic (continued), BAS ANI Enhanced, BAS CCS7, SMB Translations, SAID Essentials, FAX-Thru Service, MDS Call Messenger, XLAS Translations

Volume 4 of 25

SS7 Datafill

Number Translation Services, DMS SP/SSP, Trunk Signaling, ISDN User Part (ISUP)

Volume 5 of 25

Screening and Routing Datafill

Universal Translations, Universal Call Processing, UDDD Service, AIN Essentials, AIN Service Enablers

Volume 6 of 25

Competitive Services Part 1 of 2

LNP Translations, Equal Access, EQA Local, EQA Toll

Volume 7 of 25

Competitive Services Part 2 of 2

LATA Equal Access System, Number Portability Service Base, Local Services, LOC Carrier Parameter, LOC Dialing Enhancements, LOC DOLP Selector, LOC Resale/Unbundling, Local Service Provider-Networks, Local Call Area Screening, LOC Generic CPN

Volume 8 of 25

Data, ISDN, and Internet Services Part 1 of 3

1-Meg Modem Service, Datapath, Data Span, ISDN BRI, NI0 ISDN Base, NI0 NI-1 BRI, NI0 NI-1 BRI Enhanced Maintenance

Volume 9of 25

Data, ISDN, and Internet Services Part 2 of 3

NI0 NI-1 Packet, NI0 NI-2/3 BRI, NI0 NI-2 BRI Services

Volume 10 of 25

Data, ISDN, and Internet Services Part 3 of 3

MISC ISDN Enhancements, NI0 NI98 Enhancements Ph1, NI0 NI98 Enhancements Ph2, PRI Translations, NI0 NI-1 PRI, NI0 NI-1 PRI Networking, NI0 NI-2 PRI, NI0 ISDN PRI Base, NI0 ISDN PRI CNAM, PRI Hotel/Motel, B-Channel Packet PRI, NI0 Circular Hunt-NA, NI0 E911 SCRN NI-2, ISDN DWS, DMS-100 and Meridian 1 Options 11-81 datafill correlation, Call Treatments and Cause Values

Volume 11 of 25

Meridian Digital Centrex (MDC) Part 1 of 6

Meridian Digital Centrex, MDC Minimum

Volume 12 of 25

Meridian Digital Centrex (MDC) Part 2 of 6

MDC Minimum (continued), MDC MSAC, MDC Standard

Volume 13 of 25

Meridian Digital Centrex (MDC) Part 3 of 6

MDC Standard (continued), MDC CLASS on MDC, MDC MBG Minimum, MDC MBG Standard

Volume 14 of 25

Meridian Digital Centrex (MDC) Part 4 of 6

MDC MBG Standard (continued), MDC MBS Minimum, MDC MBS Standard, MDC PRO

Volume 15 of 25

Meridian Digital Centrex (MDC) Part 5 of 6

MDC PRO (continued), MDC Tailored MDC 1, MDC Tailored MDC 2, MDC Tailored MDC 3, MDC Tailored MDC 4, MDC Tailored NARS, MDC Name/DN Blocking, MDC Per Line Feature Control, MDC Call Forward Indication, MDC to 10-digit Routing, MDC to Universal Routing

Volume 16 of 25

Meridian Digital Centrex (MDC) Part 6 of 6

Automatic Call Distribution, ACD Base, CompuCALL Base, ACD Networking, ICM Call Manager Interface, ICM Call Center, ICM Network ICM, ICCM Call Queue Management, ICM Enhanced ICCM Functionality, CompuCALL Status Query, Appendices

Volume 17 of 25

Residential Enhanced Services (RES) Part 1 of 3

Residential Enhanced Services, RES Access Management, RES Advanced Custom Calling

Volume 18 of 25

Residential Enhanced Services (RES) Part 2 of 3

RES Display Functionality and Privacy, RES Interface Functionality

Volume 19 of 25

Residential Enhanced Services (RES) Part 3 of 3

RES Non-Display Services, RES Service Enablers, RES Signaling, Routing, and OAM, In-Session Activation, RES AutoRecall with Name, Malicious Call Tracking Logs, Appendixes

Volume 20 of 25

Emergency Services

Emergency Number Services, GETS0001

Volume 21 of 25

TOPS Part 1 of 5

TOPS Reference Information, Operator Services Basic

Volume 22 of 25

TOPS Part 2 of 5

Operator Services Basic (continued)

Volume 23 of 25

TOPS Part 3 of 5

Enhanced Services, Enhanced Workstation Services Software, Operator Services AIN

Volume 24 of 25

TOPS Part 4 of 5

Operator Services AIN (continued), Operator Services Directory Assistance, Operator Services Equal Access

Volume 25 of 25

TOPS Part 5 of 5

Operator Services Equal Access (continued), Operator Services Information, TOPS Position Controller, Unbundling

About this document

How to check the version and issue of this document

The version and issue of the document are indicated by numbers, for example, 01.01.

The first two digits indicate the version. The version number increases each time the document is updated to support a new software release. For example, the first release of a document is 01.01. In the *next* software release cycle, the first release of the same document is 02.01.

The second two digits indicate the issue. The issue number increases each time the document is revised but rereleased in the *same* software release cycle. For example, the second release of a document in the same software release cycle is 01.02.

To determine which version of this document applies to the software in your office and how documentation for your product is organized, check the release information in *Product Documentation Directory, 297-8991-001*.

References in this document

The following documents are referred to in this document:

- *Advanced Business Services Log Report Reference Manual*
- *Advanced Business Translations Guide*
- *Advanced Intelligent Network 0.1 Complete Maintenance Guide*, 297-5161-510
- *Advanced Intelligent Network 0.1 Cookbook*, 297-5161-352
- *Advanced Intelligent Network 0.1 Feature Interactions*, 297-5161-107
- *Advanced Intelligent Network 0.1 Response Translation Guide*, 297-5161-353
- *Advanced Intelligent Network Essentials Service Implementation Guide*
- *Advanced Intelligent Network Service Enablers Service Implementation Guide*

- *Advanced Intelligent Network Service Switching Point (SSP) Provisioning Cookbook*
- *Basic Administration Procedures*
- *Basic Translations Tools Guide*, 297-1001-360
- *BCS35 ISDN Primary Rate UNI Specifications (NIS A211-1)*
- *Bellcore Format Automatic Message Accounting Reference Guide*, 297-1001-830
- *Bellcore Technical Reference, TR-TSY-000350*
- *CCS/CCIS6 and CCITT6 System Description*
- *CCS7 Maintenance Reference Manual*
- *Commands Reference Manual*, 297-2663-819
- *Common Channel Signaling 7 Maintenance Reference Manual*, 297-1001-531
- *Core Translations Guide*
- *Cost of Ownership Reduction Feature Specification*
- *Customer Data Change (CDC) Operating Company Guide*, 297-2061-312
- *Customer Data Schema Reference Manual*, 297-8021-351
- *Dialable Wideband Service Services Guide*, 297-2663-110
- *Digital Recorded Announcement Machine DRAM and EDRAM Guide*, 297-1001-527
- *Digital Recorded Announcement Machine Maintenance Reference Manual*, 297-1001-527
- *DMS-100 Alarm Clearing Procedures*, 297-8021-543
- *DMS-100 Family Commands Reference Manual*, 297-1001-822
- *DMS-100 Family Maintenance and Operations Manual*, 297-8991-500
- *DMS-100 Provisioning Manual*, 297-1001-450
- *Equal Access Maintenance Manual*
- *Feature Description Manual*
- *GSF Metering Guide*, 297-8601-020
- *Hardware Description Manual*
- *Integrated Business Network Services Meridian M5009 Basic (9 Button) Business Set Description, Installation and Maintenance*
- *Integrated Business Network Services Meridian M5112 Handsfree (12 Button) Business Set Description, Installation, Operation and Maintenance*

- *ISDN SERVORD Reference Manual*, 297-2041-310
- *Location Routing Number-Local Number Portability Service Implementation Guide*
- *Log Reports Reference Manual*
- *Meridian Digital Centrex Simplified Message Desk Interface Set-up and Operation*, 297-2051-104
- *Meridian Digital Centrex Station Message Detail Recording Reference Guide*, 297-2071-119
- *Office Parameters Reference Manual*
- *One Night Process and Hybrid Software Delivery Procedures*, 297-1001-303
- *Operational Measurements Reference Manual*
- *Recovery Procedures*
- *SERVORD Reference Manual*
- *TOPS MP Force Management Guide*
- *TOPS MP Operator Guide*
- *TOPS MPX Force Management Guide*
- *TOPS TAMI User Guide*
- *TOPS VSN Installation Manual*

As of NA011 (LEC and LET) and EUR010 (EUR) releases, any references to the data schema section of the Translations Guide will be mapped to the *Customer Data Schema Reference Manual*.

The Advanced Business Services suite does not include an *Advanced Maintenance Guide*. Consult one or more of the following documents:

- *Bellcore Format Automatic Message Accounting Maintenance Guide*, 297-1001-570
- *Input/Output Devices Maintenance Guide*, 297-1001-590
- *Lines Maintenance Guide*, 297-1001-594
- *Networks Maintenance Guide*, 297-1001-591
- *Peripheral Modules Maintenance Guide*, 297-1001-592
- *Trunks Maintenance Guide*, 297-1001-595

What precautionary messages mean

The types of precautionary messages used in NT documents include attention boxes and danger, warning, and caution messages.

An attention box identifies information that is necessary for the proper performance of a procedure or task or the correct interpretation of information or data. Danger, warning, and caution messages indicate possible risks.

Examples of the precautionary messages follow.

ATTENTION - Information needed to perform a task

ATTENTION

If the unused DS-3 ports are not deprovisioned before a DS-1/VT Mapper is installed, the DS-1 traffic will not be carried through the DS-1/VT Mapper, even though the DS-1/VT Mapper is properly provisioned.

DANGER - Possibility of personal injury

DANGER

Risk of electrocution

Do not open the front panel of the inverter unless fuses F1, F2, and F3 have been removed. The inverter contains high-voltage lines. Until the fuses are removed, the high-voltage lines are active, and you risk being electrocuted.

WARNING - Possibility of equipment damage

WARNING

Damage to the backplane connector pins

Align the card before seating it, to avoid bending the backplane connector pins. Use light thumb pressure to align the card with the connectors. Next, use the levers on the card to seat the card into the connectors.

CAUTION - Possibility of service interruption or degradation

CAUTION
Possible loss of service
Before continuing, confirm that you are removing the card from the inactive unit of the peripheral module. Subscriber service will be lost if you remove a card from the active unit.

How commands, parameters, and responses are represented

Commands, parameters, and responses in this document conform to the following conventions.

Input prompt (>)

An input prompt (>) indicates that the information that follows is a command:

```
>BSY
```

Commands and fixed parameters

Commands and fixed parameters that are entered at a MAP terminal are shown in uppercase letters:

```
>BSY CTRL
```

Variables

Variables are shown in lowercase letters:

```
>BSY  CTRL  ctrl_no
```

The letters or numbers that the variable represents must be entered. Each variable is explained in a list that follows the command string.

Responses

Responses correspond to the MAP display and are shown in a different type:

```
FP 3 Busy CTRL 0: Command request has been submitted.

FP 3 Busy CTRL 0: Command passed.
```

1 Introduction to 10-digit translations

Understanding 10-digit translations

The primary function of the 10-digit dial plan, otherwise known as the North American numbering plan or the Standard Numbering Plan, is the handling of plain ordinary telephone system (POTS) traffic (calls). This traffic occurs when a source, called an originator, dials digits that represent a destination.

The digits dialed must conform to the Standard Numbering Plan. This plan consists of two basic parts: a three-digit numbering plan area (NPA) code that identifies a geographical area and a seven-digit directory number (DN) that is made up of a three-digit central office (CO) code and a four-digit line number as follows:

- NXX - NXX - XXXX
  (NPA) - (CO) - (line number)

  Long distance dialing is made possible by the addition of a toll digit (1) being dialed before the above digital sequence.

- 1 - NXX - NXX - XXXX(toll) - (NPA) - (CO) - (line number)

  where
  N is a digit from 2 to 9
  X is a digit from 0 to 9

Signaling for 10-digit translations

Not applicable

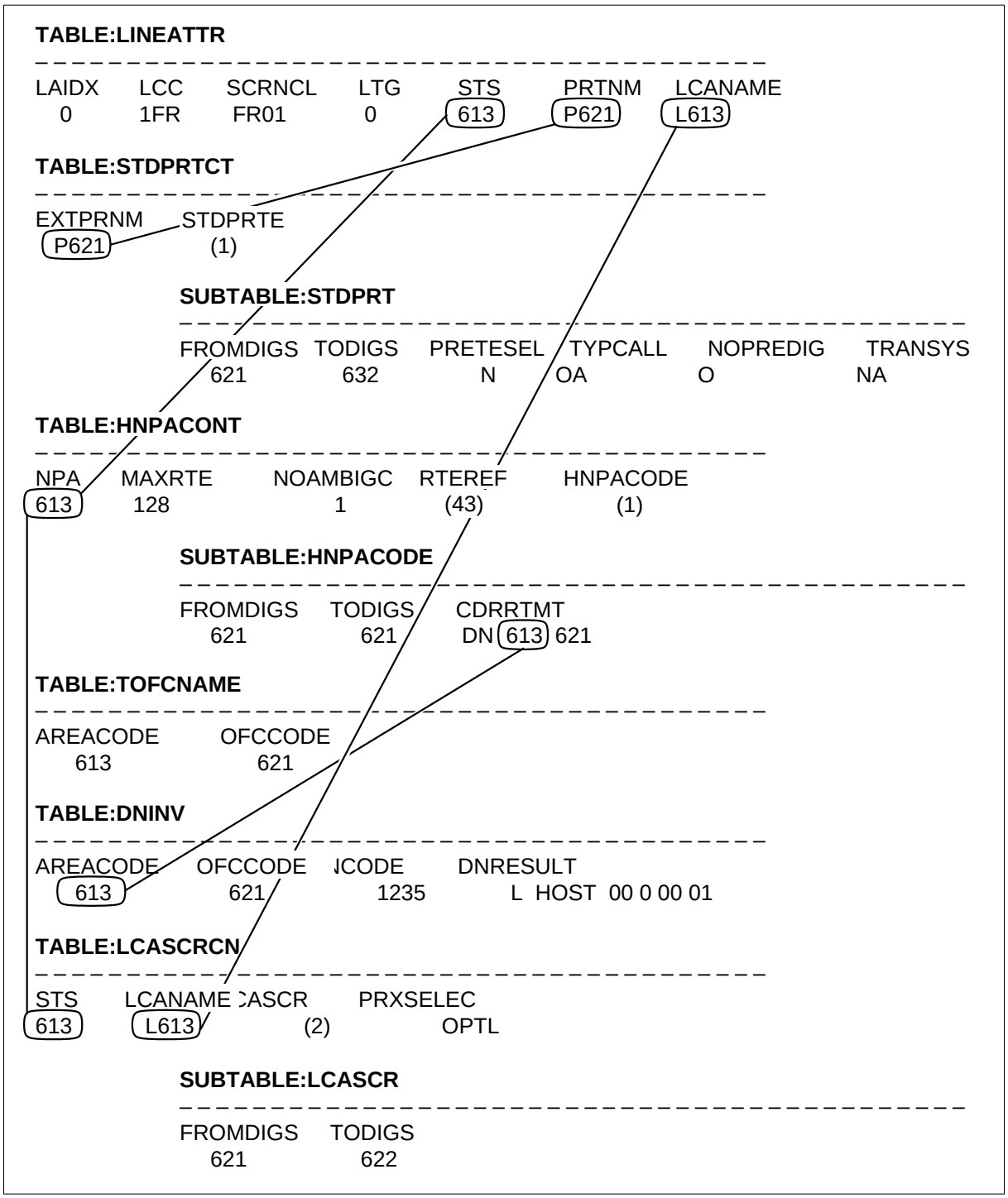
Preparing to datafill 10-digit translations

Translation is the process of determining where a call is destined based on the digits the subscriber dials and who the subscriber is, since different subscribers have different plans and feature capabilities.

The processing of this call involves the reading of specific tuples (horizontal rows) and fields (vertical rows) in designated data tables to determine the termination point of a call or the path a call takes to its final destination.

The interrelationship of tuples and fields to the data tables is shown in the following example.

Figure 1-1 Example of tuple and field interrelationships



Call processing

Call processing can be divided into two phases: the originating phase and the terminating phase.

The originating phase consists of such functions as the origination of the call, giving a dialtone or a start signal, the collection of digits, and determining the route and the charge treatment.

The terminating phase includes such functions as establishing a connection through the network, starting and giving audible ringing, handling the answer, supervising the talking state, and disconnecting the call.

The following is a list of the steps involved in call processing:

1. Collect data from the line record associated with the physical circuit from which an off-hook signal was received.
2. Map the translation path that the call will follow by collecting the key field of a tuple in each table to be accessed and translating the destination digits.
3. Screen the digits to identify calls that do not go to normal translations.
4. Translate the first three digits of the call (NPA for a 10-digit call, NXX for a 7-digit call) to identify the call destination.
5. Translate the secondary digits (the third, fourth, and fifth digits, or NXX), which is only required for calls to either:
   - an NPA where the call is routed differently based on the destination NXX
   - an NXX where the call is routed differently based on the first three digits of the local number
6. Final screening of the call for local dialing requirements (were 1+7-digit calls correctly dialed?) and class of service restrictions.

Digit manipulation

Digit manipulation is the process by which digits are translated, or read and routed through the system. In order to fully understand the digit manipulation process, knowledge of the following key terms is required.

- Functions must be performed by the central control complex (CCC) before any entry into program or data store areas of information is permitted.
- The node number is a distinct number allocated to each device in the system that is capable of handling a message. This number is used to identify the peripheral processor (PP) that originates or receives a message.
- The call processing identification (CPID) structure contains information used for call processing. It contains the agent identification (AID), the call

process selector (CPS) fields, and forms part of the call condense block (CCB).

- The path end is used to identify an end point in a network. It contains such terminal information as the network module channel, the network module port, and the network module pair number. The path end is entered in the CCB.
- The agent (originator or terminator of a call) is associated with specific hardware terminals. The agent lists data that is unique to that particular hardware terminal.
- The agency is a group of agents with similar, but not necessarily identical, features. The agency is also responsible for the sequence of run time commands and process calls through the various stages of call progression. Agencies implement features, provide program code, and support data for each major class of service, as well as provide unique data for each of its agents.

Each hardware terminal has a unique hardware terminal identifier (NODE) that consists of the peripheral module controller and the line or trunk terminal number. This number allows the index into and out of the I/O utility module.

When a terminal has received an off-hook signal, or a seizure on a trunk, a message is sent to the CCC with the following information:

- the NODE number, which is the index into the NODE table
- the terminal number, which is the index into the terminal identification map (TIDMAP) and TSM

The I/O utility module converts the off-hook signal or trunk seizure (hardware terminal identification) into an agency identification. It then relates the activity to the software data structure associated with the terminal.

Each entry specifies an agent identification, including the agency number. This agent identification points to the data associated with the particular hardware terminal or call process identification.

The call process identification, in the TIDMAP, has the CP selector and the agent identification, which contains the index into table LENLINES.

The CCC must then associate a call data block (CDB) and a CCB with the call process that has been seized by the CCC after it has analyzed the message sent by the terminal.

The CDB is the private data area for the call process. It is used to store any information relevant to the handling of a call such as a customer class, digit

translation results, and options and features that the line or trunk can have. This information is updated as the call progresses.

The CCB is used to store the call process type, the run time of the program code, and the data required to execute a given task. The CPID and the path end are stored here as well.

As mentioned previously, a call is originated by a source dialing digits, in the form of a DN that represents a destination. These digits must be translated and this is accomplished by using database tables that are contained in the digit translations utility. These tables are used for one-, two-, and three-digit interpretation, or translations, of the digits dialed. They are referred to as databases A, B, C, D, E, F, and G.

Each call processing agency module in an office has a digit translation pointer associated with it that indicates which of the two specific databases, A and B, is to be used by that particular module. The A database is a one-digit translator and the B database is a two-digit translator. They contain only the central office codes and service codes that represent local calls for that particular agency.

The A and B databases point to either C and D or E and F databases where subsequent digits are translated. These four databases are shared by all the other agencies in the office. The E, a one-digit base, and the F, a two-digit base, contain all the NPA codes that can be served from here, as well as the toll codes that are within the home NPA. The A and B databases are used for three-digit translations of toll calls while the A and B and E and F are used for six-digit translations of toll calls.

Databases C (a one-digit base) and D (a three-digit base) are used for translations of the last four digits, or line number portion, of the DN in order to find where the subscriber or trunk is located in the office.

Database G is used for listing the operator codes that are used to reach the operators.

Decoding of the first three digits results in one of the following outputs from databases A and B:

- route pattern identification (trunk group) that specifies all possible routes that can be used to complete the particular type of call
- digit translation pointer (intra-office call) that points to other databases where subsequent digits are sent for translations
- nil (no route) and the digits are recycled through the E and F databases (six-digit translations) to verify the toll code for this area

- number of digits required to complete a call that includes 7 digits (intra-office or local), 8 digits (home route - HRTE), and 11 digits (foreign route - FNPA or FRTE)
- charge or no charge indication

Routes

For outgoing calls, once the route pattern is decided from A and B or A and B and E and F, then the route utility is seized. All the trunk groups available are listed here. The first choice route of a particular route pattern is identified and an attempt is made to terminate on one of the idle trunks within the group. If all the trunks are busy, then a second or alternate route is identified and an attempt is made to terminate again on one of the idle trunks. If there are no idle trunks in the second group, then another route is identified. This process is continued until the final route is reached. There can be up to a maximum of eight routes for a call, but it is not necessary that they all be used.

Data tables

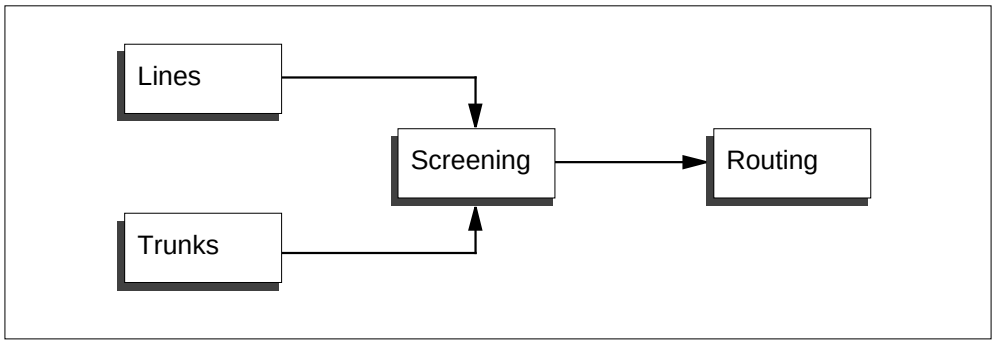
In call processing, tables from both program store and data store are used. The manner in which these tables are accessed and the route selected for completion of a call is subject to data received from the operating company.

The tables are categorized into the following areas:

- lines
- screening
- routing
- trunks
- treatment

Most calls can be traced using a simplified block diagram as illustrated in Figure 1-2.

Figure 1-2 Call processing blocks



The call originates from either a line or a trunk. When a call originates from a line, the associated line tables are read and interpreted. If the call originates on an incoming trunk, the appropriate trunk tables are used. In either case, these tables provide information about the hardware location, the type of signaling to expect, and where to send the call to analyze the dialed or received digits.

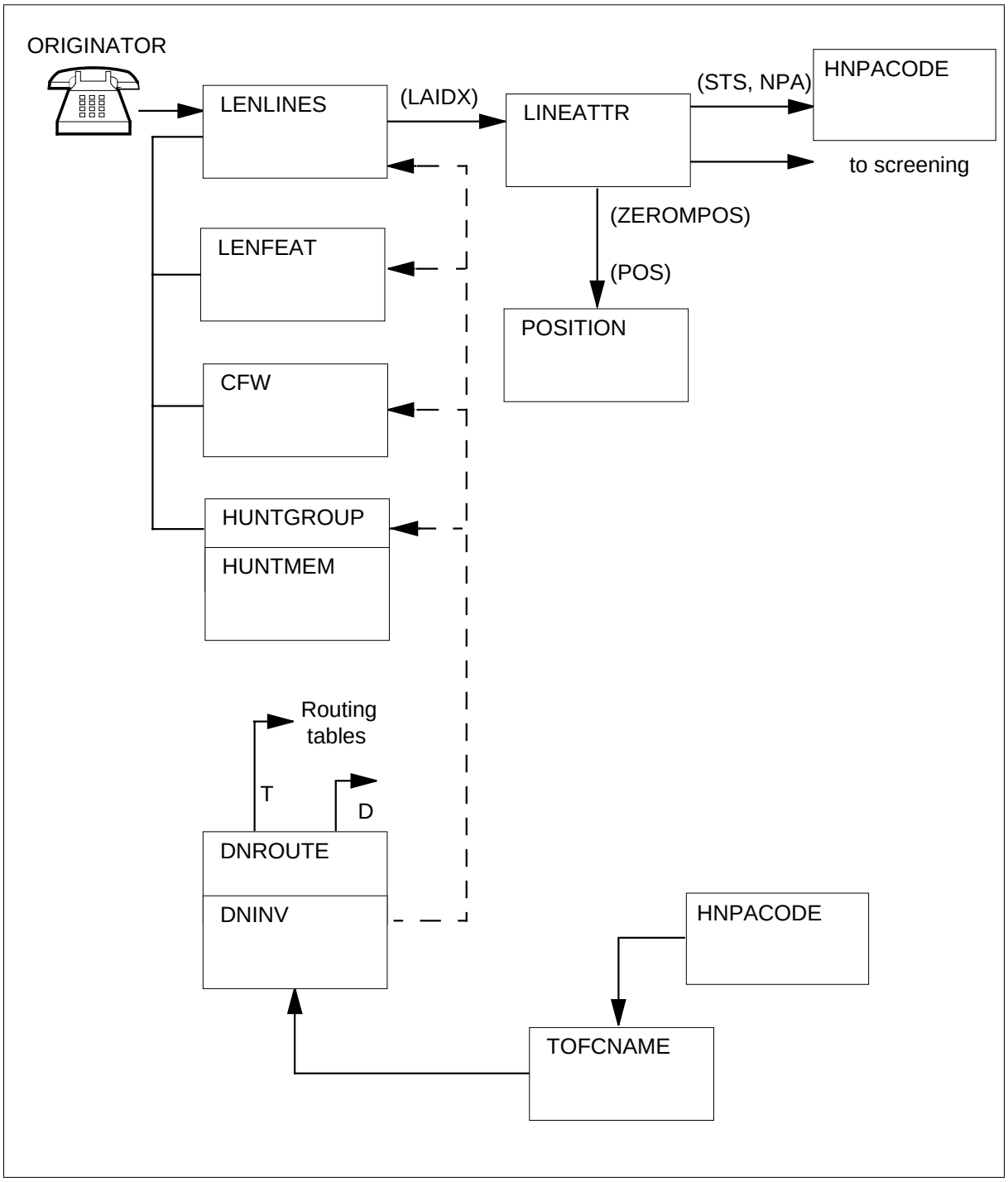
To accomplish the analysis of the digits, the call enters the screening tables, as directed from the line or trunk tables. After some general pre-screening or pre-translation is performed, the call may progress into more detailed screening based on NPA/NXX digits to determine the path into the designated routing tables for defining the final destination or termination of the call.

Line tables

The line tables match a seven-digit DN with a hardware location as well as the options and custom calling features that are recorded. Information on these and other tables used in the screening process can be located in the data schema section of this document. The following tables are used:

- LENLINES
- LINEATTR
- LENFEAT
- CFW
- HUNTGRP
- HUNTMEM
- DNROUTE
- DNINV
- TOFCNAME

Figure 1-3 Table flow for lines



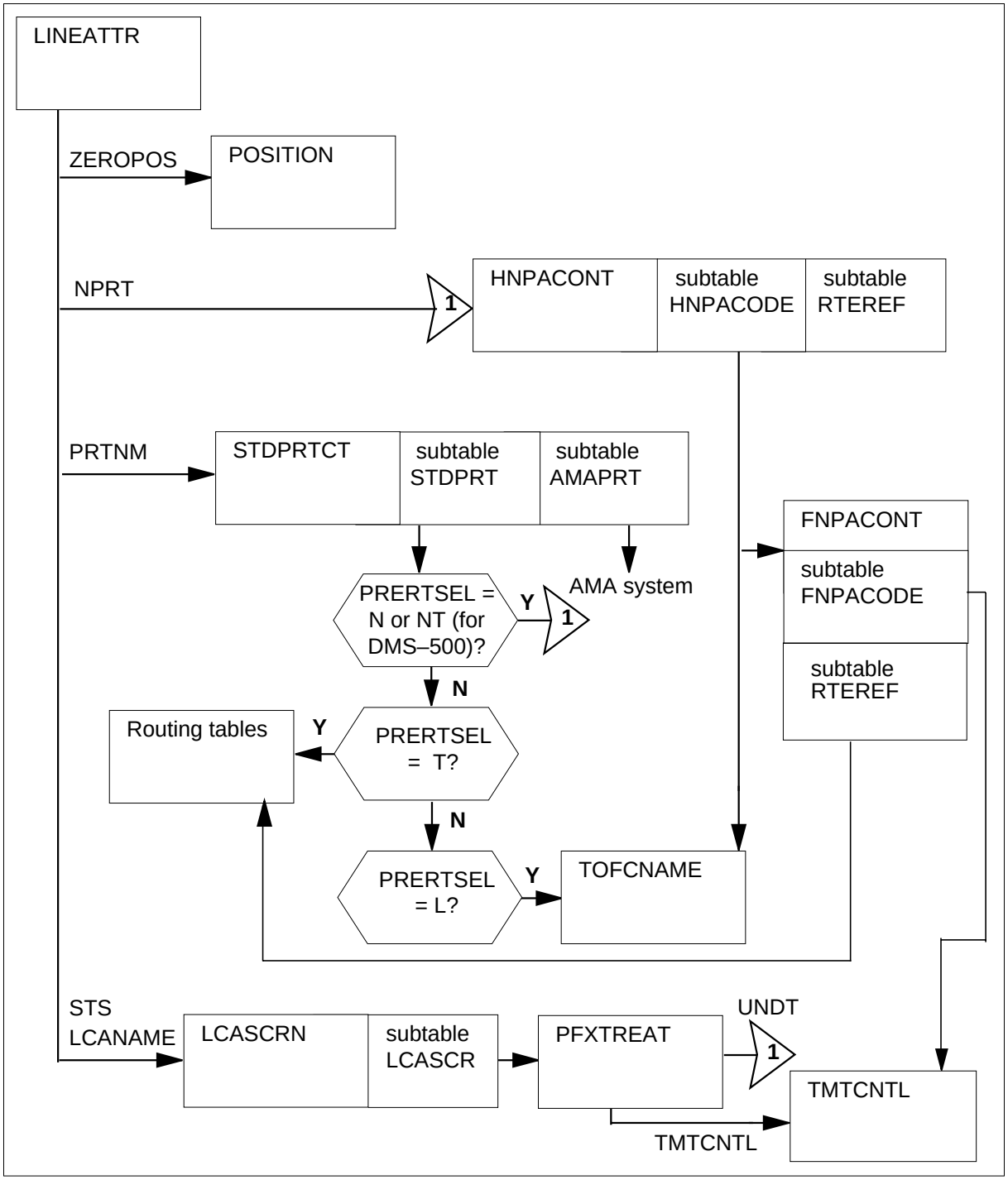
Screening tables

Screening tables are used to screen dialed digits against originator characteristics and to change the normal pattern of call progression through an

office. Information on these and other tables used in the screening process can be located in the data schema section of this document. The following tables are used:

- POSITION
- STDPRTCT
- HNPACONT
- FNPACONT
- LCASCRCN
- PFXTREAT

Figure 1-4 Table flow for screening



Routing tables

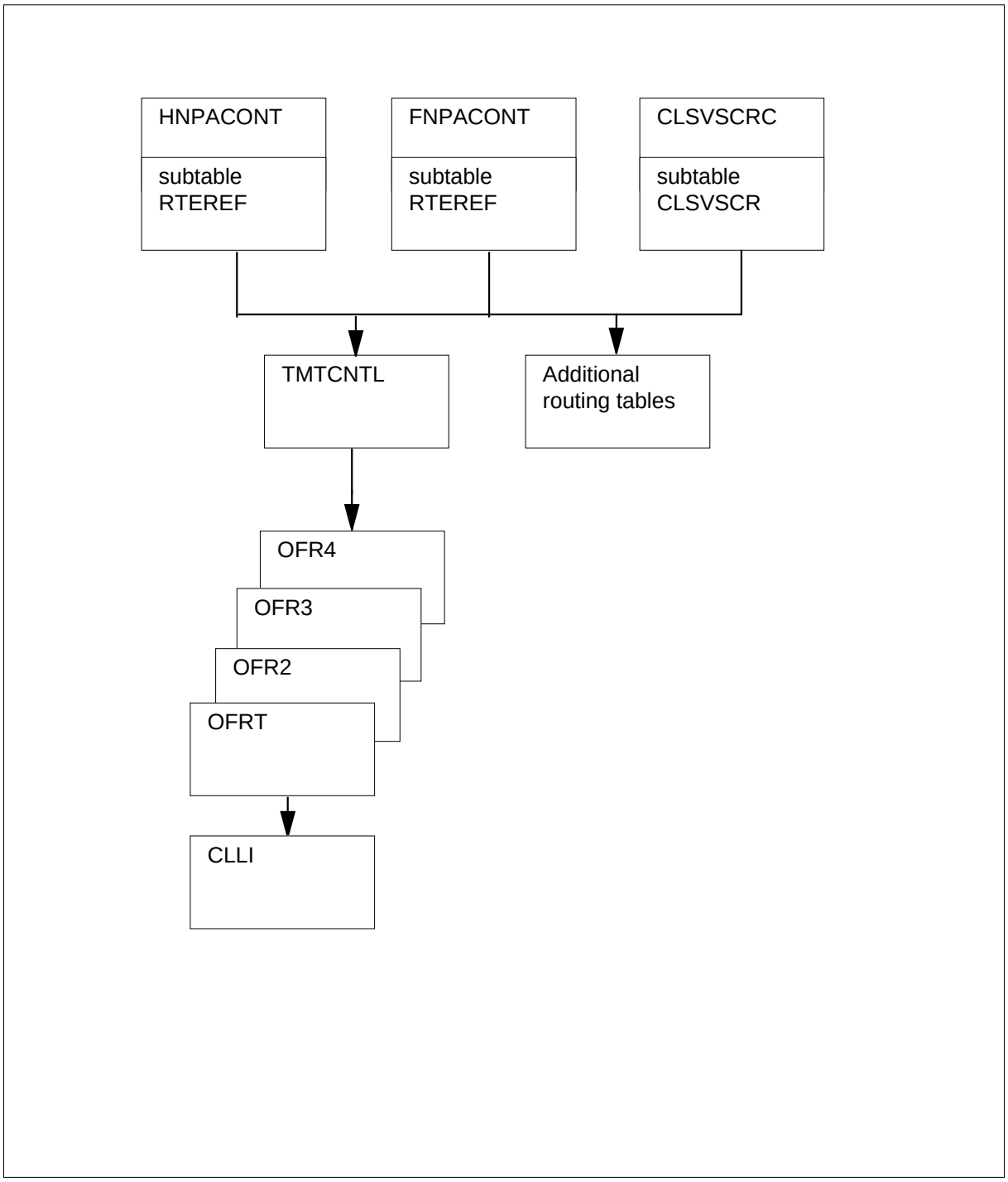
Routing tables provide a path to be taken when a proper code has been dialed. If digits need to be added or deleted, this occurs during the routing stages.

Information on these and other tables used in the screening process can be found in the data schema section of this document. The following tables are used:

- OFRT
- HNPACONT.RTEREF
- FNPACONT.RTEREF

These tables are used if an originating call is being translated and a preceding stage identifies a route reference index. A route reference index can point to a list of up to eight alternate routes or a treatment list.

Figure 1-5 Table flow for routing



Trunk tables

Trunk tables contain detailed information about trunks originating and terminating in the switch. Each trunk connected to the office is represented by

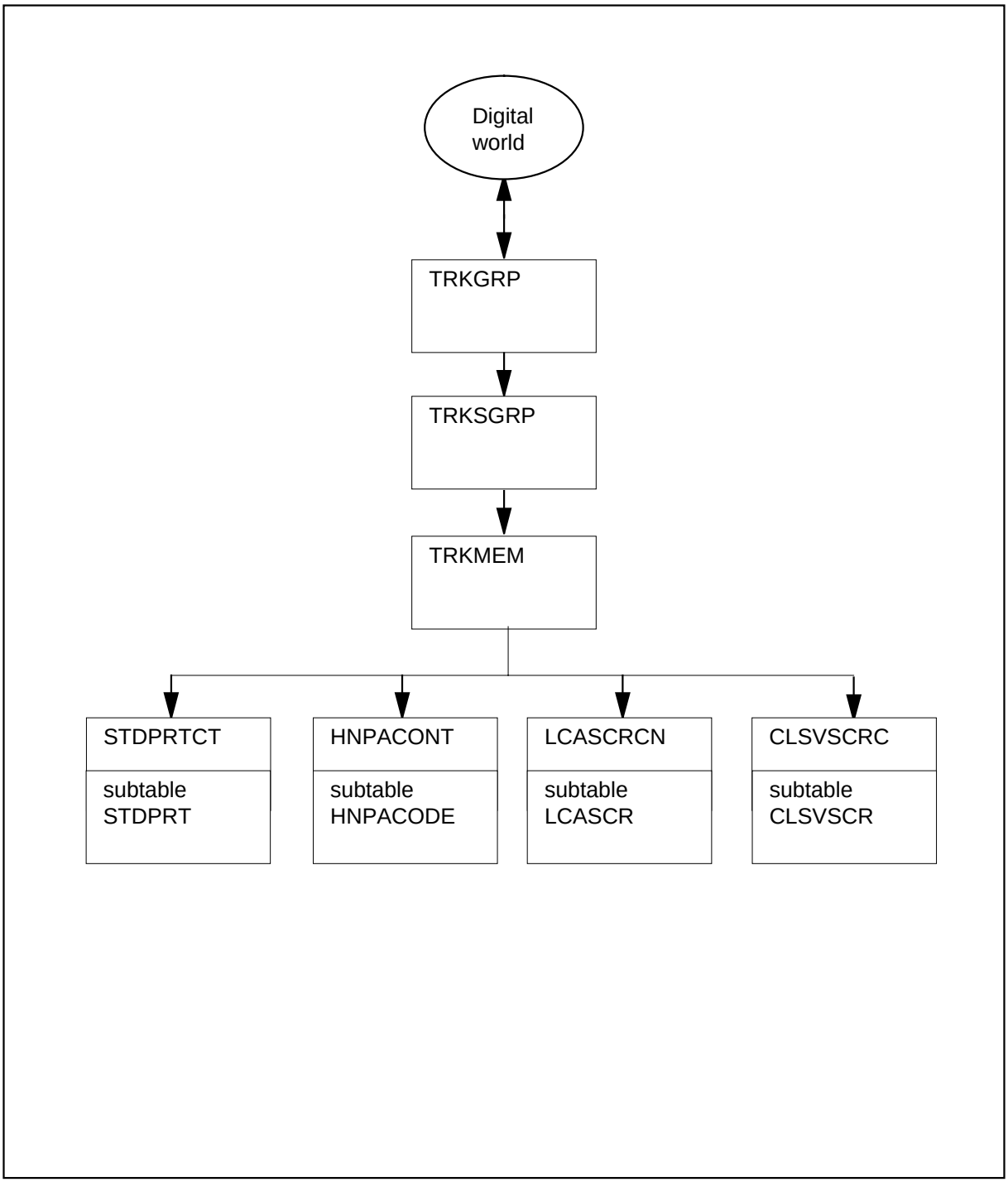
entries in the trunk tables. These tables include information about the following:

- type of trunk group
- type of signaling
- hardware location of each trunk
- screening information for the incoming call from trunks to define the next logical step in translation

Information on these and other tables used in the screening process can be found in the data schema section of this document. The following tables are used:

- CLLI
- TRKGRP
- TRKSGRP
- TRKMEM

Figure 1-6 Table flow for trunks



Treatment tables

Treatment tables provide an event path when some unusual or wrong condition occurs. These paths route to recorded announcements or tones.

The treatment routes for tones and announcements must be datafilled in table CLLI. Table TONES lists specific tones and identifies the type, pattern, and duration of each tone. Table STN (or table SVRCKT) contains additional tone data. The DMS sends the tone information to the originating peripheral module (PM), and the PM generates and sends the tone out over the originating line or trunk.

Announcements are datafilled in tables ANNS and ANNMEMS. Table ANNS identifies the type of announcement, the maximum number of simultaneous connections for the announcement, and the maximum length of the announcement. Table ANNMEMS identifies the hardware location for the announcement. The hardware can be a DRAM (digital recorded announcement machine), located on a maintenance trunk module (MTM), or an audichron located on a trunk module (TM8).

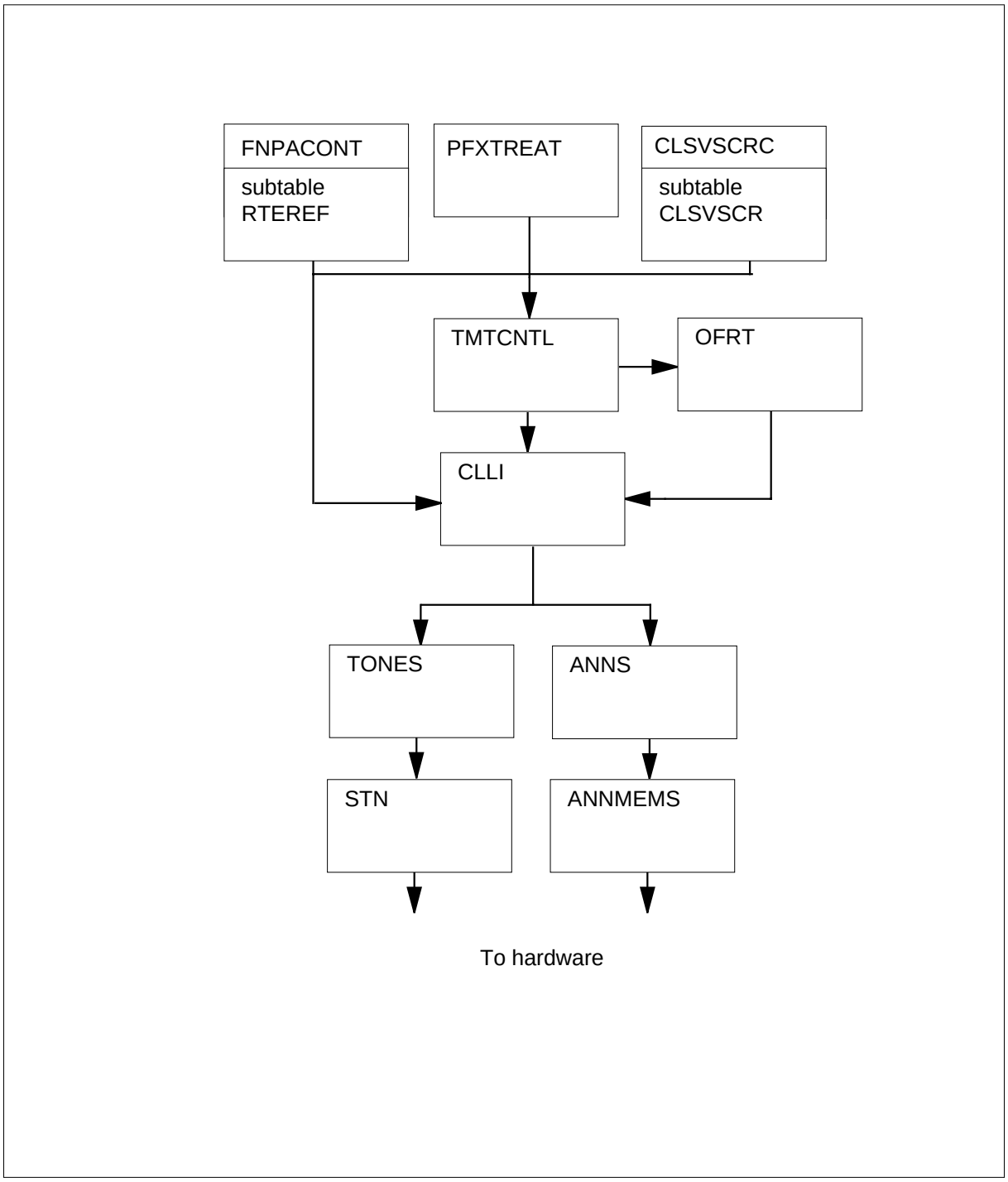
There are a number of specific subtables that can be used for particular types of originators. The default subtable is OFFTREAT.

Table DRAMS (digital recorded announcement machine) or table EDRAM (enhanced digital recording announcement machine) is datafilled by Northern Telecom with the information for the trunk cards.

Information on these and other tables used in the treatment process can be found in the data schema section of this document. The following tables are used:

- TMTCNTL
- CLLI
- TONES
- STN
- ANNS
- ANNMEMS

Figure 1-7 Table flow for treatment



Call processing functional areas

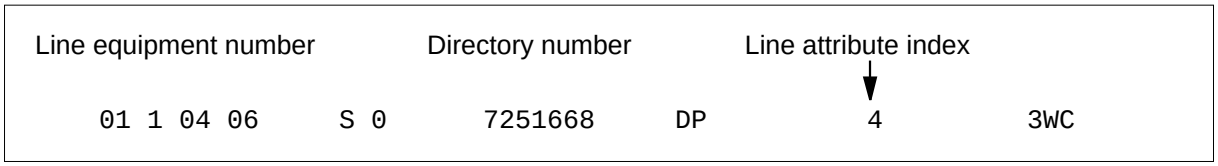
Data tables can be grouped into the following five call processing functional areas:

- data collection
- digit pre-screening
- digit interpretation
- final digit screening
- routing

Data collection

Once the off-hook signal is received and the digits are dialed, the first step is the collection of data from the line record associated with the originator's physical circuit. This includes the DN and the line attribute associated with the call.

Figure 1-8 Table LENLINESx

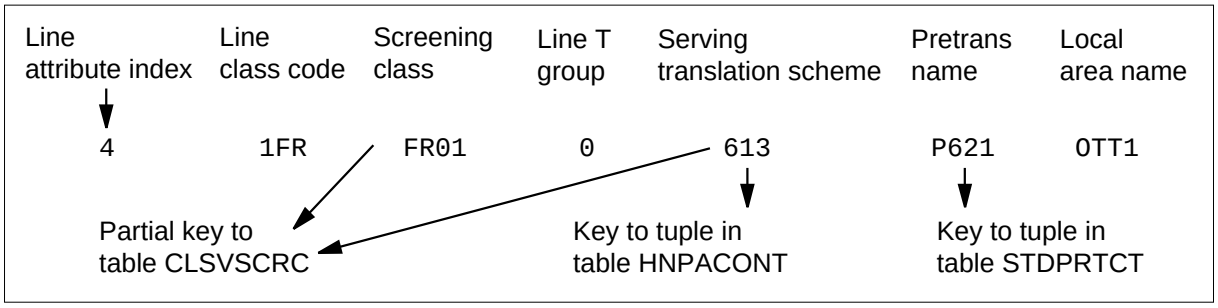


A path is then mapped through translations for the call. This includes the keys of the tuples used in the pre-screening and digit translation processes.

Table LINEATTR is used to associate a group of calling lines with a

- home area code called a serving translation scheme (STS)
- local (free calling) area name (LCANAME)
- pre-translator class name (PRTNM)
- class of service name (SCRNL)

Figure 1-9 Table LINEATTR



Digit pre-screening

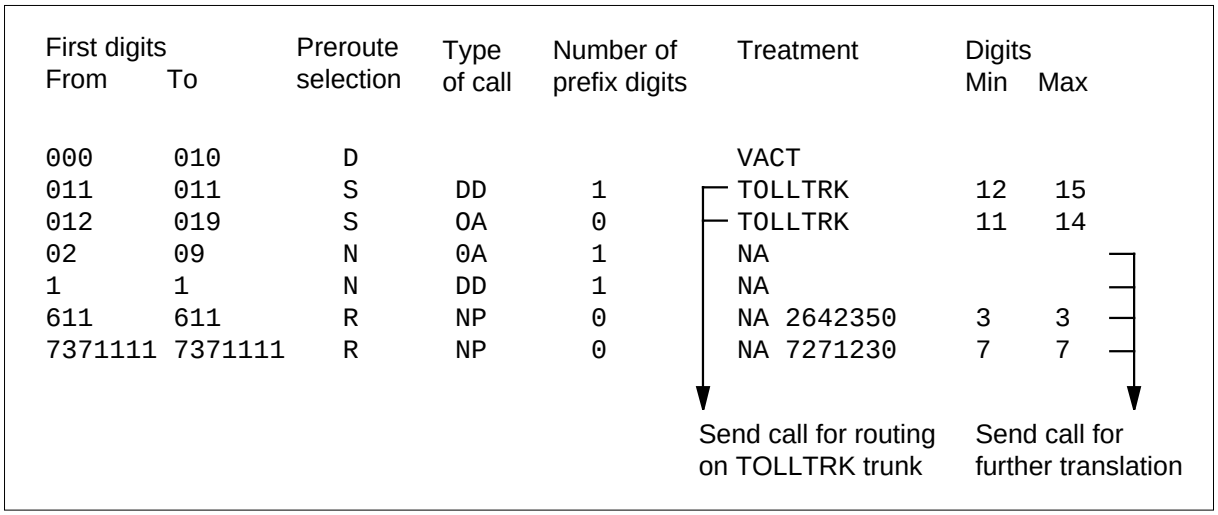
The digit pre-screening process compares the destination digits with a digit range. Any unmatched calls go forward for further translation.

Table STDPRTCT does the following operations:

- checks for partial dialing or excess digits
- sends calls for further translation classified as:
  - — direct dial (DD) 1+
  - — operator assisted (OA) 0+
  - — no prefix (NP) 10-digits or 7-digits
- points to a specific route, line, or trunk
- sends call for special handling

Figure 1-10 Table STDPRTCT

Figure 1-11 Subtable STDPRT



Digit interpretation

The 10-digit interpretation plan is made up of primary and secondary digit translations.

Primary digit translations compares the first three destination digits (NPA on a 10-digit call and NXX on a 7-digit call). The call is then pointed to a route or to a secondary digit translation table.

Table HNPACONT, and its associated subtables, points calls to one of the following:

- a route number (where the immediate destination can be determined from the first three destination address digits)
- table FNPACONT

Figure 1-12 Table HNPACONT

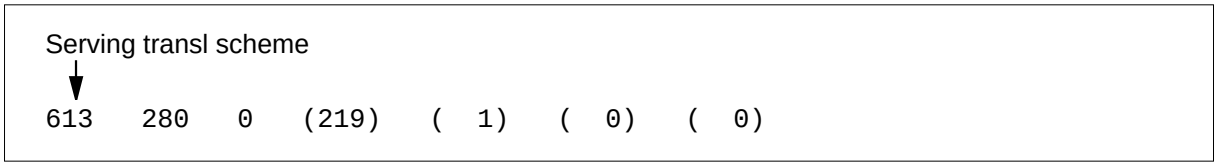


Figure 1-13 Subtable HNPACODE

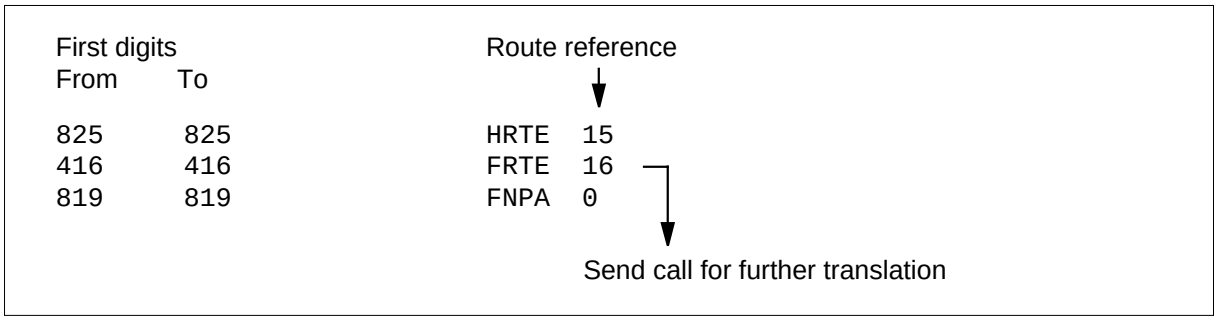
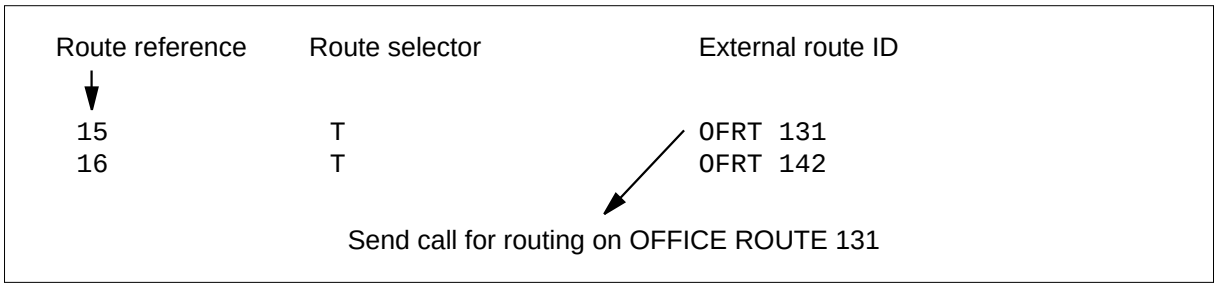


Figure 1-14 Subtable RTEREF



Secondary digit translations points a call to a route based on the fourth, fifth, and sixth destination digits. A separate tuple for each destination NPA is required within the subtable for calls routed by office codes (NXX).

The foreign number plan table is comprised of a subtable for each destination area code where the routing or handling of the call differs depending on the

NXX (destination digits 4 to 6). By accessing the appropriate subtable tuple using digits 4 to 6, calls are pointed to a route number based on six-digit translation.

Figure 1-15 Table FNPACONT

Figure 1-16 Subtable FNPACODE

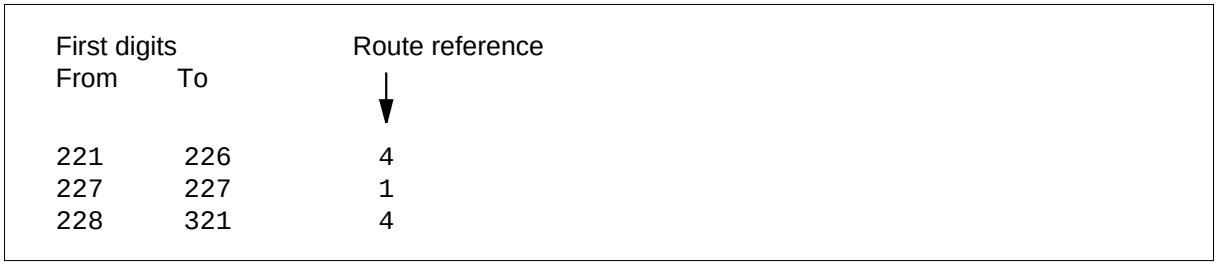
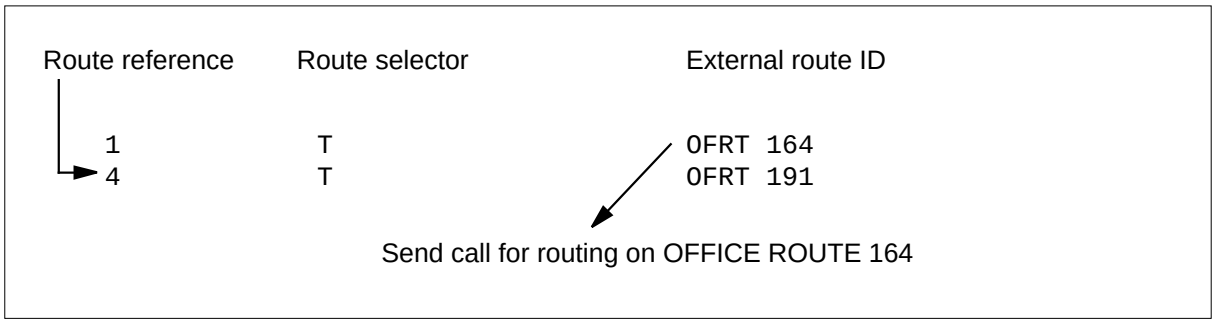


Figure 1-17 Subtable RETEREF



Final digit screening

Final digit screening can be based on class of service or seven- or eight-digit calls.

Class of service screening applies class of service requirements and limitations. Table CLSVCRC allows an STS (origin NPA) and call type (DD, OA, or NP) combined parameter to be used to point specific calls to an operator, to a treatment, or to a route. Additionally, the action may be varied depending on digits dialed by accessing a subtable (instead of pointing directly to an operator, treatment, or route).

Figure 1-18 Table CLSVSCRC

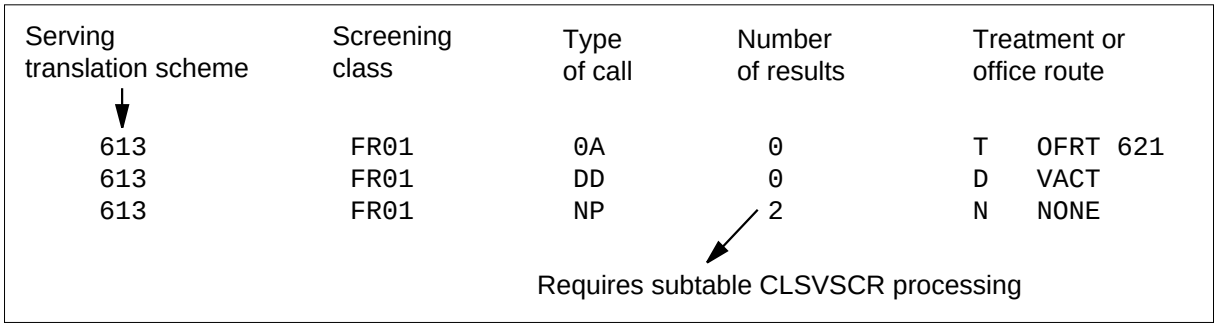
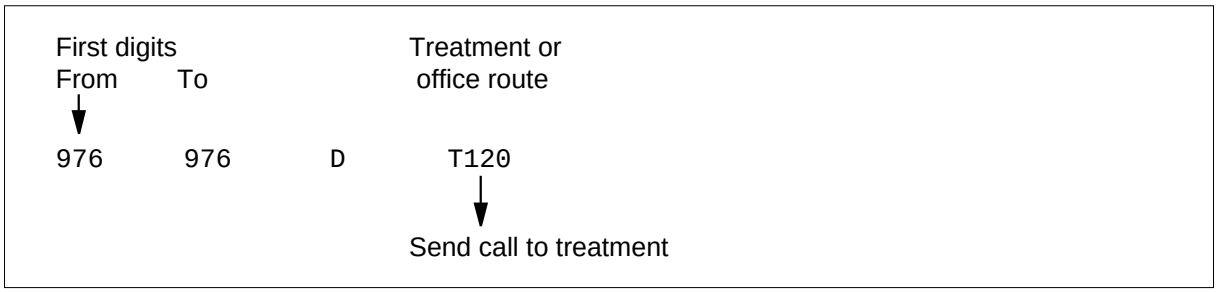


Figure 1-19 Subtable CLSVSCR



The seven- or eight-digit screening compares call classification (DD, OA, or NP) to calls with local area requirements for 1+ and 0+ dialing.

Figure 1-20 Table LCASCRCN

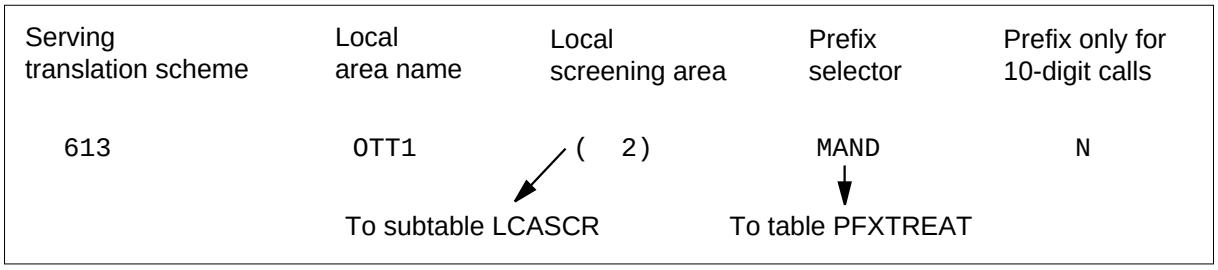


Figure 1-21 Subtable LCASCR

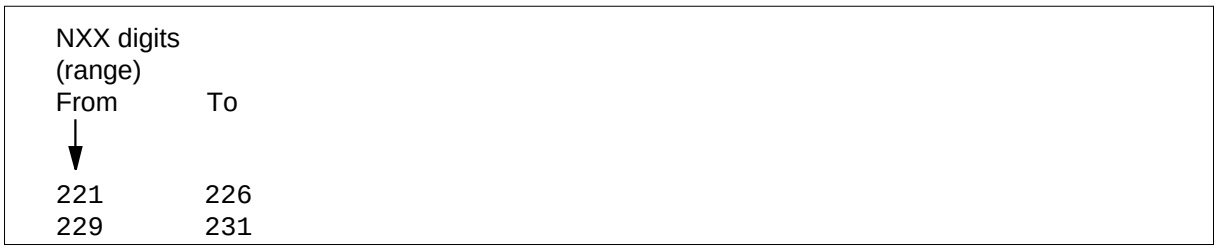
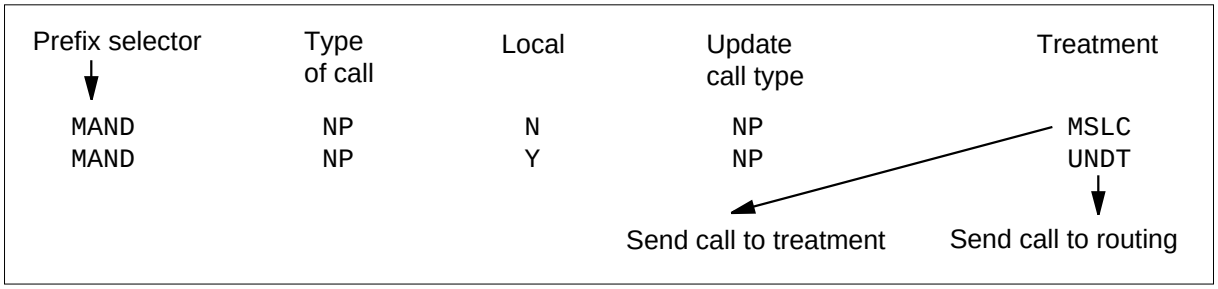


Figure 1-22 Table PFXTREAT



Functional groups for 10-digit translations

10-digit translations has no functional groups.

Line to line translations

Ordering codes

Line to line translations has no ordering codes.

Release applicability

TL03 and up

Prerequisites

Line to line translations has no prerequisites.

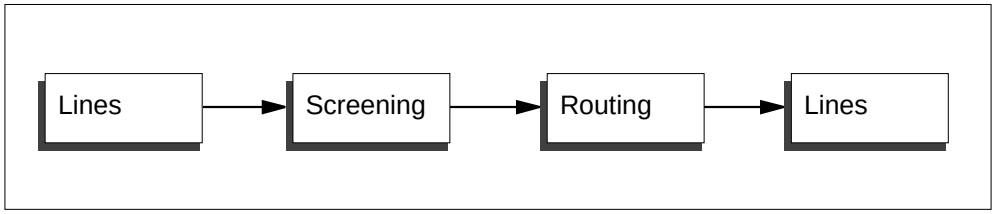
Description

When a call originates from a line, the associated line tables are read and interpreted. The call then enters the screening tables where digit analysis begins. After some general pre-screening, or pre-translation is performed, the call may progress into more detailed screening based on NPA/NXX digits to determine the path into the designated routing tables for defining the final destination or termination of the call.

Operation

Line to line translations can be traced using a simplified block diagram representing the major functions within the translation process, as shown in the following figure.

Call processing blocks for Line to line translations



The lines tables contain information about the originator of the call in a DMS-100 switch. These tables have three primary functions:

- establish the hardware function and specify the hardware location for each line.
- indicate the type of ringing codes used or options and features assigned to each line.
- provide the next logical step in translation.

The screening tables contain the information used to analyze the digits that the DMS receives. This screening process tests the digits dialed prior to

Line to line translations (continued)

continuing to the next routing stage, to determine, for example, whether this call is local or non-local.

The screening tables establish the call type based on the digits received. The three basic call types are:

- operator assisted (OA)
- direct dial (DD)
- no prefix (NP)

The routing tables route the calls to their final destination. The information found in these tables dictates how and where a call will be completed, or if the call will route to a recorded announcement or treatment.

Translations table flow for Line to line translations

As soon as a line goes off-hook, the associated line concentrating module (LCM) informs the switch that the line went off hook and provides the line equipment number (LEN). The originating line has its LEN stored in table LENLINES. From the data stored in table LENLINES, the switch determines the directory number (DN), party and options of the line. If there are features associated with the line, the switch accesses table LENFEAT to determine what these features are.

Field LNATTIDX in table LENLINES points to a tuple in table LINEATTR. The entries in this tuple determine the following:

- the standard pretranslator to route to in table STDPRTCT
- the local call area (LCA) subtable to use for local call checking
- the serving numbering plan area (SNPA) to access in table HNPACONT

Verification of the call type is done in table LCASCRCN and its subtable LCASCR and table PFXTREAT.

The call then routes to table STDPRTCT and its subtable STDPRT. The pretranslator route selector entered in subfield PRERTSEL determines how call processing progresses. Information on the valid values for this subfield can be located in the data schema section of this document.

If the entry in this subfield is N, translations proceeds to table HNPACONT and its subtable HNPACODE. The dialed NXX is located and defined.

Table TOFCNAME defines all the terminating offices in the switch and they are identified by area code and office code. Table DNINV contains the data for

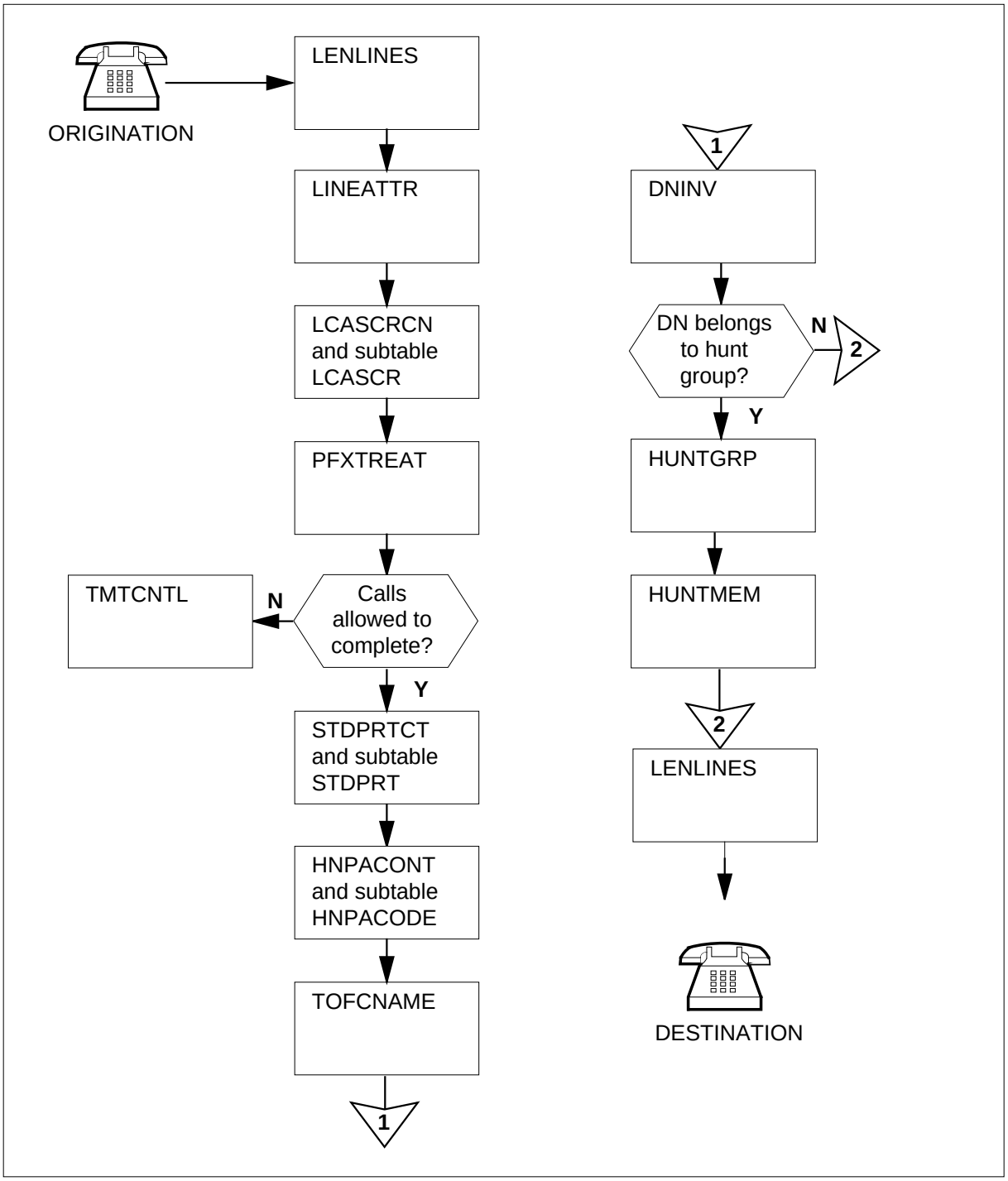
Line to line translations (continued)

all assigned and unassigned DNs. If the DN belongs to a hunt group, tables HUNTGRP and HUNTMEM will be accessed.

The Line to line translations process is shown in the flowchart that follows.

Line to line translations (continued)

Table flow for a line-to-line call



Line to line translations (continued)

The following table lists the datafill content used in the flowchart for a call routed between lines 2252136 and 2252164. In the example

- NPA = 418
- calling line DN = 2252136
- called line DN = 2252164
- standard pretranslator = P225

Datafill example for Line to line translations

Datafill table	Example data
LENLINES	RCU0 00 0 03 16 S 0 2252136 DT 1 $
LINEATTR	1 1FR NONE NT NSCR 0 418 P225 P225 NONE 0 NIL NILSFC NILLATA 0 NIL NIL 00 Y AINRESGRP 0 0 $
LCASCRCN	418 P225 (3) MAND N
subtable LCASCR	225 226
PFXTREAT	MAND DD N DD UNDT
STDPRTCT	P225 (1) (65021)
subtable STDPRT	418 418 N DD 0 NA
HNPACONT	418 128 0 (68) (1) (2) (0)
subtable HNPACODE	225 225 DN 418 225
TOFCNAME	418 225
DNINV	418 225 2164 H 11 0
HUNTMEM	11 0 N D 2252164 N
HUNTGRP	11 418 2252164 DNH N N N RCVD N N N N N N 4 $
LENLINES	RCU0 00 0 14 04 S 0 2252164 DT 1 $

Limitations and restrictions

Line to line translations has no limitations or restrictions.

Line to line translations (continued)

Billing

For information on billing, refer to the Bellcore format AMA translations section of this document.

Datafilling office parameters

The following table shows the office parameters used by Line to line translations. For more information about office parameters, refer to *Office Parameters Reference Manual.*

Office parameters used by Line to line translations

Table name	Parameter name	Explanation and action
OFCENG	ACTIVE_DN_SYSTEM	This parameter specifies the type of DNs that can be used in an office. If this parameter is set to NORTH_AMERICAN, the directory number must use the form NPA-NXX-XXXX. If this parameter is set to UNIVERSAL, the directory number may vary in length.
	AIN_ACTIVE	This parameter controls the activation of the Advanced Intelligent Network (AIN). Enter Y to activate AIN software. Enter N to deactivate AIN software. If this parameter is set to N, parameter AIN_OFFICE_TRIGGRP in table OFCVAR is disregarded.
OFCVAR	AIN_OFFICE_TRIGGRP	This parameter is used to subscribe trigger behaviors on an office-wide basis. The entry in field AINGRP in table TRIGGRP is entered here. The default value is NIL.

Line to line translations (continued)

Datafill sequence

The following table lists the tables that require datafill to implement Line to line translations for the calling line. The tables are listed in the order in which they are to be datafilled.

Datafill tables required for Line to line translations for the calling line

Table	Purpose of table
HNPACONT	The home numbering plan area control table lists all the home or serving area NPAs for a particular area.
subtable HNPACODE	The home numbering plan area code subtable lists the route treatment or table to which the translation routes for each of the assigned NPAs.
STDPRTCT	The standard pretranslator table lists the names of the standard pretranslator subtables.
subtable STDPRT	The standard pretranslator subtable determines the next stage of translation, based on the range of leading digits.
LCASCRCN	The local calling area screening control table lists the NPA code and local calling area name and its prefix selector.
subtable LCASCR	The local calling area screening code subtable determines from the dialed digits if the call is local or non-local.
PFXTREAT	The prefix treatment table determines the call treatment to which a call is routed.
LINEATTR	The line attribute table provides pointers to screening and billing tables and assigns line attributes for digit analysis.
LENLINES	The line assignment table contains the DN, hardware location, and options associated with the calling line.

The following table lists the tables that require datafill to implement Line to line translations for the called line. The tables are listed in the order in which they are to be datafilled.

Datafill tables required for Line to line translations (Sheet 1 of 2)

Table	Purpose of table
TOFCNAME	The terminating office name table defines all terminating offices in the switch.
DNINV	The directory number inventory table is a read-only table that contains data for all assigned and unassigned DNs.

Line to line translations (continued)

Datafill tables required for Line to line translations (Sheet 2 of 2)

Table	Purpose of table
HUNTGRP	The hunt group table lists data assignments for each hunt group in the switching unit.
HUNTMEM	The hunt member table lists the members assigned to the hunt groups.

Datafilling table HNPACONT

The following table shows the datafill specific to Line to line translations for table HNPACONT. Only those fields that apply directly to Line to line translations are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table HNPACONT

Field	Subfield or refinement	Entry	Explanation and action
STS		0 to9 999 999	Serving numbering plan area. Enter a serving numbering plan area (SNPA) or STS code.
HNPACODE		see note	Home numbering plan area code. This field is an index into subtable HNPACODE. ***Note:*** This field does not accept any input.

Datafill example for table HNPACONT

The following example shows sample datafill for table HNPACONT.

MAP display example for table HNPACONT

```
STS  NORTREFS  NOAMBIGC  RTEREF  HNPACODE  ATTRIB  RTEMAP
_____________________________________________________
418  128       0         ( 68)   ( 1)      ( 2)    ( 0)
```

Datafilling subtable HNPACONT.HNPACODE

The following table shows the datafill specific to Line to line translations for subtable HNPACONT.HNPACODE. Only those fields that apply directly to

Line to line translations (continued)

Line to line translations are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling subtable HNPACONT.HNPACODE

Field	Subfield or refinement	Entry	Explanation and action
FROMDIGS		numeric (3 digits)	From digits. Enter the number representing a single code or the first in a block of consecutive codes that have the same input data.
TODIGS		numeric (3 digits)	To digits. If field FROMDIGS represents a single code, enter the same single code as in field FROMDIGS. If field FROMDIGS represents the first number of a block of consecutive numbers, enter the last number in the block.
CDRRTMT		see subfield	Code type, route reference or treatment. This field consists of subfield CD.
	CD	DN	Code type. Enter DN for terminating office code and datafill refinements SNPA and NXX.
	SNPA	numeric (3 digits)	Terminating serving numbering plan area. Enter the SNPA of the called terminating line DN. If the operating company uses screening to intraswitch SNPAs, translation of the dialed digits proceeds to table TOFCNAME, using SNPA and NXX as the key.
	NXX	numeric (3 digits)	Terminating NXX. Enter three digits for the NXX code of the called terminating line DN.

Datafill example for subtable HNPACONT.HNPACODE

The following example shows sample datafill for subtable HNPACONT.HNPACODE.

MAP display example for subtable HNPACONT.HNPACODE

```
FROMDIGS     TODIGS            CDRRTMT
-------------------------------------------------
225          225               DN  418  225
```

Line to line translations (continued)

Datafilling table STDPRTCT

The following table shows the datafill specific to Line to line translations for table STDPRTCT. Only those fields that apply directly to Line to line translations are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table STDPRTCT

Field	Subfield or refinement	Entry	Explanation and action
EXPRTNM		alphanumeric (up to 8 characters)	External standard pretranslator subtable name. Enter the name defined by the operating company to represent the standard pretranslator.
STDPRT		see note	Standard pretranslator. The field is an index into subtable STDPRT. ***Note:*** This field does not accept any input.

Datafill example for table STDPRTCT

The following example shows sample datafill for table STDPRTCT.

MAP display example for table STDPRTCT

```
EXPRTNM    STDPRT    AMAPRT
_____________________________________________________________
P225       (    1)   (65021)
```

Datafilling subtable STDPRTCT.STDPRT

The following table shows the datafill specific to Line to line translations for subtable STDPRTCT.STDPRT. Only those fields that apply directly to Line to

Line to line translations (continued)

line translations are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling subtable STDPRTCT.STDPRT

Field	Subfield or refinement	Entry	Explanation and action
FROMDIGS		numeric (up to 18 digits)	From digits. Enter the digit or digits to be translated. If the entry represents a block of consecutive numbers, enter the first number in the block.
TODIGS		numeric (up to 18 digits)	To digits. If field FROMDIGS represents a block of consecutive numbers, enter the last number in the block.
PRETRTE		see subfield	Pretranslation route. This field consists of subfield PRERTSEL and its refinements TYPECALL, NOPREDIG, TRANSYS, and POS.
	PRERTSEL	N or NT	Pretranslator route selector. Enter N or NT. Enter N. Refer to the data schema section of this document for more information. Enter NT for DMS-500 switches only.
	TYPCALL	DD, OA, NP, or NL	Type of call. Enter the type of call: DD (direct dial), NP (no prefix), OA (operator assisted), or NL (nil). For Traffic Operator Position System (TOPS) calls, there can be a mixture of 0 and 1 (OA and DD) call types. Enter NL for these cases.
	NOPREDIG	0 to 7	Number of prefix digits. Enter the number of digits that are to be interpreted as prefix digits.
	TRANSYS	NA, IN, or IP	Translation system. Enter IN if the translation routes to international translations (on a local and toll combined switching unit only). Enter IP if the translation routes to international partitioned translations (DMS-250 only). Enter NA if the translation routes to national translations.

Line to line translations (continued)

Datafill example for subtable STDPRTCT.STDPRT

The following example shows sample datafill for subtable STDPRTCT.STDPRT.

MAP display example for subtable STDPRTCT.STDPRT

```
FROMDIGS            TODIGS          PRETRTE
_____________________________________________________
418                  418            N  DD  0  NA
```

Datafilling table LCASCRCN

The following table shows the datafill specific to Line to line translations for table LCASCRCN. Only those fields that apply directly to Line to line translations are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table LCASCRCN

Field	Subfield or refinement	Entry	Explanation and action
NPALOCNM		see subfields	NPA local calling area subtable name. This field consists of subfields STS and LCANAME.
	STS	numeric (3 digits)	Serving translation scheme. Enter a serving NPA code for the trunk group.
	LCANAME	alphanumeric (up to 4 characters)	Local calling area name. Enter the key to subtable LCASCRCN.LCASCR.
LCASCR		see note	Local calling area screening. This field is an index into subtable LCASCR. ***Note:*** This field does not accept any input.
PFXSELEC		OPTL, MAND or alphanumeric (up to 4 characters)	Prefix selector. Enter the name of the prefix selector that is assigned to subtable LCASCR.

Line to line translations (continued)

Datafill example for table LCASCRCN

The following example shows sample datafill for table LCASCRCN.

MAP display example for table LCASCRCN

```
NPALOCNM    LCASCR   PFXSELEC   PFSFOR10
_____________________________________________________________________
418   P225  (   3)    MAND       N
```

Datafilling subtable LCASCRCN.LCASCR

The following table shows the datafill specific to Line to line translations for subtable LCASCRCN.LCASCR. Only those fields that apply directly to Line to line translations are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling subtable LCASCRCN.LCASCR

Field	Subfield or refinement	Entry	Explanation and action
FROMDIGS		numeric (3 digits)	From digits. Enter the three-digit local NNX code. This number represents a single code or the first in a block of consecutive local NNX codes.
TODIGS		numeric (3 digits)	To digits. If field FROMDIGS represents the first number of a block of consecutive local NNX codes, enter the last NNX code in the block. If field FROMDIGS represents a single local NNX code, enter the NNX code entered in FROMDIGS.

Datafill example for subtable LCASCRCN.LCASCR

The following example shows sample datafill for subtable LCASCRCN.LCASCR.

Line to line translations (continued)

MAP display example for subtable LCASCRCN.LCASCR

```
FROMDIGS      TODIGS
_____________________________________________________________
225           226
```

Datafilling table PFXTREAT

The following table shows the datafill specific to Line to line translations for table PFXTREAT. Only those fields that apply directly to Line to line translations are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table PFXTREAT

Field	Subfield or refinement	Entry	Explanation and action
TYPLCLCD		see subfields	Type of call and local code. This field consists of subfields PFXSELEC, TYPCALL, and LOCAL.
	PFXSELEC	OPTL, MAND or alphanumeric (up to 4 characters)	Prefix selector. Enter the prefix selector assigned to the prefix treatment.
	TYPCALL	DD, NP, OA or NL	Type of call. Enter either DD (direct dial), NP (no prefix), OA (operator assisted), or NL (nil) for the type of call.

Datafill example for table PFXTREAT

The following example shows sample datafill for table PFXTREAT.

MAP display example for table PFXTREAT

```
TYPLCLCD                UPDTYPCA   TREAT
________________________________________________________
MAND  DD  N             DD         UNDT
```

Datafilling table LINEATTR

The following table shows the datafill specific to Line to line translations for table LINEATTR. Only those fields that apply directly to Line to line translations are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table LINEATTR (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
LNATTIDX		0 to 31 999	Line attribute index. Enter the index into table LINEATTR.
SCRNCL		alphanumeric (up to 4 charactersor NSCR)	Class of Service screening. If screening by class of service is required, enter the key to the class of service subtable assigned to the line attribute index. If screening by class of service is not required, enter NSCR.
STS		numeric (3 digits)	Serving translation scheme. Enter the serving numbering plan area (NPA) assigned to the line attribute index. The serving translation scheme (STS) of an existing tuple cannot be changed.

Line to line translations (continued)

Datafilling table LINEATTR (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
PRTNM		alphanumeric (up to 4 characters or NPRT)	Standard pretranslator subtable name. If pretranslation of digits is required, enter the key to the standard pretranslator subtable assigned to the line attribute index. If standard pretranslation is not required, enter NPRT.
LCANAME		alphanumeric (up to 4 characters or NLCA)	Local calling area screening subtable name. If screening of local central office codes (NNX) is required, enter the key to the local calling area subtable assigned to the line attribute index. If screening of local NNX codes is not required, enter NLCA.

Datafill example for table LINEATTR

The following example shows sample datafill for table LINEATTR.

MAP display example for table LINEATTR

```
LNATTIDX LCC  CHGCLSS COST SCRNCL LTG STS PRTNM LCANAME ZEROMPOS
TRAFSNO  MRSA   SFC     LATANM   MDI    IXNAME   DGCLNAME   FANIDIGS
      RESINF          OPTIONS
_____________________________________________________________________
1        1FR  NONE    NT   NSCR   0   418 P225  P225    NONE
0        NIL    NILSFC  NILLATA  0      NIL      NIL        00
      Y              AINRESGRP 0 0  $
```

Datafilling table LENLINES

The following table shows the datafill specific to Line to line translations for table LENLINES. Only those fields that apply directly to Line to line

Line to line translations (continued)

translations are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table LENLINES

Field	Subfield or refinement	Entry	Explanation and action
LEN		see subfields	Line equipment number. This field defines the physical location of the equipment that is connected to a specific telephone line. Because field LEN is common to more than 60 tables, it is documented in a single section to avoid unnecessary duplication. For a more complete description of LEN and associated subfields refer to section "Common entry field LEN" in the data schema section of this document. ***Note:*** Field LEN consists of subfields SITE, FRAME, UNIT, DRAWER or LSG, SHELF, SLOT, and CIRCUIT.
PTY		R1 to R5, T1 to T5 or S	Party and ringing combination. If the line is assigned to a two-, four-, eight-, or ten-party line, enter the party, R1 to R5 or T1 to T5, of the DN assigned to the line. If the line is assigned to an individual line, enter S for single party.
LNATTIDX		0 to 4095	Line attribute index. Enter the index into table LINEATTR.

Datafill example for table LENLINES

The following example shows sample datafill for table LENLINES.

MAP display example for table LENLINES

```
LEN                    PTY        RINGCODE    DN
                  SIGTYPE   LNATTIDX    OPTLIST

_____________________________________________________________
RCU0 00  0  03 16    S          0           2252136
                  DT         1           $
```

Line to line translations (continued)

Datafilling table TOFCNAME

The following table shows the datafill specific to Line to line translations for table TOFCNAME. Only those fields that apply directly to Line to line translations are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table TOFCNAME

Field	Subfield or refinement	Entry	Explanation and action
AREACODE		0 to 9 999 999	Area code. The area code identifies a major geographical area served by the switch. This field can contain one to seven digits. In a North American office, the area code must be three digits in length. Enter an area code that has been defined in table SNPANAME or table HNPACONT.
OFCCODE		0 to 9 999 999 or $	Office code. The office code is a subregion of the area code. It can have zero to seven digits. In a North American office, the office code must be three digits in length.

Datafill example for table TOFCNAME

The following example shows sample datafill for table TOFCNAME.

MAP display example for table TOFCNAME

```
AREACODE        OFCCODE
_____________________________________________________________
418             225
```

Datafilling table DNINV

Table DNINV contains the data for all assigned and unassigned DNs. Table DNINV is a read-only table. Information is added to it as DNs are assigned or used in other tables such as LENLINES.

The following table shows the datafill specific to Line to line translations for table DNINV. Only those fields that apply directly to Line to line translations

Line to line translations (continued)

are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table DNINV

Field	Subfield or refinement	Entry	Explanation and action
AREACODE		0 to 9 999 999(1 to 7 digits)	Area code. The area code identifies a major geographical area served by the switch. If office parameter ACTIVE_DN_SYSTEM in table OFCENG is set to North American, the area code must be three digits long.
OFCCODE		0 to 9 999 999(1 to 7 digits)	Office code digit register. The office code is a subregion of the area code. If office parameter ACTIVE_DN_SYSTEM in table OFCENG is set to North American, the area code must be three digits long. The office code must be specified in table TOFCNAME.
STNCODE		0 to 99 999 999(1 to 8 digits)	Station code. The station code identifies a unique station within the terminating office (TOFC). If office parameter ACTIVE_DN_SYSTEM in table OFCENG is set to North American, the area code must be one or four digits in length. If one digit is entered, it is treated as a D-digit, where the D-digit represents the fourth digit in the format ABC-DEFG.

Datafill example for table DNINV

The following example shows sample datafill for table DNINV.

MAP display example for table DNINV

```
AREACODE   OFCCODE     STNCODE                          DNRESULT
-------------------------------------------------------------------
418        225         2164                            H  11  0
```

Line to line translations (continued)

Datafilling table HUNTGRP

Table HUNTGRP is datafilled if the called line belongs to a hunt group.

The following table shows the datafill specific to Line to line translations for table HUNTGRP. Only those fields that apply directly to Line to line translations are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table HUNTGRP

Field	Subfield or refinement	Entry	Explanation and action
HTGRP		0 to 8191	Hunt group number. Enter the hunt group number assigned to the hunt group.
DN		numeric (up to 15 digits)	Directory number. Enter the listed DN of the hunt group.
GRPTYP		DNH	Hunt group type. Enter DNH and datafill refinement TRMOPT.
GRPDATA	TRMBOPT	Y or N	Terminating billing option. If the optional terminator software package is provided, and if a record is generated for each call to a member of the hunt group, enter Y. Otherwise, enter N.

Datafill example for table HUNTGRP

The following example shows sample datafill for table HUNTGRP.

MAP display example for table HUNTGRP

```
HTGRP SNPA      DN                          GRPTYP
GRPDATA
_____________________________________________________________________
11    418       2252164                     DNH
N  N  N  RCVD  N  N  N N N N 4 $
```

Datafilling table HUNTMEM

Table HUNTMEM is datafilled if the called line belongs to a hunt group.

The following table shows the datafill specific to Line to line translations for table HUNTMEM. Only those fields that apply directly to Line to line

Line to line translations (continued)

translations are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table HUNTMEM

Field	Subfield or refinement	Entry	Explanation and action
HTGRP		0 to 8191	Hunt group number key. Enter the hunt group number to which the member belongs.
HTMDATA		see subfield	Hunt member data. This field consists of subfield SEL.
	SEL	B, D, L or P	Select hunt group type. Enter one of the following: • B—bridged night number • D—directory number • L—multiline or distributed line • P—multiple position If the entry in this field is D, complete subfields DN and BNNDAT.
	DN	numeric (up to 15 digits)	Directory number. Enter the DN assigned to the hunt group sequence number.

Datafill example for table HUNTMEM

The following example shows sample datafill for table HUNTMEM.

MAP display example for table HUNTMEM

```
HTGRP    SEQNO    INSERT              HTMDATA
_____________________________________________________
11       0        N                   D    2252164  N
```

Translation verification tools

The following example shows the output from TRAVER when it is used to verify Line to line translations.

Line to line translations (continued)

TRAVER output example for Line to line translations

```
>traver l 3350691 3358692 b

TABLE LINEATTR
10 1FR NONE NT NSCR 7 406 P329 P329 NONE 0 NIL NILSFC NILLATA 0 NIL NIL
00 N $
LCABILL OFF – BILLING DONE ON BASIS OF CALLTYPE
TABLE DNATTRS
TUPLE NOT FOUND
TABLE DNGRPS
TUPLE NOT FOUND
TABLE LENFEAT
TUPLE NOT FOUND
TABLE OFCVAR
AIN_OFFICE_TRIGGRP OFCTRIG
AIN Orig Attempt TDP: no subscribed trigger.
TABLE STDPRTCT
P329 ( 1) (65021) 0
 . SUBTABLE STDPRT
WARNING: CHANGES IN TABLE STDPRT MAY ALTER OFFICE BILLING.
CALL TYPE DEFAULT IS NP.  PLEASE REFER TO DOCUMENTATION.
 . 335 336 N NP 0 NA
 . SUBTABLE AMAPRT
 . KEY NOT FOUND
 . DEFAULT VALUE IS:   NONE OVRNONE  N
TABLE HNPACONT
406 128 0 ( 69) ( 1) ( 2) ( 0) 0
 . SUBTABLE HNPACODE
 . 335 335 DN 406 335
AIN Info Collected TDP: no subscribed trigger.
TABLE TRIGGRP
OFCTRIG INFOANAL
 . N11 ( DG N11DIG)$ NIL
 . PODP ( DG PODPDIG)$ NIL
```

Line to line translations (continued)

TRAVER output example for Line to line translations (continued)

```
AIN Network Busy TDP: trigger criteria met,querying the database if
network is busy.
TABLE TOFCNAME
406 335
TABLE DNINV
406 335 8692 L HOST 00 0 01 01
AIN Term Attempt TDP: no subscribed trigger.
TABLE DNATTRS
TUPLE NOT FOUND
TABLE DNGRPS
TUPLE NOT FOUND
TABLE LCASCRCN
406 P329 ( 3) MAND N
 . SUBTABLE LCASCR
 . 335 336
TABLE PFXTREAT
MAND NP Y NP UNDT

+++ TRAVER: SUCCESSFUL CALL TRACE +++



DIGIT TRANSLATION ROUTES

1 LINE                  4063358692         ST

TREATMENT ROUTES.  TREATMENT IS: GNCT
1 *OFLO
2 LKOUT
```

The following example shows the output from TRAVER when it is used to verify Line to line translations where the called number belongs to a hunt group.

Line to line translations (continued)

TRAVER output example for Line to line translations for a called number belonging to a hunt group

```
>traver l 2252136 2252164 b
TABLE LINEATTR
1 1FR NONE NT NSCR 0 418 P225 P225 NONE 0 NIL NILSFC LATA1 0 NIL NIL 00
Y AINRESGRP 0 0 $
LCABILL OFF – BILLING DONE ON BASIS OF CALLTYPE
TABLE DNATTRS
TUPLE NOT FOUND
TABLE DNGRPS
TUPLE NOT FOUND
TABLE LENFEAT
TUPLE NOT FOUND
TABLE OFCVAR
AIN_OFFICE_TRIGGRP OFCTRIG
AIN Orig Attempt TDP: no subscribed trigger.
TABLE STDPRTCT
P225 ( 1) (65021) 0
 . SUBTABLE STDPRT
WARNING: CHANGES IN TABLE STDPRT MAY ALTER OFFICE
BILLING.  CALL TYPE DEFAULT IS NP.  PLEASE REFER TO
DOCUMENTATION.
 . 225 225 L NP 0 418 225
AIN Info Collected TDP: no subscribed trigger.
TABLE TRIGGRP
OFCTRIG INFOANAL
 . N11 ( DG N11DIG)$ NIL
 . PODP ( DG PODPDIG)$ NIL
AIN Info Analyzed TDP: trigger criteria not met.
TABLE TOFCNAME
418 225
TABLE DNINV
418 225 2164 H 11 0
AIN Term Attempt TDP: no subscribed trigger.
TABLE DNATTRS
TUPLE NOT FOUND
TABLE DNGRPS
TUPLE NOT FOUND
```

Line to line translations (end)

TRAVER output example for Line to line translations for a called number belonging to a hunt group (continued)

```
TABLE HUNTGRP
11 418 2252164  DNH  N  N  N  RCVD  N  N  N  N  N  N  4 $
TABLE HUNTMEM
11    0 N  D  2252164  N
 . SUBTABLE AMAPRT
 . KEY NOT FOUND
 . DEFAULT VALUE IS:  NONE OVRNONE  N
LATA IS NIL, THEREFORE NOT AN EQUAL ACCESS CALL

+++TRAVER:SUCCESSFUL CALL TRACE+++

AIN Network Busy TDP: trigger criteria met,
querying the database if network is busy.

DIGIT TRANSLATION ROUTES

| LINE     4182252164     ST

TREATMENT ROUTES  TREATMENT IS: GNCT
1 *OFLO
4 LKOUT

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

Line to treatment translations

Ordering codes

Line to treatment translations has no ordering code.

Release applicability

TL03 and up

Prerequisites

Line to treatment translations has no prerequisites.

Description

When a call originates from a line, the associated line tables are read and interpreted. The call then enters the screening tables where digit analysis begins. If the call cannot be completed, the call routes to treatment.

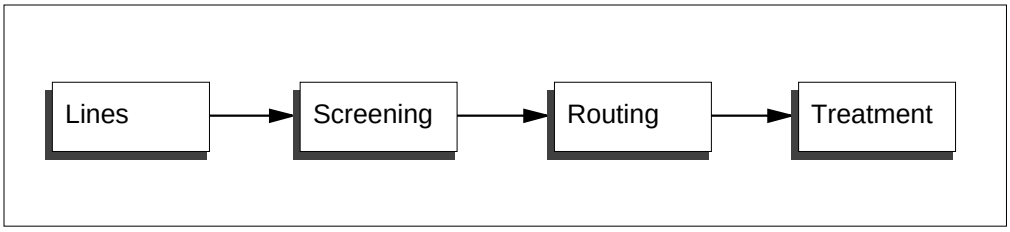
A call is routed to treatment under the following conditions:

- The operating company explicitly routes this call to treatment.
- The DMS switch detects certain conditions that result in treatment.

Operation

Line to treatment translations can be traced using a simplified block diagram, representing the major functions within the translation process, as shown in the following figure.

Call processing blocks for Line to treatment translations



The lines tables contain information about the originator of the call in a DMS-100 switch. These tables have three primary functions:

- Establish the hardware function and specify the hardware location for each line.
- Indicate the type of ringing codes used or options and features assigned to each line.
- Provide the next logical step in translation.

Line to treatment translations (continued)

The screening tables contain the information used to analyze the digits that the DMS switch receives. This screening process tests the digits dialed before continuing to the next routing stage, to determine, for example, whether this call is local or non-local.

The screening tables establish the call type based on the digits received. The three basic call types are

- operator assisted (OA)
- direct dial (DD)
- no prefix (NP)

The routing tables route the call to its final destination. If the call cannot be completed, it will route to a recorded announcement or treatment.

Translations table flow

The Line to treatment translations translations tables are described in the following list:

- Table LENLINES contains the site name assigned to the remote location (for remote lines), the LEN, the party to which the DN is assigned, the DN, the signal type, the index into table LINEATTR, and any options assigned to the line.
- Table LINEATTR defines the line attributes by indexes to other tables, as follows:
  - — the standard pretranslator to route to in table STDPRTCT, if applicable
  - — the index into table LCASCRCN and its subtable LCASCR for local call screening
  - — the serving numbering plan area (SNPA) to access in table HNPACONT
  - — the index into table CLSVSCRC and its subtable CLSVSCR for class of service screening
- Table STDPRTCT lists the standard pretranslator names.
- Subtable STDPRTCT.STDPRT is the first table indexed by received leading digits provided that the originating line attribute specifies a pretranslator name.
- Table HNPACONT lists the home NPA code subtables.
- Subtable HNPACONT.HNPACODE defines the route and treatments for each NPA.

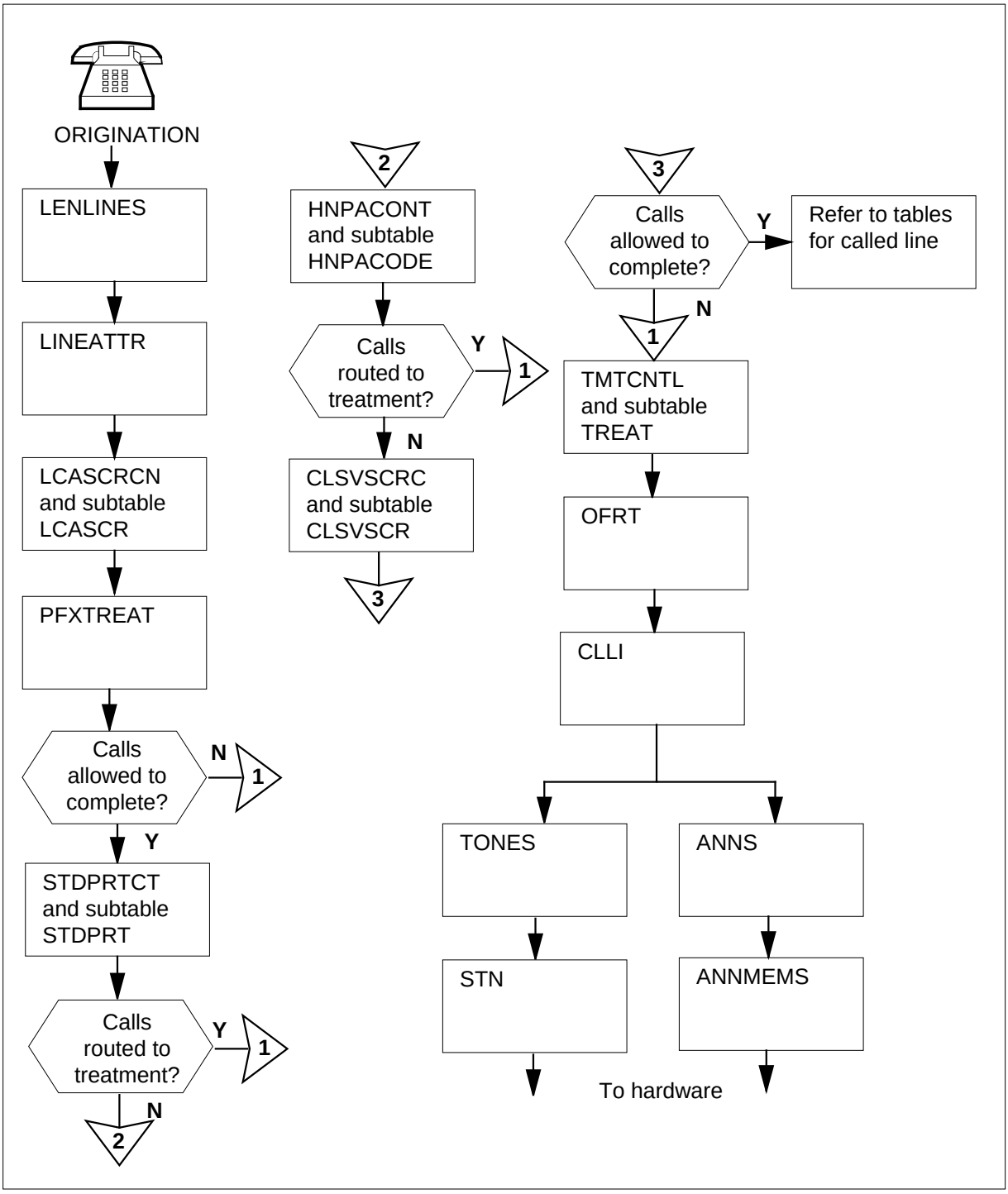
Line to treatment translations (continued)

- Table LCASCRCN is the control table for local calling area screening. It verifies the call type and screens the DN again, if applicable.
- Subtable LCASCRCN.LCASCR verifies the call type and screens the DN again, if applicable.
- Table CLSVSCRC is the control table for class of service screening, if applicable.
- Subtable CLSVSCRC.CLSVSCR screens by class of service, if applicable.
- Table PFXTREAT determines the call treatment to which a call is routed, based on the prefix selector from table LCASCRCN, the type of call from the standard pretranslator, and the local calling area status (local or toll) from subtable LCASCRCN.LCASCR.
- Table TMTCNTL is the control table for treatments (routes) applied to uncompleted calls.
- Subtable TMTCNTL.TREAT defines the tones, announcements, or states that are to be returned when a specified treatment code is encountered.
- Table OFRT lists the office routes for additional routing, if necessary.
- Table CLLI uniquely identifies the far-end of each announcement, tone, trunk group, test trunk, national milliwatt test line, and service circuit. Each treatment CLLI, except for fixed treatment CLLIs IDLE, LKOUT (lockout), and COPP (cutoff on permanent signal and partial dial), is also defined in tables TONES, STN, ANNS, and ANNMEMS.
- Table STN contains data for special tones.
- Table TONES lists specific tones and identifies the type, pattern, and duration of each tone.
- Table ANNS identifies the type, maximum number of simultaneous connections, and maximum length of each announcement.
- Table ANNMEMS identifies the hardware location for the announcement. The hardware can be a DRAM (digital recorded announcement machine) located on a maintenance trunk module (MTM), or an Audichron located on a trunk module (TM8).

The Line to treatment translations process is shown in the flowchart that follows.

Line to treatment translations (continued)

Table flow for Line to treatment translations



Line to treatment translations (continued)

The following table lists the datafill content used in the flowchart.

Datafill example for Line to treatment translations

Datafill table	Example data
LENLINES	HOST 02 0 05 08 R1 1 5703055 DT 71 $
LINEATTR	71 2FR NONE NT 807B 1 807 P570 P570 RTE3 10 NIL NILSFC NILLATA 0 NIL NIL 00 N $
STDPRTCT	P570 (1) (65021)
subtable STDPRT	8 910 D VACT
HNPACONT	418 128 0 (68) (1) (2) (0)
subtable HNPACODE	225 225 VCT BUSY
LCASCRCN	807 P570 (1) MAND N
subtable LCASCR	570 570
CLSVSCRC	418 P225 NP 2 D BUSY (0)
subtable CLSVSCR	344 345 D VACT
PFXTREAT	MAND DD N DD UNDT
TMTCNTL	LNT (47)
subtable TREAT	VACT Y T OFRT 66
OFRT	66 (S D VCA) (S D *OFLO) (S D LKOUT) $
CLLI	VCA 94 10 XX
STN	CWT 0 MTM 6 17 3X68AC 127 0
TONES	*BUSY 21 50 101010 LO 40 30
ANNS	VCA STND 25 30 14 1
ANNMEMS	VCA 0 DRAM DRA (0 MTM 2 4) $

Line to treatment translations (continued)

Limitations and restrictions

Line to treatment translations has no limitations or restrictions.

Interactions

Line to treatment translations has no functionality interactions.

Activation/deactivation by the end user

Line to treatment translations requires no activation or deactivation by the end user.

Billing

Line to treatment translations does not affect billing.

Station Message Detail Recording

Line to treatment translations does not affect Station Message Detail Recording.

Datafilling office parameters

The following table shows the office parameters used by Line to treatment translations. For more information about office parameters, refer to *Office Parameters Reference Manual.*

Office parameters used by Line to treatment translations (Sheet 1 of 2)

Table name	Parameter name	Explanation and action
OFCENG	NCCBS	Enter a number from 0 to 65 535 to specify the number of call condense blocks (CCB) required for the switching unit. A CCB is a software register associated with a call throughout its duration, containing information such as the identity of the calling and called appearances. The default value is 80.
	MAX_PROGRAMMERS	This parameter is required for a switching unit with the Call Forwarding Remote Access (CFRA) feature. It specifies the maximum number of users that can simultaneously perform a remote programming action of CFRA.
	NUMCPWAKE	This parameter is required in all switching units and specifies the maximum number of call process wakeups in the system.

Line to treatment translations (continued)

Office parameters used by Line to treatment translations (Sheet 2 of 2)

Table name	Parameter name	Explanation and action
	TFAN_OUT_MAX_NUMBER	This parameter specifies the maximum number of destination traffic separation numbers (DTSN) that can be assigned to • outgoing and two-way trunk groups in table TRKGRP • lines in table LINEATTR • network class of service numbers in table NCOS • announcements in table ANNS • tones in table TONES • special tones in table STN This parameter can be assigned values SIZE_15, SIZE_31, SIZE_64, or SIZE_127.
	TOPS_ACTS	This parameter specifies whether the TOPS Automatic Coin Toll Service ACTS feature is active in the office.
OFCVAR	AIN_OFFICE_TRIGGRP	This parameter is used to ascribe trigger behaviors on an office-wide basis. The entry in field AINGRP in table TRIGGRP is entered here. The default value is NIL.
	CWT_TONE_LENGTH	This parameter specifies the length of a solid burst of call waiting (CWT) tone, in 100 ms intervals.
	DIST_CWT_TONE	This parameter specifies the on-off durations for the special CWT distinctive cadence, in 10 ms intervals. The default value is 25 (250 ms) on and 10 (100 ms) off.

Line to treatment translations (continued)

Datafill sequence

The following table lists the tables that require datafill to implement Line to treatment translations. The tables are listed in the order in which they are to be datafilled.

Datafill tables required for Line to treatment translations (Sheet 1 of 2)

Table	Purpose of table
LENLINES	The line assignment table contains the directory number (DN), hardware location, and options associated with the calling line.
LINEATTR	The line attribute table provides pointers to screening and billing tables and assigns line attributes for digit analysis.
STDPRTCT	The standard pretranslator table lists the names of the standard pretranslator subtables.
subtable STDPRT	The standard pretranslator subtable determines the next stage of translation, based on the range of leading digits.
HNPACONT	The home numbering plan area control table lists all the home or serving area NPAs for a particular area.
subtable HNPACODE	The home numbering plan area code subtable lists the route treatment or table to which the translation routes for each of the assigned NPAs.
LCASCRCN	The local calling area screening control table lists the NPA code and local calling area name and its prefix selector.
subtable LCASCR	The local calling area screening code subtable determines from the dialed digits if the call is local or non-local.
CLSVSCRC	The class of service control table lists the serving NPA of the screening class, the screening class name, and the type of call to which screening is applicable.
subtable CLSVSCR	The class of service subtable determines, for specific digits dialed, if the call will maintain the route specified in subtable HNPACONT.HNPACODE or route to treatment.
PFXTREAT	The prefix treatment table determines the call treatment to which a call is routed.
TMTCNTL	The treatment control table defines all treatments.
subtable TREAT	The treatment subtable defines the tones, announcements, and states to be returned to the originator of the call when a specified treatment code is encountered during call translation.

Line to treatment translations (continued)

Datafill tables required for Line to treatment translations (Sheet 2 of 2)

Table	Purpose of table
OFRT	The office route table lists the sequence of tones, announcements, and states to be returned to the originator of the call when a specified treatment code is encountered during call translation.
CLLI	The common language location identifier table defines the CLLI of each tone and announcement.
STN	The special tone table lists the physical location and the maximum number of connections that can be made to each special tone.
TONES	The tones table defines tones generated at the line or trunk peripheral.
ANNS	The announcement table contains data for each analog and digital announcement assigned in the switching unit.
ANNMEMS	The announcement member table lists the assignments for each of the members assigned to the announcements listed in table ANNS.

Datafilling table LENLINES

The following table shows the datafill specific to Line to treatment translations for table LENLINES. Only those fields that apply directly to Line to treatment

Line to treatment translations (continued)

translations are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table LENLINES

Field	Subfield or refinement	Entry	Explanation and action
LEN		see subfields	Line equipment number. This field defines the physical location of the equipment that is connected to a specific telephone line. Because field LEN is common to more than 60 tables, it is documented in a single section to avoid unnecessary duplication. For a more complete description of LEN and its associated subfields, refer to the section “Common entry field LEN" in the data schema section of this document. ***Note:*** Field LEN consists of subfields SITE, FRAME, UNIT, DRAWER or LSG, SHELF, SLOT, and CIRCUIT.
PTY		R1 to R5, T1 to T5 or S	Party and ringing combination. If the line is assigned to a two-, four-, eight-, or ten-party line, enter the party, R1 to R5 or T1 to T5, of the DN assigned to the line. If the line is assigned to an individual line, enter S for single party.
LNATTIDX		0 to 31 999	Line attribute index. Enter the index into table LINEATTR.

Datafill example for table LENLINES

The following example shows sample datafill for table LENLINES.

MAP display example for table LENLINES

```
LEN                    PTY         RINGCODE    DN
                  SIGTYPE    LNATTIDX    OPTLIST

_____________________________________________________________
HOST 02 0 05 08        R1          1           5703055
                   DT          71          $
```

Line to treatment translations (continued)

Datafilling table LINEATTR

The following table shows the datafill specific to Line to treatment translations for table LINEATTR. Only those fields that apply directly to Line to treatment translations are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table LINEATTR

Field	Subfield or refinement	Entry	Explanation and action
LNATTIDX		0 to 31 999	Line attribute index. Enter the index into table LINEATTR.
SCRNCL		alphanumeric (up to 4 characters or NSCR)	Class of service screening subtable name. If screening by class of service is required, enter the name of the class of service subtable assigned to the line attribute index. If screening by class of service is not required, enter NSCR.
STS		numeric (3 digits)	Serving translation scheme. Enter the SNPA assigned to the line attribute index. The STS of an existing tuple cannot be changed.
PRTNM		alphanumeric (up to 4 characters or NPRT)	Standard pretranslator subtable name. If pretranslation of digits is required, enter the name of the standard pretranslator subtable assigned to the line attribute index. If standard pretranslation is not required, enter NPRT.
LCANAME		alphanumeric (up to 4 characters or NLCA)	Local calling area screening subtable name. If screening of local central office codes (NNX) is required, enter the name of the local calling area subtable assigned to the line attribute index. If screening of local NNX codes is not required, enter NLCA.

Datafill example for table LINEATTR

The following example shows sample datafill for table LINEATTR.

Line to treatment translations (continued)

MAP display example for table LINEATTR

```
LNATTIDX LCC  CHGCLSS COST SCRNCL LTG STS PRTNM LCANAME ZEROMPOS
TRAFSNO  MRSA   SFC     LATANM   MDI    IXNAME   DGCLNAME   FANIDIGS
      RESINF          OPTIONS
_____________________________________________________________________
71      2FR   NONE    NT   807B   1   807 P570   P570    RTE3
10      NIL    NILSFC   NILLATA  0       NIL     NIL        00
      N              $
```

Datafilling table STDPRTCT

The following table shows the datafill specific to Line to treatment translations for table STDPRTCT. Only those fields that apply directly to Line to treatment translations are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table STDPRTCT

Field	Subfield or refinement	Entry	Explanation and action
EXPRTNM		alphanumeric (up to 8 characters)	External standard pretranslator subtable name. Enter the name defined by the operating company to represent the standard pretranslator subtable.
STDPRT			Standard pretranslator. The field is an index into subtable STDPRT. ***Note:*** This field does not accept any input.

Datafill example for table STDPRTCT

The following example shows sample datafill for table STDPRTCT.

MAP display example for table STDPRTCT

```
EXPRTNM    STDPRT    AMAPRT
_____________________________________________________________
P225       (   1)    (65021)
```

Line to treatment translations (continued)

Datafilling subtable STDPRTCT.STDPRT

The following table shows the datafill specific to Line to treatment translations for subtable STDPRTCT.STDPRT. Only those fields that apply directly to Line to treatment translations are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling subtable STDPRTCT.STDPRT

Field	Subfield or refinement	Entry	Explanation and action
FROMDIGS		numeric (up to 18 digits)	From digits. Enter the digit or digits to be translated. If the entry represents a block of consecutive numbers, enter the first number in the block.
TODIGS		numeric (up to 18 digits)	To digits. If field FROMDIGS represents a block of consecutive numbers, enter the last number in the block.
PRETRTE		see subfields	Pretranslation route. This field consists of subfields PRERTSEL and TREAT.
	PRERTSEL	D	Pretranslator route selector. Enter D to route directly to a treatment.
	TREAT	alphanumeric (4 characters)	Treatment. Enter the treatment that is the route of the translation.

Datafill example for subtable STDPRTCT.STDPRT

The following example shows sample datafill for subtable STDPRTCT.STDPRT.

MAP display example for subtable STDPRTCT.STDPRT

```
FROMDIGS          TODIGS          PRETRTE
-------------------------------------------
560               560             D VACT
```

Line to treatment translations (continued)

Datafilling table HNPACONT

The following table shows the datafill specific to Line to treatment translations for table HNPACONT. Only those fields that apply directly to Line to treatment translations are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table HNPACONT

Field	Subfield or refinement	Entry	Explanation and action
STS		0 to 9 999 999	Serving numbering plan area. Enter a serving numbering plan area (SNPA) or STS code.
HNPACODE			Home numbering plan area code. This field is an index into subtable HNPACODE. ***Note:*** This field does not accept any input.

Datafill example for table HNPACONT

The following example shows sample datafill for table HNPACONT.

MAP display example for table HNPACONT

```
STS  NORTREFS  NOAMBIGC  RTEREF  HNPACODE  ATTRIB  RTEMAP
_____________________________________________________________
418  128       0         (  68)  (1)       (2)     (0)
```

Datafilling subtable HNPACONT.HNPACODE

The following table shows the datafill specific to Line to treatment translations for subtable HNPACONT.HNPACODE. Only those fields that apply directly

Line to treatment translations (continued)

to Line to treatment translations are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling subtable HNPACONT.HNPACODE

Field	Subfield or refinement	Entry	Explanation and action
FROMDIGS		numeric (3 digits)	From digits. Enter the number representing a single code or the first in a block of consecutive codes that have the same input data.
TODIGS		numeric (3 digits)	To digits. If field FROMDIGS represents a single code, enter the same single code as in field FROMDIGS. If field FROMDIGS represents the first number of a block of consecutive numbers, enter the last number in the block.
CDRRTMT		see subfield	Code type, route reference, or treatment. This field consists of subfield CD.
	CD	VCT	Code type. Enter VCT to route a call to treatment specified in refinement TMT.
	TMT	alphanumeric	Treatment. Enter the treatment that is used to index subtable TMTCNTL.TREAT.

Datafill example for subtable HNPACONT.HNPACODE

The following example shows sample datafill for subtable HNPACONT.HNPACODE.

MAP display example for subtable HNPACONT.HNPACODE

```
FROMDIGS     TODIGS            CDRRTMT
_____________________________________________________
225          225               VCT   BUSY
```

Datafilling table LCASCRCN

The following table shows the datafill specific to Line to treatment translations for table LCASCRCN. Only those fields that apply directly to Line to

treatment translations are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table LCASCRCN

Field	Subfield or refinement	Entry	Explanation and action
NPALOCNM		see subfields	NPA local calling area subtable name. This field consists of subfields STS and LCANAME.
	STS	numeric (3 digits)	Serving translation scheme. Enter an SNPA code for the trunk group.
	LCANAME	alphanumeric (up to 4 characters)	Local calling area name. Enter the key to subtable LCASCRCN.LCASCR.
LCASCR			Local calling area screening. This field is an index into subtable LCASCR. ***Note:*** This field does not accept any input.
PFXSELEC		OPTL, MAND, or alphanumeric (up to 4 characters)	Prefix selector. Enter the name of the prefix selector that is assigned to subtable LCASCR.

Datafill example for table LCASCRCN

The following example shows sample datafill for table LCASCRCN.

MAP display example for table LCASCRCN

```
NPALOCNM   LCASCR  PFXSELEC  PFSFOR10
_____________________________________________________________________
418  P225  (  3)   MAND      N
```

Datafilling subtable LCASCRCN.LCASCR

The following table shows the datafill specific to Line to treatment translations for subtable LCASCRCN.LCASCR. Only those fields that apply directly to

Line to treatment translations (continued)

Line to treatment translations are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling subtable LCASCRCN.LCASCR

Field	Subfield or refinement	Entry	Explanation and action
FROMDIGS		numeric (3 digits)	From digits. Enter the three-digit local NNX code to be screened. This number represents a single code or the first in a block of consecutive local NNX codes.
TODIGS		numeric (3 digits)	To digits. If field FROMDIGS represents the first number of a block of consecutive local NNX codes, enter the last NNX code in the block to be screened. If field FROMDIGS represents a single local NNX code, enter the NNX code entered in FROMDIGS.

Datafill example for subtable LCASCRCN.LCASCR

The following example shows sample datafill for subtable LCASCRCN.LCASCR.

MAP display example for subtable LCASCRCN.LCASCR

```
FROMDIGS      TODIGS
_____________________________________________________________
225           226
```

Datafilling table CLSVSCRC

The following table shows the datafill specific to Line to treatment translations for table CLSVSCRC. Only those fields that apply directly to Line to

Line to treatment translations (continued)

treatment translations are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table CLSVSCRC (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
NPASCTYP		see subfields	NPA screening class type. This field consists of subfields STS, SCRNCL, and TYPCALL.
	STS	numeric	Serving translation scheme. Enter the SNPA for a given trunk group or line attribute.
	SCRNCL	alphanumeric (1 to 4 digits)	Screening class. Enter the class of service screening subtable name assigned to the trunk group, line attribute, or CAMA or AMR5 billing code.
	TYPCALL	DD, OA, NP, or NL	Type of call. Enter the type of call, DD (direct dial), OA (operator assisted), NP (no prefix), or NL (nil). For Traffic Operator Position System (TOPS) calls, there can be a mixture of 0 and 1 (OA and DD) call types. Enter NL for these cases.
NORSLTS		0 to 255	Number of results. Enter the number of results required.
TMTOFRT		see subfields	Treatment or office route. This field consists of subfields SCRNSEL and RTEREFIX.
	SCRNSEL	T or D	Screening selector. Enter the screening selector T if translation routes to table OFRT. Datafill subfield RTEREFIX. Enter the screening selector D if translation routes to one of the treatments in table TREAT. Datafill subfield TREAT.
	RTEREFIX	see subfields	Route reference index. This field consists of subfields OFC_RTE and RTE_ID.
	OFC_RTE	OFRT, OFR2, OFR3, or OFR4	Office route table name. Enter the office route table name to which the translations are directed.

Line to treatment translations (continued)

Datafilling table CLSVSCRC (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
	RTE_ID	0 to 1023	Route reference table index. Enter the route index in table OFRT to which the translation routes.
	TREAT	alphanumeric	Treatment. Enter the treatment in table TREAT to which translation routes.

Datafill example for table CLSVSCRC

The following example shows sample datafill for table CLSVSCRC.

MAP display example for table CLSVSCRC

```
NPASCTYP        NORSLTS     TMTOFRT     CLSVSC

_____________________________________________________________________

418    P225 NP    2          D BUSY      (0)
```

Datafilling subtable CLSVSCRC.CLSVSCR

The following table shows the datafill specific to Line to treatment translations for subtable CLSVSCRC.CLSVSCR. Only those fields that apply directly to

Line to treatment translations (continued)

Line to treatment translations are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling subtable CLSVSCRC.CLSVSCR (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
FROMDIGS		numeric (up to 18 digits)	From digits. Enter the single code or the first in a block of consecutive codes that have the same screening route.
TODIGS		numeric (up to 18 digits)	To digits. If field FROMDIGS represents a single code, the entry in this field is the same as the entry in field FROMDIGS. If the field FROMDIGS represents the first number in a block of consecutive codes, the entry in this field is equal to the last number in the block.
TMTOFRT		see subfields	Treatment or office route. This field consists of subfields INPA and SCRNSEL.
	INPA	I or blank	Interchangeable numbering plan area. Enter I if INPA codes require separate routes for seven and ten dialed digits. If I is entered, two routes are required. The first route is used for calls with seven dialed digits, and the second route is used for calls with ten dialed digits.
	SCRNSEL	T or D	Screening selector. Enter the screening selector T if translation routes to table OFRT. Datafill subfield RTEREFIX. Enter the screening selector D if translation routes to one of the treatments in table TREAT. Datafill subfield TREAT.
	RTEREFIX	see subfields	Route reference index. This field consists of subfields OFC_RTE and RTE_ID.
	OFC_RTE	OFRT, OFR2, OFR3, or OFR4	Office route table name. Enter the office route table name to which the translations are directed. If the INPA selector I is entered in subfield INPA, two office route table names must be entered. The first office route table handles seven-digit calls and the second office route table handles ten-digit calls.

Line to treatment translations (continued)

Datafilling subtable CLSVSCRC.CLSVSCR (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
	RTE_ID	0 to 1023	Route reference table index. Enter the route index in table OFRT to which the translation routes. If the INPA selector I is entered in subfield INPA, two route reference indices must be entered. The first index applies to the first office route table entered in subfield OFC_RTE, and the second index applies to the second office route table entered in subfield OFC_RTE.
	TREAT	alphanumeric	Treatment. Enter the treatment in table TREAT to which translation routes. If the INPA selector I is entered in subfield INPA, two treatments must be entered. The first treatment handles seven-digit calls, and the second treatment handles ten-digit calls.

Datafill example for subtable CLSVSCRC.CLSVSCR

The following example shows sample datafill for subtable CLSVSCRC.CLSVSCR.

MAP display example for subtable CLSVSCRC.CLSVSCR

```
FROMDIGS    TODIGS      TMTOFRT
_____________________________________________________________
344         345         D    VACT
```

Datafilling table PFXTREAT

The following table shows the datafill specific to Line to treatment translations for table PFXTREAT. Only those fields that apply directly to Line to treatment

translations are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table PFXTREAT

Field	Subfield or refinement	Entry	Explanation and action
TYPLCLCD		see subfields	Type of call and local code. This field consists of subfields PFXSELEC and TYPCALL.
	PFXSELEC	OPTL, MAND, or alphanumeric (up to 4 characters)	Prefix selector. Enter the prefix selector assigned to the prefix treatment.
	TYPCALL	DD, NP, OA, or NL	Type of call. Enter either DD (direct dial), NP (no prefix), OA (operator assisted), or NL (nil) for the type of call. For Traffic Operator Position System (TOPS) calls, there can be a mixture of 0 and 1 (OA and DD) call types. Enter NL for these cases.
TREAT		alphanumeric (up to 4 characters)	Treatment. Enter the treatment that is the route of the translation.

Datafill example for table PFXTREAT

The following example shows sample datafill for table PFXTREAT.

MAP display example for table PFXTREAT

```
TYPLCLCD                    UPDTYPCA    TREAT
_____________________________________________________________
MAND   DD   N              DD          UNDT
```

Datafilling table TMTCNTL

The following table shows the datafill specific to Line to treatment translations for table TMTCNTL. Only those fields that apply directly to Line to treatment

Line to treatment translations (continued)

translations are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table TMTCNTL

Field	Subfield or refinement	Entry	Explanation and action
EXTTMTNM		LNT	Extended treatment name. Enter LNT.

Datafill example for table TMTCNTL

The following example shows sample datafill for table TMTCNTL.

MAP display example for table TMTCNTL

```
EXTTMTNM     TREAT
_____________________________________________________________
LNT          ( 49)
```

Datafilling subtable TMTCNTL.TREAT

The following table shows the datafill specific to Line to treatment translations for subtable TMTCNTL.TREAT. Only those fields that apply directly to Line to treatment translations are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling subtable TMTCNTL.TREAT (Sheet 1 of 2)

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 for a trunk or line message 138 printout each time translation is routed to a treatment. Otherwise enter N.
FSTRTE		see subfields	First route. This field consists of subfields FSTRTSEL, CLLI, TABID, and KEY.

Line to treatment translations (continued)

Datafilling subtable TMTCNTL.TREAT (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
	FSTRTSEL	S or T	First route selector. Enter S if the treatment routes to a CLLI listed in table TONES, and datafill subfield CLLI. Enter T if the treatment routes to table OFRT. Datafill subfields TABID and KEY.
	CLLI	alphanumeric (1 to 16 characters)	Common language location identifier. Enter the CLLI of the tone to which translation is routed.
	TABID	OFRT, OFR2, OFR3, or OFR4	Table name. Enter the office route table name.
	KEY	1 to 1023	Key. Enter the index into the office route table that defines the route list for the treatment.

Datafill example for subtable TMTCNTL.TREAT

The following example shows sample datafill for subtable TMTCNTL.TREAT. In the first tuple, the call routes to table OFRT. In the second tuple, the call routes to a tone.

Note: The SCATMT must be added to tables ANNS and ANNMEMS before datafilling table TMTCNTL and its subtables LNT and OFFTREAT.

MAP display example for subtable TMTCNTL.TREAT

```
TREATMT     LOG     FSTRTE
_____________________________________________________________________
BUSY        N       T OFRT 80
EMR1        Y       S  *TST3
```

Datafilling table OFRT

The following table shows the datafill specific to Line to treatment translations for table OFRT. Only those fields that apply directly to Line to treatment

Line to treatment translations (continued)

translations are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table OFRT

Field	Subfield or refinement	Entry	Explanation and action
RTE		1 to 1023	Route reference index. Enter the route reference number assigned to the route list.
RTELIST		see subfield	Route list. This field consists of subfield RTESEL and refinements RTESEL, CONNTYPE, CLLI, and ROUTATTR_INDEX. Enter $ to signify the end of the vector.
	RTESEL	S or SX	Route selector. Enter S for standard and datafill refinements CONNTYPE and CLLI. Enter SX for expanded standard and datafill refinements CLLI and ROUTATTR_INDEX.
	CONNTYPE	D	Connection type. This field is not used by system logic. Enter D to satisfy table control.
	CLLI	alphanumeric (1 to 16 characters)	Common language location identifier. Enter the code in table CLLI to which translation is routed.
	ROUTATTR_INDEX	alphanumeric (1 to 16 characters)	Route attribute index. Enter the index in table ROUTATTR that contains the expanded routing information to be applied to the call.

Datafill example for table OFRT

The following example shows sample datafill for table OFRT.

MAP display example for table OFRT

```
RTE         RTELIST
_____________________________________________________________
165         (  S   D   VCA) (S D T120) $
```

Line to treatment translations (continued)

Datafilling table CLLI

The following table shows the datafill specific to Line to treatment translations for table CLLI. Only those fields that apply directly to Line to treatment translations are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table CLLI

Field	Subfield or refinement	Entry	Explanation and action
CLLI		alphanumeric (1 to 16 characters)	Common language location identifier. Enter a CLLI code to uniquely identify the far end of each announcement, tone, or trunk group.

Datafill example for table CLLI

The following example shows sample datafill for table CLLI.

MAP display example for table CLLI

```
CLLI              ADNUM       TRKGRSIZ        ADMININF
-------------------------------------------------------
BUSY              149         0               BUSY_TONE
```

Datafilling table STN

The following table shows the datafill specific to Line to treatment translations for table STN. Only those fields that apply directly to Line to treatment translations are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table STN (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
SK		see subfields	Special tone key. This field consists of subfields TONE and MEMBER.
	TONE	alphanumeric (1 to 16 characters)	Tone. Enter the fixed code (TONE_INDEX) assigned to the tone trunk circuit in table CLLI.

Line to treatment translations (continued)

Datafilling table STN (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
	MEMBER	0 to 999	Member number. Enter the member number assigned to the tone trunk circuit.
MAXCONN		0 to 255	Maximum connections. Enter the maximum number of simultaneous connections that are allowed to be made to the tone trunk circuit.

Datafill example for table STN

The following example shows sample datafill for table STN.

MAP display example for table STN

```
SK       TMTYPE  TMNO  TMCKTNO  CARDCODE  MAXCONN  TRAFSNO
_____________________________________________________________
CWT  0   MTM     6     17       3X68AC    127      0
```

Datafilling table TONES

The following table shows the datafill specific to Line to treatment translations for table TONES. Only those fields that apply directly to Line to treatment

Line to treatment translations (continued)

translations are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table TONES (Sheet 1 of 2)

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.
TRAFSNO		0 to 127	Traffic separation number. If the switching unit has the optional Traffic Separation software feature, enter the outgoing traffic separation number assigned to the tone. If traffic separation is not required, enter 0. The range of values for the outgoing traffic separation number depends on office parameter TFAN_OUT_MAX_NUMBER in table OFCENG.
SEGTIME		10 to 100	Segment time. Enter the duration of one segment of tone specified in multiples of 10 ms (for example: 25 = 250 ms).
TONEPATT		numeric (up to16 digits)	Tone pattern. Enter a string of up to 16 digits 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

Line to treatment translations (continued)

Datafilling table TONES (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
TONETYP		HI, HZ400_5DB, or LO	Tone type. Enter the type of tone generator required. Since some of the tone generators listed are mutually exclusive, only a subset of these tone generators can be found in a given software load. Tone generator types other than those described are not valid entries. Enter HI for high tone. Enter HZ400_5DB for a tone generated at 400 Hz at -5 dBm. Enter LO for low tone.
MAXDURN		1 to 255	Maximum duration. Enter the maximum time in seconds that a call condense block can be attached. The maximum time duration for silent tone is 10 s.

Datafill example for table TONES

The following example shows sample datafill for table TONES.

MAP display example for table TONES

```
CLLI   TRAFSNO SEGTIME TONEPATT TONETYP MAXDURN MAXCONN
_____________________________________________________
*BUSY 21       50       101010   LO       40       30
```

Datafilling table ANNS

The following table shows the datafill specific to Line to treatment translations for table ANNS. Only those fields that apply directly to Line to treatment

Line to treatment translations (continued)

translations are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table ANNS (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
CLLI		alphanumeric (1 to 16 characters)	Announcement CLLI key. Enter the code that represents the announcement in table CLLI.
ANTYPE		ACTS, AIN, AIS, AOSSVR, CFRA, CLASS, CNAL, CNALT, CNAT, DMCT, MCCS, NFRA, SLEENG, SLEFRE, SPP, STND, SACB, TOPSVR	Announcement type. Enter the announcement type as follows: • ACTS for Automatic Coin Toll Service • AIN for a given DMS switch user interface for each customer group • AIS for Automatic Intercept System announcement if the switch has the AIS feature • AOSSVR for AOSS Voice Response • CFRA for Call Forwarding Remote Access announcement • CLASS for Custom Local Area Signaling Services announcement • CNAL for Calling Number Announcement playback to a line • CNALT for Calling Number Announcement playback to a line and over a trunk to a loudspeaker • CNAT forCalling Number Announcement playback over a trunk to a loudspeaker • DMCT for Denied Malicious Call Termination • MCCS for Mechanized Calling Card Announcement • NFRA for Network facility Remote Access • SLEENG for Screening List Editing English

Line to treatment translations (continued)

Datafilling table ANNS (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
ANTYPE (continued)			Announcement type (continued). Enter the announcement type as follows: • SLEFRE for Screening List Editing French • SPP for Station Programmable PIN (Personal Identification Number) • STND for Standard Announcement • SACB for Subscriber Activated Call Blocking • TOPSVR for TOPS Voice Response ***Note:*** Office parameter TOPS_ACTS must be set to Y in table OFCENG.
MAXCONN		1 to 255	Maximum connections. Enter the maximum number of simultaneous connections that are permitted on the announcement.
CYTIME		1 to 18 or 0	Cycle times. Enter the time, in seconds, for one announcement cycle on one channel. ***Note 1:*** If your office is equipped with a Cook or equivalent announcement machine and table AUDIO is datafilled as ANNS, field CYTIME is changed to 0. This allows flexible announcement timing. ***Note 2:*** The cycle time for an Audichron is 0 due to the variable length announcement feature on Audichron. By setting the value of this field to 0, the length of the announcement is always matched.
MAXCYC		1 to 255	Maximum cycles. Enter the maximum number of times the complete announcement is heard before the call is advanced to the next route in the route list.

Datafill example for table ANNS

The following example shows sample datafill for table ANNS.

Line to treatment translations (continued)

MAP display example for table ANNS

```
CLLI ANTYPE TRAFSNO MAXCONN CYTIME MAXCYC
_____________________________________________________________
VCA  STND   25      30      14     1
```

Datafilling table ANNMEMS

The following table shows the datafill specific to Line to treatment translations for table ANNMEMS. Only those fields that apply directly to Line to treatment translations are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table ANNMEMS

Field	Subfield or refinement	Entry	Explanation and action
ANNMEM		see subfields	Announcement member key. This field consists of subfields ANN and MEMBER.
	ANN	alphanumeric (1 to 16 characters)	Announcement. Enter the code that represents the announcement group in table CLLI.
	MEMBER	0 to 255	Member. If the trunk circuit is the first in the trunk list for the announcement member, enter the number assigned to the member. If digital, each announcement member can be assigned up to eight trunk circuits. If analog, each announcement can be assigned up to two trunk circuits.
HDWTYPE		AUDICHRON or DRAM	Hardware type. Enter AUDICHRON if the first entry for the member and hardware type is analog. Enter DRAM if the recorded announcement member is digital.

Datafill example for table ANNMEMS

The following example shows sample datafill for table ANNMEMS.

Line to treatment translations (continued)

MAP display example for table ANNMEMS

```
ANNMEM    HDWTYPE CARD   MEMINFO
_____________________________________________________________
VCA  0    DRAM    DRA    (0 MTM 2 4) $
```

Translation verification tools

The following example shows the output from TRAVER when it is used to verify Line to treatment translations.

Line to treatment translations (end)

TRAVER output example for Line to treatment translations

```
>traver l 5703055 8194506666 b
TABLE LINEATTR
71 2FR NONE NT 807B 1 807 P570 P570 RTE3 10 NIL NILSFC NILLATA 0 NIL NIL
00 N $
LCABILL OFF – BILLING DONE ON BASIS OF CALLTYPE
TABLE DNATTRS
TUPLE NOT FOUND
TABLE DNGRPS
TUPLE NOT FOUND
Originator is not an AIN agent, therefore AIN info is not processed.
TABLE STDPRTCT
P570 ( 1) (65021) 0
 . SUBTABLE STDPRT
WARNING: CHANGES IN TABLE STDPRT MAY ALTER OFFICE
BILLING.  CALL TYPE DEFAULT IS NP.  PLEASE REFER TO
DOCUMENTATION.
 . 8 910 D VACT
 . SUBTABLE AMAPRT
 . KEY NOT FOUND
 . DEFAULT VALUE IS:   NONE OVRNONE  N
TABLE TMTCNTL
LNT ( 47)
 . SUBTABLE TREAT
 . VACT Y T OFRT 66
 . TABLE OFRT
 .   66 S D VCA
 .      S D *OFLO
 .      S D LKOUT
 . EXIT TABLE OFRT

+++ TRAVER: SUCCESSFUL CALL TRACE +++


TREATMENT ROUTES.  TREATMENT IS: VACT
1 VCA
2 *OFLO
3 LKOUT

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

SERVORD

Line to treatment translations does not use SERVORD.

Line to trunk translations

Ordering codes

Line to trunk translations has no ordering codes.

Release applicability

TL03 and up

Prerequisites

Line to trunk translations has no prerequisites.

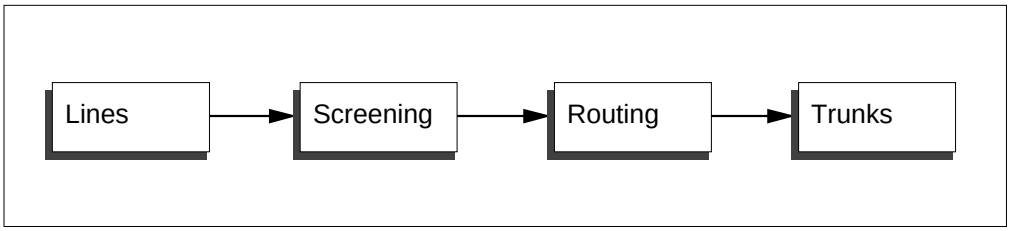
Description

When a call originates from a line, the associated line tables are read and interpreted. The call then enters the screening tables where digit analysis begins. After some general pre-screening or pre-translation is performed, the call may progress into more detailed screening based on NPA/NXX digits to determine the path into the designated routing tables for defining the destination trunk for termination of the call.

Operation

Line to trunk translations can be traced using a simplified block diagram, representing the major functions within the translation process, as shown in the following figure.

Call processing blocks for Line to trunk translations



The lines tables contain information about the originator of the call in a DMS-100 switch. These tables have three primary functions:

- establish the hardware function and specify the hardware location for each line.
- indicate the type of ringing codes used or options and features assigned to each line.
- provide the next logical step in translation.

The screening tables contain the information used to analyze the digits that the DMS switch receives. This screening process tests the digits dialed before

Line to trunk translations (continued)

continuing to the next routing stage, to determine, for example, whether this call is local or non-local.

The screening tables establish the call type based on the digits received. The three basic call types are:

- operator assisted (OA)
- direct dial (DD)
- no prefix (NP)

The routing tables route the calls to their final destination. The information found in these tables dictates how and where a call will be completed, or if the call will route to a recorded announcement or treatment.

The trunking tables contain detailed information about trunks originating and terminating in the DMS. Each trunk connected to the office is represented by entries in trunk tables.

Translations table flow for Line to trunk translations

As soon as a line goes off-hook, the associated line concentrating module (LCM) informs the switch that the line went off hook and provides the line equipment number (LEN). The originating line has its LEN stored in table LENLINES. From the data stored in table LENLINES, the switch determines the directory number (DN), party, and options of the line. If there are features associated with the line, the switch accesses table LENFEAT to determine what these features are.

Field LNATTIDX in table LENLINES points to a tuple in table LINEATTR. The entries in this tuple determine the following:

- the Standard Pretranslator to route to in table STDPRTCT
- the local call area (LCA) subtable to use for local call checking
- the serving numbering plan area (SNPA) to access in table HNPACONT

Verification of the call type is done in table LCASCRCN and its subtable LCASCR and in table PFXTREAT.

The call then routes to table STDPRTCT and its subtable STDPRT. At this point, call processing will continue either through table HNPACONT and its subtables or through table OFRT. The pretranslator route selector entered in subfield PRERTSEL of subtable STDPRT determines how call processing progresses. Information on the valid values for this subfield can be located in the data schema section.

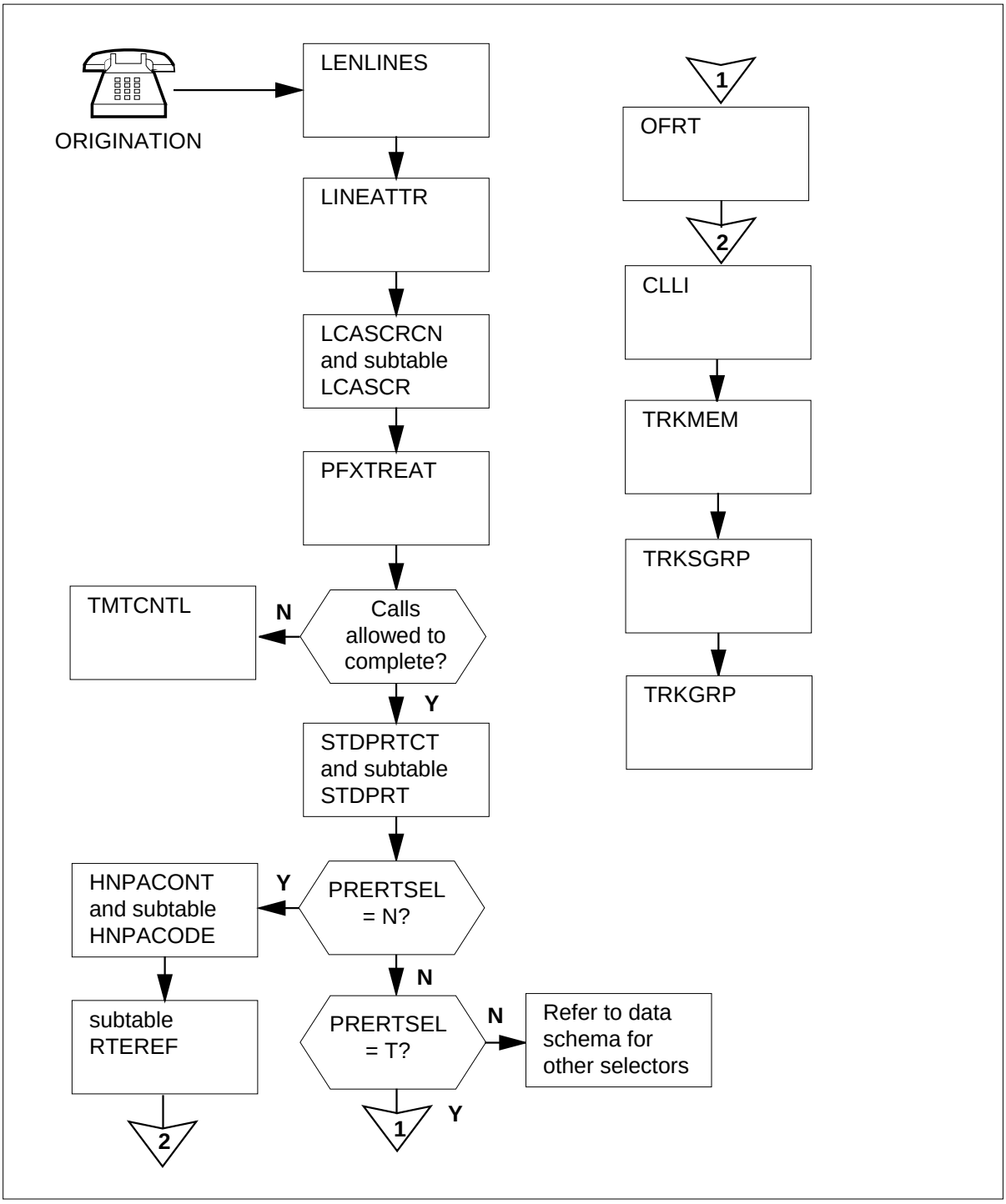
Line to trunk translations (continued)

The common language location identifier (CLLI) of the trunk datafilled in subtable HNPACONT.RTEREF or table OFRT is listed in table CLLI. Trunk group type and screening information are provided in table TRKGRP. Table TRKSGRP defines the signaling and control information and table TRKMEM contains the physical location of each trunk member.

The Line to trunk translations process is shown in the flowchart that follows.

Line to trunk translations (continued)

Table flow for Line to trunk translations



Line to trunk translations (continued)

The following table lists the datafill content used in the flowchart for a call routed between a line and a trunk using table OFRT. In the example

- NPA of calling line = 807
- calling line DN = 5701011
- called line DN = 9601017
- trunk = S5BBB807OPTCA
- NPA of called line = 705
- pretranslator route selector = T

Datafill example for Line to trunk translations routing using table OFRT

Datafill table	Example data
LENLINES	HOST 14 1 01 02 S 0 5701011 DT 7 $
LINEATTR	7 1FR NONE NT NSCR 1 807 P570 P570 RTE3 10 NIL NILSFC NILLATA 0 NIL NIL 00 N $
LCASCRCN	807 P570 (1) MAND N
subtable LCASCR	570 570
PFXTREAT	MAND DD N DD UNDT
STDPRTCT	P570 (1) (65021)
subtable STDPRT	1571 17 T DD 1 OFRT 165 7 11 NONE
OFRT	165 (N D S5BBB807OPTCA 0 N N) $
CLLI	S5BBB807OPTCA 356 80 S5BBB_TO_S5807_OG_PTS_CAMA
TRKMEM	S5BBB807OPTCA 29 0 DTC 10 7 10
TRKSGRP	S5BBB807OPTCA 0 DS1SIG STD OG MF DD 7 0 NO NO N N Y 120 UNEQ M
TRKGRP	S5BBB807OPTCA OC 0 NPDGP NCRT CA MIDL WK N N OG $

Line to trunk translations (continued)

The following table lists the datafill content used in the flowchart for a call routed between a line and a trunk using table HNPACONT and its subtables. In the example

- NPA of calling line = 807
- calling line DN = 5663000
- called line DN = 9601017
- trunk = S5807705TPTIT
- NPA of called line = 705
- pretranslator route selector = N

Datafill example for Line to trunk translations routing using table HNPACONT (Sheet 1 of 2)

Datafill table	Example data
LENLINES	HOST 04 0 00 19 S 0 5663000 DT 8 $
LINEATTR	8 1FR NONE NT NSCR 2 807 P566 P566 RTE1 10 NIL NILSFC NILLATA 0 NIL NIL 00 N $
LCASCRCN	807 P566 (2) MAND N
subtable LCASCR	566 566
PFXTREAT	MAND DD N DD UNDT
STDPRTCT	P566 (1) (65021)
subtable STDPRT	11 1806 N DD 1 NA
HNPACONT	807 201 1 ((32) (1) (14) (0) 0
subtable HNPACODE	705960 705960 FRTE 21
subtable RTEREF	21 N D S5807705TPTIT 3 N N
CLLI	S5807705TPTIT 228 40 S5807_TO_S5705_2W_PTS_INTERTOL
TRKMEM	S5807705TPTIT 6 0 DTC 5 9 7

Line to trunk translations (continued)

Datafill example for Line to trunk translations routing using table HNPACONT (Sheet 2 of 2)

Datafill table	Example data
TRKSGRP	S5807705TPTIT 0 DS1SIG STD 2W MF DD N 5 5 MF DD 7 0 N NO NO N N Y M 70 UNEQ
TRKGRP	S5807705TPTIT IT 0 NPDGP NCIT 2W IT ASEQ 705 P807 NSCR 807 000 N N $

Limitations and restrictions

The Line to trunk translations process has no limitations or restrictions.

Billing

For information on billing, refer to the Bellcore format AMA translations section of this document.

Datafilling office parameters

The following table shows the office parameters used by Line to trunk translations. For more information about office parameters, refer to *Office Parameters Reference Manual.*

Office parameters used by Line to trunk translations

Table name	Parameter name	Explanation and action
OFCENG	ACTIVE_DN_SYSTEM	This parameter specifies the type of DNs that can be used in an office. If this parameter is set to NORTH_AMERICAN, the directory number must use the form NPA-NXX-XXXX. If this parameter is set to UNIVERSAL, the directory number may vary in length.
	AIN_ACTIVE	This parameter controls the activation of the Advanced Intelligent Network (AIN). Enter Y to activate AIN software. Enter N to deactivate AIN software. If this parameter is set to N, parameter AIN_OFFICE_TRIGGRP in table OFCVAR is disregarded.
OFCVAR	AIN_OFFICE_TRIGGRP	This parameter is used to subscribe trigger behaviors on an office-wide basis. The entry in field AINGRP in table TRIGGRP is entered here. The default value is NIL.

Line to trunk translations (continued)

Datafill sequence

The following table lists the tables that require datafill to implement Line to trunk translations for the calling line. The tables are listed in the order in which they are to be datafilled.

Datafill tables required for Line to trunk translations for the calling line

Table	Purpose of table
HNPACONT	The home numbering plan area control table lists all the home or serving area NPAs for a particular area.
subtable HNPACODE	The home numbering plan area code subtable lists the route treatment or table to which the translation routes for each of the assigned NPAs.
STDPRTCT	The standard pretranslator table lists the names of the standard pretranslator subtables.
subtable STDPRT	The standard pretranslator subtable determines the next stage of translation, based on the range of leading digits.
LCASCRCN	The local calling area screening control table lists the NPA code and local calling area name and its prefix selector.
subtable LCASCR	The local calling area screening code subtable determines from the dialed digits if the call is local or non-local.
PFXTREAT	The prefix treatment table determines the call treatment to which a call is routed.
LINEATTR	The line attribute table provides pointers to screening and billing tables and assigns line attributes for digit analysis.
LENLINES	The line assignment table contains the DN, hardware location, and options associated with the calling line.

The following table lists the tables that require datafill to implement Line to trunk translations for the called trunk. The tables are listed in the order in which they are to be datafilled.

Datafill tables required for Line to trunk translations for the trunk (Sheet 1 of 2)

Table	Purpose of table
CLLI	The common language location identifier table lists the name that uniquely identifies each trunk group, tone, or announcement.
TRKGRP	The trunk group table contains customer-defined data associated with each trunk group.

Line to trunk translations (continued)

Datafill tables required for Line to trunk translations for the trunk (Sheet 2 of 2)

Table	Purpose of table
TRKSGRP	The trunk subgroup table specifies supplementary information for each trunk group.
TRKMEM	The trunk member table gives the physical location of each trunk assigned to one of the trunk groups.
OFRT	The office route table lists up to eight alternate routes in order of preference. This table lists tones or announcements for calls requiring treatment.

Datafilling table HNPACONT

The following table shows the datafill specific to Line to trunk translations for table HNPACONT. Only those fields that apply directly to Line to trunk translations are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table HNPACONT

Field	Subfield or refinement	Entry	Explanation and action
STS		0 to 9 999 999	Serving translation scheme. Enter the serving numbering plan area (SNPA) or STS code.
HNPACODE		see note	Home numbering plan area code. This field is an index into subtable HNPACODE. ***Note:*** This field does not accept any input.

Datafill example for table HNPACONT

The following example shows sample datafill for table HNPACONT.

MAP display example for table HNPACONT

```
STS  NORTREFS  NOAMBIGC  RTEREF  HNPACODE  ATTRIB  RTEMAP
_____________________________________________________________
807  201       1         (  31)  (  1)     ( 14)   (  0)
```

Line to trunk translations (continued)

Datafilling subtable HNPACONT.HNPACODE

The following table shows the datafill specific to Line to trunk translations for subtable HNPACONT.HNPACODE. Only those fields that apply directly to Line to trunk translations are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling subtable HNPACONT.HNPACODE

Field	Subfield or refinement	Entry	Explanation and action
FROMDIGS		numeric (3 digits)	From digits. Enter the number representing a single code or the first in a block of consecutive codes that have the same input data.
TODIGS		numeric (3 digits)	To digits. If field FROMDIGS represents a single code, enter the same single code as in field FROMDIGS. If field FROMDIGS represents the first number of a block of consecutive numbers, enter the last number in the block.
CDRRTMT		see subfield	Code type, route reference or treatment. This field consists of subfield CD.
	CD	FRTE, HRTE, or LRTE	Code type. Enter FRTE if the call routes to a foreign numbering plan area (FNPA) that requires three-digit translation. Enter HRTE if the call routes to a non-local route within the home numbering plan (HNPA). Enter LRTE if the call routes to a local route. Datafill refinement RR.
	RR	1 to 1023	Route reference index. Enter the route reference index of the route list in subtable HNPACONT.RTEREF.

Datafill example for subtable HNPACONT.HNPACODE

The following example shows sample datafill for subtable HNPACONT.HNPACODE.

Line to trunk translations (continued)

MAP display example for subtable HNPACONT.HNPACODE

```
FROMDIGS      TODIGS            CDRRTMT
_____________________________________________
705960        705960            FRTE   21
```

Datafilling subtable HNPACONT.RTEREF

The following subtable shows the datafill specific to Line to trunk translations for subtable HNPACONT.RTEREF. Only those fields that apply directly to Line to trunk translations are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling subtable HNPACONT.RTEREF

Field	Subfield or refinement	Entry	Explanation and action
RTE		1 to 1023, blank	Route reference index. Enter the route reference number assigned to the route list.
RTELIST		see subfield	Route list. This field consists of a vector of up to nine multiples of subfield RTESEL and refinements CONNTYPE, CLLI, DELDIGS, PRFXDIGS, and CANCNORC. Enter $ to signify the end of the vector.
	RTESEL	N	Route selector. Enter N if the outgoing or two-way trunk group is intertoll. Enter T if translation routes to table OFRT.
	CLLI	alphanumeric (1 to 16 characters)	Common language location identifier. Enter the code in table CLLI to which translation is routed.

Datafill example for subtable HNPACONT.RTEREF

The following example shows sample datafill for subtable HNPACONT.RTEREF.

MAP display example for subtable HNPACONT.RTEREF

```
RTE       RTELIST
-------------------------------------------------------
21        (  N     D    S5807705TPTIT  3     N N) $
```

Datafilling table STDPRTCT

The following table shows the datafill specific to Line to trunk translations for table STDPRTCT. Only those fields that apply directly to Line to trunk translations are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table STDPRTCT

Field	Subfield or refinement	Entry	Explanation and action
EXPRTNM		alphanumeric (up to 8 characters)	External standard pretranslator subtable name. Enter the name defined by the operating company to represent the standard pretranslator subtable.
STDPRT		see note	Standard pretranslator. The field is an index into subtable STDPRT. ***Note:*** This field does not accept any input.

Datafill example for table STDPRTCT

The following example shows sample datafill for table STDPRTCT.

MAP display example for table STDPRTCT

```
EXPRTNM    STDPRT    AMAPRT
_____________________________________________________
P566       (   1)   (65021)
```

Line to trunk translations (continued)

Datafilling subtable STDPRTCT.STDPRT

The following table shows the datafill specific to Line to trunk translations for subtable STDPRTCT.STDPRT. Only those fields that apply directly to Line to trunk translations are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling subtable STDPRTCT.STDPRT (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
FROMDIGS		numeric (up to 18 digits)	From digits. Enter the digit or digits to be translated. If the entry represents a block of consecutive numbers, enter the first number in the block.
TODIGS		numeric (up to 18 digits)	To digits. If field FROMDIGS represents a block of consecutive numbers, enter the last number in the block.
PRETRTE		see subfield	Pre-translation route. This field consists of subfield PRERTSEL and its refinements TYPECALL, NOPREDIG, TRANSYS, and POS.
	PRERTSEL	N, S, or T	Pre-translator route selector. Enter N if translation is to route to table HNPACONT. Enter S if translation is to route directly to table CLLI. Enter T if translations is to route to a test line or table OFRT. Refer to the data schema section of this document for more information on pretranslator route selectors.
	TYPCALL	DD, OA, NP, or NL	Type of call. Enter the type of call: DD (direct dial), NP (no prefix), OA (operator assisted), or NL (nil). For Traffic Operator Position System (TOPS) calls, there can be a mixture of 0 and 1 (OA and DD) call types. Enter NL for these cases.

Datafilling subtable STDPRTCT.STDPRT (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
	NOPREDIG	0 to 7	Number of prefix digits. Enter the number of digits that are to be interpreted as prefix digits.
	TRANSYS	NA, or IN	Translation system. Enter IN if the translation routes to international translations (on a local and toll combined switching unit only). Enter NA if the translation routes to national translations.

Datafill example for subtable STDPRTCT.STDPRT

The following example shows sample datafill for subtable STDPRTCT.STDPRT.

MAP display example for subtable STDPRTCT.STDPRT

```
FROMDIGS            TODIGS          PRETRTE
_____________________________________________________
11                  1806            N  DD  1  NA
```

Datafilling table LCASCRCN

The following table shows the datafill specific to Line to trunk translations for table LCASCRCN. Only those fields that apply directly to Line to trunk translations are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table LCASCRCN (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
NPALOCNM		see subfields	NPA local calling area subtable name. This field consists of subfields STS and LCANAME.
	STS	numeric (3 digits)	Serving translation scheme. Enter a serving NPA code for the trunk group.

Line to trunk translations (continued)

Datafilling table LCASCRCN (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
	LCANAME	alphanumeric (up to 4 characters)	Local calling area name. Enter the key to subtable LCASCRCN.LCASCR.
LCASCR		see note	Local calling area screening. This field is an index into subtable LCASCR. ***Note:*** This field does not accept any input.
PFXSELEC		OPTL, MAND or alphanumeric (up to 4 characters)	Prefix selector. Enter the name of the prefix selector that is assigned to subtable LCASCR.

Datafill example for table LCASCRCN

The following example shows sample datafill for table LCASCRCN.

MAP display example for table LCASCRCN

```
NPALOCNM    LCASCR   PFXSELEC   PFSFOR10
_____________________________________________________________________
418   P225   (   3)   MAND       N
```

Datafilling subtable LCASCRCN.LCASCR

The following table shows the datafill specific to Line to trunk translations for subtable LCASCRCN.LCASCR. Only those fields that apply directly to Line

to trunk translations are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling subtable LCASCRCN.LCASCR

Field	Subfield or refinement	Entry	Explanation and action
FROMDIGS		numeric (3 digits)	From digits. Enter the three-digit local NNX code. This number represents a single code or the first in a block of consecutive local NNX codes.
TODIGS		numeric (3 digits)	To digits. If field FROMDIGS represents the first number of a block of consecutive local NNX codes, enter the last NNX code in the block. If field FROMDIGS represents a single local NNX code, enter the NNX code entered in FROMDIGS

Datafill example for subtable LCASCRCN.LCASCR

The following example shows sample datafill for subtable LCASCRCN.LCASCR.

MAP display example for subtable LCASCRCN.LCASCR

```
FROMDIGS      TODIGS
_____________________________________________________________
566           566
```

Datafilling table PFXTREAT

The following table shows the datafill specific to Line to trunk translations for table PFXTREAT. Only those fields that apply directly to Line to trunk

Line to trunk translations (continued)

translations are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table PFXTREAT

Field	Subfield or refinement	Entry	Explanation and action
TYPLCLCD		see subfields	Type of call and local code. This field consists of subfields PFXSELEC, TYPCALL, and LOCCODE.
	PFXSELEC	OPTL, MAND or alphanumeric (up to 4 characters)	Prefix selector. Enter the prefix selector assigned to the prefix treatment.
	TYPCALL	DD, NP, OA, or NL	Type of call. Enter either DD (direct dial), NP (no prefix), OA (operator assisted), or NL (nil) for the type of call. For Traffic Operator Position System (TOPS) calls, there can be a mixture of 0 and 1 (OA and DD) call types. Enter NL for these cases.
	LOCCODE	Y or N	Local code. Enter Y if the record is for a local call. Enter N if the prefix treatment record is for a non-local call.
UPDTYPCA		DD, NP, OA, or NL	Type of call. Enter either DD (direct dial), NP (no prefix), OA (operator assisted), or NL (nil) for the type of call. For Traffic Operator Position System (TOPS) calls, there can be a mixture of 0 and 1 (OA and DD) call types. Enter NL for these cases.

Datafill example for table PFXTREAT

The following example shows sample datafill for table PFXTREAT.

Line to trunk translations (continued)

MAP display example for table PFXTREAT

```
TYPLCLCD                    UPDTYPCA    TREAT
-------------------------------------------------------
MAND   DD   N               DD          UNDT
```

Datafilling table LINEATTR

The following table shows the datafill specific to Line to trunk translations for table LINEATTR. Only those fields that apply directly to Line to trunk translations are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table LINEATTR (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
LNATTIDX		0 to 31 999	Line attribute index. Enter the index into table LINEATTR.
SCRNCL		alphanumeric (up to 4 characters or NSCR)	Class of service screening subtable name. If screening by class of service is required, enter the key to the class of service subtable assigned to the line attribute index. If screening by class of service is not required, enter NSCR.
STS		numeric (3 digits)	Serving translation scheme. Enter the serving numbering plan area (NPA) assigned to the line attribute index. The serving translation scheme (STS) of an existing tuple cannot be changed.

Line to trunk translations (continued)

Datafilling table LINEATTR (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
PRTNM		alphanumeric (up to 4 characters or NPRT)	Standard pre-translator subtable name. If pre-translation of digits is required, enter the key to the standard pre-translator subtable assigned to the line attribute index. If standard pre-translation is not required, enter NPRT.
LCANAME		alphanumeric (up to 4 characters or NLCA)	Local calling area screening subtable name. If screening of local central office codes (NNX) is required, enter the key to the local calling area subtable assigned to the line attribute index. If screening of local NNX codes is not required, enter NLCA.

Datafill example for table LINEATTR

The following example shows sample datafill for table LINEATTR.

MAP display example for table LINEATTR

```
LNATTIDX LCC  CHGCLSS COST SCRNCL LTG STS PRTNM LCANAME ZEROMPOS
TRAFSNO  MRSA   SFC    LATANM   MDI    IXNAME   DGCLNAME   FANIDIGS
     RESINF          OPTIONS
_____________________________________________________________________
7       1FR   NONE    NT   NSCR   1   807 P570  P570    RTE3
10       NIL    NILSFC  NILLATA  0      NIL     NIL        00
     N              $
```

Datafilling table LENLINES

The following table shows the datafill specific to Line to trunk translations for table LENLINES. Only those fields that apply directly to Line to trunk

Line to trunk translations (continued)

translations are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table LENLINES

Field	Subfield or refinement	Entry	Explanation and action
LEN		see subfields	Line equipment number. This field defines the physical location of the equipment that is connected to a specific telephone line. Because field LEN is common to more than 60 tables, it is documented in a single section to avoid unnecessary duplication. For a more complete description of LEN and associated subfields refer to section "Common entry field LEN" in the data schema section of this document. ***Note:*** Field LEN consists of subfields SITE, FRAME, UNIT, DRAWER or LSG, SHELF, SLOT, and CIRCUIT.
PTY		R1 to R5, T1 to T5 or S	Party and ringing combination. If the line is assigned to a two-, four-, eight-, or ten-party line, enter the party, R1 to R5 or T1 to T5, of the DN assigned to the line. If the line is assigned to an individual line, enter S for single party.
LNATTIDX		0 to 31 999	Line attribute index. Enter the index into table LINEATTR.

Datafill example for table LENLINES

The following example shows sample datafill for table LENLINES.

MAP display example for table LENLINES

```
LEN                    PTY        RINGCODE    DN
     SIGTYPE   LNATTIDX    OPTLIST

_____________________________________________________________________
HOST 14 1 01 02        S          0           5701011
     DT        7           $
```

Line to trunk translations (continued)

Datafilling table CLLI

The following table shows the datafill specific to Line to trunk translations for table CLLI. Only those fields that apply directly to Line to trunk translations are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table CLLI

Field	Subfield or refinement	Entry	Explanation and action
CLLI		alphanumeric (1 to 16 characters)	Common language location identifier. Enter a CLLI code to uniquely identify the far end of each announcement, tone, or trunk group.

Datafill example for table CLLI

The following example shows sample datafill for table CLLI.

MAP display example for table CLLI

```
CLLI                ADNUM       TRKGRSIZ
ADMININF
_____________________________________________________________________
S5BBB807OPTCA       356         80
S5BBB_TO_S5807_OG_PTS_CAMA
```

Datafilling table TRKGRP

The following table shows the datafill specific to Line to trunk translations for table TRKGRP. Only those fields that apply directly to Line to trunk translations are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table TRKGRP

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 CLLI code assigned to the trunk group in table CLLI.

Datafill example for table TRKGRP

The following example shows sample datafill for table TRKGRP.

MAP display example for table TRKGRP

```
GRPKEY
GRPINFO
_____________________________________________________________________
S5BBB807OPTCA
OC 0 NPDGP NCRT CA MIDL WK N N OG $
```

Datafilling table TRKSGRP

The following table shows the datafill specific to Line to trunk translations for table TRKSGRP. Only those fields that apply directly to Line to trunk translations are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table TRKSGRP

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 code that is assigned in table CLLI to the trunk group to which the subgroup belongs.
	SGRP	0 or 1	Subgroup number. Enter the number assigned to the trunk subgroup.

Datafill example for table TRKSGRP

The following example shows sample datafill for table TRKSGRP.

Line to trunk translations (continued)

MAP display example for table TRKSGRP

```
SGRPKEY             CARDCODE
SGRPVAR
_____________________________________________________________________
S5BBB807OPTCA  0   DS1SIG
STD   OG    MF   DD   7  0  NO  NO  N N  Y 120  UNEQ   M
```

Datafilling table TRKMEM

The following table shows the datafill specific to Line to trunk translations for table TRKMEM. Only those fields that apply directly to Line to trunk translations are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table TRKMEM (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
CLLI		alphanumeric (1 to 16 characters)	Common language location identifier. Enter the CLLI code datafilled in table CLLI that is assigned to the trunk group of which the trunk is a member.
EXTRKNM		o 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.
MEMVAR		see subfield	Variable data for members. This field consists of subfield PMTYPE and refinements.
	PMTYPE	DTC	Peripheral module type. Enter the peripheral module (PM) type on which the trunk is mounted and datafill the refinements associated with this entry value. Enter DTC for a digital trunk controller and complete subfields DTCNO, DTCCKTNO, and DTCCKTTS.
	DTCNO	0 to 511	Digital trunk controller number. Enter the number of the DTC to which the trunk group member is assigned.

Line to trunk translations (continued)

Datafilling table TRKMEM (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
	DTCCKTNO	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	1 to 24	Digital trunk controller circuit time-slot. Enter the number of the circuit card DS-1 time-slot to which the trunk group member is assigned.

Datafill example for table TRKMEM

The following example shows sample datafill for table TRKMEM.

MAP display example for table TRKMEM

```
CLLI            EXTRKNM   SGRP              MEMVAR
_____________________________________________________
S5BBB807OPTCA   0         0                 DTC   0 1 5
```

Datafilling table OFRT

The following table shows the datafill specific to Line to trunk translations for table OFRT. Only those fields that apply directly to Line to trunk translations are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table OFRT (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
RTE		1 to 1023, blank	Route reference index. Enter the route reference number assigned to the route list.
RTELIST		see subfield	Route list. This field consists of the subfields described below.
	RTESEL	N or N2	Route selector. Enter N or N2.

Line to trunk translations (continued)

Datafilling table OFRT (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
	CONNTYPE	D	Connection type. Enter D to satisfy the table editor. This field is not used by the system logic.
	CLLI	alphanumeric	Common language location identifier. Enter the code in table CLLI to which translation is to be routed.
	DELDIGS	0 to 15	Delete digits. Enter the number of digits, from 0 to 15, to be deleted before outpulsing. Enter 15, which must be the number of digits to be deleted before outpulsing if route selector N2 is to be used.
	PRFXDIGS	numeric	Prefix digits. If digits and/or control signals are to be prefixed, enter the digits (up to 11) or equivalents that are to be prefixed. If control signals are to be prefixed, enter the signal's digit equivalent. Enter N if no digits are to be prefixed.
	CANCNORC	N	Cancel normal charge. Enter N.
	DDLS	0 to 15	Delete digits last stage. Enter the number of digits, from 0 to 15, to be deleted from the front of the called number to be outpulsed.
	ADLS	0 to 15	Add digits last stage. Enter the actual digits which are prefixed onto the front of the called number to be outpulsed. Enter N if no digits are to be prefixed onto the front of the called number to be outpulsed.
	RTESEL	N	Route selector. Enter N.
	CLLI	alphanumeric (1 to 16 characters)	Common language location identifier. Enter the code in table CLLI to which translation is routed.

Datafill example for table OFRT

The following example shows sample datafill for table OFRT.

Line to trunk translations (continued)

MAP display example for table OFRT

```
RTE         RTELIST
_____________________________________________________
165         (    N   D   S5BBB807OPTCA  0      N N) $
```

Translation verification tools

The following example shows the output from TRAVER when it is used to verify Line to trunk translations using table OFRT.

Line to trunk translations (continued)

TRAVER output example for Line to trunk translations using table OFRT

```
>traver l 5701011 17059601017 b
TABLE LINEATTR
7 1FR NONE NT NSCR 1 807 P570 P570 RTE3 10 NIL NILSFC NILLATA 0 NIL NIL
00 N $
LCABILL OFF – BILLING DONE ON BASIS OF CALLTYPE
TABLE DNATTRS
TUPLE NOT FOUND
TABLE DNGRPS
TUPLE NOT FOUND
TABLE LENFEAT
TUPLE NOT FOUND
TABLE OFCVAR
AIN_OFFICE_TRIGGRP NIL
AIN Orig Attempt TDP: no subscribed trigger.
TABLE STDPRTCT
P570 ( 1) (65021) 0
 . SUBTABLE STDPRT
WARNING: CHANGES IN TABLE STDPRT MAY ALTER OFFICE
BILLING.  CALL TYPE DEFAULT IS NP.  PLEASE REFER TO
DOCUMENTATION.
 . 17 17 T DD 1 OFRT 165 7 11 NONE
AIN Info Collected TDP: no subscribed trigger.
AIN Info Analyzed TDP: no subscribed trigger.
 .  . TABLE OFRT
 .  .  165 N D S5BBB807OPTCA 0 N N
 .  . EXIT TABLE OFRT
 . SUBTABLE AMAPRT
 . KEY NOT FOUND
 . DEFAULT VALUE IS:   NONE OVRNONE  N
LATA IS NIL, THEREFORE NOT AN EQUAL ACCESS CALL

+++ TRAVER: SUCCESSFUL CALL TRACE +++

DIGIT TRANSLATION ROUTES

1 S5BBB807OPTCA         7059601017         ST

TREATMENT ROUTES.  TREATMENT IS: GNCT
1 *OFLO
2 LKOUT

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

The following example shows the output from TRAVER when it is used to verify Line to trunk translations using subtable HNPACONT.HNPACODE.

Line to trunk translations (continued)

TRAVER output example for Line to trunk translations using subtable HNPACONT.HNPACODE

```
>traver l 5663000 17059601017 b

TABLE LINEATTR
8 1FR NONE NT NSCR 2 807 P566 P566 RTE1 10 NIL NILSFC NILLATA 0 NIL NIL
00 N $
LCABILL OFF – BILLING DONE ON BASIS OF CALLTYPE
TABLE DNATTRS
TUPLE NOT FOUND
TABLE DNGRPS
TUPLE NOT FOUND
TABLE LENFEAT
TUPLE NOT FOUND
TABLE OFCVAR
AIN_OFFICE_TRIGGRP NIL
AIN Orig Attempt TDP: no subscribed trigger.
TABLE STDPRTCT
P566 ( 1) (65021) 0
 . SUBTABLE STDPRT
WARNING: CHANGES IN TABLE STDPRT MAY ALTER OFFICE
BILLING.  CALL TYPE DEFAULT IS NP.  PLEASE REFER TO
DOCUMENTATION.
 . 17 1806 N DD 1 NA
 . SUBTABLE AMAPRT
 . KEY NOT FOUND
 . DEFAULT VALUE IS:   NONE OVRNONE  N
```

Line to trunk translations (end)

TRAVER output example for Line to trunk translations using subtable HNPACONT.HNPACODE (continued)

```
TABLE HNPACONT
807 201 1 ( 32) ( 1) ( 14) ( 0) 0
 . SUBTABLE HNPACODE
 . 705960 705960 FRTE 21
AIN Info Collected TDP: no subscribed trigger.
AIN Info Analyzed TDP: no subscribed trigger.
 . SUBTABLE RTEREF
 .   21 N D S5807705TPTIT 3 N N
 . EXIT TABLE RTEREF
EXIT TABLE HNPACONT
TABLE LCASCRCN
807 P566 ( 2) MAND N
 . SUBTABLE LCASCR
 . TUPLE NOT FOUND.  DEFAULT IS NON-LOCAL
TABLE PFXTREAT
MAND DD N DD UNDT
LATA IS NIL, THEREFORE NOT AN EQUAL ACCESS CALL

 +++ TRAVER: SUCCESSFUL CALL TRACE +++


DIGIT TRANSLATION ROUTES

1 S5807705TPTIT         9601017            ST

TREATMENT ROUTES.  TREATMENT IS: GNCT
1 *OFLO
2 LKOUT

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

Provisioning for Enhanced Multi-NPAP

Ordering codes

Functional group ordering code: NPE0004

Functionality ordering code: N/A

Release applicability

NA012 and up

NA012 introduced Provisioning for Enhanced Multi-NPA

Requirements

This document includes all the data table information for Provisioning for Enhanced Multi-NPA. One of the functionalities of this feature allows seven- or ten-digit translations of E911 calls. Your office must support the appropriate seven- or ten-digit translations for these calls to be completed.

Complete use of Provisioning for Enhanced Multi-NPA can require software or hardware not described in this document.

Description

Provisioning for Enhanced Multi-NPA provides the capability that allows secondary DNs (SDN) in teen service and hunt group members to have multiple NPAs that can be different from those of the primary and pilot DNs. Users can enable or disable this feature. Refer to the activation and deactivation by the user section in this document.

When it is enabled, SDNs in teen service and hunt group members can be assigned with NPAs different from those of the primary and pilot DNs, respectively. The assignments are done using Service Order System (SERVORD) commands, which are modified for this feature. Refer to the operation section in this document for more detail.

System tables that store DN entries, user interface for some SERVORD commands, and results of query commands on DNs and line equipment numbers (LEN) are modified to accept or display more than seven digits for NPA inclusions in DN entries.

Another functionality of this feature is related to E911 PSAP call translations. The user can choose to translate E911 calls in seven or ten digits. Users cannot enable or disable this functionality of call translations. Refer to the operation section in this document for more detail.

In addition, this feature supports multi-party lines (2FR, 2MR, 4FR, and 8FR).

Provisioning for Enhanced Multi-NPAP (continued)

Operation

The following SERVORD commands can be used to assign multiple NPAs to SDNs in teen service and hunt group members: NEW, ADD, ADO, DEO, CHF, CDN, and EST. The following query commands are modified to accept or display DNs of up to 15 digits: QDN, QLEN, QDNWRK, QLT, and QIT.

DN entries are screened for validity and ambiguity. A DN entry is valid when it is equipped in the office. A DN entry is ambiguous when an office contains two NPAs with the same office code. When entries are invalid or ambiguous, a prompt appears for a re-entry.

On E911 provisioning, whenever options LINEPSAP, LDTPSAP, ACDPSAP, and PRIPSAP are assigned or modified with commands NEW, ADO and CHF, this feature generate a field prompt named NATLXLA which requires a 'Y' (yes) or 'N' (no) entry. When a 'Y' is entered, field PSAPDN in table E911PSAP is ten digits (with NPA). When a 'N' is entered, field PSAPDN is seven digits (without NPA). The entry to field NATLXLA affects the routing of E911 calls, since call translations are based on the seven- or ten-digit PSAP DN.

DANGER

Change to the NATLXLA field entry for an existing PSAP

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

Note: Field NATLXLARoute (EDNR) is for a different type of PSAP. It is not applicable to this feature. EDNR PSAPs do not use the field NATLXLA.

Translations table flow for E911 PSAP

The list that follows includes the translations tables for E911 PSAP:

- table TRKGRP
- table E911SRDB
- table E911ESN
- table E911PSAP
- table STDPRTCT (subtable STDPRT)
- table HNPACONT (subtable HNPACODE)

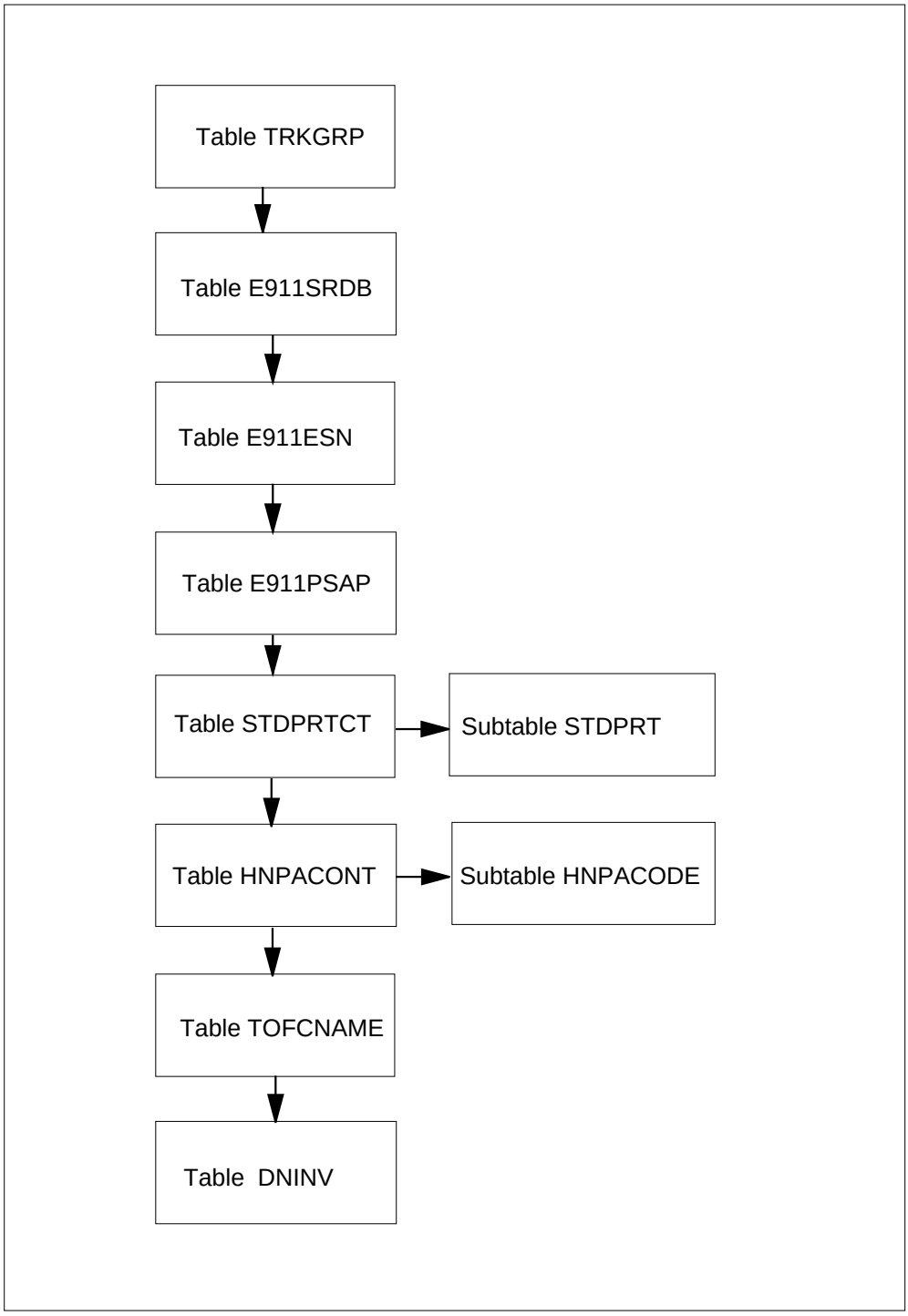
Provisioning for Enhanced Multi-NPAP (continued)

- table TOFCNAME
- table DNINV

The flowchart that follows provides the E911 PSAP translations process. This applies to whether the entry to field NATLXLA is 'Y' (ten-digit translations) or 'N' (seven-digit translations). Refer to the E911 PSAP examples in the SERVORD examples section of this document.

Provisioning for Enhanced Multi-NPAP (continued)

Table flow for E911 PSAP call translations



Provisioning for Enhanced Multi-NPAP (continued)

Datafill example for E911 PSAP call translations

Datafill table	Example data
TRKGRP	E911ICS7 IT 0 ELO NCRT IC NIL MIDL 613 AT1 NSCR 613 000 N N (E911 747 113 E911_STD) $
E911SRDB	919 781 1 453 111
E911ESN	111 Y ACDPSAP POLICE FIRE RESCUE NONE NONE NONE
E911PSAP	ACDPSAP 6212111 N
STDPRTCT	AT1 (1) (65021) 2
STDPRT	621 621 N NP 0 NA
HNPACONT	613 Y 915 2 (51) (1) (0) (0) 2 $
HNPACODE	621 621 DN 613 621
TOFCNAME	613 621 $
DNINV	613 621 2111 FEAT ACD ACDPSAP2 PRIM 0 0

Limitations and restrictions

Your office must support the appropriate seven- or ten-digit translations for E911 calls to be completed properly.

Interactions

When Provisioning for Enhanced Multi-NPA is enabled, you can specify SDNs in teen service and hunt group members to contain NPAs different from those of the pilot or primary DNs. This can be done through use of the following SERVORD commands: NEW, ADD, ADO, DEO, CHF, CDN, and EST.

On E911 provisioning, whenever options LINEPSAP, LDTPSAP, ACDPSAP, or PRIPSAP are modified or assigned, a new field named NATLXLA appears. This field requires a 'Y' (yes) or 'N' (no) entry. When the entry is 'Y', translations of calls to the PSAP are based on ten digits (with NPA). Field PSAPDN in table E911PSAP is datafilled with ten digits. When the entry is 'N', translations of calls to the PSAP are based on seven digits (without NPA). field PSAPDN in table E911PSAP is datafilled with seven digits.

Activation and deactivation by the user

Except for E911 PSAP provisioning, Provisioning for Enhanced Multi-NPA can be enabled or disabled. This can be done through the use of software

Provisioning for Enhanced Multi-NPAP (continued)

optionality control (SOC). For further information on SOC, contact your next level of support.

Billing

Provisioning for Enhanced Multi-NPA does not change billing records.

Station Message Detail Recording

Provisioning for Enhanced Multi-NPA does not require Station Message Detail Recording.

OPARMs used by Provisioning for Enhanced Multi-NPA

Provisioning for Enhanced Multi-NPA does not generate office parameters.

Datafill sequence

The following tables list the tables that require datafill to implement Provisioning for Enhanced Multi-NPA. The tables are listed in the order in which they are to be datafilled.

Datafill requirements for Provisioning for Enhanced Multi-NPA

Table	Purpose of table
LENFEAT (Note)	Line Equipment Number Feature table contains features on line equipments.
IBNFEAT (Note)	IBN Line Feature table contains specific line features that are assigned to the IBN lines listed in table IBNLINES.
HUNTGRP (Note)	Hunt Group table contains data for each hunt group assigned in the switching unit.
HUNTMEM (Note)	Hunt Group Member table contains a list of members assigned to the hunt groups in table HUNTGRP.
PREFHUNT (Note)	Preferred Hunt Group table contains a list of members assigned to the preferential hunt group.
ACDGRP	Automatic Call Distribution Group table contains ACD features and the customer groups that are associated with the features.
LTDATA	Logical Terminal Data table contains service-related data associated with the logical terminal identifier.
Note: This table is datafilled through SERVORD; therefore, no datafill procedure or example is provided. Refer to "SERVORD" for an example of using SERVORD to datafill this table.	

Datafill for table ACDGRP

The table that follows provides the datafill related to Provisioning for Enhanced Multi-NPA for table ACDGRP. This table includes only those fields that apply directly to Provisioning for Enhanced Multi-NPA. Refer to table ACDGRP in the *Customer Data Schema Reference Manual* for more information.

Datafill related to table ACDGRP

Field	Subfield	Entry	Explanation and action
NATLXLA		Y or N	This field appears whenever option ACDPSAP is assigned or modified. When the entry to this field is 'Y', call translations to this PSAP are based on 10 digits (with NPA). Field PSAPDN in table E911PSAP is datafilled with 10 digits. When entry is 'N', call translations are based on 7 digits (without NPA). Field PSAPDN is datafilled with 7 digits.

Datafill example for table ACDGRP

The figure that follows shows sample datafill for table ACDGRP.

MAP example for table ACDGRP

```
ACDNAME  CUSTGRP  ACDRINGTH  THROUTE  NSROUTE  PRIOPRO  DBG
MAXCQSIZ  MAXWAIT  ACDMIS
MSQS  DISTRING   OBSWTONE  FRCNGTSV  OPTIONS
-----------------------------------------------------------------
ACDPSAPH2 E911 15 OFRT 911 OFRT 911 120 N 5 120 N N NONE Y N
```

Datafill for table LTDATA

The table that follows provides the datafill related to Provisioning for Enhanced Multi-NPA for table LTDATA. This table includes only those fields that apply directly to Provisioning for Enhanced Multi-NPA. Refer to table

Provisioning for Enhanced Multi-NPAP (continued)

LTDATA in the *Customer Data Schema Reference Manual* for more information.

Datafill related to table LTDATA

Field	Subfield	Entry	Explanation and action
NATLXLA		Y or N	This field appears whenever option PRIPSAP is assigned or modified. When the entry to this field is 'Y', call translations to this PSAP are based on 10 digits (with NPA). Field PSAPDN in table E911PSAP is datafilled with 10 digits. When entry is 'N', call translations are based on 7 digits (without NPA). Field PSAPDN is datafilled with 7 digits.

Datafill example for table LTDATA

The figure that follows shows sample datafill for table LTDATA.

MAP example for table LTDATA

```
LTDKEY  LTDRSLT
------------------------------------------------------------------
ISDN 700 SERV SERV N N ALWAYS ALWAYS (PRIPSAP Y Y 613 7774000 N) $
```

Translation verification tools

Translations of E911 calls to the PSAP are based on the PSAP DN in table E911PSAP. The entry to field NATLXLA ('Y' for a ten-digit PSAP DN and 'N' for a seven-digit PSAP DN) affects call translations.

The following TRAVER examples show a ten-digit and seven-digit PSAP DN translations, respectively.

Provisioning for Enhanced Multi-NPAP (continued)

TRAVER output example for 10-digit E911 PSAP DN translations

```
>traver tr e911ics7 911 b cdn 9197811478
TABLE TRKGRP
E911ICS7 IT 0 ELO NCRT IC NIL MIDL 613 ATI NSCR 613 000 N N
 (E911 747 113 E911_STD)$
TABLE E911SRDB
919 781 1 453 111
TABLE E911ESN
111 Y ACDPSAPH2 ACDPSAPH1 ACDPSAPH2 ACDPSAPMDC LINEPSAPH1
LINEPSAPMDC POLICE
TABLE E911PSAP
ACDPSAP2 6136212111 N
TABLE OFCVAR
AIN_OFFICE_TRIGGRP LNPOFFICE
TABLE HNPACONT
613 Y 917 2 (55)(1)(0)(0) 2 $
. SUBTABLE HNPACODE
. 61362121 6139 HNPA 0
. 621 621 DN 613 621
TABLE TOFCNAME
613 621 $
TABLE DNINV
613 621 2111 FEAT ACD ACDPSAPH2
PRIM 0 0
TABLE DNFEAT
TUPLE NOT FOUND
TABLE DNATTRS
613 621 2111
  (PUBLIC (SUPPRESS Y Y) (NAME
ACDPSAPH2) $)
  (PRIVATE (NAME ACDPSAPH2) $)$$
```

—continued—

Provisioning for Enhanced Multi-NPAP (continued)

TRAVER output example for 10-digit PSAP DN translations (continued)

```
TABLE TRIGGRP
LNPOFFICE INFOANAL
  .PODP (DG PODPDIG)$ NIL
Trigger AIN PODP is applicable to office.
  .LNP (DG LNPDIG) (ESCEA) (ESCOP) (ESCDN) (ESCCN DD)$ NIL
Trigger AIN LNP is applicable to office.
AIN Info Analyzed TDP: trigger criteria not met.
AIN Term Attempt TDP: no subscribed trigger.

+++ TRAVER: SUCCESSFUL CALL TRACE +++

DIGIT TRANSLATION ROUTES
1 FEATURE  6136212111  ST
TREATMENT ROUTES. TREATMENT IS: GNCT 1 T120

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

—end—

TRAVER output example for 7-digit PSAP DN translations

```
>traver tr e911ics7 911 b cdn 9197811453
TABLE TRKGRP
E911ICS7IT 0 ELO NCRT IC NIL MIDL 613 ATI NSCR 613 000 N N
 (E911 747 113 E911_STD)$
TABLE E911SRDB
 919 781 1 453 111
TABLE E911ESN
111 Y ACDPSAPH2 ACDPSAPH1 ACDPSAPH2 ACDPSAMDC LINEPSAPH1
LINEPSAPMDC POLICE
TABLE E911PSAP
ACDPSAPH2 6212111 N
TABLE OFVAR
AIN_OFFICE_TRIGGRP LNPOFFICE
TABLE HNPACONT
613 Y 917 2 (55)(1)(0)(0) 2 $
. SUBTABLE HNPACODE
. 621 621 DN 613 621
TABLE TOFCNAME
613 621 $
```

—continued—

Provisioning for Enhanced Multi-NPAP (continued)

TRAVER output example for 7-digit PSAP DN translations (continued)

```
TABLE DNINV
613 621 2111 FEAT ACD ACDPSAPH2 PRIM 0 0
TABLE DNFEAT
TUPLE NOT FOUND
TABLE DNATTRS
613 621 2111
 (PUBLIC (SUPPRESS Y Y)(NAME ACDPSAPH2)$)
 (PRIVATE (NAME ACDPSAPH2)$)$$
TABLE DNGRPS
TUPLE NOT FOUND
LNP00100 SOC Option is IDLE.
LNP Info: Called DN is resident.
LNP Info: Called DN has native NPANXX.
LNP Info: HNPA results are used.
AIN Info Collected TDP: no subscribed trigger.
TABLE FNPA7DIG
TUPLE NOT FOUND
TABLE TRIGGRP
LNPOFFICE INFOANAL
.PODP (DG PODPDIG)$NIL
Trigger AIN PODP is applicable to office.
.LNP (DG LNPDIG)(ESCEA)(ESCOP)(ESCDN)(ESCCN DD)$NIL
Trigger AIN LNP is applicable to office.
AIN Info ANalyzed TDP: trigger criteria not met.
AIN Term Attempt TDP: no subscribed trigger.

+++ TRAVER: SUCCESSFUL CALL TRACE +++

DIGIT TRANSLATION ROUTES
1 FEATURE  6136212111  ST
TREATMENT ROUTES. TREATMENT IS: GNCT 1 T20

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

—end—

SERVORD

Provisioning for Enhanced Multi-NPA uses SERVORD as follows.

Provisioning for Enhanced Multi-NPAP (continued)

SERVORD limitations and restrictions

Provisioning for Enhanced Multi-NPA affects the following:

- Teen Service provisioning, query and data management
- Hunt group provisioning, query and data management
- BNN group provisioning and query
- PRH group provisioning and query
- E911 PSAP provisioning

SERVORD prompts

The table that follows provides the SERVORD prompts associated with Provisioning for Enhanced Multi-NPA, option SDN.

SERVORD prompts for Provisioning for Enhanced Multi-NPA - SDN (Sheet 1 of 2)

Prompt	Correct input	Explanation
DN_OR_LEN	DN (up to 15 digits) or LEN (Note)	Directory number or line equipment number.
OPTION	(Note)	The service to add, change, or delete.
SDN	Up to 15 digits	Existing secondary directory number.
NEW_SDN	Up to 15 digits	New SDN to replace an existing SDN. It appears when commands ADO, and CHF are used.
SDN_RING	0 to 3	Secondary DN ring type. Enter 1 for lines with FSR.
Note: Refer to the *Servord Reference Manual*.		

Provisioning for Enhanced Multi-NPAP (continued)

SERVORD prompts for Provisioning for Enhanced Multi-NPA - SDN (Sheet 2 of 2)

Prompt	Correct input	Explanation
SDN_OPT	N, P, E	Call forward options for SDN. N for no call forwarding. P for call forwarding. E for Enhanced SDN, which requires feature NTXE94AA-Ordering code RES00017.
SDN_DNY	NODNY, DNYCWT	NODNY = No deny to call waiting. DNYCWT = Deny call waiting. This not applicable for teen service on MDC (enter $).
Note: Refer to the *Servord Reference Manual*.		

The table that follows provides the SERVORD prompts associated with Provisioning for Enhanced Multi-NPA, option DNH.

SERVORD prompts for Provisioning for Enhanced Multi-NPA - DNH (Sheet 1 of 2)

Prompt	Correct input	Explanation
DN_LEN	(Note)	DN for a DNH group member and its associated LEN.
GROUPSIZE	0 to1024	Hunt group size.
INTERCEPT_ NAME	AINT, ANCT, BLDN, CANN, OPRT, UNDN (Note)	Type of intercept desired.
KEY	1 to 1023	(Note)
LEN	(Note)	Line equipment number.
LINK_DN	Up to 15 digits	DN of a new member to be added to a hunt group. This prompt appears when the ADD command is used.
Note: Refer to the *Servord Reference Manual*.		

Provisioning for Enhanced Multi-NPAP (continued)

SERVORD prompts for Provisioning for Enhanced Multi-NPA - DNH (Sheet 2 of 2)

Prompt	Correct input	Explanation
LINKDN	Up to 15 digits	DN of a new member to be added to a hunt group. This prompt appears when the ADO command is used.
NEW_DN	Up to 15 digits	New DN to replace an existing DN of a member of a DNH group. This prompt appears when commands CDN and CHDN are used.
OLD_DN	Up to 15 digits	Existng DN of a member of a DNH group.
OPTION	(Note)	The service to add, change, or delete.
OPTKEY	1 to 69 for business set (set 1, 2, 3, 4, or 7 for data unit)	Identifies the key on the business set or data unit to which an option is assigned.

Note: Refer to the *Servord Reference Manual*.

The table that follows provides the SERVORD prompts associated with Provisioning for Enhanced Multi-NPA, option PRH.

SERVORD prompts for Provisioning for Enhanced Multi-NPA - PRH

Prompt	Correct input	Explanation
GROUPTYPE	BNN, CPU, DLH, MLH, PRH, MPH, SIMRING	Type of group to establish, modify, or delete.
PILOT_DN	Up to 15 digits	Primary DN of a hunt group or BNN group. This prompt appears when the EST command is used.
PRH_DN	Up to 15 digits	New PRH group DN. This prompt appears when the EST command is used.

Provisioning for Enhanced Multi-NPAP (continued)

The table that follows provides the SERVORD prompts associated with Provisioning for Enhanced Multi-NPA, option BNN.

SERVORD prompts for Provisioning for Enhanced Multi-NPA

Prompt	Correct input	Explanation
SONUMBER	(Note)	A unique number for the service order to be entered.
GROUPTYPE	BNN, CPU, DLH, MLH, PRH, MPH, SIMRING	Type of group to establish, modify, or delete.
PILOT_DN	Up to 15 digits	Primary DN of a hunt group or BNN group. This prompt appears when the EST command is used.
HOST_HUNT_TYPE	AU, BNN, CPU, DLH, DNH, MLH (Note)	The type of hunt group on which a BNN hunt group is to be established.
HOST_DN	Up to 15 digits	DN of a hunt group member, which is the initial connection of the hunt group and the BNN pilot. This prompt appears when the EST command is used.
DN_BNN	Up to 15 digits	DN of DNH member connected to a BNN member. This prompt appears when commands EST and ADD are used.
BNN	Up to 15 digits	DN of BNN member connected to a DNH member-DN_BNN. This prompt appears when the EST command is used.
		Note: Refer to the *Servord Reference Manual*.

Provisioning for Enhanced Multi-NPAP (continued)

The table that follows provides the SERVORD prompts associated with Provisioning for Enhanced Multi-NPA query commands.

SERVORD prompts for Provisioning for Enhanced Multi-NPA, query command QDNWRK (Sheet 1 of 2)

Prompt	Correct input	Explanation
DIRECTORY_ NUMBER_RANGE	R, ALL, R nnnnnnn nnnnnnn where R prompts you to set a range, ALL and A query every DN	The range of DNs to be queried.
FROM_DN	Up to 15 digits	First DN in a range (R) of DNs being queried.
TO_DN	Up to 15 digits	Last DN in a range (R) of DNs being queried.
AGENT OR LINE_CLASS_ CODE: NLCC	Refer to the “Line class code" table in Chapter 2 for a list of valid LCCs. Defaults to all line class codes (NLCC).	For CM SERVORD, enter the line class code of the service to be queried.
OPTION	Refer to the “Line service options" table in Chapter 2 for a list of valid inputs. If one option is entered, only data on lines with the specified option is printed out. If a $ character is entered, the printout includes all options. When the option is entered in the no prompt mode the option must be delimited by the $ character.	QDNWRK and QLENWRK commands only.
SUMMARY_OR_ DETAILS	S = Specifies a summary printout. Produces a total count of the DNs or LENs being queried.	The type of printout required.

Provisioning for Enhanced Multi-NPAP (continued)

SERVORD prompts for Provisioning for Enhanced Multi-NPA, query command QDNWRK (Sheet 2 of 2)

Prompt	Correct input	Explanation
	D = Specifies a detailed printout. Provides the same information as S, plus other details, including: • DN queried • type of DN • LEN associated with the DN • LCC or ACC • signaling type • line attribute index • line inventory data • option information • XLAPLAN key • RATEAREA key Defaults to S, which is SUMMARY.	

The table that follows provides the SERVORD prompts associated with Provisioning for Enhanced Multi-NPA - E911 PSAP call translations.

SERVORD prompts for Provisioning for Enhanced Multi-NPA - E911 PSAP call translations (LINEPSAP, LTDPSAP) (Sheet 1 of 2)

Prompt	Correct input	Explanation
ANISPILL	Y, N	Indicates whether ANI spill is expected for LDTPSAP or LINEPSAP.
ANONCALL	Y, N	Indicates direct calls to PSAP DN are allowed.
BSYOTPCT	0 to 100	Percentage of hunt group members allowed to busy-out automatically due to two consecutive wink failures. If the busy-out percentage is set to 100 percent, all member lines can be automatically busied-out.
Note: Refer to the *Servord Reference Manual*.		

Provisioning for Enhanced Multi-NPAP (continued)

SERVORD prompts for Provisioning for Enhanced Multi-NPA - E911 PSAP call translations (LINEPSAP, LTDPSAP) (Sheet 2 of 2)

Prompt	Correct input	Explanation
CRALMPCT	0 to 100	Percentage of line appearance on a digital trunk (LDT) PSAP hunt group members that must be busy (in a state other than CPB, IDL, or INB) for the E911_LDTBSY_CRITICAL alarm to be raised.
DN_OR_LEN	DN (up to 15 digits) or LEN (Note)	Directory number or line equipment number.
ENHDISP	Y, N	Indicates the wireless protocol 2-line display for PSAPs.
MJALMPCT	0 to 100	Percentage of LDT PSAP hunt group members that must be busy (in a state other than CPB, IDL, or INB) for the E911_LDTBSY_MAJOR alarm to be raised.
MNALMPCT	0 to 100	Percentage of LDT PSAP hunt group members that must be busy (in a state other than CPB, IDL, or INB) for the E911_LDTBSY_MAJOR alarm to be raised.
NATLXLA	Y, N	Y = ten-digit call translations for E911 PSAP. N = seven-digit call translations for E911 PSAP.
NPD_MAPS	Vector of NPD, SNPA	Option associated with adding PSAP fields to the LINEPSAP and LDTPSAP options.
OPTKEY	1 to 69 for business set (set 1, 2, 3, 4, or 7 for data unit)	Identifies key on business set or data unit to which an option is assigned.
OPTION	(Note)	The service to add, change, or delete.
PSAPNAME	Up to 16 characters	Public safety answering point name.
SONUMBER	(Note)	A unique number for the service order to be entered.

Note: Refer to the *Servord Reference Manual*.

Provisioning for Enhanced Multi-NPAP (continued)

SERVORD examples for Provisioning for Enhanced Multi-NPA

The following SERVORD command examples show effects when Provisioning for Enhanced Multi-NPA is enabled or disabled.

The following examples show the CHF command (with the SDN option) in prompt mode when Provisioning for Enhanced Multi-NPA is disabled and enabled.

CHF command example when multi-NPA is disabled and the NPA of the SDN is different from that of the primary DN - SDN option

```
>CHF
DN_OR_LEN:
>6136210043
OPTION:
>SDN
SDN:
>6136219021
NEW_SDN:6219021
>9097503000
SDN_RING:
>0
SDN_OPT:
>E
SDN_DNY:
>$
OPTION:
>$
COMMAND AS ENTERED:
CHF NOW 99 9 2 PM 6210043 (SDN 6136219021 9097503000 0 E
$)$
ENTER Y TO CONFIRM, N TO REJECT OR E TO EDIT
>Y
6136210043: Primary DN has a different NPA than the
NEW_SDN
*** ERROR - INCONSISTENT DATA ***
COMMAND AS ENTERED:
CHF NOW 99 9 2 PM 6210043 (SDN 6136219021 9097503000 0 E
$) $
ENTER Y TO CONFIRM, N TO REJECT OR E TO EDIT
```

Provisioning for Enhanced Multi-NPAP (continued)

CHF command example when multi-NPA is enabled and the NPA of the SDN is different from that of the primary DN - SDN option

```
>CHF
DN_OR_LEN:
>6136210043
OPTION:
>SDN
SDN:
>6136219021
NEW_SDN:6219021
>9097503000
SDN_RING:
>0
SDN_OPT:
>E
SDN_DNY:
>$
OPTION:
>$
COMMAND AS ENTERED:
CHF NOW 99 9 2 PM 6210043 (SDN 6136219021 9097503000 0 E
$)$
ENTER Y TO CONFIRM, N TO REJECT OR E TO EDIT
>Y
```

The following examples show the ADD command in prompt mode (with the DNH option) when multi-NPA is disabled and enabled.

Provisioning for Enhanced Multi-NPAP (continued)

ADD command example when multi-NPA is disabled and a DNH member is created to have a different NPA from that of the pilot - DNH option

```
>ADD $ DNH
LINK_DN:
>6136215946
DN_LEN:
>7506700
LEN:
>ISDN 24
KEY:
>1
DN_LEN:
>$
OPTION:
>$
GROUPSIZE: 3
>
COMMAND AS ENTERED:
ADD NOW 99 1 19 PM DNH 6136215946 (7506700 ISDN 24 1) $
$ 3
ENTER Y TO CONFIRM, N TO REJECT OR E TO EDIT
>Y
6136215946: HAS A DIFFERENT SNPA THAN LINK_DN
*** ERROR - INCONSISTENT DATA ***
COMMAND AS ENTERED:
ADD NOW 99 1 19 PM DNH 6136215946 (7506700 ISDN 24 1) $
$ 3
ENTER 7 TO CONFIRM, N TO REJECT OR E TO EDIT
>N
```

Provisioning for Enhanced Multi-NPAP (continued)

ADD command example when multi-NPA is enabled and a DNH member is created to have a different NPA from that of the pilot - DNH option

```
>ADD $ DNH
LINK_DN:
>6136215946
DN_LEN:
>7506700
LEN:
>ISDN 24
KEY:
>1
DN_LEN:
>$
OPTION:
>$
GROUPSIZE: 3
>
COMMAND AS ENTERED:
ADD NOW 99 1 19 PM DNH 6136215946 (7506700 ISDN 24 1) $
$ 3
ENTER Y TO CONFIRM, N TO REJECT OR E TO EDIT
>Y
```

The following example shows the ADO command in prompt mode (with the DNH option) when multi-NPA is disabled.

ADO command example when multi-NPA is disabled and a DNH member with the same NPA as that of the pilot is created

```
>ADO $ 6136215942
OPTKEY:
>1
OPTION:
>DNH
LINKDN:
>6136215946
GROUPSIZE: 3
>
OPTKEY
>$
COMMAND AS ENTERED:
ADO NOW 99 3 3 PM DNH 6136215942 (1 DNH 6136215946 3) $
ENTER Y TO CONFIRM, N TO REJECT OR E TO EDIT
>Y
```

Provisioning for Enhanced Multi-NPAP (continued)

The following example shows the CDN command in prompt mode when multi-NPA is disabled.

CDN command example when multi-NPA is disabled and a DNH member with a different NPA from that of the pilot is created

```
>CDN $
OLD_DN:
>6136215950
NEW_DN:
>9097506710
INTERCEPT_NAME:
>BLDN
COMMAND AS ENTERED:
CDN NOW 99 1 18 PM 6136215950 9097506710 BLDN
ENTER Y TO CONFIRM, N TO REJECT OR E TO EDIT
>Y
CDN NOT ALLOWED - DNH member must have the same SNPA as
DNH pilot.
*** ERROR - INCONSISTENT DATA ***
COMMAND AS ENTERED:
CDN NOW 99 1 18 PM 6136215950 9097506710 BLDN
ENTER Y TO CONFIRM, N TO REJECT OR E TO EDIT
>N
```

The following example shows the EST command (in prompt mode) used to created PRH group when multi-NPA is enabled.

Provisioning for Enhanced Multi-NPAP (continued)

EST command example when multi-NPA is enabled

```
>EST $
GROUPTYPE:
>PRH
PILOT_DN:
>6136219053
PRH_DN:
>6219051
PRH_DN:
>6136212004
PRH_DN:
>9097504000
PRH_DN:
>$
COMMAND AS ENTERED:
EST NOW 99 9 3 AM PRH 6136219053 (6219051)
(6136212004)(9097504000) $
ENTER Y TO CONFIRM,N TO REJECT OR E TO EDIT
>Y
```

The following examples show the EST command (with the BNN option) in prompt mode when multi-NPA is disabled and enabled.

Provisioning for Enhanced Multi-NPAP (continued)

EST command example when multi-NPA is disabled and a BNN member is created with a different NPA from the pilot - BNN option

```
>EST
SONUMBER: NOW 99 11 19 AM
>
GROUPTYPE:
>BNN
PILOT_DN:
>9095500030
HOST_HUNT_TYPE:
>DNH
HOST_DN
>909500000
DN_BNN
>9095500001
BNN
>6136210000
DN_BNN
>$
BNN
>$
COMMAND AS ENTERED:
EST NOW 99 11 19 AM BNN 9095500030 DNH 9095500000
(9095500001 6136210000)$$10
ENTER Y TO CONFIRM,N TO REJECT OR E TO EDIT
>Y
6136210000: IS NOT IN SAME SNPA GROUP AS LINK DN
*** ERROR - INCONSISTENT DATA ***
COMMAND AS ENTERED:
EST NOW 99 11 19 AM BNN 9095500030 DNH 9095500000
(9095500001 6136210000)$$10
ENTER Y TO CONFIRM,N TO REJECT OR E TO EDIT
>N
```

Provisioning for Enhanced Multi-NPAP (continued)

EST command example when multi-NPA is enabled and a BNN member is created with a different NPA from the pilot - BNN option

```
>EST
SONUMBER: NOW 99 11 19 AM
>
GROUPTYPE:
>BNN
PILOT_DN:
>9095500030
HOST_HUNT_TYPE:
>DNH
HOST_DN
>909500000
DN_BNN
>9095500001
BNN
>6136210000
DN_BNN
>$
BNN
>$
COMMAND AS ENTERED:
EST NOW 99 11 19 AM BNN 5500030 DNH 9095500000
(9095500001 6136210000)$$10
ENTER Y TO CONFIRM,N TO REJECT OR E TO EDIT
>Y
```

The following example shows the query command QDNWRK in prompt mode.

Provisioning for Enhanced Multi-NPAP (continued)

Example of the QDNWRK command where FROM_DN and TO_DN are 15 digits

```
>QDNWRK
DIRECTORY_NUMBER_RANGE: ALL
>R
FROM_DN:
>9196211200
TO_DN:
>9196211300
AGENT OR LINE_CLASS_CODE: NLCC
>1FR
OPTION:
>DGT
SUMMARY_OR_DETAILS: S
>S
OPTION:
>$
COMMAND AS ENTERED
QDNWRK R 6211200 6211300 AFR DGT$ S
ENTER Y TO CONFIRM, N TO REJECT OR E TO EDIT
>Y
WARNING: QUERIES OF ALL DNS OR QUERIES OF A LARGE RANGE
OF DNS MAY RUN FOR 30 MINUTES OR MORE BEFORE PRODUCING
ANY OUTPUT
REPORT ON WORKING DIRECTORY NUMBERS
FROM 9196211200 TO 9196211300
   LCC     1FR           OPTION               DGT
TOTAL COUNT OF WORKING DN FROM 9196211200 TO 9196211300:
4
```

The following query command examples show query results of commands QDN, QLEN, QLT with DN displays of ten digits.

Note: QDNWRK and QLENWRK query result displays are the same as those of QDN and QLEN.

Provisioning for Enhanced Multi-NPAP (continued)

QDN command example for a BNN pilot DN assigned to a DNH member

```
>QDN 7506000
------------------------------------------------------
DN: 7506000(NON-UNIQUE)
TYPE:   PILOT OF BNN HUNT GROUP
SNPA:   909  SIG:   N/A  LNATTIDX:  N/A
HUNT GROUP: 89    HUNT MEMBER:  0
LINE EQUIPMENT NUMBER:  HOST 05 0 00 21
LINE CLASS CODE:    PSET (WITH DISPLAY)
KEY:    1
CUSTGRP: IBNTST  SUBGRP: 0  NCOS: 0 RING: Y
CARDCODE: 6X21AC  GND: N PADGRP: PPHON BNV: NL MNO: Y
PM NODE NUMBER: 49
PM TERMINAL NUMBER: 22
DNGRPS OPTIONS:
NETNAME:    PUBLIC
NAME:   CGA
NETNAME:    PRIVATE
NAME:   PCGA
OPTIONS:
NONE
OFFICE OPTIONS:
AIN LNPOFFICE
HOST DN:    6136219050
GROUP OPTIONS:
RCVD
MEMBER INFO:
1  90975060001  HOST DN 6136219051
1  90975060002  HOST DN 6136219052
```

Provisioning for Enhanced Multi-NPAP (continued)

QLEN command example display of a DNH pilot, which is also a BNN pilot and a PRH member

```
>QLEN 5 0 0 21
-----------------------------------------------------
LEN:    HOST 05 0 00 21
TYPE:   PILOT OF DNH HUNT GROUP
SNPA:   613
HUNT GROUP: 87    HUNT MEMBER:  0
DIRECTORY NUMBER:   6219050 (NON–UNIQUE)
LINE CLASS CODE:    PSET (WITH DISPLAY)
CUSTGRP: IBNTST  SUBGRP: 0  NCOS: 0 RING: Y
ADDONS: NONE    EXTENSION:  N
CARDCODE: 6X21AC  GND: N PADGRP: PPHON BNV: NL MNO: Y
PM NODE NUMBER: 49
PM TERMINAL NUMBER: 22
OPTIONS:
NONE
OFFICE OPTIONS:
AIN LNPOFFICE

KEY     DN
---     --
1       DN  6219050

KEY     FEATURE
---     -------
NONE
GROUP BNN:  9097506000
GROUP OPTIONS:
RCVD
MEMBER INFO:
1  6136219051   GROUP BNN   9097506001
2  6136219052   GROUP BNN   9097506002
3  6136219053   GROUP BNN   9097507000
4  6136219054
PRH INFO
   MEMBER OF THE FOLLOWING PRH LISTS
   LIST#    MEM#    PILOTDN     LINKDN
   1        1       6136219054  6136219054
-----------------------------------------------------
```

Provisioning for Enhanced Multi-NPAP (continued)

QLT command example display of a DLH pilot LTID

```
>QLT ISDN 406
------------------------------------------------------
LTID:   ISDN 406
SNPA:   909
DIRECTORY NUMBER:   5500021 (NON–UNIQUE)
LT GROUP NO:    0
LTCLASS:    BRAFS   DEFAULT LOGICAL TERMINAL:   N
EKTS:   N   CACH:   N
SLBRI:  N
CS: N   PS: D   TEI:    STATIC
ELN:    N
CUSTGRP: IBNTST  SUBGRP: 0  NCOS: 0  RING: N
LINE CLASS CODE:    ISDNKSET
MAXKEYS:    18
TYPE:   PILOT OF DLH HUNT GROUP
HUNT GROUP: 87  HUNT MEMBER:    0
OPTIONS:
NONE
OFFICE OPTIONS:
AIN LNPOFFICE
KEY     DN
---     --
1       DN  9095500021
KEY     FEATURE
---     --
NONE
GRUOP OPTIONS:
RCVD
MEMBER INFO:
1  KEY: 1   ISDN    407 8196220000
------------------------------------------------------
```

Provisioning for Enhanced Multi-NPAP (continued)

Example of the QIT command used to query a circuit switch service

```
> QIT
Enter: LTGRP
> ISDN
Enter: LTNUM [PARAMETER_TYPE] [OUTPUT_FORMAT]
> 645 CS
LTID:  ISDN 645
DPN GROUP NO: 5
LTCLASS: BRAFS
EKTS: N  CACH:N
SLBRI: N
BEARER SERVICES ALLOWED: VOICE  DEFAULT LOGICAL TERMINAL:N
CS: Y  PS: N
ELN: N
VERSION:
TSPID:
LEN: HOST 00 00 00 03  TEI: DYNAMIC
GROUP:   COMKODAK SUBGRP: 0 NCOS:0
LINE CLASS CODE: ISDNKSET
MAXKEYS: 25
OPTIONS:
RLS EBO SFC AFC 3WC
   KEY     DN
   ---     --
   1       DN        9197221234

   KEY   FEATURE
   ---   -------
    2     AFC
    3     AFC
    6     EBO
   11     3WC
   24     RLS
```

The following E911 PSAP examples show the use of the ADO and CHF commands in provisioning E911 PSAPs (options LINEPSAP and LDTPSAP).

Provisioning for Enhanced Multi-NPAP (continued)

ADO command example in prompt mode when provisioning E911 PSAPs - LINEPSAP option, with entry to field NATLXLA as 'N' for 7-digit translations

```
>ADO
SONUMBER: NOW 99 12 17 AM
>
DN_OR_LEN:
>0 1 9 1
OPTKEY:
>1
OPTION:
>LINEPSAP
ANONCALL:
>Y
ENHDISP:
>N
NPD_MAPS:
>$
PSAPNAME:
>LINEPSAPH1
NATLXLA:
>N
OPTKEY:
>$
COMMAND AS ENTERED:
ADO NOW 99 12 17 AM HOST 00 1 09 01 (1 LINEPSAP Y N $
LINEPSAPH1 N)$
ENTER Y TO CONFIRM, N TO REJECT OR E TO EDIT
>Y
```

Provisioning for Enhanced Multi-NPAP (continued)

CHF command example in prompt mode when provisioning E911 PSAPs - LINEPSAP option, with entry to field NATLXLA as 'Y' for 10-digit translations

```
>CHF
SONUMBER: NOW 99 12 17 AM
>
DN_OR_LEN:
>0 1 9 1
OPTKEY:
>1
OPTION:
>LINEPSAP
ANONCALL:
>Y
ENHDISP:
>N
NPD_MAPS:
>$
PSAPNAME:
>LINEPSAPH1
NATLXLA:
>Y
OPTKEY:
>$
COMMAND AS ENTERED:
CHF NOW 99 12 17 AM HOST 00 1 09 01 (1 LINEPSAP Y N $
LINEPSAPH1 Y)$
ENTER Y TO CONFIRM, N TO REJECT OR E TO EDIT
>Y
This NATLXLA change requires additional translations for
911 calls to complete. Verify translations to this PSAP
using the TRAVER command.
```

Provisioning for Enhanced Multi-NPAP (end)

CHF command example in prompt mode when provisioning E911 PSAPs - LDTPSAP option, with entry to field NATLXLA as 'Y' for 10-digit translations

```
>CHF
SONUMBER: NOW 99 12 17 AM
>
DN_OR_LEN:
>PSAP 0 0 0 0
OPTION:
>LDTPSAP
ANONCALL:
>N
ANISPILL:
>Y
ENHDISP:
>Y
PSAPNAME:
>POLICE
MNALMPCT:
>30
MJALMPCT:
>40
CRALMPCT:
>50
BSYOTPCT:
>50
NATLXLA:
>Y
OPTION:
>$
COMMAND AS ENTERED:
CHF NOW 99 12 17 AM PSAP 00 0 00 00 (LDTPSAP N Y Y
POLICE 30 40 50 50 Y) $
ENTER Y TO CONFIRM, N TO REJECT OR E TO EDIT
>Y
This NATLXLA change requires additional translations for
911 calls to complete. Verify translations to this PSAP
using the TRAVER command.
```

Trunk to line translations

Ordering codes

Trunk to line translations has no ordering codes.

Release applicability

TL03 and up

Prerequisites

Trunk to line translations has no prerequisites.

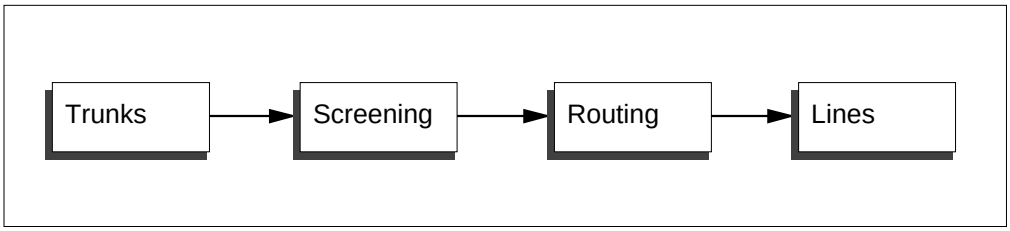
Description

When a call originates on an incoming trunk, the appropriate trunk tables are used. The call then enters the screening tables where digit analysis begins. After some general pre-screening or pre-translation is performed, the call may progress into more detailed screening based on NPA/NXX digits to determine the path into the designated routing tables for defining the final destination, or termination of the call.

Operation

Trunk to line translations can be traced using a simplified block diagram, representing the major functions within the translation process, as shown in the following figure.

Call processing blocks for Trunk to line translations



The trunk tables contain detailed information about trunks originating and terminating in the switch. Each trunk connected to the office is represented by entries in the trunk tables. These tables include information about the following:

- type of trunk group
- type of signaling
- hardware location of each trunk
- screening information for incoming call from trunks to define the next logical step in translation

Trunk to line translations (continued)

The screening tables contain the information used to analyze the digits that the DMS receives. This screening process tests the digits dialed prior to continuing to the next routing stage, to determine, for example, whether this call is local or non-local.

The screening tables establish the call type based on the digits received. The three basic call types are:

- operator assisted (OA)
- direct dial (DD)
- no prefix (NP)

The routing tables route the calls to their final destination. The information found in these tables dictates how and where a call will be completed, or if the call will route to a recorded announcement or treatment.

The lines tables contain information about the terminating line. These tables have two primary functions:

- Establish the hardware function and specify the hardware location for each line.
- Indicate the type of ringing codes used or options and features assigned to each line.

Translations table flow for Trunk to line translations

The call originates from a particular hardware location on an incoming trunk member listed in table TRKMEM. Signaling information is obtained from table TRKSGRP.

For an incoming trunk, table TRKGRP lists the Serving Numbering Plan Area (SNPA) in subfield SNPA and the pretranslator subtable name in subfield PRTNM.

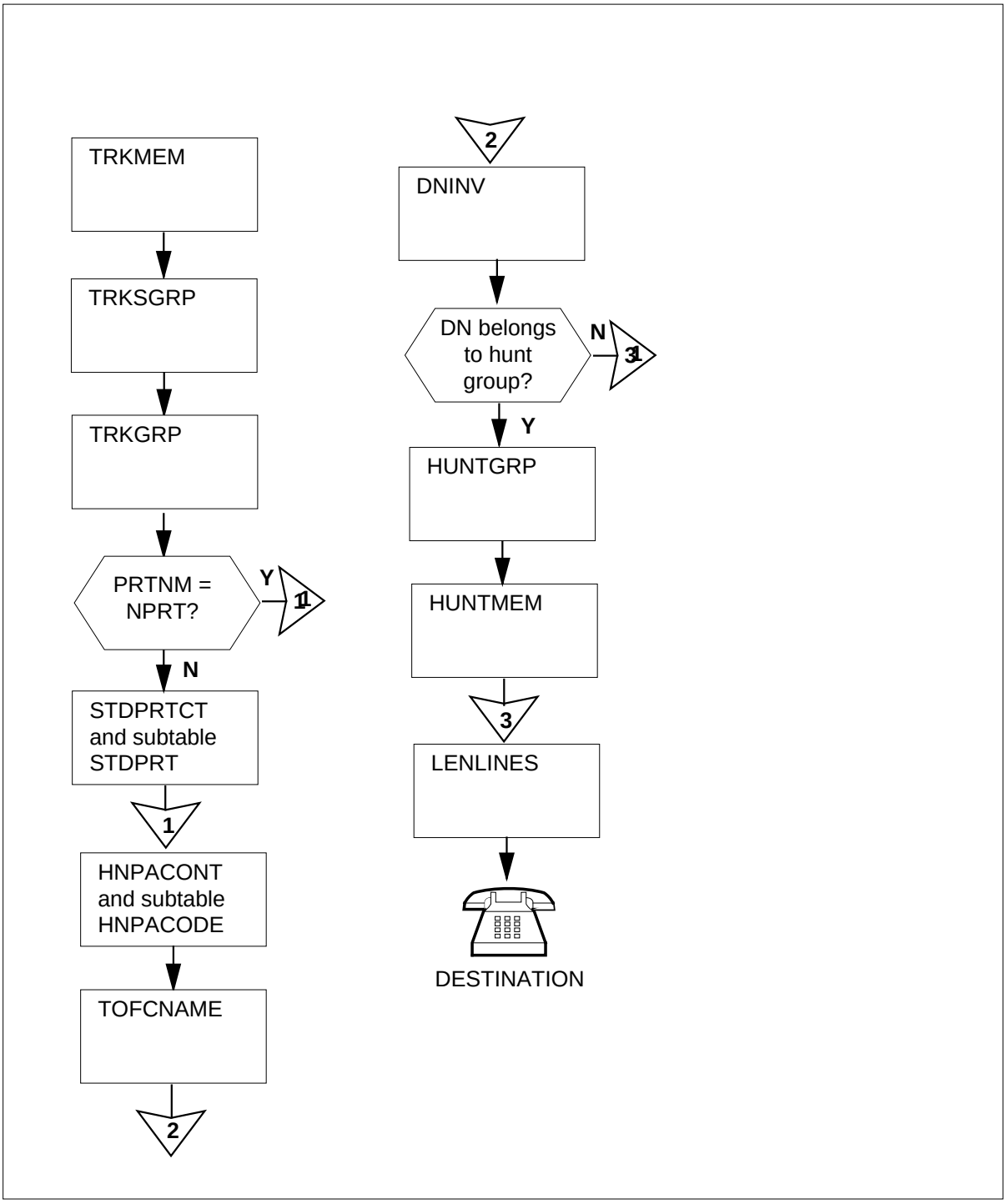
If a pretranslator subtable name is specified, translation continues with table STDPRTCT and its subtable STDPRT. If no pretranslator is specified, the entry in subfield PRTNM is NPRT and the call routes to table HNPACONT and its subtable HNPACODE.

Table TOFCNAME defines all the terminating offices in the switch and they are identified by area code and office code. Table DNINV contains the data for all assigned and unassigned directory numbers (DN). If the DN belongs to a hunt group, tables HUNTGRP and HUNTMEM will be accessed.

The Trunk to line translations process is shown in the flowchart that follows.

Trunk to line translations (continued)

Table flow for Trunk to line translations



Trunk to line translations (continued)

The following table lists the datafill content used in the flowchart. In this example, the terminating line belongs to a hunt group. In the example

- trunk = F514T13TISIT048
- terminating SNPA = 514
- terminating DN = 5462225

Datafill example for Trunk to line translations

Datafill table	Example data
CLLI	F514T13TISIT048 1527 1 SSP5_TACISUP_TRAF_TRUNKS
TRKMEM	F514T13TISIT048 1 0 DTC 13 19 24
TRKSGRP	F514T13TISIT048 0 DS1SIG C7UP 2W N N UNEQ NONE Q764 2W 2W 0 TATSTAC $ TACTIMER CIC
TRKGRP	F514T13TISIT048 IT 0 NPDGP NCIT 2W NIL MIDL 514 NPRT NSCR 514 000 Y N $
HNPACONT	514 98 0 (72) (1) (24) (0)
subtable HNPACODE	546 546 DN 514 546
TOFCNAME	514 546
DNINV	514 546 2225 H 57 0
HUNTGRP	57 514 5462225 DNH N N N RCVD N N N N N N 4 $
HUNTMEM	57 0 N D 5462225 N
LENLINES	HOST 05 0 16 17 S 0 5462225 DT 108 $

The following table lists the datafill content used in the flowchart. In this example, a pretranslator is specified in table TRKGRP. In the example

- trunk = S5AAA807IPTLA
- pretranslator = P807

Trunk to line translations (continued)

- terminating SNPA = 807
- terminating DN = 5663000

Datafill example for Trunk to line translations

Datafill table	Example data
CLLI	S5AAA807IPTLA 346 40 S5AAA_TO_S5807_IC_PTS_LAMA
TRKMEM	S5AAA807IPTLA 0 0 DTC 5 1 1
TRKSGRP	S5AAA807IPTLA 0 DS1SIG STD IC DP WK N 10 10 NO NO N N Y M UNEQ
TRKGRP	S5AAA807IPTLA IT 0 NPDGP NCRT IC DD MIDL 000 P807 NSCR 807 000 N N $
STDPRTCT	P807 (1) (65021)
subtable STDPRT	807 807 N DD 3 NA
HNPACONT	807 201 1 (31) (1) (14) (0)
subtable HNPACODE	457 457 DN 807 566
TOFCNAME	807 566
DNINV	807 566 3000 L HOST 04 0 00 19
LENLINES	HOST 04 0 00 19 S 0 5663000 DT 8 $

Limitations and restrictions

Trunk to line translations has no limitations or restrictions.

Billing

For information on billing, refer to the Bellcore format AMA translations section of this document.

Trunk to line translations (continued)

Datafilling office parameters

The following table shows the office parameters used by Trunk to line translations. For more information about office parameters, refer to *Office Parameters Reference Manual.*

Office parameters used by Trunk to line translations

Table name	Parameter name	Explanation and action
OFCENG	ACTIVE_DN_SYSTEM	This parameter specifies the type of DN that can be used in an office. If this parameter is set to NORTH_AMERICAN, the directory number must use the form NPA-NXX-XXXX. If this parameter is set to UNIVERSAL, the directory number may vary in length.
	AIN_ACTIVE	This parameter controls the activation of the Advanced Intelligent Network (AIN). Enter Y to activate AIN software. Enter N to deactivate AIN software. If this parameter is set to N, parameter AIN_OFFICE_TRIGGRP in table OFCVAR is disregarded.
OFCVAR	AIN_OFFICE_TRIGGRP	This parameter is used to subscribe trigger behaviors on an office-wide basis. The entry in field AINGRP in table TRIGGRP is entered here. The default value is NIL.

Datafill sequence

The following table lists the tables that require datafill to implement Trunk to line translations for the trunk. The tables are listed in the order in which they are to be datafilled.

Datafill tables required for Trunk to line translations for the trunk (Sheet 1 of 2)

Table	Purpose of table
CLLI	The common language location identifier table lists the name that uniquely identifies each trunk group, tone, or announcement.
TRKGRP	The trunk group table contains customer-defined data associated with each trunk group.

Trunk to line translations (continued)

Datafill tables required for Trunk to line translations for the trunk (Sheet 2 of 2)

Table	Purpose of table
TRKSGRP	The trunk subgroup table specifies supplementary information for each trunk group.
TRKMEM	The trunk member table gives the physical location of each trunk assigned to one of the trunk groups.

The following table lists the tables that require datafill to implement Trunk to line translations for the called line. The tables are listed in the order in which they are to be datafilled.

Datafill tables required for Trunk to line translations

Table	Purpose of table
HNPACONT	The home numbering plan area control table lists all the home or serving area NPAs for a particular area.
subtable HNPACODE	The home numbering plan area code subtable lists the route treatment or table to which the translation routes for each of the assigned NPAs.
STDPRTCT	The standard pretranslator table lists the names of the standard pretranslator subtables.
subtable STDPRT	The standard pretranslator subtable determines the next stage of translation, based on the range of leading digits.
TOFCNAME	The terminating office name table defines all terminating offices in the switch.
DNINV	The directory number inventory table is a read-only table that contains data for all assigned and unassigned DNs.
HUNTGRP	The hunt group table lists data assignments for each hunt group in the switching unit.
HUNTMEM	The hunt member table lists the members assigned to the hunt groups.
LENLINES	The line assignment table contains the DN, hardware location, and options associated with the calling line.

Datafilling table CLLI

The following table shows the datafill specific to Trunk to line translations for table CLLI. Only those fields that apply directly to Trunk to line translations

Trunk to line translations (continued)

are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table CLLI

Field	Subfield or refinement	Entry	Explanation and action
CLLI		alphanumeric (1 to 16 characters)	Common language location identifier. Enter a CLLI code to uniquely identify the far end of each announcement, tone, or trunk group.

Datafill example for table CLLI

The following example shows sample datafill for table CLLI.

MAP display example for table CLLI

```
CLLI                ADNUM       TRKGRSIZ
ADMININF
_____________________________________________________________
S5BBB807OPTCA       356         80
S5BBB_TO_S5807_OG_PTS_CAMA
```

Datafilling table TRKGRP

The following table shows the datafill specific to Trunk to line translations for table TRKGRP. Only those fields that apply directly to Trunk to line translations are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table TRKGRP

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 CLLI code assigned to the trunk group in table CLLI.

Datafill example for table TRKGRP

The following example shows sample datafill for table TRKGRP.

MAP display example for table TRKGRP

```
GRPKEY
GRPINFO
_____________________________________________________________________
F514T13TISIT048
IT 0 NPDGP NCIT 2W NIL MIDL 514 NPRT NSCR 514 000 Y N $
```

Datafilling table TRKSGRP

The following table shows the datafill specific to Trunk to line translations for table TRKSGRP. Only those fields that apply directly to Trunk to line translations are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table TRKSGRP

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 code that is assigned in table CLLI to the trunk group to which the subgroup belongs.
	SGRP	0 or 1	Subgroup number. Enter the number assigned to the trunk subgroup.

Datafill example for table TRKSGRP

The following example shows sample datafill for table TRKSGRP.

MAP display example for table TRKSGRP

```
SGRPKEY            CARDCODE
SGRPVAR
_____________________________________________________________________
F514T13TISIT048 0   DS1SIG
C7UP 2W  N  N UNEQ  NONE  Q764  2W 2W 0 TATSTAC $
TACTIMER CIC
```

Trunk to line translations (continued)

Datafilling table TRKMEM

The following table shows the datafill specific to Trunk to line translations for table TRKMEM. Only those fields that apply directly to Trunk to line translations are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table TRKMEM

Field	Subfield or refinement	Entry	Explanation and action
CLLI		alphanumeric (1 to 16 characters)	Common language location identifier. Enter the CLLI code that is assigned to the trunk group of which the trunk is a member. This CLLI code is assigned in table CLLI.
EXTRKNM		o 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.
MEMVAR		see subfield	Variable data for members. This field consists of subfield PMTYPE and refinements.
	PMTYPE	DTC	Peripheral module type. Enter the peripheral module (PM) type on which the trunk is mounted and datafill the refinements associated with this entry value. Enter DTC for a digital trunk controller and complete subfields DTCNO, DTCCKTNO, and DTCCKTTS.
	DTCNO	0 to 511	Digital trunk controller number. Enter the number of the DTC to which the trunk group member is assigned.
	DTCCKTNO	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	1 to 24	Digital trunk controller circuit time-slot. Enter the number of the circuit card DS-1 time-slot to which the trunk group member is assigned.

Datafill example for table TRKMEM

The following example shows sample datafill for table TRKMEM.

MAP display example for table TRKMEM

```
CLLI              EXTRKNM  SGRP              MEMVAR
_____________________________________________________
S5AAA807IPTLA     0        0                 DTC    5 1 1
```

Datafilling table STDPRTCT

The following table shows the datafill specific to Trunk to line translations for table STDPRTCT. Only those fields that apply directly to Trunk to line translations are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table STDPRTCT

Field	Subfield or refinement	Entry	Explanation and action
EXPRTNM		alphanumeric (up to 8 characters)	External standard pretranslator name. Enter the key defined by the operating company to represent the standard pretranslator subtable.
STDPRT		see note	Standard pretranslator. The field is an index into subtable STDPRT. ***Note:*** This field does not accept any input.

Datafill example for table STDPRTCT

The following example shows sample datafill for table STDPRTCT.

MAP display example for table STDPRTCT

```
EXPRTNM    STDPRT    AMAPRT
_____________________________________________
P705       (    1)   (65021)
```

Trunk to line translations (continued)

Datafilling subtable STDPRTCT.STDPRT

The following table shows the datafill specific to Trunk to line translations for subtable STDPRTCT.STDPRT. Only those fields that apply directly to Trunk to line translations are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling subtable STDPRTCT.STDPRT

Field	Subfield or refinement	Entry	Explanation and action
FROMDIGS		numeric (up to 18 digits)	From digits. Enter the digit or digits to be translated. If the entry represents a block of consecutive numbers, enter the first number in the block.
TODIGS		numeric (up to 18 digits)	To digits. If field FROMDIGS represents a block of consecutive numbers, enter the last number in the block.
PRETRTE		see subfield	Pretranslation route. This field consists of subfield PRERTSEL and its refinements, TYPECALL, NOPREDIG, TRANSYS, and POS.
	PRERTSEL	N	Pretranslator route selector. Enter N. Refer to the data schema section of this document for more information.
	TYPCALL	DD, OA, NP, or NL	Type of call. Enter the type of call: DD (direct dial), NP (no prefix), OA (operator assisted), or NL (nil). For Traffic Operator Position System (TOPS) calls, there can be a mixture of 0 and 1 (OA and DD) call types. Enter NL for these cases.
	NOPREDIG	0 to 7	Number of prefix digits. Enter the number of digits that are to be interpreted as prefix digits.
	TRANSYS	IN, IP, or NA	Translation system. Enter IN if the translation routes to international translations (on a local and toll combined switching unit only). Enter IP if the translation routes to international partitioned translations (DMS-250 only). Enter NA if the translation routes to national translations.

Datafill example for subtable STDPRTCT.STDPRT

The following example shows sample datafill for subtable STDPRTCT.STDPRT.

MAP display example for subtable STDPRTCT.STDPRT

```
FROMDIGS          TODIGS         PRETRTE
_____________________________________________________
2                 704            N DD 0 NA
```

Datafilling table HNPACONT

The following table shows the datafill specific to Trunk to line translations for table HNPACONT. Only those fields that apply directly to Trunk to line translations are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table HNPACONT

Field	Subfield or refinement	Entry	Explanation and action
STS		0 to9 999 999	Serving translation scheme. Enter an SNPA or STS code.
HNPACODE		see note	Home numbering plan area code. This field is an index into subtable HNPACODE. ***Note:*** This field does not accept any input.

Datafill example for table HNPACONT

The following example shows sample datafill for table HNPACONT.

Trunk to line translations (continued)

MAP display example for table HNPACONT

```
STS   NORTREFS   NOAMBIGC   RTEREF   HNPACODE   ATTRIB   RTEMAP
_____________________________________________________________
514   98         0          (   72) (    1)    (   24) (   0)
```

Datafilling subtable HNPACONT.HNPACODE

The following table shows the datafill specific to Trunk to line translations for subtable HNPACONT.HNPACODE. Only those fields that apply directly to Trunk to line translations are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling subtable HNPACONT.HNPACODE

Field	Subfield or refinement	Entry	Explanation and action
FROMDIGS		numeric (3 digits)	From digits. Enter the number representing a single code or the first in a block of consecutive codes that have the same input data.
TODIGS		numeric (3 digits)	To digits. If field FROMDIGS represents a single code, enter the same single code as in field FROMDIGS. If field FROMDIGS represents the first number of a block of consecutive numbers, enter the last number in the block.
CDRRTMT		see subfield	Code type, route reference or treatment. This field consists of subfield CD.
	CD	DN	Code type. Enter DN for terminating office code and datafill refinements SNPA and NXX.
	SNPA	numeric (3 digits)	Terminating serving numbering plan area. Enter the SNPA of the called terminating line DN. If the operating company uses screening to intraswitch SNPAs, translation of the dialed digits proceeds to table TOFCNAME, using SNPA and NXX as the key.
	NXX	numeric (3 digits)	Terminating NXX. Enter three digits for the NXX code of the called terminating line DN.

Datafill example for subtable HNPACONT.HNPACODE

The following example shows sample datafill for subtable HNPACONT.HNPACODE.

MAP display example for subtable HNPACONT.HNPACODE

```
FROMDIGS     TODIGS            CDRRTMT
_____________________________________________________
546          546               DN 514 546
```

Datafilling table TOFCNAME

The following table shows the datafill specific to Trunk to line translations for table TOFCNAME. Only those fields that apply directly to Trunk to line translations are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table TOFCNAME

Field	Subfield or refinement	Entry	Explanation and action
AREACODE		0 to 9 999 999	Area code. The area code identifies a major geographical area served by the switch. This field can contain one to seven digits. In a North American office, the area code must be three digits in length. Enter an area code that has been defined in table SNPANAME or table HNPACONT.
OFCCODE		0 to 9 999 999 or $	Office code. The office code is a subregion of the area code. It can have zero to seven digits. In a North American office, the office code must be three digits in length.

Datafill example for table TOFCNAME

The following example shows sample datafill for table TOFCNAME.

Trunk to line translations (continued)

MAP display example for table TOFCNAME

```
AREACODE        OFCCODE
_____________________________________________________________
807             566
```

Datafilling table DNINV

Table DNINV contains the data for all assigned and unassigned DNs. Table DNINV is a read-only table. Information is added to it as DNs are assigned of used in other tables such as LENLINES.

The following table shows the datafill specific to Trunk to line translations for table DNINV. Only those fields that apply directly to Trunk to line translations are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table DNINV (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
AREACODE		0 to 9 999 999 (1 to 7 digits)	Area code. The area code identifies a major geographical area served by the switch. If office parameter ACTIVE_DN_SYSTEM in table OFCENG is set to North American, the area code must be three digits long.

Datafilling table DNINV (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
OFCCODE		0 to 9 999 999 (1 to 7 digits)	Office code digit register. The office code is a subregion of the area code. If office parameter ACTIVE_DN_SYSTEM in table OFCENG is set to North American, the area code must be three digits long. The office code must be specified in table TOFCNAME.
STNCODE		0 to 99 999 999 (1 to 8 digits)	Station code. The station code identifies a unique station within the terminating office. If office parameter ACTIVE_DN_SYSTEM in table OFCENG is set to North American, the area code must be one or four digits in length. If one digit is entered, it is treated as a D-digit, where the D-digit represents the fourth digit in the format ABC-DEFG.

Datafill example for table DNINV

The following example shows sample datafill for table DNINV.

MAP display example for table DNINV

```
AREACODE   OFCCODE    STNCODE            DNRESULT
_____________________________________________________
807        566        3000               L HOST 04 0 00 19
```

Datafilling table HUNTGRP

Table HUNTGRP is datafilled if the called line belongs to a hunt group.

The following table shows the datafill specific to Trunk to line translations for table HUNTGRP. Only those fields that apply directly to Trunk to line

Trunk to line translations (continued)

translations are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table HUNTGRP

Field	Subfield or refinement	Entry	Explanation and action
HTGRP		0 to 8191	Hunt group number. Enter the hunt group number assigned to the hunt group.
DN		numeric (up to 15 digits)	Directory number. Enter the listed DN of the hunt group.
GRPTYP		DNH	Hunt group type. Enter DNH and datafill refinement TRMOPT.
GRPDATA	TRMBOPT	Y or N	Terminating billing option. If the optional terminator software package is provided, and if a record is generated for each call to a member of the hunt group, enter Y. Otherwise, enter N.

Datafill example for table HUNTGRP

The following example shows sample datafill for table HUNTGRP.

MAP display example for table HUNTGRP

```
HTGRP   SNPA       DN                        GRPTYP
GRPDATA
_____________________________________________________________________
57      514        5462225                   DNH
N  N  N  RCVD  N  N  N  N  N  N  4  $
```

Datafilling table HUNTMEM

Table HUNTMEM is datafilled if the called line belongs to a hunt group.

The following table shows the datafill specific to Trunk to line translations for table HUNTMEM. Only those fields that apply directly to Trunk to line

translations are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table HUNTMEM

Field	Subfield or refinement	Entry	Explanation and action
HTGRP		0 to 8191	Hunt group number key. Enter the hunt group number to which the member belongs.
HTMDATA		see subfield	Hunt member data. This field consists of subfield SEL.
	SEL	B, D, L or P	Select hunt group type. Enter one of the following: • B—bridged night number • D—directory number • L—multiline or distributed line • P—multiple position If the entry in this field is D, complete subfields DN and BNNDAT.
	DN	numeric (up to 15 digits)	Directory number. Enter the DN assigned to the hunt group sequence number.

Datafill example for table HUNTMEM

The following example shows sample datafill for table HUNTMEM.

MAP display example for table HUNTMEM

```
HTGRP    SEQNO    INSERT              HTMDATA
_____________________________________________________
57       0        N                   D 5462225 N
```

Datafilling table LENLINES

The following table shows the datafill specific to Trunk to line translations for table LENLINES. Only those fields that apply directly to Trunk to line

Trunk to line translations (continued)

translations are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table LENLINES

Field	Subfield or refinement	Entry	Explanation and action
LEN		see note	Line equipment number. This field defines the physical location of the equipment that is connected to a specific telephone line. Because field LEN is common to more than 60 tables, it is documented in a single section to avoid unnecessary duplication. For a more complete description of LEN and associated subfields refer to section "Common entry field LEN" in the data schema section of this document. ***Note:*** Field LEN consists of subfields SITE, FRAME, UNIT, DRAWER or LSG, SHELF, SLOT, and CIRCUIT.
PTY		R1 to R5, T1 to T5 or S	Party and ringing combination. If the line is assigned to a two-, four-, eight-, or ten-party line, enter the party, R1 to R5 or T1 to T5, of the DN assigned to the line. If the line is assigned to an individual line, enter S for single party.
LNATTIDX		0 to 2047	Line attribute index. Enter the index into table LINEATTR.

Datafill example for table LENLINES

The following example shows sample datafill for table LENLINES.

MAP display example for table LENLINES

```
LEN                    PTY        RINGCODE    DN
SIGTYPE    LNATTIDX    OPTLIST
_____________________________________________________________
HOST  04 0 00 19       S          0           5663000
DT         8           $
```

Trunk to line translations (end)

Translation verification tools

The following example shows the output from TRAVER when it is used to verify Trunk to line translations. No pretranslator is specified.

TRAVER output example for Trunk to line translations

```
>traver tr S5AAA807IISLA 5663000 b
TABLE TRKGRP
S5AAA807IISLA IT 0 NPDGP NCRT IC DD MIDL 000 P807 NSCR 807 000 N N $
TABLE OFCVAR
AIN_OFFICE_TRIGGRP NIL
TABLE STDPRTCT
P807 ( 1) (65021) 0
 . SUBTABLE STDPRT
WARNING: CHANGES IN TABLE STDPRT MAY ALTER OFFICE
BILLING.  CALL TYPE DEFAULT IS NP.  PLEASE REFER TO
DOCUMENTATION.
 . 5 806 N DD 0 NA
 . SUBTABLE AMAPRT
 . KEY NOT FOUND
 . DEFAULT VALUE IS:   NONE OVRNONE  N
TABLE HNPACONT
807 201 1 ( 31) ( 1) ( 14) ( 0) 0
 . SUBTABLE HNPACODE
 . 566 566 DN 807 566
AIN Info Collected TDP: no subscribed trigger.
AIN Info Analyzed TDP: no subscribed trigger.
TABLE TOFCNAME
807 566
TABLE DNINV
807 566 3000 L HOST 04 0 00 19
AIN Term Attempt TDP: no subscribed trigger.
TABLE DNATTRS
TUPLE NOT FOUND
TABLE DNGRPS
TUPLE NOT FOUND

+++ TRAVER: SUCCESSFUL CALL TRACE +++
DIGIT TRANSLATION ROUTES

1 LINE                  8075663000         ST

TREATMENT ROUTES.  TREATMENT IS: GNCT
1 120T0

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

Trunk to treatment translations

Ordering codes

Trunk to treatment translations has no ordering codes.

Release applicability

TL03 and up

Prerequisites

Trunk to treatment translations has no prerequisites.

Description

When a call originates on an incoming trunk, the appropriate trunk tables are used. The call then enters the screening tables where digit analysis begins. After some general pre-screening or pre-translation is performed, the call may progress into more detailed screening based on NPA/NXX digits to determine the path into the designated routing tables for defining the final destination, or termination of the call. If the call cannot be completed, the call routes to treatment.

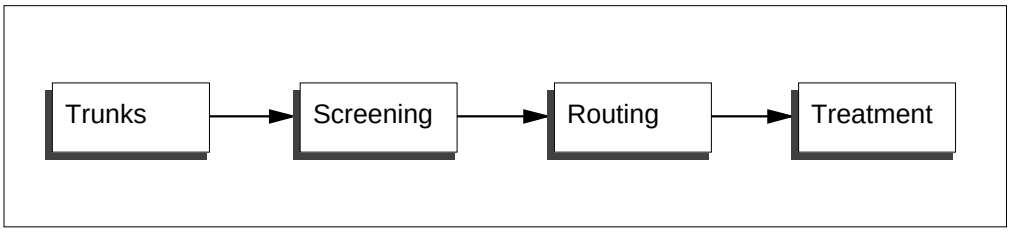
A call is routed to treatment under the following conditions:

- The operating company had explicitly routed this call to treatment.
- The DMS switch detects certain conditions that result in treatment.

Operation

Trunk to treatment translations can be traced using a simplified block diagram, representing the major functions within the translation process, as shown in the following figure .

Call processing blocks for Trunk to treatment translations



The trunk tables contain detailed information about trunks originating and terminating in the switch. Each trunk connected to the office is represented by

Trunk to treatment translations (continued)

entries in the trunk tables. These tables include information about the following:

- type of trunk group
- type of signaling
- hardware location of each trunk
- screening information for incoming call from trunks to define the next logical step in translation

The screening tables contain the information used to analyze the digits that the DMS switch receives. This screening process tests the digits dialed before continuing to the next routing stage, to determine, for example, whether this call is local or non-local.

The screening tables establish the call type based on the digits received. The three basic call types are

- operator assisted (OA)
- direct dial (DD)
- no prefix (NP)

The routing tables route the call to its final destination. If the call cannot be completed, it will route to a recorded announcement or treatment.

Translations table flow for Trunk to treatment translations

The call originates from a particular hardware location on an incoming trunk member listed in table TRKMEM. Signaling information is obtained from table TRKSGRP.

For an incoming trunk, table TRKGRP lists the Serving Numbering Plan Area (SNPA) in subfield SNPA and the pretranslator subtable name in subfield PRTNM.

If a pretranslator subtable name is specified, translation continues with table STDPRTCT and its subtable STDPRT. If no pretranslator is specified, the entry in subfield PRTNM is NPRT and the call routes to table HNPACONT and its subtable HNPACODE.

If the call cannot be completed, it is routed to table TMTCNTL and its subtable TREAT. Subtable TREAT defines the tones, announcements, or states that are to be returned when a specified treatment code is encountered.

Trunk to treatment translations (continued)

Call processing continues through table OFRT. The common language location identifier (CLLI) datafilled in table OFRT is listed in table CLLI. Each treatment CLLI, except for fixed treatment CLLIs IDLE, LKOUT (lockout), and COPP (cutoff on permanent signal and partial dial), is also defined in tables TONES, STN, ANNS, and ANNMEMS.

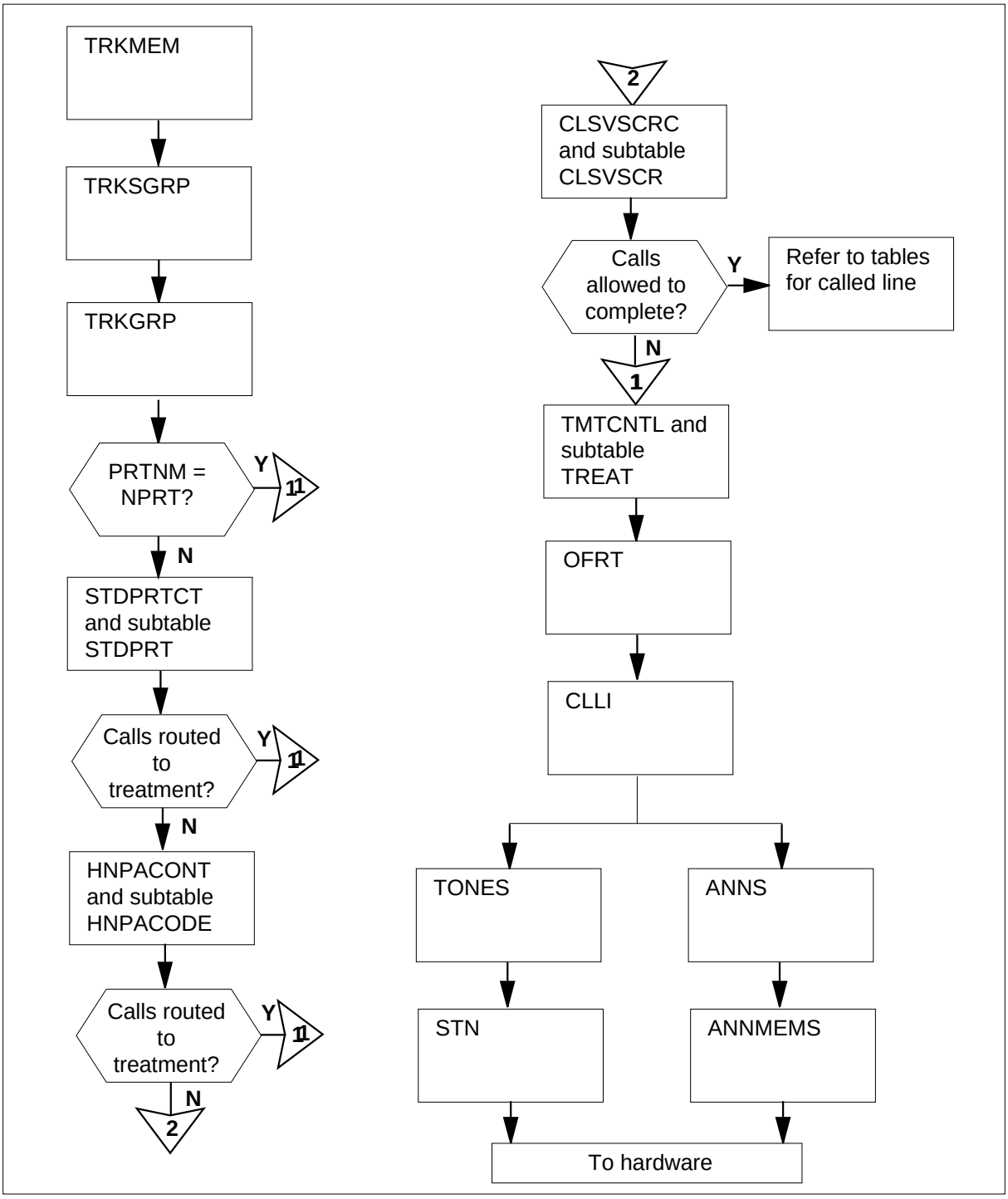
Table TONES lists specific tones and identifies the type, pattern, and duration of each tone. Table STN contains additional tone data.

Table ANNS identifies the type, maximum number of simultaneous connections, and maximum length of each announcement. Table ANNMEMS identifies the hardware location for the announcement. The hardware can be a DRAM (digital recorded announcement machine), located on a maintenance trunk module (MTM), or an audichron located on a trunk module (TM8).

Trunk to treatment translations translation process is shown in the flowchart that follows.

Trunk to treatment translations (continued)

Table flow for Trunk to treatment translations



Trunk to treatment translations (continued)

The following table lists the datafill content used in the flowchart.

Datafill example forTrunk to treatment translations

Datafill table	Example data
CLLI	S5807705TPTIT 228 40 S5807_TO_S5705_2W_PTS_INTERTOL
TRKGRP	S5807705TPTIT IT 0 NPDGP NCIT 2W IT ASEQ 705 P807 NSCR 807 000 N N $
TRKSGRP	S5807705TPTIT 0 DS1SIG STD 2W MF DD N 5 5 MF DD 7 0 N NO NO N N Y M 70 UNEQ
TRKMEM	S5807705TPTIT 0 0 DTC 5 9 1
STDPRTCT	P807 (1) (65021)
subtable STDPRT	8 910 D VACT
TMTCNTL	ITTRKGRP (7)
subtable TREAT	SSTO Y T OFRT 72
OFRT	72 (S D *OFLO) $
CLLI	*OFLO 168 10 TREATMENT
TONES	*OFLO 20 25 101010 LO 30 10

Limitations and restrictions

Trunk to treatment translations has no limitations or restrictions.

Billing

Trunk to treatment translations does not affect billing.

Trunk to treatment translations (continued)

Datafilling office parameters

The following table shows the office parameters used by Trunk to treatment translations. For more information about office parameters, refer to *Office Parameters Reference Manual.*

Office parameters used by Trunk to treatment translations (Sheet 1 of 2)

Table name	Parameter name	Explanation and action
OFCENG	NCCBS	Enter a number from 0 to 65 535 to specify the number of call condense blocks (CCB) required for the switching unit. A CCB is a software register associated with a call throughout its duration, containing information such as the identity of the calling and called appearances. The default value is 80.
	MAX_PROGRAMMERS	This parameter is required for a switching unit with the Call Forwarding Remote Access (CFRA) feature. It specifies the maximum number of users that can simultaneously perform a remote programming action of CFRA.
	NUMCPWAKE	This parameter is required in all switching units and specifies the maximum number of call process wakeups in the system.
	TFAN_OUT_MAX_NUMBER	This parameter specifies the maximum number of destination traffic separation numbers (DTSN) that can be assigned to • outgoing and two-way trunk groups in table TRKGRP • lines in table LINEATTR • network class of service numbers in table NCOS • announcements in table ANNS • tones in table TONES • special tones in table STN This parameter can be assigned values SIZE_15, SIZE_31, SIZE_64, or SIZE_127.

Trunk to treatment translations (continued)

Office parameters used by Trunk to treatment translations (Sheet 2 of 2)

Table name	Parameter name	Explanation and action
	TOPS_ACTS	This parameter specifies whether the TOPS Automatic Coin Toll Service ACTS feature is active in the office.
OFCVAR	AIN_OFFICE_TRIGGRP	This parameter is used to asbscribe trigger behaviors on an office-wide basis. The entry in field AINGRP in table TRIGGRP is entered here. The default value is NIL.
	CWT_TONE_LENGTH	This parameter specifies the length of a solid burst of call waiting (CWT) tone, in 100 ms intervals.
	DIST_CWT_TONE	This parameter specifies the on-off durations for the special CWT distinctive cadence, in 10 ms intervals. The default value is 25 (250 ms) on and 10 (100 ms) off.

Datafill sequence

The following table lists the tables that require datafill to implement Trunk to treatment translations. The tables are listed in the order in which they are to be datafilled.

Datafill tables required for Trunk to treatment translations (Sheet 1 of 2)

Table	Purpose of table
CLLI	The common language location identifier table defines the CLLI of each tone and announcement.
TONES	The tones table defines tones generated at the line or trunk peripheral.
STN	The special tone table lists the physical location and the maximum number of connections that can be made to each special tone.
ANNS	The announcement table contains data for each analog and digital announcement assigned in the switching unit.
ANNMEMS	The announcement member table lists the assignments for each of the members assigned to the announcements listed in table ANNS.
OFRT	The office route table lists the sequence of tones, announcements, and states to be returned to the originator of the call when a specified treatment code is encountered during call translation.

Trunk to treatment translations (continued)

Datafill tables required for Trunk to treatment translations (Sheet 2 of 2)

Table	Purpose of table
TMTCNTL	The treatment control table defines all treatments.
subtable TREAT	The treatment subtable defines the tones, announcements, and states to be returned to the originator of the call when a specified treatment code is encountered during call translation.
HNPACONT	The home numbering plan area control table lists all the home or serving area NPAs for a particular area.
subtable HNPACODE	The home numbering plan area code subtable lists the route treatment or table to which the translation routes for each of the assigned NPAs.
STDPRTCT	The standard pretranslator table lists the names of the standard pretranslator subtables.
subtable STDPRT	The standard pretranslator subtable determines the next stage of translation, based on the range of leading digits.
LCASCRCN	The local calling area screening control table lists the NPA code and local calling area name and its prefix selector.
subtable LCASCR	The local calling area screening code subtable determines from the dialed digits if the call is local or non-local.
CLSVSCRC	The class of service control table lists the serving NPA of the screening class, the screening class name, and the type of call to which screening is applicable.
subtable CLSVSCR	The class of service subtable determines, for specific digits dialed, if the call will maintain the route specified in subtable HNPACONT.HNPACODE or route to treatment.
TRKGRP	The trunk group table contains customer-defined data associated with each trunk group.
TRKSGRP	The trunk subgroup table specifies supplementary information for each trunk group.
TRKMEM	The trunk member table gives the physical location of each trunk assigned to one of the trunk groups.

Datafilling table CLLI

Table CLLI must contain a tuple for the originating office and the tone or announcement.

The following table shows the datafill specific to Trunk to treatment translations for table CLLI. Only those fields that apply directly to Trunk to

Trunk to treatment translations (continued)

treatment translations are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table CLLI

Field	Subfield or refinement	Entry	Explanation and action
CLLI		alphanumeric (1 to 16 characters)	Common language location identifier. Enter a CLLI code to uniquely identify the far end of each announcement, tone, or trunk group.

Datafill example for table CLLI

The following example shows sample datafill for table CLLI. The first example contains the CLLI for the trunk. The second example contains the CLLI for the treatment.

MAP display example for table CLLI

```
CLLI              ADNUM      TRKGRSIZ
                                  ADMININF
_____________________________________________________________
F514T13TISIT048   1527       1
                                  SSP5_TACISUP_TRAF_TRUNKS
*BUSY             149        0
                                  BUSY_TONE
```

Datafilling table TONES

The following table shows the datafill specific to Trunk to treatment translations for table TONES. Only those fields that apply directly to Trunk to

Trunk to treatment translations (continued)

treatment translations are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table TONES (Sheet 1 of 2)

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.
TRAFSNO		0 to 127	Traffic separation number. If 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 not required, enter 0. The range of values for the outgoing traffic separation number is dependent upon office parameter TFAN_OUT_MAX_NUMBER in table OFCENG.
SEGTIME		10 to 100	Segment time. Enter the duration of one segment of tone specified in multiples of 10 ms (for example: 25 = 250 ms).
TONEPATT		numeric (up to16 digits)	Tone pattern. Enter a string of up to 16 digits 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

Trunk to treatment translations (continued)

Datafilling table TONES (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
TONETYP		HI, HZ400_5DB, or LO	Tone type. Enter the type of tone generator required. 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. Tone generator types other than those described below are not valid entries. Enter HI for high tone. Enter HZ400_5DB for a tone generated at 400 Hz at -5 dBm. Enter LO for low tone.
MAXDURN		1 to 255	Maximum duration. Enter the maximum time in seconds that a call condense block can be attached. The maximum time duration for silent tone is 10 s.

Datafill example for table TONES

The following example shows sample datafill for table TONES.

MAP display example for table TONES

```
CLLI   TRAFSNO SEGTIME TONEPATT TONETYP MAXDURN MAXCONN
_____________________________________________________
*BUSY 21       50      101010   LO      40      30
```

Datafilling table STN

The following table shows the datafill specific to Trunk to treatment translations for table STN. Only those fields that apply directly to Trunk to

treatment translations are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table STN

Field	Subfield or refinement	Entry	Explanation and action
SK		see subfields	Special tone key. This field consists of subfields TONE and MEMBER.
	TONE	alphanumeric (1 to 16 characters)	Tone. Enter the fixed code (TONE_INDEX) assigned to the tone trunk circuit in table CLLI.
	MEMBER	0 to 999	Member number. Enter the member number assigned to the tone trunk circuit.
MAXCONN		0 to 255	Maximum connections. Enter the maximum number of simultaneous connections that are allowed to be made to the tone trunk circuit.

Datafill example for table STN

The following example shows sample datafill for table STN.

MAP display example for table STN

```
SK       TMTYPE  TMNO  TMCKTNO  CARDCODE  MAXCONN  TRAFSNO
_____________________________________________________________
CWT  0   MTM     6     17       3X68AC    127      0
```

Datafilling table ANNS

The following table shows the datafill specific to Trunk to treatment translations for table ANNS. Only those fields that apply directly to Trunk to

Trunk to treatment translations (continued)

treatment translations are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table ANNS (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
CLLI		alphanumeric (1 to 16 characters)	Announcement CLLI key. Enter the code that represents the announcement in table CLLI.
ANTYPE		see below	Announcement type. Enter the announcement type as follows:
		ACTS	ACTS to specify Automatic Coin Toll Service
		AIN	AIN to specify a given DMS user interface for each customer group
		AIS	AIS to specify Automatic Intercept System announcement if the switch has the AIS feature
		AOSSVR	AOSSVR to specify AOSS Voice Response
		CFRA	CFRA to specify Call Forwarding Remote Access announcement
		CLASS	CLASS to specify Custom Local Area Signaling Services announcement
		CNAL	CNAL to specify Calling Number Announcement playback to a line
		CNALT	CNALT to specify Calling Number Announcement playback to a line and over a trunk to a loudspeaker
		CNAT	CNAT to specify Calling Number Announcement playback over a trunk to a loudspeaker
		DMCT	DMCT to specify Denied Malicious Call Termination
		MCCS	MCCS to specify Mechanized Calling Card Announcement
		NFRA	NFRA to specify Network facility Remote Access
		SACB	SACB to specify Subscriber Activated Call Blocking

Trunk to treatment translations (continued)

Datafilling table ANNS (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
		SLEENG	SLEENG to specify Screening List Editing English
		SLEFRE	SLEFRE to specify Screening List Editing French
		SPP	SPP to specify Station Programmable PIN (Personal Identification Number)
		STND	STND to specify Standard Announcement
		TOPSVR	TOPSVR to specify TOPS Voice Response ***Note:*** Office parameter TOPS_ACTS must be set to Y in table OFCENG
MAXCONN		1 to 255	Maximum connections. Enter the maximum number of simultaneous connections that are permitted on the announcement.
CYTIME		1 to 18 or 0	Cycle times. Enter the time, in seconds, for one announcement cycle on one channel. ***Note 1:*** If your office is equipped with a Cook or equivalent announcement machine and table AUDIO is datafilled as ANNS, field CYTIME is changed to 0. This allows flexible announcement timing. ***Note 2:*** The cycle time for an Audichron is 0 due to the variable length announcement feature on Audichron. By setting the value of this field to 0, the length of the announcement is always matched.
MAXCYC		1 to 255	Maximum cycles. Enter the maximum number of times the complete announcement is heard before the call is advanced to the next route in the route list. An entry outside of this range is invalid.

Datafill example for table ANNS

The following example shows sample datafill for table ANNS.

Trunk to treatment translations (continued)

MAP display example for table ANNS

```
CLLI ANTYPE TRAFSNO MAXCONN CYTIME MAXCYC
_____________________________________________________________
VCA  STND   25      30      14     1
```

Datafilling table ANNMEMS

The following table shows the datafill specific to Trunk to treatment translations for table ANNMEMS. Only those fields that apply directly to Trunk to treatment translations are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table ANNMEMS

Field	Subfield or refinement	Entry	Explanation and action
ANNMEM		see subfields	Announcement member key. This field consists of subfields ANN and MEMBER.
	ANN	alphanumeric (1 to 16 characters)	Announcement. Enter the code that represents the announcement group in table CLLI.
	MEMBER	0 to 255	Member. If the trunk circuit is the first in the trunk list for the announcement member, enter the number assigned to the member. If digital, each announcement member can be assigned up to eight trunk circuits. If analog, each announcement can be assigned up to two trunk circuits.
HDWTYPE		AUDICHRON DRAM	Hardware type. Enter AUDICHRON if the first entry for the member and hardware type is analog. Enter DRAM if the recorded announcement member is digital.

Datafill example for table ANNMEMS

The following example shows sample datafill for table ANNMEMS.

Trunk to treatment translations (continued)

MAP display example for table ANNMEMS

```
ANNMEM    HDWTYPE CARD   MEMINFO
_____________________________________________________________
VCA  0    DRAM    DRA    (0 MTM 2 4) $
```

Datafilling table OFRT

The following table shows the datafill specific to Trunk to treatment translations for table OFRT. Only those fields that apply directly to Trunk to treatment translations are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table OFRT

Field	Subfield or refinement	Entry	Explanation and action
RTE		1 to 1023, blank	Route reference index. Enter the route reference number assigned to the route list.
RTELIST		see subfield	Route list. This field consists of subfield RTESEL and refinements RTESEL, CONNTYPE, CLLI and ROUTATTR_INDEX. Enter $ to signify the end of the vector.
	RTESEL	S or SX	Route selector. Enter S and datafill refinements CONNTYPE and CLLI if the route is standard. Enter SX and datafill refinements CLLI and ROUTATTR_INDEX if the route is expanded standard.
	CONNTYPE	D	Connection type. This field is not used by system logic. Enter D to satisfy table control.
	CLLI	alphanumeric (1 to 16 characters)	Common language location identifier. Enter the code in table CLLI to which translation is routed.
	ROUTATTR_ INDEX	alphanumeric (1 to 16 characters)	Route attribute index. Enter the index in table ROUTATTR containing the expanded routing information to be applied to the call.

Trunk to treatment translations (continued)

Datafill example for table OFRT

The following example shows sample datafill for table OFRT.

MAP display example for table OFRT

```
RTE         RTELIST
_____________________________________________________________
165         (   S    D    VCA) (S D T120) $
```

Datafilling table TMTCNTL

The following table shows the datafill specific to Trunk to treatment translations for table TMTCNTL. Only those fields that apply directly to Trunk to treatment translations are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table TMTCNTL

Field	Subfield or refinement	Entry	Explanation and action
EXTTMTNM		ITTRKGRP, OFFTREAT, INTRKGRP, TOPS, PXTRKGRP	Extended treatment name. The following treatments are valid: • ITTRKGRP for intertoll • OFFTREAT for office • INTRKGRP for incoming CAMA • TITRKGRP for local incoming trunk • TOPS for TOPS • PXTRKGRP for PBX two-way trunks

Datafill example for table TMTCNTL

The following example shows sample datafill for table TMTCNTL.

Trunk to treatment translations (continued)

MAP display example for table TMTCNTL

```
EXTTMTNM     TREAT
_____________________________________________________________________
ITTRKGRP     (     7)
```

Datafilling subtable TMTCNTL.TREAT

The following table shows the datafill specific to Trunk to treatment translations for subtable TMTCNTL.TREAT. Only those fields that apply directly to Trunk to treatment translations are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling subtable TMTCNTL.TREAT (Sheet 1 of 2)

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 for a trunk or line message 138 printout each time translation is routed to a treatment. Otherwise enter N.
FSTRTE		see subfields	First route. This field consists of subfields FSTRTSEL TABID, and KEY.
	FSTRTSEL	S or T	First route selector. Enter S if treatment routes to a CLLI listed in table TONES. Complete subfield CLLI. Enter T if treatment routes to table OFRT. Complete subfields TABID and KEY.
	CLLI	alphanumeric (1 to 16 characters)	Common language location identifier. Enter the CLLI of the tone to which translation is routed.

Trunk to treatment translations (continued)

Datafilling subtable TMTCNTL.TREAT (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
	TABID	OFRT, OFR2, OFR3, or OFR4	Table name. Enter the office route table name.
	KEY	1 to 1023	Key. Enter the index into the office route table which defines the route list for the treatment.

Datafill example for subtable TMTCNTL.TREAT

The following example shows sample datafill for subtable TMTCNTL.TREAT. In the example, the treatment is start signal time out (SSTO).

MAP display example for subtable TMTCNTL.TREAT

```
TREATMT        LOG    FSTRTE
_____________________________________________________________
SSTO    Y      T      OFRT    72
```

Datafilling table HNPACONT

The following table shows the datafill specific to Trunk to treatment translations for table HNPACONT. Only those fields that apply directly to Trunk to treatment translations are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table HNPACONT

Field	Subfield or refinement	Entry	Explanation and action
STS		0 to9 999 999	Serving numbering plan area. Enter a serving numbering plan area (SNPA) or STS code.
HNPACODE		see note	Home numbering plan area code. This field is an index into subtable HNPACODE. ***Note:*** This field does not accept any input.

Trunk to treatment translations (continued)

Datafill example for table HNPACONT

The following example shows sample datafill for table HNPACONT.

MAP display example for table HNPACONT

```
STS   NORTREFS   NOAMBIGC   RTEREF   HNPACODE   ATTRIB   RTEMAP
_____________________________________________________________
418   128        0          (  68)   (1)        (2)      (0)
```

Datafilling subtable HNPACONT.HNPACODE

The following table shows the datafill specific to Trunk to treatment translations for subtable HNPACONT.HNPACODE. Only those fields that apply directly to Trunk to treatment translations are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling subtable HNPACONT.HNPACODE

Field	Subfield or refinement	Entry	Explanation and action
FROMDIGS		numeric (3 digits)	From digits. Enter the number representing a single code or the first in a block of consecutive codes that have the same input data.
TODIGS		numeric (3 digits)	To digits. If field FROMDIGS represents a single code, enter the same single code as in field FROMDIGS. If field FROMDIGS represents the first number of a block of consecutive numbers, enter the last number in the block.
CDRRTMT		see subfield	Code type, route reference or treatment. This field consists of subfield CD.
	CD	VCT	Code type. Enter VCT to route a call to treatment specified in refinement TMT below.
	TMT	alphanumeric	Treatment. Enter the treatment that is used to index subtable TMTCNTL.TREAT.

Datafill example for subtable HNPACONT.HNPACODE

The following example shows sample datafill for subtable HNPACONT.HNPACODE.

Trunk to treatment translations (continued)

MAP display example for subtable HNPACONT.HNPACODE

```
FROMDIGS     TODIGS            CDRRTMT
_____________________________________________________
225          225               VCT    BUSY
```

Datafilling table STDPRTCT

The following table shows the datafill specific to Trunk to treatment translations for table STDPRTCT. Only those fields that apply directly to Trunk to treatment translations are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table STDPRTCT

Field	Subfield or refinement	Entry	Explanation and action
EXPRTNM		alphanumeric (up to 8 characters)	External standard pretranslator subtable name. Enter the name defined by the operating company to represent the standard pretranslator subtable.
STDPRT		see note	Standard pretranslator. The field is an index into subtable STDPRT. ***Note:*** This field does not accept any input.

Datafill example for table STDPRTCT

The following example shows sample datafill for table STDPRTCT.

MAP display example for table STDPRTCT

```
EXPRTNM    STDPRT    AMAPRT
_____________________________________________________
P225       (   1)    (65021)
```

Datafilling subtable STDPRTCT.STDPRT

The following table shows the datafill specific to Trunk to treatment translations for subtable STDPRTCT.STDPRT. Only those fields that apply directly to Trunk to treatment translations are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling subtable STDPRTCT.STDPRT

Field	Subfield or refinement	Entry	Explanation and action
FROMDIGS		numeric (up to 18 digits)	From digits. Enter the digit or digits to be translated. If the entry represents a block of consecutive numbers, enter the first number in the block.
TODIGS		numeric (up to 18 digits)	To digits. If field FROMDIGS represents a block of consecutive numbers, enter the last number in the block.
PRETRTE		see subfield	Pretranslation route. This field consists of subfields PRERTSEL and TREAT.
	PRERTSEL	D	Pretranslator route selector. Enter D to route directly to a treatment.
	TREAT	alphanumeric (4 characters)	Treatment. Enter the treatment that is the route of the translation.

Datafill example for subtable STDPRTCT.STDPRT

The following example shows sample datafill for subtable STDPRTCT.STDPRT.

MAP display example for subtable STDPRTCT.STDPRT

```
FROMDIGS          TODIGS          PRETRTE
-------------------------------------------
560               560             D VACT
```

Trunk to treatment translations (continued)

Datafilling table CLSVSCRC

The following table shows the datafill specific to Trunk to treatment translations for table CLSVSCRC. Only those fields that apply directly to Trunk to treatment translations are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table CLSVSCRC (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
NPASCTYP		see subfields	NPA screening class type. This field is consists of subfields STS, SCRNCL, and TYPCALL.
	STS	numeric	Serving translation scheme. Enter the serving home numbering plan area (NPA) for a given trunk group or line attribute.
	SCRNCL	alphanumeric (1 to 4 digits)	Screening class. Enter the class of service screening subtable name assigned to the trunk group, line attribute or CAMA or AMR5 billing code.
	TYPCALL	DD, OA, NP, or NL	Type of call. Enter the type of call, DD (direct dial), OA (operator assisted), NP (no prefix), or NL (nil). For Traffic Operator Position System (TOPS) calls, there can be a mixture of 0 and 1 (OA and DD) call types. Enter NL for these cases.
NORSLTS		0 to 255	Number of results. Enter the number of results required.
TMTOFRT		see subfields	Treatment or office route. This field consists of subfields SCRNSEL and RTEREFIX.
	SCRNSEL	T or D	Screening selector. Enter the screening selector T, if translation routes to table OFRT. Complete subfield RTEREFIX. Enter the screening selector D, if translation routes to one of the treatments in table TREAT. Complete subfield TREAT.
	RTEREFIX	see subfields	Route reference index. This field consists of subfields OFC_RTE and RTE_ID.

Trunk to treatment translations (continued)

Datafilling table CLSVSCRC (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
	OFC_RTE	OFRT, OFR2, OFR3, or OFR4	Office route table name. Enter the office route table name to which the translations are directed.
	RTE_ID	1 to 1023	Route reference table index. Enter the route index in table OFRT to which the translation routes.
	TREAT	alphanumeric	Treatment. Enter the treatment in table TREAT to which translation routes.

Datafill example for table CLSVSCRC

The following example shows sample datafill for table CLSVSCRC.

MAP display example for table CLSVSCRC

```
NPASCTYP        NORSLTS     TMTOFRT     CLSVSC

_____________________________________________________________
418    P225 NP  2           D BUSY      (0)
```

Datafilling subtable CLSVSCRC.CLSVSCR

The following table shows the datafill specific to Trunk to treatment translations for subtable CLSVSCRC.CLSVSCR. Only those fields that apply

Trunk to treatment translations (continued)

directly to Trunk to treatment translations are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling subtable CLSVSCRC.CLSVSCR (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
FROMDIGS		numeric (up to 18 digits)	From digits. Enter the single code or the first in a block of consecutive codes that have the same screening route.
TODIGS		numeric (up to 18 digits)	To digits. If field FROMDIGS represents a single code, the entry in this field is the same as the entry in field FROMDIGS. If the field FROMDIGS represents the first number in a block of consecutive codes, the entry in this field is equal to the last number in the block.
TMTOFRT		see subfield	Treatment or office route. This field consists of subfields INPA and SCRNSEL.
	INPA	I or blank	*Interchangeable Numbering Plan Area* Enter I if INPA codes require separate routes for seven and ten dialed digits. If I is entered, two routes will be required. The first route will be used for calls with seven dialed digits and the second route will be used for calls with ten dialed digits.
	SCRNSEL	T or D	Screening selector. Enter the screening selector T, if translation routes to table OFRT. Complete subfield RTEREFIX. Enter the screening selector D, if translation routes to one of the treatments in table TREAT. Complete subfield TREAT.
	RTEREFIX	see subfields	Route reference index. This field consists of subfields OFC_RTE and RTE_ID.
	OFC_RTE	OFRT, OFR2, OFR3, or OFR4	Office route table name. Enter the office route table name to which the translations are directed. If the INPA selector I has been entered in subfield INPA two office route table names must be entered. The first OFR table will handle seven digit calls and the second OFR table will handle ten digit calls.

Trunk to treatment translations (continued)

Datafilling subtable CLSVSCRC.CLSVSCR (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
	RTE_ID	1 to 1023	Route reference table index. Enter the route index in table OFRT to which the translation routes. If the INPA selector I has been entered in subfield INPA two route reference indices must be entered. The first index will apply to the first OFR table entered in subfield OFC_RTE and the second index will apply to the second OFR table entered in subfield OFC_RTE.
	TREAT	alphanumeric	Treatment. Enter the treatment in table TREAT, to which translation routes. If the INPA selector I has been entered in subfield INPA two treatments must be entered. The first treatment will handle seven digit calls and the second treatment will handle ten digit calls.

Datafill example for subtable CLSVSCRC.LCSVSCR

The following example shows sample datafill for subtable CLSVSCRC.LCSVSCR.

MAP display example for subtable CLSVSCRC.LCSVSCR

```
FROMDIGS    TODIGS      TMTOFRT
_____________________________________________________________
344         345         D   VACT
```

Datafilling table TRKGRP

The following table shows the datafill specific to Trunk to treatment translations for table TRKGRP. Only those fields that apply directly to Trunk

Trunk to treatment translations (continued)

to treatment translations are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table TRKGRP

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 CLLI code assigned to the trunk group in table CLLI.

Datafill example for table TRKGRP

The following example shows sample datafill for table TRKGRP.

MAP display example for table TRKGRP

```
GRPKEY
GRPINFO
_____________________________________________________________
F514T13TISIT048
IT 0 NPDGP NCIT 2W NIL MIDL 514 NPRT NSCR 514 000 Y N $
```

Datafilling table TRKSGRP

The following table shows the datafill specific to Trunk to treatment translations for table TRKSGRP. Only those fields that apply directly to Trunk to treatment translations are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table TRKSGRP (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.

Datafilling table TRKSGRP (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
	CLLI	alphanumeric (1 to 16 characters)	Common language location identifier. Enter the code that is assigned in table CLLI to the trunk group to which the subgroup belongs.
	SGRP	0 or 1	Subgroup number. Enter the number assigned to the trunk subgroup.

Datafill example for table TRKSGRP

The following example shows sample datafill for table TRKSGRP.

MAP display example for table TRKSGRP

```
SGRPKEY              CARDCODE
SGRPVAR
_____________________________________________________________________
F514T13TISIT048 0    DS1SIG
C7UP 2W  N  N UNEQ   NONE  Q764  2W 2W 0 TATSTAC $
TACTIMER CIC
```

Datafilling table TRKMEM

The following table shows the datafill specific to Trunk to treatment translations for table TRKMEM. Only those fields that apply directly to Trunk to treatment translations are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table TRKMEM (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
CLLI		alphanumeric (1 to 16 characters)	Common language location identifier. Enter the CLLI code that is assigned to the trunk group of which the trunk is a member. This CLLI code is assigned in table CLLI.
EXTRKNM		o 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.

Trunk to treatment translations (continued)

Datafilling table TRKMEM (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
MEMVAR		see subfield	Variable data for members. This field consists of subfield PMTYPE and refinements.
	PMTYPE	DTC	Peripheral module type. Enter the peripheral module (PM) type on which the trunk is mounted and datafill the refinements associated with this entry value. Enter DTC for a digital trunk controller and complete subfields DTCNO, DTCCKTNO, and DTCCKTTS.
	DTCNO	0 to 511	Digital trunk controller number. Enter the number of the DTC to which the trunk group member is assigned.
	DTCCKTNO	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	1 to 24	Digital trunk controller circuit time-slot. Enter the number of the circuit card DS-1 time-slot to which the trunk group member is assigned.

Datafill example for table TRKMEM

The following example shows sample datafill for table TRKMEM.

MAP display example for table TRKMEM

```
CLLI              EXTRKNM  SGRP        MEMVAR
_____________________________________________
F514T13TISIT048   1        0           DTC  13 19 24
```

Translation verification tools

The following example shows the output from TRAVER when it is used to verify Trunk to treatment translations.

Trunk to treatment translations (end)

TRAVER output example for Trunk to treatment translations

```
>traver tr S5807705TPTIT 17059601017 b
TABLE TRKGRP
S5807705TPTIT IT 0 NPDGP NCIT 2W IT ASEQ 705 P807 NSCR 807 000 N N $
TABLE OFCVAR
AIN_OFFICE_TRIGGRP NIL
TABLE STDPRTCT
P807 ( 1) (65021) 0
 . SUBTABLE STDPRT
WARNING: CHANGES IN TABLE STDPRT MAY ALTER OFFICE
BILLING.  CALL TYPE DEFAULT IS NP.  PLEASE REFER TO
DOCUMENTATION.
 . 1 1 N DD 1 IN
 . SUBTABLE AMAPRT
 . KEY NOT FOUND
 . DEFAULT VALUE IS:   NONE OVRNONE  N
TABLE CCTR
TUPLE NOT FOUND
DEFAULT IS: 0 18 D VACT
TABLE TMTCNTL
ITTRKGRP ( 7)
 . SUBTABLE TREAT
KEY NOT FOUND
DEFAULT OFFTREAT IS USED
TABLE TMTCNTL
OFFTREAT ( 53)
 . SUBTABLE TREAT
 . VACT Y T OFRT 57
 . TABLE OFRT
 .   57 S D VCA
 .      S D *FRA0
 . EXIT TABLE OFRT

+++ TRAVER: SUCCESSFUL CALL TRACE +++

TREATMENT ROUTES.  TREATMENT IS: VACT
1 VCA
2 *FRA0

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

Trunk to trunk translations

Ordering codes

Trunk to trunk translations has no ordering codes.

Release applicability

TL03 and up

Prerequisites

Trunk to trunk translations has no prerequisites.

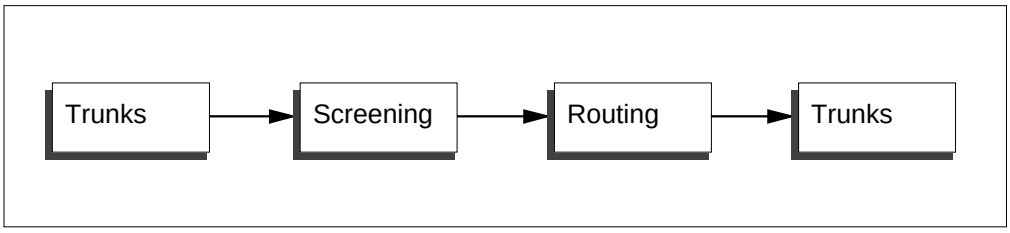
Description

The system elements whose operation and translations are described below are specific to Trunk to trunk translations.

Operation

Trunk to trunk calls can be traced using a simplified block diagram, representing the major functions within the translation process, as shown in the following figure.

Call processing blocks for Trunk to trunk translations



The trunk tables contain detailed information about trunks originating and terminating in the switch. Each trunk connected to the office is represented by entries in the trunk tables. These tables include information about the following:

- type of trunk group
- type of signaling
- hardware location of each trunk
- screening information for incoming call from trunks to define the next logical step in translation

The screening tables contain the information used to analyze the digits that the DMS receives. This screening process tests the digits dialed prior to continuing to the next routing stage, to determine, for example, whether this call is local or non-local.

Trunk to trunk translations (continued)

The screening tables establish the call type based on the digits received. The three basic call types are:

- operator assisted (OA)
- direct dial (DD)

The routing tables route the calls to their final destination. The information found in these tables dictates how and where a call will be completed, or if the call will route to a recorded announcement or treatment.

The Trunk to trunk translations process is shown in the flowchart that follows.

Translations table flow for Trunk to trunk translations

The call originates from a particular hardware location on an incoming trunk member listed in table TRKMEM. Signaling information is obtained from table TRKSGRP.

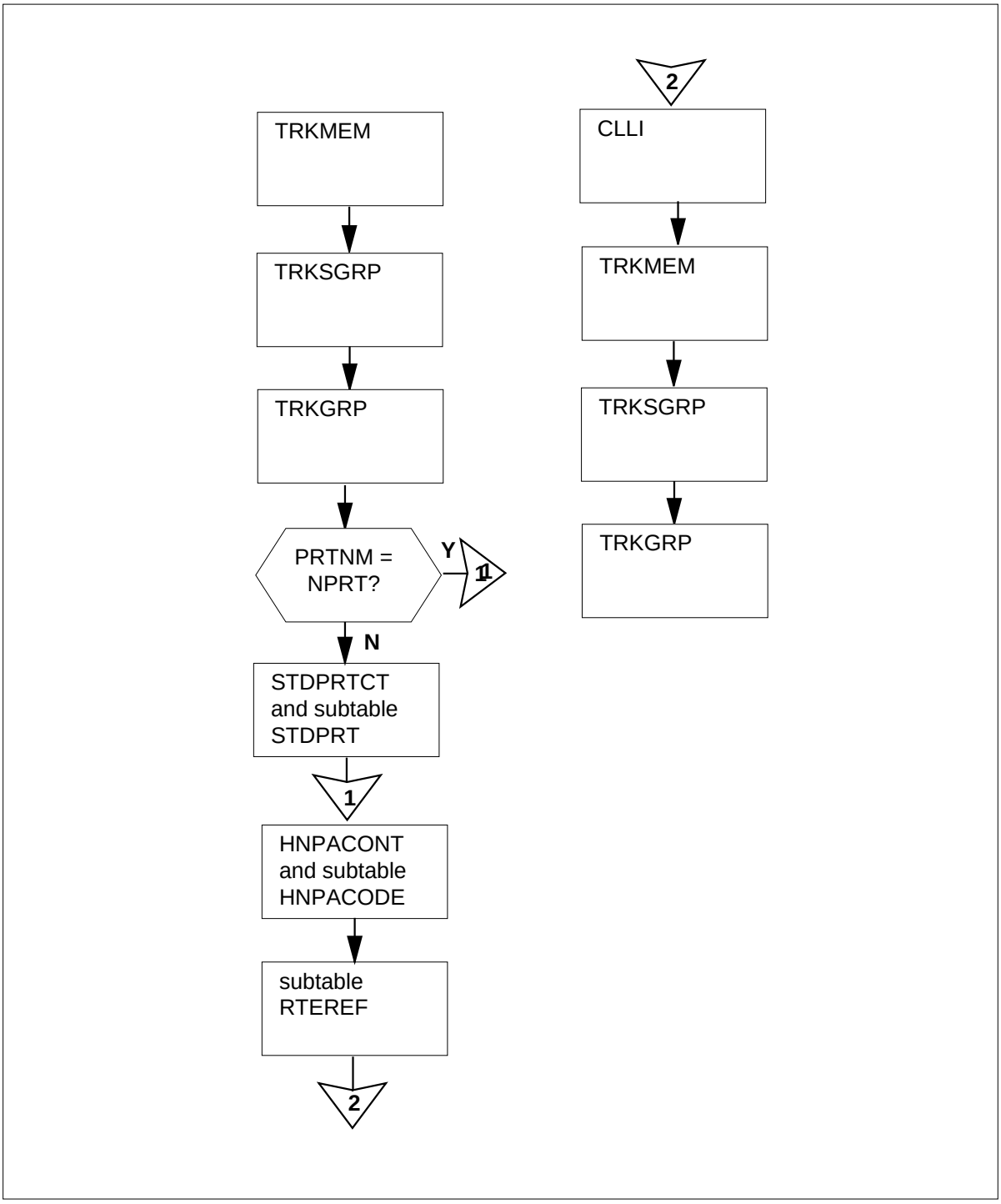
For an incoming trunk, table TRKGRP lists the Serving Numbering Plan Area (SNPA) in subfield SNPA and the pretranslator subtable name in subfield PRTNM.

If a pretranslator subtable name is specified, translation continues with table STDPRTCT and its subtable STDPRT. If no pretranslator is specified, the entry in subfield PRTNM is NPRT and the call routes to table HNPACONT and its subtable HNPACODE.

At this point, call processing will continue through table HNPACONT and its subtables. The common language location identifier (CLLI) of the trunk datafilled in subtable HNPACONT.RTEREF is listed in table CLLI. Trunk group type and screening information are provided in table TRKGRP. Table TRKSGRP defines the signaling and control information and table TRKMEM contains the physical location of each trunk member.

Trunk to trunk translations (continued)

Table flow for Trunk to trunk translations



Trunk to trunk translations (continued)

The following table lists the datafill content used in the flowchart.

Datafill example for Trunk to trunk translations

Datafill table	Example data
CLLI	F514T13TISIT048 1527 1 SSP5_TACISUP_TRAF_TRUNKS
TRKMEM	F514T13TISIT048 1 0 DTC 13 19 24
TRKSGRP	F514T13TISIT048 0 DS1SIG C7UP 2W N N UNEQ NONE Q764 2W 2W 0 TATSTAC $ TACTIMER CIC
TRKGRP	F514T13TISIT048 IT 0 NPDGP NCIT 2W NIL MIDL 514 NPRT NSCR 514 000 Y N $
HNPACONT	514 98 0 (72) (1) (24) (0)
subtable HNPACODE	819457 819457 FRTE 23
subtable RTEREF	23 (N D S1514819TISIT 3 N N) $
CLLI	S1514819TISIT 239 48 S5_450_TO_S1_819_LAMA
TRKMEM	S1514819TISIT 0 0 DTC 2 10 1
TRKSGRP	S1514819TISIT 0 DS1SIG C7UP 2W N N UNEQ NONE Q764 THRH 0 DMS26 $ NIL CIC
TRKGRP	S1514819TISIT IT 0 NPDGP NCIT 2W IT MIDL 819 P514 NSCR 514 000 N N $

The following table lists the datafill content used in the flowchart. In this example, pretranslator P807 is specified and the call routes through table STDPRTCT and its subtable.

Datafill example for Trunk to trunk translations (Sheet 1 of 2)

Datafill table	Example data
CLLI	S5AAA807IPTLA 346 40 S5AAA_TO_S5807_IC_PTS_LAMA
TRKMEM	S5AAA807IPTLA 0 0 DTC 5 1 1
TRKSGRP	S5AAA807IPTLA 0 DS1SIG STD IC DP WK N 10 10 NO NO N N Y M UNEQ
TRKGRP	S5AAA807IPTLA IT 0 NPDGP NCRT IC DD MIDL 000 P807 NSCR 807 000 N N $

Trunk to trunk translations (continued)

Datafill example for Trunk to trunk translations (Sheet 2 of 2)

Datafill table	Example data
STDPRTCT	P807 (1) (65021)
subtable STDPRT	807 807 N DD 3 NA
HNPACONT	807 201 1 (31) (1) (14) (0)
subtable HNPACODE	514978 514978 FRTE 9
subtable RETEREF	9 (N D S1807819TISIT 0 N N) $
CLLI	S1807819TISIT 238 48 S5_450_TO_S1_819_LAMA
TRKMEM	S1807819TISIT 0 0 DTC 4 2 1
TRKSGRP	S1807819TISIT 0 DS1SIG C7UP 2W N N UNEQ NONE Q764 THRH 0 DMS26 $ NIL CIC
TRKGRP	S1807819TISIT IT 0 NPDGP NCIT 2W IT MIDL 819 P807 NSCR 807 000 N N $

Limitations and restrictions

The Trunk to trunk translations process has no limitations or restrictions.

Billing

For information on billing, refer to the Bellcore format AMA translations section of this document.

Trunk to trunk translations (continued)

Datafilling office parameters

The following table shows the office parameters used by Trunk to trunk translations. For more information about office parameters, refer to *Office Parameters Reference Manual.*

Office parameters used by Trunk to trunk translations

Table name	Parameter name	Explanation and action
OFCENG	AIN_ACTIVE	This parameter controls the activation of the Advanced Intelligent Network (AIN). Enter Y to activate AIN software. Enter N to deactivate AIN software. If this parameter is set to N, parameter AIN_OFFICE_TRIGGRP in table OFCVAR is disregarded.
OFCVAR	AIN_OFFICE_TRIGGRP	This parameter is used to subscribe trigger behaviors on an office-wide basis. The entry in field AINGRP in table TRIGGRP is entered here. The default value is NIL.

Datafill sequence

The following table lists the tables that require datafill to implement Trunk to trunk translations. The tables are listed in the order in which they are to be datafilled.

Datafill tables required for Trunk to trunk translations (Sheet 1 of 2)

Table	Purpose of table
CLLI	The common language location identifier table lists the name that uniquely identifies each trunk group, tone, or announcement.
TRKGRP	The trunk group table contains customer-defined data associated with each trunk group.
TRKSGRP	The trunk subgroup table specifies supplementary information for each trunk group.
TRKMEM	The trunk member table gives the physical location of each trunk assigned to one of the trunk groups.
OFRT	The office route table lists up to eight alternate routes in order of preference. This table lists tones or announcements for calls requiring treatment.
HNPACONT	The home numbering plan area control table lists all the home or serving area NPAs for a particular area.

Trunk to trunk translations (continued)

Datafill tables required for Trunk to trunk translations (Sheet 2 of 2)

Table	Purpose of table
subtable HNPACODE	The home numbering plan area code subtable lists the route treatment or table to which the translation routes for each of the assigned NPAs.
STDPRTCT	The standard pretranslator table lists the names of the standard pretranslator subtables.
subtable STDPRT	The standard pretranslator subtable determines the next stage of translation, based on the range of leading digits.
CLLI	The common language location identifier table lists the name that uniquely identifies each trunk group, tone, or announcement.
TRKGRP	The trunk group table contains customer-defined data associated with each trunk group.
TRKSGRP	The trunk subgroup table specifies supplementary information for each trunk group.
TRKMEM	The trunk member table gives the physical location of each trunk assigned assigned to one of the trunk groups.

Datafilling table CLLI

Table CLLI must contain a tuple for the originating and terminating office.

The following table shows the datafill specific to Trunk to trunk translations for table CLLI. Only those fields that apply directly to Trunk to trunk translations are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table CLLI

Field	Subfield or refinement	Entry	Explanation and action
CLLI		alphanumeric (1 to 16 characters)	Common language location identifier. Enter a CLLI code to uniquely identify the far end of each announcement, tone, or trunk group.

Datafill example for table CLLI

The following example shows sample datafill for table CLLI.

MAP display example for table CLLI

```
CLLI                ADNUM       TRKGRSIZ
ADMININF
_____________________________________________________________________
S5BBB807OPTCA       356         80
S5BBB_TO_S5807_OG_PTS_CAMA
```

Datafilling table TRKGRP

Table TRKGRP must contain a tuple for the originating and terminating office.

The following table shows the datafill specific to Trunk to trunk translations for table TRKGRP. Only those fields that apply directly to Trunk to trunk translations are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table TRKGRP

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 CLLI code assigned to the trunk group in table CLLI.

Datafill example for table TRKGRP

The following example shows sample datafill for table TRKGRP.

MAP display example for table TRKGRP

```
GRPKEY
GRPINFO
_____________________________________________________________________
F514T13TISIT048
IT 0 NPDGP NCIT 2W NIL MIDL 514 NPRT NSCR 514 000 Y N $
```

Trunk to trunk translations (continued)

Datafilling table TRKSGRP

Table TRKSGRP must contain a tuple for the originating and terminating office.

The following table shows the datafill specific to Trunk to trunk translations for table TRKSGRP. Only those fields that apply directly to Trunk to trunk translations are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table TRKSGRP

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 code that is assigned in table CLLI to the trunk group to which the subgroup belongs.
	SGRP	0 or 1	Subgroup number. Enter the number assigned to the trunk subgroup.

Datafill example for table TRKSGRP

The following example shows sample datafill for table TRKSGRP.

MAP display example for table TRKSGRP

```
SGRPKEY              CARDCODE
SGRPVAR
_____________________________________________________________
F514T13TISIT048 0    DS1SIG
C7UP 2W  N  N UNEQ   NONE  Q764  2W 2W 0 TATSTAC $
TACTIMER CIC
```

Datafilling table TRKMEM

Table TRKMEM must contain a tuple for the originating and terminating office.

The following table shows the datafill specific to Trunk to trunk translations for table TRKMEM. Only those fields that apply directly to Trunk to trunk

Trunk to trunk translations (continued)

translations are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table TRKMEM

Field	Subfield or refinement	Entry	Explanation and action
CLLI		alphanumeric (1 to 16 characters)	Common language location identifier. Enter the CLLI code that is assigned to the trunk group of which the trunk is a member. This CLLI code is assigned in table CLLI.
EXTRKNM		o 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.
MEMVAR		see subfield	Variable data for members. This field consists of subfield PMTYPE and refinements.
	PMTYPE	DTC	Peripheral module type. Enter the peripheral module (PM) type on which the trunk is mounted and datafill the refinements associated with this entry value. Enter DTC for a digital trunk controller and complete subfields DTCNO, DTCCKTNO, and DTCCKTTS.
	DTCNO	0 to 511	Digital trunk controller number. Enter the number of the DTC to which the trunk group member is assigned.
	DTCCKTNO	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	1 to 24	Digital trunk controller circuit time-slot. Enter the number of the circuit card DS-1 time-slot to which the trunk group member is assigned.

Datafill example for table TRKMEM

The following example shows sample datafill for table TRKMEM.

Trunk to trunk translations (continued)

MAP display example for table TRKMEM

```
CLLI              EXTRKNM  SGRP        MEMVAR
_____________________________________________
F514T13TISIT048   1        0           DTC  13 19 24
```

Datafilling table STDPRTCT

The following table shows the datafill specific to Trunk to trunk translations for table STDPRTCT. Only those fields that apply directly to Trunk to trunk translations are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table STDPRTCT

Field	Subfield or refinement	Entry	Explanation and action
EXPRTNM		alphanumeric (up to 8 characters)	External standard pretranslator subtable name. Enter the name defined by the operating company to represent the standard pretranslator.
STDPRT		see note	Standard pretranslator. The field is an index into subtable STDPRT. ***Note:*** This field does not accept any input.

Datafill example for table STDPRTCT

The following example shows sample datafill for table STDPRTCT.

MAP display example for table STDPRTCT

```
EXPRTNM    STDPRT    AMAPRT
_____________________________________________
P705       (    1)   (65021)
```

Datafilling subtable STDPRTCT.STDPRT

The following table shows the datafill specific to Trunk to trunk translations for subtable STDPRTCT.STDPRT. Only those fields that apply directly to Trunk to trunk translations are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling subtable STDPRTCT.STDPRT

Field	Subfield or refinement	Entry	Explanation and action
FROMDIGS		numeric (up to 18 digits)	From digits. Enter the digit or digits to be translated. If the entry represents a block of consecutive numbers, enter the first number in the block.
TODIGS		numeric (up to 18 digits)	To digits. If field FROMDIGS represents a block of consecutive numbers, enter the last number in the block.
PRETRTE		see subfield	Pretranslation route. This field consists of subfield PRERTSEL and its refinements TYPECALL, NOPREDIG, TRANSYS, and POS.
	PRERTSEL	N	Pretranslator route selector. Enter N. Refer to the data schema section of this document for more information.
	TYPCALL	DD, OA, NP, or NL	Type of call. Enter the type of call: DD (direct dial), NP (no prefix), OA (operator assisted), or NL (nil). For Traffic Operator Position System (TOPS) calls, there can be a mixture of 0 and 1 (OA and DD) call types. Enter NL for these cases.
	NOPREDIG	0 to 7	Number of prefix digits. Enter the number of digits that are to be interpreted as prefix digits.
	TRANSYS	IN, IP, or NA	Translation system. Enter IN if the translation routes to international translations (on a local and toll combined switching unit only). Enter IP if the translation routes to international partitioned translations (DMS-250 only). Enter NA if the translation routes to national translations.

Trunk to trunk translations (continued)

Datafill example for subtable STDPRTCT.STDPRT

The following example shows sample datafill for subtable STDPRTCT.STDPRT.

MAP display example for subtable STDPRTCT.STDPRT

```
FROMDIGS          TODIGS          PRETRTE
_____________________________________________________
2                 704             N DD 0 NA
```

Datafilling table HNPACONT

The following table shows the datafill specific to Trunk to trunk translations for table HNPACONT. Only those fields that apply directly to Trunk to trunk translations are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table HNPACONT

Field	Subfield or refinement	Entry	Explanation and action
STS		0 to 9 999 999	Serving translation scheme. Enter an SNPA or STS code.
HNPACODE		see note	Home numbering plan area code. This field is an index into subtable HNPACODE. ***Note:*** This field does not accept any input.

Datafill example for table HNPACONT

The following example shows sample datafill for table HNPACONT.

Trunk to trunk translations (continued)

MAP display example for table HNPACONT

```
STS   NORTREFS   NOAMBIGC   RTEREF   HNPACODE   ATTRIB   RTEMAP
_____________________________________________________________
514   98         0          (   72) (    1)    (   24) (   0)
```

Datafilling subtable HNPACONT.HNPACODE

The following table shows the datafill specific to Trunk to trunk translations for subtable HNPACONT.HNPACODE. Only those fields that apply directly to Trunk to trunk translations are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling subtable HNPACONT.HNPACODE

Field	Subfield or refinement	Entry	Explanation and action
FROMDIGS		numeric (3 digits)	From digits. Enter the number representing a single code or the first in a block of consecutive codes that have the same input data.
TODIGS		numeric (3 digits)	To digits. If field FROMDIGS represents a single code, enter the same single code as in field FROMDIGS. If field FROMDIGS represents the first number of a block of consecutive numbers, enter the last number in the block.
CDRRTMT		see subfield	Code type, route reference or treatment. This field consists of subfield CD.
	CD	DN	Code type. Enter DN for terminating office code and datafill refinements SNPA and NXX.
	SNPA	numeric (3 digits)	Terminating serving numbering plan area. Enter the SNPA of the called terminating line DN. If the operating company uses screening to intraswitch SNPAs, translation of the dialed digits proceeds to table TOFCNAME, using SNPA and NXX as the key.
	NXX	numeric (3 digits)	Terminating NXX. Enter three digits for the NXX code of the called terminating line DN.

Trunk to trunk translations (continued)

Datafill example for subtable HNPACONT.HNPACODE

The following example shows sample datafill for subtable HNPACONT.HNPACODE.

MAP display example for subtable HNPACONT.HNPACODE

```
FROMDIGS     TODIGS            CDRRTMT
_____________________________________________________
546          546               DN 514 546
```

Datafilling subtable HNPACONT.RTEREF

The following subtable shows the datafill specific to Trunk to trunk translations for subtable HNPACONT.RTEREF. Only those fields that apply directly to Trunk to trunk translations are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling subtable HNPACONT.RTEREF

Field	Subfield or refinement	Entry	Explanation and action
RTE		1 to 1023, blank	Route reference index. Enter the route reference number assigned to the route list.
RTELIST		see subfield	Route list. This field consists of a vector of up to nine multiples of subfield RTESEL and refinements CONNTYPE, CLLI, DELDIGS, PRFXDIGS, and CANCNORC. Enter $ to signify the end of the vector.
	RTESEL	N	Route selector. Enter N if the outgoing or two-way trunk group is intertoll. Enter T if translation routes to table OFRT.
	CLLI	alphanumeric (1 to 16 characters)	Common language location identifier. Enter the code in table CLLI to which translation is routed.

Datafill example for subtable HNPACONT.RTEREF

The following example shows sample datafill for subtable HNPACONT.RTEREF.

Trunk to trunk translations (continued)

MAP display example for subtable HNPACONT.RTEREF

```
RTE       RTELIST
----------------------------------------------------------
21        (  N     D    S5807705TPTIT  3     N N) $
```

Translation verification tools

The following example shows a typical TRAVER output generated for Trunk to trunk translations.

Trunk to trunk translations (end)

TRAVER output example for Trunk to trunk translations

```
>traver tr S5AAA807IISLA 8194573075 b
TABLE TRKGRP
S5AAA807IISLA IT 0 NPDGP NCRT IC DD MIDL 000 P807 NSCR 807 000 N N $
TABLE OFCVAR
AIN_OFFICE_TRIGGRP NIL
TABLE STDPRTCT
P807 ( 1) (65021) 0
 . SUBTABLE STDPRT
WARNING: CHANGES IN TABLE STDPRT MAY ALTER OFFICE
BILLING.  CALL TYPE DEFAULT IS NP.  PLEASE REFER TO
DOCUMENTATION.
 . 81 9 N DD 0 NA
 . SUBTABLE AMAPRT
 . KEY NOT FOUND
 . DEFAULT VALUE IS:   NONE OVRNONE  N
TABLE HNPACONT
807 201 1 ( 31) ( 1) ( 14) ( 0) 0
 . SUBTABLE HNPACODE
 . 819457 819457 FRTE 9
AIN Info Collected TDP: no subscribed trigger.
AIN Info Analyzed TDP: no subscribed trigger.
 . SUBTABLE RTEREF
 .    9 N D S1807819TISIT 0 N N
 . EXIT TABLE RTEREF
EXIT TABLE HNPACONT

+++ TRAVER: SUCCESSFUL CALL TRACE +++


DIGIT TRANSLATION ROUTES

1 S1807819TISIT         8194573075         ST

TREATMENT ROUTES.  TREATMENT IS: GNCT
1 120T0

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

Panther support for third-party RMs

Ordering codes

Functional group ordering code: Unavailable at time of publication

Functionality ordering code: Unavailable at time of publication

Release applicability

SN06 (DMS)

SN06 (DMS) introduced Panther support for third-party RMs.

Requirements

Panther support for third-party RMs has no functional group requirements.

Description

The Panther tools provide automatic software load upgrade for DMS peripherals like DTC and SPM. Previously, Panther did not not support the upgrade of third-party resource modules (RMs) of the SPM. This feature allows for:

- the creation of upgrade plan for a third-party RM upgrade
- upgrade of third-party RMs along with all other RMs

Note: Currently VSPs are the only third-party RMs that are supported.This feature allows for the Panther upgrade of any third-party RMs introduced in future.

Operation

Existing functionality

The Panther automatic upgrade tools consist of:

- PMUPGRADE tool, which automates
  - — the selection and copying of new PM load and patch files from the distribution media to the DMS switch
  - — the generation of the PM upgrade plan outlining the tasks required to upgrade the PMs with the new loads and patches
- SWUPGRADE PM tool, which automates
  - — the execution of the tasks in the PM upgrade plan to load or patch the necessary PMs

Before this feature, in the upgrade of SPMs using Panther, the third-party RM loads are not selected and copied from the distribution media of the DMS to

the switch. Consequently no plan is generated by the PMUPGRADE for the upgrade of third-party RMs.

In the SWUPGRADE execution phase, any third-party RMs are currently discarded from the set of RMs to be upgraded, and a warning is displayed:

Existing warning message

```
WARNING: SPM 0 VSP 0 is not a NORTEL product
and will not be included as part of upgrade.
```

New functionality

This feature provides Panther support for third-party RMs. For this, the PMUPGRADE selects and copies the third-party RM load from the distribution media to the DMS switch, and a plan is generated for the third-party RM upgrade. A comparison of new functionality and the existing functionality of various PMUPGRADE commands is shown in the table below:

Comparison of existing and new behavior

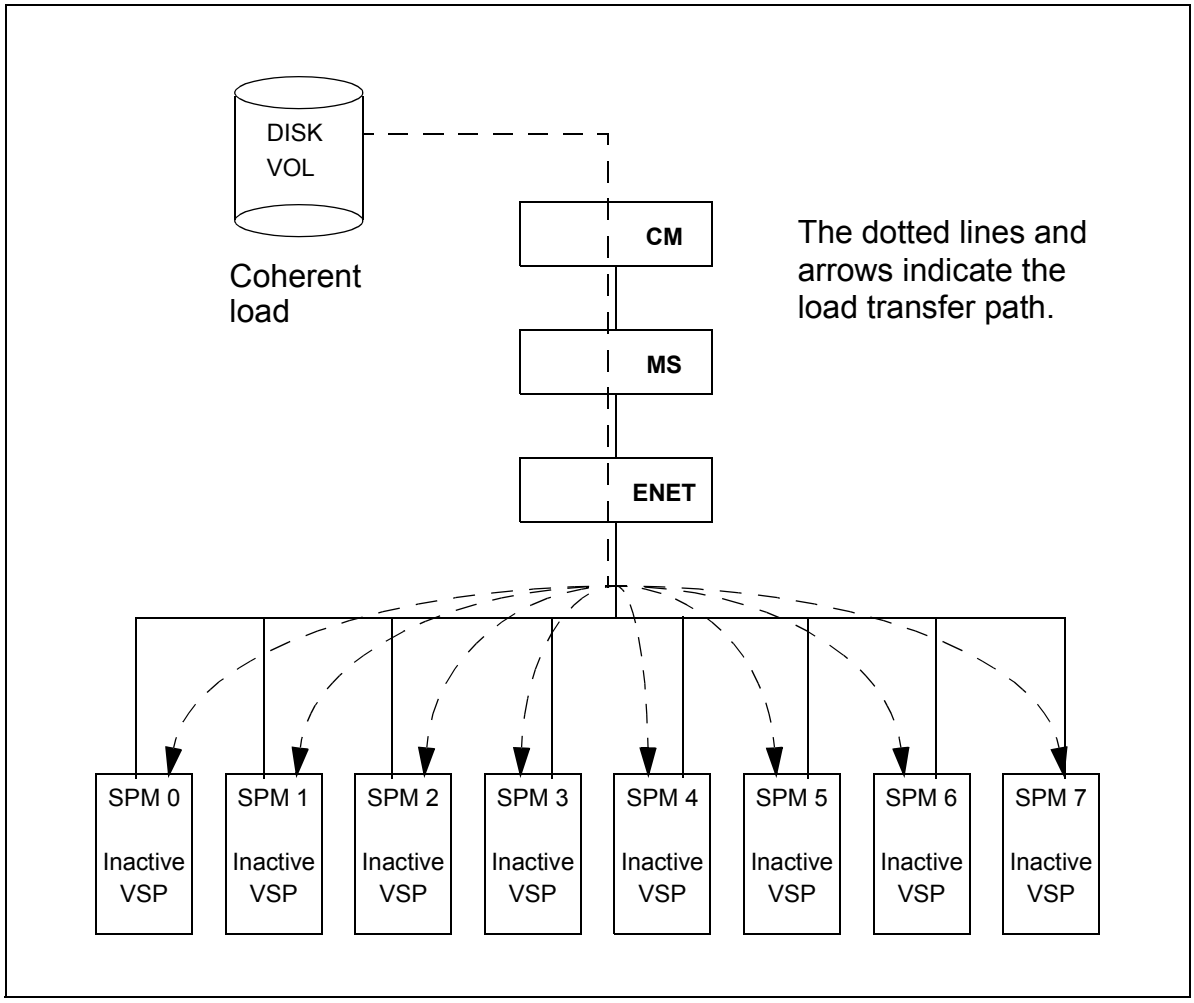
PMUPGRADE command	Explanation	Existing functionality	New functionality
Display nodes	Displays a table which contains all the nodes in the office and the loads corresponding to each of these nodes.	Does not display the third-party RM load associated with an SPM. For example, the coherent load used by a third-party voice signal processor (VSP) is not displayed.	Displays the third-party load information associated with an SPM.
Display loads	Displays all the loads used in the office.This loads are taken from table PMLOADS. It also lists all the tables which refers to this load.	Does not cross-refer third-party load with table MNCKTPAK.	Cross-refers the third-party load with table MNCKTPAK.

Comparison of existing and new behavior

PMUPGRADE command	Explanation	Existing functionality	New functionality
Start filecopy	This command copies all the load from distribution volume to destination volume.	third-party loads are not copied to destination volume.	Copies the third-party load to the destination volume.
Start plan	This command creates a plan for upgrade based the load files copied.	third-party RMs are excluded from the upgrade plan.	Creates a plan for the third-party RM upgrade.

In SWUPGRADE, during the execution of the task, Panther selects a concurrent set of eight SPMs from the upgrade task. It builds a set of third-party RMs belonging to these eight SPMs, and sends a load request to all the inactive RMs. The in-service loading of eight third-party RMs is shown in the figure below:

In-service loading of a concurrent set of eight third-party RMs (VSPs, in example)



Once the in-service loading of these RMs is complete, sparing of the RMs takes place. All the newly inactive RMs are mate loaded. Since the mate loading concurrency is 64, all newly inactive RMs in this concurrent set will be mate loaded in one step. After successfully completing the upgrade of this concurrent set of SPMs, Panther continues the upgrade with the next concurrent set of SPMs.

Loading of third-party VSP using coherent load

Currently, VSPs with PEC Codes NTLX85AA, NTLX86AA and NTLX86VA are the third-party RMs available. These VSPs use the coherent load COHXXXX. The following loading scenarios are possible in a mixed office configuration.

Office with third-party VSPs and Nortel DSPs If there are Nortel Digital Signal Processors (DSP) with normal DSPXXXX load present in each of the SPMs, Panther ensures that these RMs are not upgraded using the coherent load. Only the third-party VSPs are upgraded to the new coherent load whereas the DSPs get loaded with the DSPXXXX load.

Note: The message displayed on the Panther screen log does not include the load name. The different behavior for Nortel DSPs and third-party VSPs is therefore not apparent from the Panther screen log.

Office with third-party VSPs and Nortel VSPs In a mixed office, the same SPM cannot have both normal (Nortel) VSPs and third-party VSPs. The SPMs with normal VSPs comes under one upgrade task of Panther, while the SPMs with third-party VSPs are upgraded in a separate task. These two upgrade tasks must be executed separately. Hence there is no interaction between third-party VSPs and Nortel VSPs**.**

For each stage of third-party VSP upgrade, the messages displayed are the existing messages, as described in the next section.

Panther screen logs

PMUPGRADE commands

In PMUPGRADE, by setting up a Panther plan similar to any other RM upgrade, the craftperson can view the plan created - as shown in the figure below.

Panther display of PMUPGRADE plan

```
>display plan

                    PMUPGRADE PLAN REPORT
Upgrade Layer: 1
-----------------
TASK 1:
SITE:
LOADS:              FROM COH0018_010021 TO COH0018_010023
NODES:              SPM 1
              SPM 2
REQUIRES:           none
LOADED FROM FLASH: NO
AUTOMATED:          YES
```

The PMUPGRADE command display nodes, displays the third-party RM loads associated with an SPM - as shown in the figure below.

Panther display for 'display nodes' command

```
>display nodes

               PMUPGRADE NODE REPORT


Inventory Table :  MNCKTPAK
-----------------------------------------------------------------
Nodename    Loads Used
-----------------------------------------------------------------
SPM 0     ATC0000_000000   MG40000_000000   OC418AY_010024
        DSP18BA_010026
SPM 1     IWS18BA_010026   ATI18AY_010024   COH0018_010025
        DSP18BA_010026
SPM 2     ATC18AZ_010025   MG418BB_010027   OC418AY_010024
        DSP18BA_010026   COH0018_010025
SPM 3     ATC0000_000000   MG418BB_010027   OC418AY_010024
        DSP18BA_010026   DL218AZ_010025
SPM 7     ATC18AZ_010025   MG418BB_010027   OC418AY_010024
        DSP18BA_010026
```

The PMUPGRADE command display loads, links the third-party RM loads with table MNCKTPAK - as shown in the figure below.

Panther display for 'display loads' command

```
>display loads

                   PMUPGRADE LOAD REPORT
-------------------------------------------------------
LOADNAME ACTFILE          ACTVOL          Tables Used
-------------------------------------------------------
ATC18AZ ATC18AZ_010025    F02LPMLOADS       MNCKTPAK
ATI18AY ATI18AY_010024    F02LPMLOADS       MNCKTPAK
CEM18BA CEM18BA_010026    F02LPMLOADS       MNCKTPAK
COH0018 COH0018_010025    F02LPMLOADS       MNCKTPAK
DL218AZ DL218AZ_010025    F02LPMLOADS       MNCKTPAK
DLC18BA DLC18BA_010026    F02LPMLOADS       MNCKTPAK
DSP18BA DSP18BA_010026    F02LPMLOADS       MNCKTPAK
EDH15AY EDH15AY          F02LSCRATCH        DCHINV
ENX18AV ENX18AV          F02LPMLOADS        ENINV
```

Maintenance request messages

In the SWUPGRADE, the craftperson can view each stage of third-party RM upgrade on the Panther screen. All the existing maintenance request messages used by Panther for other RMs are applicable to third-party RMs also. There are no newly added messages for the third-party RMs.The Panther display for the in-service loading of a third-party RM is shown in the figure below.

Panther display for in-service loading of RMs

```
08:18:17 Loading (INSV) SPM 0 VSP 0
08:18:17 Loading (INSV) SPM 1 VSP 1
08:18:17 Loading (INSV) SPM 2 VSP 0
08:18:18 Loading (INSV) SPM 3 VSP 1
08:18:18 Loading (INSV) SPM 4 VSP 0
08:18:19 Loading (INSV) SPM 5 VSP 0
08:18:19 Loading (INSV) SPM 6 VSP 0
08:18:20 Loading (INSV) SPM 7 VSP 0

08:23:17 LOADMOD (INSV) SPM 0 VSP 0 Passed.
08:23:17 LOADMOD (INSV) SPM 1 VSP 1 Passed.
08:23:17 LOADMOD (INSV) SPM 2 VSP 0 Passed.
08:23:18 LOADMOD (INSV) SPM 3 VSP 1 Passed.
08:23:18 LOADMOD (INSV) SPM 4 VSP 0 Passed.
08:23:19 LOADMOD (INSV) SPM 5 VSP 0 Passed.
08:23:19 LOADMOD (INSV) SPM 6 VSP 0 Passed.
08:23:20 LOADMOD (INSV) SPM 7 VSP 0 Passed.
```

After in-service loading, Panther performs sparing (allocation of spare) for all these RMs. The corresponding screen display is shown in the figure below.

Panther display for sparing of third-party RMs

```
08:23:21 Manual Sparing SPM 0 VSP 1
08:23:36 Manual Sparing SPM 1 VSP 0
08:23:51 Manual Sparing SPM 2 VSP 1
08:24:06 Manual Sparing SPM 3 VSP 0
08:24:21 Manual Sparing SPM 4 VSP 1
08:24:36 Manual Sparing SPM 5 VSP 1
08:24:51 Manual Sparing SPM 6 VSP 1
08:25:06 Manual Sparing SPM 7 VSP 1
```

Once the sparing of all RMs is completed successfully, Panther goes performs the MATE loading of newly inactive VSPs. The corresponding screen display is shown in the figure below.

Panther display for MATE loading of third-party RMs

```
08:25:17 Loading (MATE) SPM 0 VSP 1
08:25:17 Loading (MATE) SPM 1 VSP 0
08:25:17 Loading (MATE) SPM 2 VSP 1
08:25:18 Loading (MATE) SPM 3 VSP 0
08:25:18 Loading (MATE) SPM 4 VSP 1
08:25:19 Loading (MATE) SPM 5 VSP 1
08:25:19 Loading (MATE) SPM 6 VSP 1
08:25:20 Loading (MATE) SPM 7 VSP 1

08:28:17 LOADMOD (MATE) SPM 0 VSP 1 Passed.
08:28:17 LOADMOD (MATE) SPM 1 VSP 0 Passed.
08:28:17 LOADMOD (MATE) SPM 2 VSP 1 Passed.
08:28:18 LOADMOD (MATE) SPM 3 VSP 0 Passed.
08:28:18 LOADMOD (MATE) SPM 4 VSP 1 Passed.
08:28:19 LOADMOD (MATE) SPM 5 VSP 1 Passed.
08:28:19 LOADMOD (MATE) SPM 6 VSP 1 Passed.
08:28:20 LOADMOD (MATE) SPM 7 VSP 1 Passed.
```

Limitations and restrictions

Panther support for third-party RMs has no limitations or restrictions. Panther will upgrade any third-party RM with the corresponding new third-party (non-Nortel) load.

Interactions

Panther support for third-party RMs does not interact with other functionalities.

Activation and deactivation by the user

Panther support for third-party RMs does not require activation or deactivation by the user.

Billing

Panther support for third-party RMs does not generate billing records or changes.

Station Message Detail Recording

Panther support for third-party RMs does not require Station Message Detail Recording.

Office parameters used by Panther support for third-party RMs

Panther support for third-party RMs does not generate office parameters.

Datafill sequence

No datafill is needed to put Panther support for third-party RMs into operation.

Translation verification tools

Panther support for third-party RMs does not use translation verification tools.

SERVORD

Panther support for third-party RMs does not use the Service Order System (SERVORD).

2 Introduction to trunk tables

Understanding trunks translations

Digital Multiplex System (DMS) translations is based on the following information:

- the digits received by the switch
- which trunk is the incoming trunk
- signaling information received from the incoming trunk

The translation process involves reading specific tuples in designated data tables to determine the path that a call takes to its destination, as well as the termination point of a call.

The number and sequence of tables accessed by a given call varies according to several factors: for example, the origin and destination of the call, the number of digits dialed, and the signaling system used on the incoming trunk group.

Translation on a call is complete when the call has been screened and sent to treatment, or when it is ready for transmission. The route that the call takes depends on the route list.

The data tables required to complete the translation process are classified as follows:

- information tables
- analysis, conversion, and routing tables
- trunk tables

Information tables provide all the trunk names, pretranslator codes, screening class codes, and other names and codes that are used by the analysis, conversion, and routing tables, and the trunk tables.

Analysis, conversion, and routing tables are the tables that perform the functions required for processing and routing calls. These functions include the translation of incoming digits, call screening, and the selection of outgoing

trunk group routes or call treatments. Analysis, conversion, and routing tables reference data in the information and trunk tables.

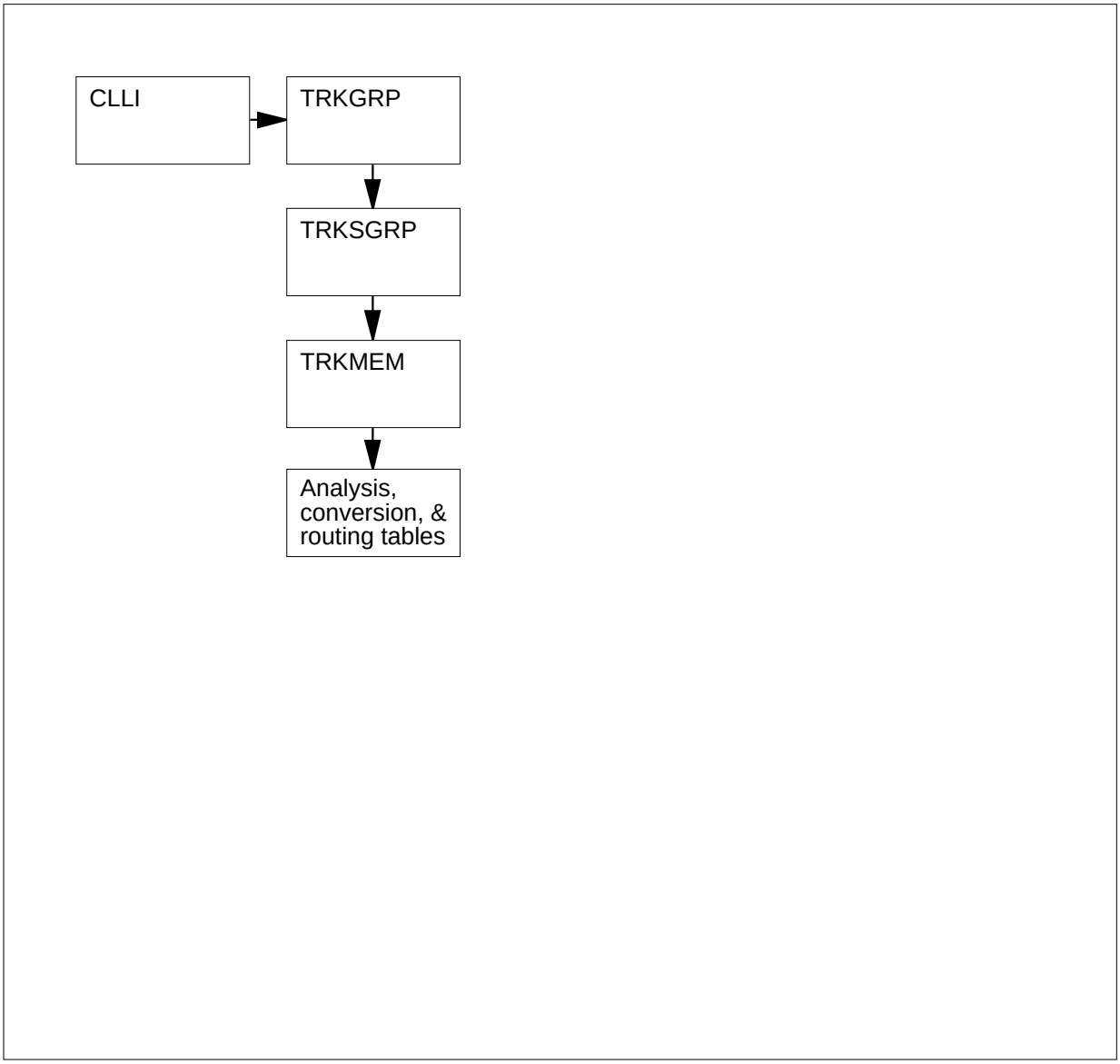
Trunk tables provide information concerning both originating and terminating trunk groups and trunk subgroups. The type of information includes the following:

- the type of trunk group (for example, intertoll, superCAMA, and operator)
- the direction of traffic flow on the trunk group (incoming, outgoing, or two way)
- the type of signaling handled by the trunk group (for example, multifrequency or dial pulse)
- the mapping of individual trunk group members to physical circuits in the switch

The trunk tables use key fields to direct calls on incoming trunks to applicable translations steps. For each call, information in the trunk tables indexes one of the translation tables to begin analysis, conversion, and routing. Each translation table, in turn, indexes another table until the call is fully translated and can be routed.

The trunk tables translations process is shown in the flowchart in figure 1. To build trunks in translations, the following tables must be datafilled in order: CLLI, TRKGRP, TRKSGRP, and TRKMEM. Additional tables may require datafill dependent on the trunk group type.

Figure 2-1 Translations table flow for trunk tables



Functional groups for trunk tables

Trunk tables have no functional groups.

A5 trunk groups

A5 trunk group functionality codes

A5 trunk groups have no functionality codes.

Release applicability

TL03 and up

Prerequisites

A5 trunk groups have no functional grop prerequisites.

Description

In a DMS-100 end office, outgoing trunk group type A5 connects with an AMR5 toll office to handle automatic message accounting (AMA) and operator-assisted calls using AMR5 signaling.

Two-way trunk group type A5, in addition to the outgoing trunk functions, can be set up for the following incoming trunk functions:

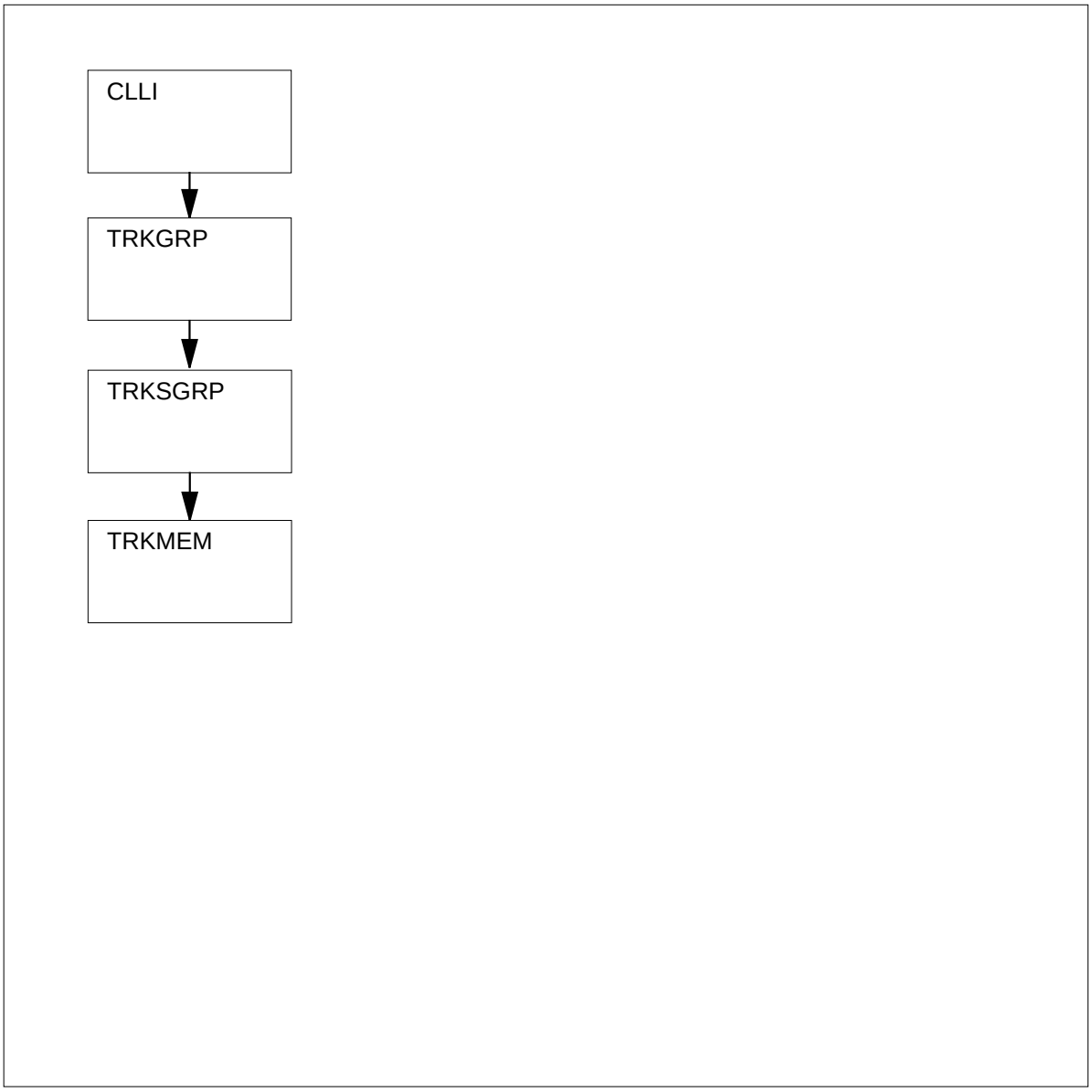
- dedicated to toll completing
- dedicated to verification
- combined toll completing and verification

Refer to trunk group type VR for additional information on verification calls.

The following figure shows the datafill dependencies for A5 trunk groups.

A5 trunk groups (continued)

Datafill dependencies for A5 trunk groups



Limitations and restrictions

A5 trunk groups have no limitations or restrictions.

Billing

For information on billing, refer to the Bellcore format AMA translations section of this document.

A5 trunk groups (continued)

Datafilling office parameters

The following table shows the office parameters used by A5 trunk groups. For more information about office parameters, refer to *Office Parameters Reference Manual.*

Office parameters used by A5 trunk groups

Table name	Parameter name	Explanation and action
OFCVAR	TRK_OOS_CHK_ON	This parameter specifies whether to check that the trunks in a trunk group are out of service before changing the values of specific fields in table TRKGRP by data modification order (DMO).
OFCOPT	TWO_WAY_FOR_AMR5	This option is required in a local or combined local/toll switching unit with software package NTX902AA and specifies whether or not the A5 trunk groups are arranged for two-way operation. The default value is N.

Datafill sequence

The following table lists the tables used by A5 trunk groups. The tables are listed in the order in which they are to be datafilled.

Tables used by A5 trunk groups

Table	Purpose of table
CLLI	The common language location identifier table uniquely identifies the far end of each announcement, tone, or trunk group.
TRKGRP	The trunk group table contains customer-defined data associated with each trunk group.
TRKSGRP	The trunk subgroup table contains supplementary information for each trunk group.
TRKMEM	The trunk member table specifies the physical location of each trunk assigned to one of the trunk groups.

A5 trunk groups (continued)

The following table shows sample input for datafilling A5 trunk groups.

Sample input for A5 trunk groups

Table	Sample input
CLLI	OTWAON2303TO 51 350 $
TRKGRP	OTWAON2303TO A5 8 TLD NCRT 3 N WK TERMHOLD AMR5B AMRCOMB TS DSEQ 2W VRCT NSCR 613 LCL CV Y 7 9 BCNAME 56KDATA
TRKSGRP	OTWAON2303TO 0 DS1SIG STD 2W DP WK N 30 30 MF WK 7 0 Y NO NO N N N M 70 UNEQ
TRKMEM	OTWAON2303TO 303 0 DCM 1 1 5 $

Datafilling table CLLI

The following table shows the datafill specific to A5 for table CLLI. Only those fields that apply directly to A5 are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table CLLI

Field	Subfield or refinement	Entry	Explanation and action
CLLI		alphanumeric (1 to 16 characters)	Common language location identifier. Enter a CLLI code to uniquely identify the far end of the A5 trunk group. Only alphabetic characters, numeric characters, and _ (underscores) can be used to datafill this field. The first character must be alphabetic. For optimum use, a CLLI code must not contain more than 12 characters, as only the first 12 characters are displayed on the MAP (maintenance and administration position) display. When a CLLI code is displayed in a log report, the entire 16-character CLLI code appears.

Datafill example for table CLLI

The following example shows sample datafill for table CLLI.

A5 trunk groups (continued)

MAP display example for table CLLI

```
CLLI              ADNUM   TRKGRSIZ   ADMININF
-------------------------------------------------------
OTWAON2303TO       51      350          $
```

Changing datafill for table CLLI

Use the standard table editor commands to change datafill for table CLLI.

Datafilling table TRKGRP

The following table shows the datafill specific to A5 for table TRKGRP. Only those fields that apply directly to A5 are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table TRKGRP (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 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, NCATDIGS, NPACHK, ANITYPE, HOLDTYPE, SIGFMT, TRAFTYPE, TRAFCLS, SELSEQ, V2DATA, and OPTION. Note that among these subfields, only those directly affected by A5 are described below. Refer to table TRKGRP in the data schema section of this document for information on an alternate structure for this field that results from the datafill of table CUSTFLDS.
	GRPTYP	A5	Group type. Enter A5 to specify the trunk group type that applies for outgoing or two-way trunks from a DMS-100 end office to an AMR5 toll office.

A5 trunk groups (continued)

Datafilling table TRKGRP (Sheet 2 of 7)

Field	Subfield or refinement	Entry	Explanation and action
	NCATDIGS	2 or 3	Number of category digits. Enter the number of category digits in the AMR5 category codes. (Since one type is allowed for each office, there can be two or three 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.
	NPACHK	Y or N	Numbering plan area check. Enter Y if a check of the numbering plan area (NPA) is required. Otherwise, enter N. If the value in this field is Y, the tens digit of the category code is modified to reflect the tributary information. NPA checks are not performed for automatic number identification failed (ANIFL) and operator number identification (ONI) calls. For these call types, the tens digit remains as it was in table CATCODES (for call types and classes not yet implemented).

A5 trunk groups (continued)

Datafilling table TRKGRP (Sheet 3 of 7)

Field	Subfield or refinement	Entry	Explanation and action
	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. 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. 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.
	HOLDTYPE	NOHOLD or TERMHOLD	Holdtype. If the call is required to terminate when either the originator or terminator goes on-hook, enter NOHOLD. Use NOHOLD in no-operator configurations. If the call is required to terminate when the terminator goes on-hook, but not when the originator goes on-hook, enter TERMHOLD (terminating operator hold). Entries other than NOHOLD and TERMHOLD 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.

A5 trunk groups (continued)

Datafilling table TRKGRP (Sheet 4 of 7)

Field	Subfield or refinement	Entry	Explanation and action
	SIGFMT	AMR5A, AMR5B, AMR5C, or AMR3	Signaling format. Datafill this field to specify the signaling format. 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.
	TRAFTYPE	AMRONE, AMRZERO, or AMRCOMB	Traffic type. Datafill this field to specify the traffic type, as described below. • Enter AMRONE for 1+ traffic. • Enter AMRZERO for 0+ and 0- traffic. • Enter AMRCOMB for 1+, 0+, and 0- traffic.
	V2DATA	see subfield	Data for two-way trunk group. This field consists of subfield DIR and refinements.
	DIR	OG or 2W	Trunk direction. For outgoing trunk groups, enter OG and datafill subfield OPTION. For two-way trunk groups, enter 2W and datafill refinements PRTNM, SCRNCL, SNPA, ORIGSRC, MODE, and VDEVAR, then datafill subfield OPTION. 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.
	PRTNM	alphanumeric (1 to 8 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).

A5 trunk groups (continued)

Datafilling table TRKGRP (Sheet 5 of 7)

Field	Subfield or refinement	Entry	Explanation and action
	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, 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 “Notes on originating source" in table HNPACONT.HNPACODE in the data schema section of this document.
	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.

A5 trunk groups (continued)

Datafilling table TRKGRP (Sheet 6 of 7)

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. 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 DMO.

A5 trunk groups (continued)

Datafilling table TRKGRP (Sheet 7 of 7)

Field	Subfield or refinement	Entry	Explanation and action
	DIGSIN2	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 DMO.
	OPTION	BCNAME	To specify the bearer-capability-name option, enter BCNAME and datafill refinement BCNAME.
	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 list of available bearer capabilities. If field OPTION and refinement BCNAME are left blank, the default bearer capability of the central office is used.

Datafill example for table TRKGRP

The following example shows sample datafill for table TRKGRP.

MAP display example for table TRKGRP

```
GRPKEY
                                                                GRPINFO
------------------------------------------------------------------------
OTWAON2303TO
  A5 8 TLD NCRT 3 N WK TERMHOLD AMR5B AMRCOMB TS DSEQ 2W VRCT NSCR 613
LCL CV Y 7 9 BCNAME 56KDATA $
```

Changing datafill for table TRKGRP

If office parameter TRK_OOS_CHK_ON in table OFCVAR is set to Y, all trunks in the trunk group must be taken out of service before changing the value of certain fields in table TRKGRP.

Datafilling table TRKSGRP

The following table shows the datafill specific to A5 for table TRKSGRP. Only those fields that apply directly to A5 are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table TRKSGRP

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 CLLI code assigned to the trunk group as datafilled in table CLLI.
	SGRP	0 or 1	Subgroup number. Enter the subgroup number assigned to the trunk group.

Datafill example for table TRKSGRP

The following example shows sample datafill for table TRKSGRP.

MAP display example for table TRKSGRP

```
           SGRPKEY        CARDCODE
SGRPVAR
                                                        SGRPVAR
------------------------------------------------------------
           OTWAON2303TO 0 DS1SIG
STD
       2W DP WK N 30 30 MF WK 7 0 Y NO NO N N N M 70 UNEQ
```

Changing datafill for table TRKSGRP

Use the standard table editor commands to change datafill for table TRKSGRP.

A5 trunk groups (end)

Datafilling table TRKMEM

The following table shows the datafill specific to A5 for table TRKMEM. Only those fields that apply directly to A5 are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table TRKMEM

Field	Subfield or refinement	Entry	Explanation and action
CLLI		alphanumeric (1 to 16 characters)	Common language location identifier. Enter the CLLI code assigned in table CLLI to the trunk group of which the trunk is a member.
EXTRKNM		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.
SGRP		0 or 1	Subgroup number. Enter the subgroup number to which the trunk is assigned.

Datafill example for table TRKMEM

The following example shows sample datafill for table TRKMEM.

MAP display example for table TRKMEM

```
CLLI          EXTRKNM   SGRP                          MEMVAR
------------------------------------------------------------
OTWAON2303TO 303        0                        DCM 1 1 5 $
```

Changing datafill for table TRKMEM

Use the standard table editor commands to change datafill for table TRKMEM.

AI trunk groups

AI trunk group functionality codes

AI trunk groups have no functionality codes.

Release applicability

TL03 and up

Prerequisites

AI trunk groups have no functional group prerequisites.

Description

Trunk group type AI is available in local and toll switching units for use as an automatic intercept system (AIS) interface.

Calls that cannot be completed as dialed are assigned various treatments. Any treatment can route to an AIS trunk group. Typical AIS routed treatments are as follows:

- OPRT - regular intercept
- DNTR - denied termination
- TESS - terminating service suspension
- TRBL - trouble intercept
- VACT - vacant code
- HNPI - home numbering plan area (NPA) intercept
- UNDN - unassigned directory number
- BLDN - blank directory number
- MSLC - misdirected local call

A separate route may be required for each type of treatment so that the correct information digit can be prefixed. This information digit is defined in table OFRT. If two or more treatments use the same information digit, they can be routed to the same index in table OFRT.

The AIS trunk must use trunk GRPTYP AI and outgoing multifrequency (MF) signalling. When the AIS trunk is seized and a wink start signal is detected, the information digit and the called number are sent in MF. When an answer is detected, the speech path is connected and the originator receives a recorded announcement.

AI trunk groups (continued)

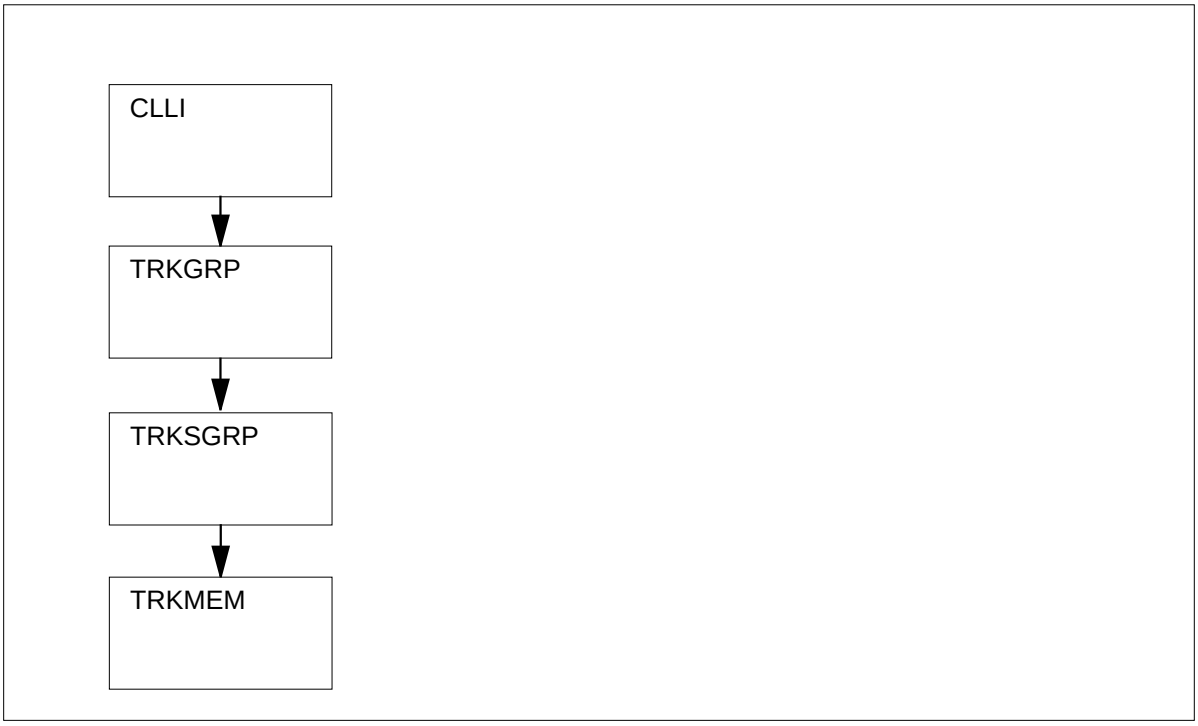
When the announcement ends, AIS returns an off-hook signal. If the calling party remains off-hook, the connection is maintained. After waiting for 4 s or more, AIS returns a second off-hook signal and an AIS operator is connected.

When the call is completed, the calling party goes on-hook and the originating line or trunk and the AIS trunk both become idle.

Since the AIS can be on-hook or off-hook, AIS deallocation requires that the on-hook signal be presented to AIS for at least 450 ms. Following this interval, the trunk can be released. The trunk guard timing in table TRKSGRP must be at least 450 ms.

The following figure shows the datafill dependencies for AI trunk groups.

Datafill dependencies for AI trunk groups



Limitations and restrictions

The following limitations and restrictions apply to AI trunk groups:

- Refer to the “Description" section.
- SS7 to AI interworking is not supported. In other words, calls coming in over a trunk group with a PULSE_TYPE of SS7 and terminating to AIS over a trunk with a TRNK_GROUP_TYPE of AI do not work. Therefore, this call scenario is not supported.

AI trunk groups (continued)

Billing

For information on billing, refer to the Bellcore format AMA translations section of this document.

Datafilling office parameters

AI trunk groups do not affect office parameters.

Datafill sequence

The following table lists the tables used by AI trunk groups. The tables are listed in the order in which they are to be datafilled.

Tables used by AI trunk groups

Table	Purpose of table
CLLI	The common language location identifier table uniquely identifies the far end of each announcement, tone, or trunk group.
TRKGRP	The trunk group table contains customer-defined data associated with each trunk group.
TRKSGRP	The trunk subgroup table contains supplementary information for each trunk group.
TRKMEM	The trunk member table specifies the physical location of each trunk assigned to one of the trunk groups.

The following table shows sample input for datafilling AI trunk groups.

Sample input for AI trunk groups

Table	Sample input
CLLI	AIS 51 75 AUTO_INTERCEPT_SYSTEM
TRKGRP	AIS AI 0 TLA NOSC IR N
TRKSGRP	AIS 0 2X88AA STD OG MF WK 7 0 NO NO N N N 70 UNEQ
TRKMEM	AIS 47 0 TM8 12 5 1 $

AI trunk groups (continued)

Datafilling table CLLI

The following table shows the datafill specific to AI for table CLLI. Only those fields that apply directly to AI are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table CLLI

Field	Subfield or refinement	Entry	Explanation and action
CLLI		AIS	Common language location identifier. Enter AIS, the fixed CLLI code for an Automatic Intercept System trunk.

Datafill example for table CLLI

The following example shows sample datafill for table CLLI.

MAP display example for table CLLI

```
CLLI            ADNUM  TRKGRSIZ                  ADMININF
-------------------------------------------------------
AIS             51    75           AUTO_INTERCEPT_SYSTEM
```

Changing datafill for table CLLI

Use the standard table editor commands to change datafill for table CLLI.

Datafilling table TRKGRP

The following table shows the datafill specific to AI for table TRKGRP. Only those fields that apply directly to AI are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table TRKGRP (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
GRPKEY		see subfield	Group key. This field consists of subfield CLLI.
	CLLI	AIS	Common language location identifier. Enter AIS.

AI trunk groups (continued)

Datafilling table TRKGRP (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
GRPINFO		see subfields	Group information. This field consists of subfields GRPTYP, TRAFSNO, PADGRP, NCCLS, TRAFCLS, and PROPAGAT. Note that among these subfields, only those directly affected by AI are described below. Refer to table TRKGRP in the data schema section of this document for information on an alternate structure for this field that results from the datafill of table CUSTFLDS.
	GRPTYP	AI	Group type. Enter AI. This is the trunk group type for AIS trunk groups.
	PROPAGAT	Y or N	Propagate answer back. Enter Y if the trunk group is to supervise the transmission of the Answer Back message sent to the originating central office switching center. Otherwise, enter N.

Datafill example for table TRKGRP

The following example shows sample datafill for table TRKGRP.

MAP display example for table TRKGRP

```
GRPKEY                                                GRPINFO
------------------------------------------------------------
AIS                                       AI 0 TLA NOSC IR N
```

Changing datafill for table TRKGRP

Use the standard table editor commands to change datafill for table TRKGRP.

AI trunk groups (continued)

Datafilling table TRKSGRP

The following table shows the datafill specific to AI for table TRKSGRP. Only those fields that apply directly to AI are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table TRKSGRP

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 CLLI code assigned to the trunk group as datafilled in table CLLI.
	SGRP	(0 or 1)	Subgroup number. Enter the subgroup number assigned to the trunk group.

Datafill example for table TRKSGRP

The following example shows sample datafill for table TRKSGRP.

MAP display example for table TRKSGRP

```
           SGRPKEY    CARDCODE
SGRPVAR
                                                        SGRPVAR
-------------------------------------------------------------
           AIS 0      2X88AA
STD
                           OG MF WK 7 0 NO NO N N N 70 UNEQ
```

Changing datafill for table TRKSGRP

Use the standard table editor commands to change datafill for table TRKSGRP.

Datafilling table TRKMEM

The following table shows the datafill specific to AI for table TRKMEM. Only those fields that apply directly to AI are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table TRKMEM

Field	Subfield or refinement	Entry	Explanation and action
CLLI		alphanumeric (1 to 16 characters)	Common language location identifier. Enter the CLLI code assigned in table CLLI to the trunk group of which the trunk is a member.
EXTRKNM		(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.
SGRP		(0 or 1)	Subgroup number. Enter the subgroup number to which the trunk is assigned.

Datafill example for table TRKMEM

The following example shows sample datafill for table TRKMEM.

MAP display example for table TRKMEM

```
CLLI          EXTRKNM  SGRP                          MEMVAR
------------------------------------------------------------
AIS           47       0                       TM8 12 5 1 $
```

Changing datafill for table TRKMEM

Use the standard table editor commands to change datafill for table TRKMEM.

AN trunk groups

AN trunk group functionality codes

AN trunk groups have no functionality codes.

Release applicability

TL03 and up

Prerequisites

AN trunk groups have no functional group prerequisites.

Description

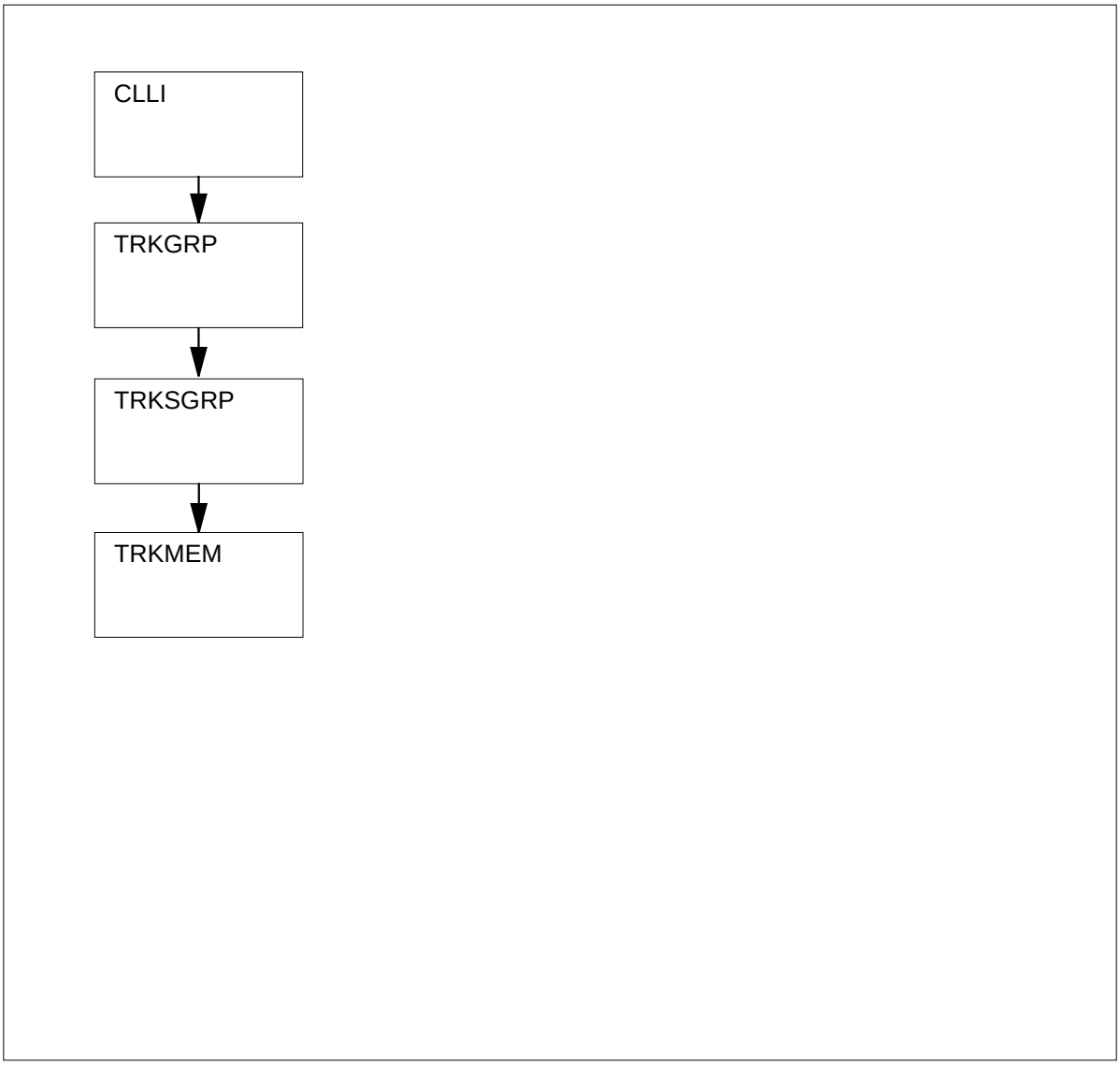
Outgoing trunk group type AN in a DMS-100 end office connects with an automatic number announcement (ANA) system.

Automatic number identification (ANI) spill consisting of the actual calling number is sent to ANA, which returns a recorded voice announcement of the calling number.

The following figure shows the datafill dependencies for AN trunk groups.

AN trunk groups (continued)

Datafill dependencies for AN trunk groups



Limitations and restrictions

AN trunk groups have no limitations or restrictions.

Billing

For information on billing, refer to the Bellcore format AMA translations section of this document.

AN trunk groups (continued)

Datafilling office parameters

AN trunk groups do not affect office parameters.

Datafill sequence

The following table lists the tables used by AN trunk groups. The tables are listed in the order in which they are to be datafilled.

Tables used by AN trunk groups

Table	Purpose of table
CLLI	The common language location identifier table uniquely identifies the far end of each announcement, tone, or trunk group.
TRKGRP	The trunk group table contains customer-defined data associated with each trunk group.
TRKSGRP	The trunk subgroup table contains supplementary information for each trunk group.
TRKMEM	The trunk member table specifies the physical location of each trunk assigned to one of the trunk groups.

The following table shows sample input for datafilling AN trunk groups.

Sample input for AN trunk groups

Table	Sample input
CLLI	OTWAON08W01O 51 75 AUTO_NUMBER_ANNOUNCEMENT
TRKGRP	OTWAON08W01O AN 0 ELO NOSC AN Y
TRKSGRP	OTWAON08W01O 0 DS1SIG STD OG NP IM 0 0 NO NO N N N 50 UNEQ
TRKMEM	OTWAON08W01O 23 0 DTC 3 0 4 $

Datafilling table CLLI

The following table shows the datafill specific to AN for table CLLI. Only those fields that apply directly to AN are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table CLLI

Field	Subfield or refinement	Entry	Explanation and action
CLLI		alphanumeric (1 to 16 characters)	Common language location identifier. Enter a CLLI code to uniquely identify the far end of the AN trunk group. Only alphabetic characters, numeric characters, and _ (underscores) can be used to datafill this field. The first character must be alphabetic. For optimum use, a CLLI code must not contain more than 12 characters, as only the first 12 characters are displayed on the MAP (maintenance and administration position) display. When a CLLI code is displayed in a log report, the entire 16-character CLLI code appears.

Datafill example for table CLLI

The following example shows sample datafill for table CLLI.

MAP display example for table CLLI

```
CLLI            ADNUM  TRKGRSIZ                   ADMININF
------------------------------------------------------------
OTWAON08W01O    51     75          AUTO_NUMBER_ANNOUNCEMENT
```

Changing datafill for table CLLI

Use the standard table editor commands to change datafill for table CLLI.

AN trunk groups (continued)

Datafilling table TRKGRP

The following table shows the datafill specific to AN for table TRKGRP. Only those fields that apply directly to AN are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table TRKGRP

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 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, and AUDRING. Note that among these subfields, only those directly affected by AN are described below.
	GRPTYP	AN	Group type. Enter AN. This is the trunk group type for automatic number announcement.
	AUDRING	Y or N	Audible ring. Enter Y if the switching unit is required to return audible ring to the originator. Otherwise, enter N.

Datafill example for table TRKGRP

The following example shows sample datafill for table TRKGRP.

MAP display example for table TRKGRP

```
GRPKEY                                    GRPINFO
------------------------------------------------------
OTWAON08W01O                              AN 0 ELO NOSC AN Y
```

Changing datafill for table TRKGRP

Use the standard table editor commands to change datafill for table TRKGRP.

Datafilling table TRKSGRP

The following table shows the datafill specific to AN for table TRKSGRP. Only those fields that apply directly to AN are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table TRKSGRP

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 CLLI code assigned to the trunk group as datafilled in table CLLI.
	SGRP	0 or 1	Subgroup number. Enter the subgroup number assigned to the trunk group.
	OPULSTYP	NP	Outgoing type of pulsing. For AN trunk groups, enter NP for no pulsing.

Datafill example for table TRKSGRP

The following example shows sample datafill for table TRKSGRP.

MAP display example for table TRKSGRP

```
           SGRPKEY      CARDCODE
SGRPVAR
                                                        SGRPVAR
------------------------------------------------------------
           OTWAON08W01O 0      DS1SIG
STD
                           OG NP IM 0 0 NO NO N N N 50 UNEQ
```

Changing datafill for table TRKSGRP

Use the standard table editor commands to change datafill for table TRKSGRP.

AN trunk groups (end)

Datafilling table TRKMEM

The following table shows the datafill specific to AN for table TRKMEM. Only those fields that apply directly to AN are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table TRKMEM

Field	Subfield or refinement	Entry	Explanation and action
CLLI		alphanumeric (1 to 16 characters)	Common language location identifier. Enter the CLLI code assigned in table CLLI to the trunk group of which the trunk is a member.
EXTRKNM		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.
SGRP		0 or 1	Subgroup number. Enter the subgroup number to which the trunk is assigned.

Datafill example for table TRKMEM

The following example shows sample datafill for table TRKMEM.

MAP display example for table TRKMEM

```
CLLI             EXTRKNM  SGRP                          MEMVAR
-------------------------------------------------------------
OTWAON08W01O     123      0                       DTC 3 0 4 $
```

Changing datafill for table TRKMEM

Use the standard table editor commands to change datafill for table TRKMEM.

ANI trunk groups

ANI trunk group functionality codes

ANI trunk groups have no functionality codes.

Release applicability

TL03 and up

Prerequisites

ANI trunk groups have no functional group prerequisites.

Description

Trunk group ANI is used for international centralized automatic message accounting (ICAMA) and International Traffic Operator Position System (ITOPS) calls.

How ANI accounting works

In order for automatic number identification (ANI) accounting to work, both the incoming and the outgoing ends of a trunk group must be of type ANI.

When a call is made, the outgoing end outpulses the called number the same way it does for non-ANI trunks. When the outgoing end receives an ANI request signal, it then outpulses the calling number.

If the outgoing end times out before it gets an ANI request signal, the calling party is routed to treatment. The type of treatment can be datafilled separately for each route.

The incoming end first collects the called number digits the same way it does on non-ANI trunks. It then sends an ANI request signal and waits to receive the calling number digits.

Upon receiving the ANI request signal, the outgoing end performs a delay (specified through datafill in table LNSIGSYS) and then proceeds to outpulse the digits of the calling number.

At this point, the incoming end collects the outpulsed digits and makes them available to billing and verification applications. If the incoming end fails to receive the outpulsed digits, the call is routed to regular treatment.

Selectable translator types

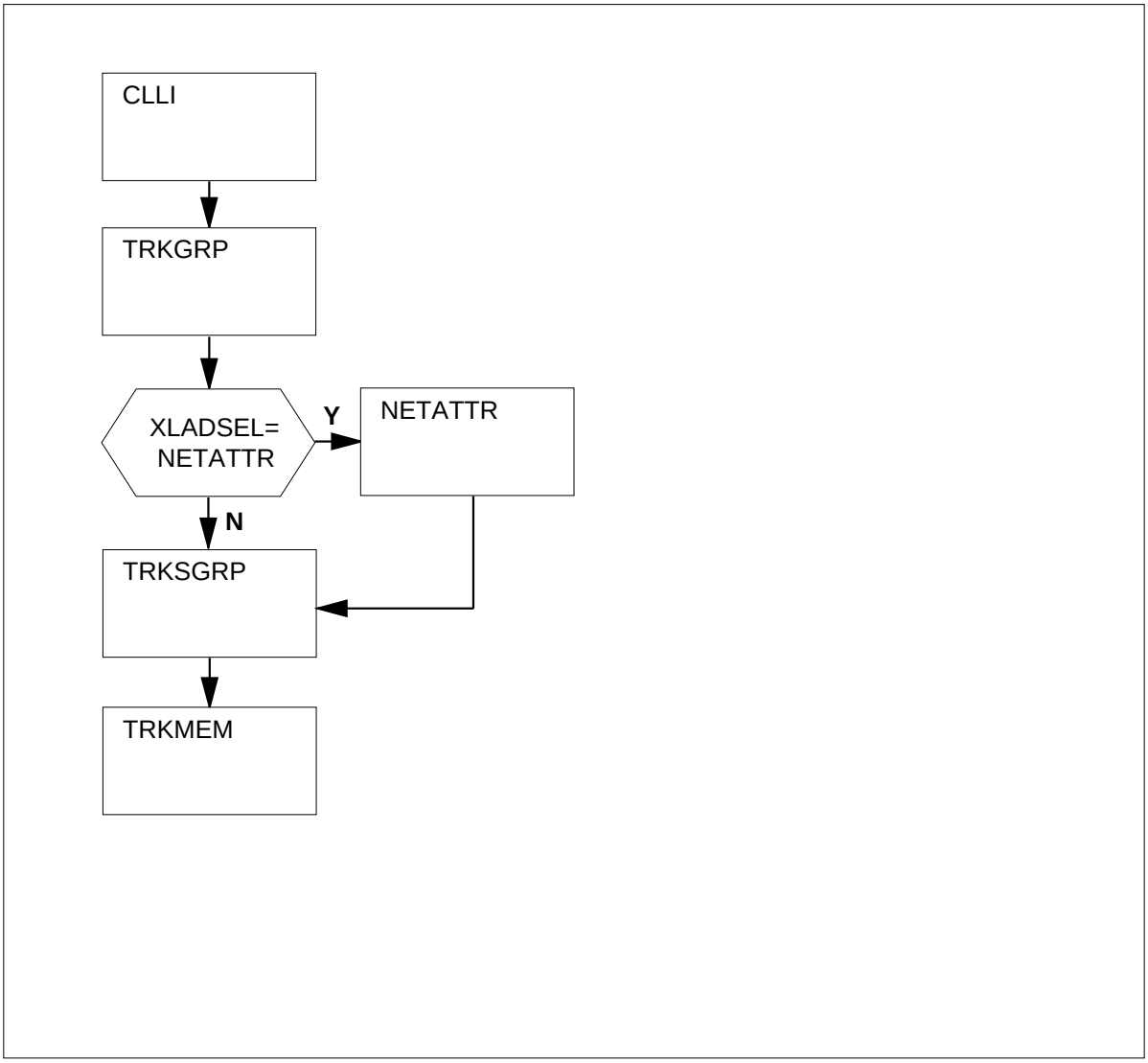
ANI allows the translator type (for example, North American or universal translations) to be selected from the trunk group data.

ANI trunk groups (continued)

The translation data selector NETATTR is an index into a new network attributes table. If this selector is used, translation data is datafilled in table NETATTR instead of table TRKGRP.

The following figure shows the datafill dependencies for ANI trunk groups.

Datafill dependencies for ANI trunk groups



Limitations and restrictions

Refer to the “Description" section for the limitations and restrictions that apply to ANI trunk groups:

ANI trunk groups (continued)

Billing

For information on billing, refer to the Bellcore format AMA translations section of this document.

Datafilling office parameters

The following table shows the office parameters used by ANI trunk groups. For more information about office parameters, refer to *Office Parameters Reference Manual.*

Office parameters used by ANI trunk groups

Table name	Parameter name	Explanation and action
OFCVAR	TRK_OOS_CHK_ON	This parameter specifies whether to check that the trunks in a trunk group are out of service before changing the values of specific fields in table TRKGRP by data modification order (DMO).
OFCENG	NUM_ICAMA_RECORDING_UNITS	This parameter specifies the maximum number of ICAMA recording units required before the next extension. Set the value of this parameter equal to the number of simultaneous toll calls originating on trunks with trunk group type ANI that have the required call class and/or the number of simultaneous toll calls originating on trunks with trunk group type MTR that have field IAA equal to Y in table TRKGRP.

Datafill sequence

The following table lists the tables used by ANI trunk groups. The tables are listed in the order in which they are to be datafilled.

Tables used by ANI trunk groups (Sheet 1 of 2)

Table	Purpose of table
CLLI	The common language location identifier table uniquely identifies the far end of each announcement, tone, or trunk group.
TRKGRP	The trunk group table contains customer-defined data associated with each trunk group.
NETATTR	The network attributes table contains translation data and optional features associated with a network. This table can be used as an alternative to table TRKGRP for datafilling the trunk translation data.

ANI trunk groups (continued)

Tables used by ANI trunk groups (Sheet 2 of 2)

Table	Purpose of table
TRKSGRP	The trunk subgroup table contains supplementary information for each trunk group.
TRKMEM	The trunk member table specifies the physical location of each trunk assigned to one of the trunk groups.

The following table shows sample input for datafilling ANI trunk groups.

Sample input for ANI trunk groups

Table	Sample input
CLLI	ICFRANI 51 128 $
TRKGRP	ICFRANI ANI 0 ELOA NCRT N N IC UNIV PX ICANICN STDINTL 7
NETATTR	1 UNIV PX ICANICN NIL
TRKSGRP	ICFRANI 0 P30CAS SIGSYS Y N DELDIAL IC LOCLNSIGDX LOCRGSIGDX NIL TERM M
TRKMEM	ICFRANI 30 0 PDTC 1 1 0 $

Datafilling table CLLI

The following table shows the datafill specific to ANI for table CLLI. Only those fields that apply directly to ANI are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table CLLI

Field	Subfield or refinement	Entry	Explanation and action
CLLI		alphanumeric (1 to 16 characters)	Common language location identifier. Enter a CLLI code to uniquely identify the far end of the ANI trunk group. Only alphabetic characters, numeric characters, and _ (underscores) can be used to datafill this field. The first character must be alphabetic. For optimum use, a CLLI code must contain not more than 12 characters, as only the first 12 characters are displayed on the MAP (maintenance and administration position) display. When a CLLI code is displayed in a log report, the entire 16-character CLLI code appears.

Datafill example for table CLLI

The following example shows sample datafill for table CLLI.

MAP display example for table CLLI

```
CLLI          ADNUM   TRKGRSIZ                    ADMININF
-------------------------------------------------------------
ICFRANI        51      128
```

Changing datafill for table CLLI

Use the standard table editor commands to change datafill for table CLLI.

ANI trunk groups (continued)

Datafilling table TRKGRP

The following table shows the datafill specific to ANI for table TRKGRP. Only those fields that apply directly to ANI are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table TRKGRP (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 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, SAT, ESUPR, and DIRSEL. Note that among these subfields, only those directly affected by ANI are described below. Refer to table TRKGRP in the data schema section of this document for information on an alternate structure for this field that results from the datafill of table CUSTFLDS.
	GRPTYP	ANI	Group type. Enter ANI to specify the automatic number identification trunk group type.
	SAT	Y or N	Satellite. Enter Y if the trunk group is set up to switch through satellite. Otherwise, enter N.
	ESUPR	Y or N	Echo suppressor. If the trunk sub-group has echo suppressors, enter Y. Otherwise, enter N.
	DIRSEL	see subfield	Trunk selection. This field consists of subfield DIR and refinements.
	DIR	IC or OG	Trunk direction. If the direction of the trunk group is incoming, enter IC and datafill refinements XLAD, ANIFMT, and ANIDNSIZ. If the direction of the trunk group is outgoing, enter OG and datafill refinements SELSEQ, ANIFMT, and ANIDNSIZ.
	XLAD	see subfield	Variable translation data. This refinement consists of subfield XLADSEL.

Datafilling table TRKGRP (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
	XLADSEL	UNIV, NALT, or NETATTR	Translation selector. If the universal translation system is used, enter UNIV and datafill refinements XLASYS and XLANAME. For a description of these refinements, refer to the data schema section of this document. If the North American translation system is used, enter NALT and datafill refinements PRTNM, SCRNCL, SNPA, and ORIGSRC. For a description of these refinements, refer to the data schema section of this document. If translation data from table NETATTR is used, enter NETATTR and datafill refinement NETINDX as described below.
	NETINDX	(0 to 1023)	Network attribute index. Enter network attribute index into table NETATTR. No other translation datafill is required, since it is available in table NETATTR.
	ANIFMT	STDBELL or STDINTL	ANI format. Enter either STDBELL or STDINTL to specify the size and values of the ID field in the ANI train.
	ANIDNSIZ	(4 to 10)	Originators directory number size. Enter the number of digits in the originator's directory number that are to be outpulsed or received in the ANI digit train.

Datafill example for table TRKGRP

The following example shows sample datafill for table TRKGRP.

MAP display example for table TRKGRP

```
GRPKEY                                                          GRPINFO
------------------------------------------------------------------------
OGTOANI                          ANI 10 ELOA NCRT N N OG MIDL STDINTL 7

ICFRANI                 ANI 0 ELOA NCRT N N IC UNIV PX ICANICN STDINTL 7
```

ANI trunk groups (continued)

Changing datafill for table TRKGRP

If office parameter TRK_OOS_CHK_ON in table OFCVAR is set to Y, all trunks in the trunk group must be taken out of service before changing the value of certain fields in table TRKGRP.

Datafilling table NETATTR

The following table shows the datafill specific to ANI for table NETATTR. Only those fields that apply directly to ANI are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table NETATTR

Field	Subfield or refinement	Entry	Explanation and action
NETIDX		0 to 1023	Network index. Enter the index referenced by table TRKGRP.
XLAVAR		see subfield	Variable translation data. This field consists of subfield XLADSEL and its refinements. For a description of these fields, refer to the data schema section of this document.

Datafill example for table NETATTR

The following example shows sample datafill for table NETATTR.

MAP display example for table NETATTR

```
NETI                   XLAVAR                          NETVAR
-------------------------------------------------------------
1                    UNIV PX ICANICN                   NIL
```

Changing datafill for table NETATTR

Use the standard table editor commands to change datafill for table NETATTR.

Datafilling table TRKSGRP

The following table shows the datafill specific to ANI for table TRKSGRP. Only those fields that apply directly to ANI are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table TRKSGRP

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 CLLI code assigned to the trunk group as datafilled in table CLLI.
	SGRP	(0 or 1)	Subgroup number. Enter the subgroup number assigned to the trunk group.

Datafill example for table TRKSGRP

The following example shows sample datafill for table TRKSGRP.

MAP display example for table TRKSGRP

```
           SGRPKEY    CARDCODE
SGRPVAR                                                    SGRPVAR
-------------------------------------------------------------------
           ICFRANI 0 P30CAS
SIGSYS
          Y N DELDIAL IC LOCLNSIGDX LOCRGSIGDX NIL TERM M
```

Changing datafill for table TRKSGRP

Use the standard table editor commands to change datafill for table TRKSGRP.

ANI trunk groups (end)

Datafilling table TRKMEM

The following table shows the datafill specific to ANI for table TRKMEM. Only those fields that apply directly to ANI are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table TRKMEM

Field	Subfield or refinement	Entry	Explanation and action
CLLI		alphanumeric (1 to 16 characters)	Common language location identifier. Enter the CLLI code assigned in table CLLI to the trunk group of which the trunk is a member.
EXTRKNM		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.
SGRP		0 to 1	Subgroup number. Enter the subgroup number to which the trunk is assigned.

Datafill example for table TRKMEM

The following example shows sample datafill for table TRKMEM.

MAP display example for table TRKMEM

```
   CLLI       EXTRKNM      SGRP                        MEMVAR
-------------------------------------------------------------
ICFRANI            30         0                 PDTC 1 1 0 $
```

Changing datafill for table TRKMEM

Use the standard table editor commands to change datafill for table TRKMEM.

ATC trunk groups

ATC trunk group functionality codes

ATC trunk groups have no functionality codes.

Release applicability

TL03 and up

Prerequisites

ATC trunk groups have no functional group prerequisites.

Description

Trunk group type ATC (access tandem to carrier) is used in a DMS-100/200 switch equipped with feature package NTX386AA (Feature Group D Carrier Code Expansion) to carry equal access (EA) traffic between an access tandem (AT) switch and an inter-LATA carrier (IC).

The equal access plan uses an AT to provide one or more dedicated trunks for EA signaling for each carrier that it serves.

The following trunks originate traffic to an ATC trunk:

- super-CAMA (GRPTYP SC)
- intertoll (GRPTYP IT)
- TOPS (GRPTYP TOPS)

The following trunks terminate traffic from an ATC trunk:

- super-CAMA (SC)
- intertoll (IT)

MF (multifrequency) is the only pulse type permitted for trunk group ATC signaling.

ATC trunk groups (continued)

The ST signals that are accepted for the possible station class types (refer to the description of field STNCLS for additional information) are shown in the table below.

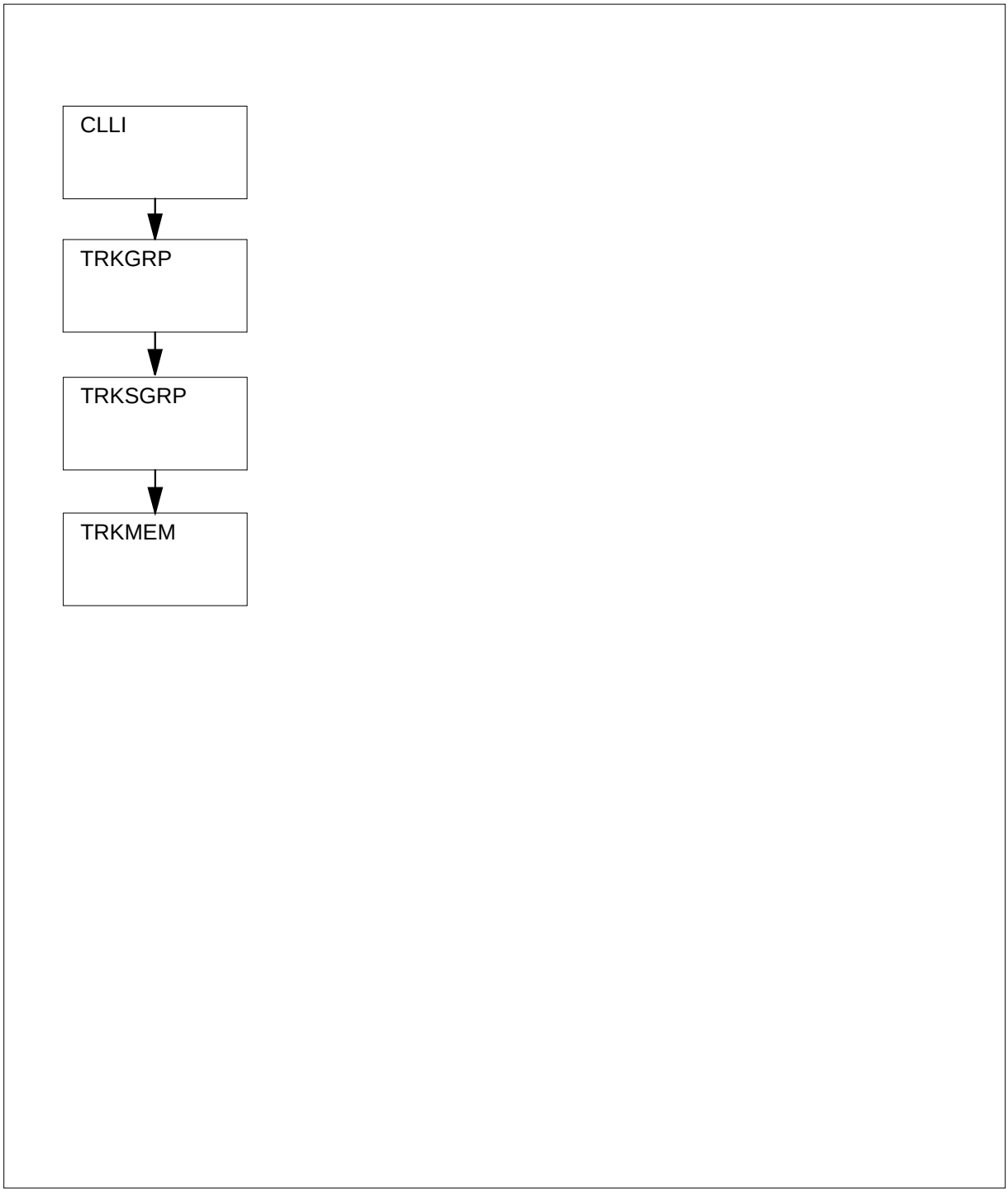
ST signals accepted for each type of entry in field STNCLS

ST signal	COMB	NON COMB	INTER TOLL
ST for 1+ traffic (COIN)	X	X	X
STP for 0+ or 0- traffic (COIN)			X
ST2P for 1+ traffic (NONCOIN)	X		X
ST3P for 0+ traffic (NONCOIN)	X		X

The following figure shows the datafill dependencies for ATC trunk groups.

ATC trunk groups (continued)

Datafill dependencies for ATC trunk groups



ATC trunk groups (continued)

Limitations and restrictions

Refer to the “Description" section for the limitations and restrictions that apply to ATC trunk groups:

Billing

For information on billing, refer to the Bellcore format AMA translations section of this document.

Datafilling office parameters

The following table shows the office parameters used by ATC trunk groups. For more information about office parameters, refer to *Office Parameters Reference Manual.*

Office parameters used by ATC trunk groups (Sheet 1 of 2)

Table name	Parameter name	Explanation and action
OFCSTD	EA_REC_1st_PRE_WK_TIME	This parameter specifies the timeout for receiving the leading edge of the first wink signal, in 160-ms intervals. The range is 1 to 255. The default value is 50 (8 s).
	EA_REC_SUB_PRE_WK_TME	This parameter specifies the timeout for receiving the leading edge of subsequent wink signals, in 160-ms intervals. The range is 1 to 255. The default value is 100 (16 s).
	EA_REC_MAX_WK_TIME	This parameter specifies the maximum time for recognition of wink, in 10-ms intervals. The range is 1 to 255. The default value is 150 (1.5 s).
OFCVAR	TRK_OOS_CHK_ON	This parameter specifies whether to check that the trunks in a trunk group are out of service before changing the values of specific fields in table TRKGRP by data modification order (DMO).

ATC trunk groups (continued)

Office parameters used by ATC trunk groups (Sheet 2 of 2)

Table name	Parameter name	Explanation and action
	EA_TEST_CALL_SPILL	This parameter specifies the number, up to a maximum of 15 digits, that will be spilled on a test call. The default value is 950005551212.

Note 1: Use standard minimum wink time values.

Note 2: The office parameter EA_TEST_CALL_SPILL is datafilled when the office is engineered. These digits are sent on a test call over an ATC trunk and consist of the following digits: two information digits, three digits for calling NPA, and seven digits for calling number.

Datafill sequence

The following table lists the tables used by ATC trunk groups. The tables are listed in the order in which they are to be datafilled.

Tables used by ATC trunk groups

Table	Purpose of table
CLLI	The common language location identifier table uniquely identifies the far end of each announcement, tone, or trunk group.
TRKGRP	The trunk group table contains customer-defined data associated with each trunk group.
TRKSGRP	The trunk subgroup table contains supplementary information for each trunk group.
TRKMEM	The trunk member table specifies the physical location of each trunk assigned to one of the trunk groups.

The following table shows sample input for datafilling ATC trunk groups.

Sample input for ATC trunk groups

Table	Sample input
CLLI	OGEACAR3 51 225 $
TRKGRP	OGEACAR3 ATC 21 TLD NCTC OG ITL MIDL NPRT NSCR 613 IC3 Y Y FGB COMB Y
TRKSGRP	OGEACAR3 0 DS1SIG STD OG MF WK 7 0 NO NO N N N 25 UNEQ
TRKMEM	OGEACAR3 101 0 DTC 3 0 4 $

ATC trunk groups (continued)

Datafilling table CLLI

The following table shows the datafill specific to ATC for table CLLI. Only those fields that apply directly to ATC are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table CLLI

Field	Subfield or refinement	Entry	Explanation and action
CLLI		alphanumeric (1 to 16 characters)	Common language location identifier. Enter a CLLI code to uniquely identify the far end of the ATC trunk group. Only alphabetic characters, numeric characters, and _ (underscores) can be used to datafill this field. The first character must be alphabetic. For optimum use, a CLLI code must not contain more than 12 characters, as only the first 12 characters are displayed on the MAP (maintenance and administration position) display. When a CLLI code is displayed in a log report, the entire 16-character CLLI code appears.

Datafill example for table CLLI

The following example shows sample datafill for table CLLI.

MAP display example for table CLLI

```
CLLI            ADNUM  TRKGRSIZ                    ADMININF
-------------------------------------------------------------
OGEACAR3         51     225                           $
```

Changing datafill for table CLLI

Use the standard table editor commands to change datafill for table CLLI.

Datafilling table TRKGRP

The following table shows the datafill specific to ATC for table TRKGRP. Only those fields that apply directly to ATC are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table TRKGRP (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 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, DIR, TRAFCLS, SELSEQ, PRTNM, SCRNCL, SNPA, CARRNM, ANI, SIGTYPE, STNCLS, OSIND, and OPTIONS. Note that among these subfields, only those directly affected by ATC are described below.
	GRPTYP	ATC	Group type. Enter ATC to specify the access tandem to carrier trunk group type.
	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, all trunks in the group must be busy before the value of this field can be changed by DMO.

ATC trunk groups (continued)

Datafilling table TRKGRP (Sheet 2 of 8)

Field	Subfield or refinement	Entry	Explanation and action
	SELSEQ	ASEQ, CNTLEVN, CNTLODD, CCWCTH, CWCTH, DSEQ, LIDL, MIDL, or WIDEBAND	Select sequence. Datafill this field to specify 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 in this field. For incoming trunk groups, this field is not required. Enter MIDL. For outgoing and two-way trunk groups, datafill this field as follows: 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. Feature package NTX244AB (Enhanced Sequential Trunk Hunting) must be present for ascending or descending sequential selection. 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. 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.

ATC trunk groups (continued)

Datafilling table TRKGRP (Sheet 3 of 8)

Field	Subfield or refinement	Entry	Explanation and action
			If the end office is not a link list switcher, and feature NTX244AB is in the switching unit, base the selection order on the order of the trunks in table TRKMEM. 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). The entries CNTLEVN and CNTLODD apply to C7UP trunks (where field SIGDATA in table TRKSGRP is equal to C7UP or ISDN). C7UP trunks subdivide into controlling groups and non-controlling groups. These groups in turn subdivide into even and odd circuit identification codes (CIC).The differences between the four groups relate to the selection sequence used for locating idle trunks. Enter CNTLEVN to select the MIDL selection sequence algorithm for even numbered CICs in the controlling group. Enter CNTLODD 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 non-controlling group is selected. This applies to both CNTLEVN and CNTLODD selection sequences. The CNTLEVN and CNTLODD options implement method 2 for Dual Seizure avoidance.

ATC trunk groups (continued)

Datafilling table TRKGRP (Sheet 4 of 8)

Field	Subfield or refinement	Entry	Explanation and action
			If wideband trunk selection is allowed for primary rate interface (PRI) ISUP trunks, enter WIDEBAND and datafill refinements WBSELSEQ, WBGRPING, and WBSEARCH. The WIDEBAND entry value is valid only if feature NTXR49AA (Dialable Wide Band Service PRI) is in the switching unit. 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 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 selection sequence. Datafill this field if the value in field SELSEQ is WIDEBAND. Specify whether the wideband trunks are selected in ascending order (ASEQ) from the first idle trunk on the search list, or in descending order (DSEQ), from the last idle trunk on the search list. The order of trunks in the search list is determined by the order in which the trunk groups are datafilled in table TRKMEM.
	WBGRPING	FIXED or FLOATING	Wideband boundary preference. Datafill this field if the value in field SELSEQ is WIDEBAND. This field contains the wideband boundary preference. Enter FIXED to specify that idle trunks within a specific time slot frame are selected. This value is valid only for local exchange carriers (LEC). Enter FLOATING to specify a number of consecutive idle trunks in a trunk group are selected.

ATC trunk groups (continued)

Datafilling table TRKGRP (Sheet 5 of 8)

Field	Subfield or refinement	Entry	Explanation and action
	WBSEARCH	BESTFITorFIRSTFIT	Wideband search. Datafill this field if the value in field SELSEQ is WIDEBAND. This field specifies the wideband search algorithm. The BESTFIT algorithm finds the smallest segment of idle channels (DS-0s) among trunks (DS-1s) within a trunk group to accommodate a wideband call, according to the boundary preference (FIXED or FLOATING) specified. The FIRSTFIT algorithm finds the first segment of idle DS0s that can accommodate a wideband call, according to the boundary preference specified.
	CARRNM	alphanumeric (1 to 16 characters) or NILC	Carrier name. Enter a carrier name that was previously datafilled in table OCCINFO.
	ANI	Y or N	Automatic number identification. Enter Y if the trunk group is to send automatic number identification (ANI) information. Otherwise, enter N. For incoming trunk groups, this field is not required. Enter N.
	SIGTYPE	BELLI, BELLII, EAPLAN, or FGB	ANI signaling type. Enter the signaling type for this trunk group. For signaling types BELLI, BELLII, or EAPLAN, datafill refinement OPERATOR_HOLD. For signaling type FGB, no additional refinements are required.
	OPERATOR_HOLD	see subfield	Operator hold. Datafill this field if the value in field SIGTYPE is BELLI, BELLII, or EAPLAN. This field consists of subfield OPRHOLD and refinement HLDTIMER.

ATC trunk groups (continued)

Datafilling table TRKGRP (Sheet 6 of 8)

Field	Subfield or refinement	Entry	Explanation and action
	OPRHOLD	Y or N	Operator hold. Datafill this field if the value in field SIGTYPE is BELLI, BELLII, or EAPLAN. If a signal is to be sent to the traffic operator position system (TOPS) to indicate that operator hold must be applied when the carrier sends an off-hook signal (to TOPS) after the called party goes off-hook, enter Y and datafill refinement HLDTIMER. Otherwise, enter N.
	HLDTIMER	0 to 60	Operator hold timer. Datafill this field if the value in field OPRHOLD is Y. Enter a value to specify the duration, in minutes, before the operator hold timeout timer expires and terminates the call. If the entry value is 0 (zero), timer timeout does not occur.

ATC trunk groups (continued)

Datafilling table TRKGRP (Sheet 7 of 8)

Field	Subfield or refinement	Entry	Explanation and action
	STNCLS	COMB, NONCOMB, or INTERTOLL	Station class signaling. Datafill this field to specify the type of signaling accepted by the inter-LATA (local access and transport area) carrier switch. If the trunk group direction is incoming, this field is not required. Enter COMB. If the office has a TOPS access tandem (AT) switch with an incoming TOPS trunk connected to an outgoing ATC trunk, datafill field STNCLS with the following values: COMB: for combined (coin and noncoin) traffic NONCOMB: for non-combined (dedicated) traffic INTERTOLL: for feature group B (FGB) signaling If the office does not have TOPS, or the incoming trunk group is of a type other than TOPS, datafill field STNCLS with the value COMB. For combined traffic , such as coin or noncoin, the ST signal indicates the class of service of the calls. For non-combined traffic, class-of-service is determined by fields CLGID and STATCSA in table TRKGRP (TOPS). Entry value INTERTOLL is valid only in TOPS offices.
	OSIND	Y or N	Operator services indicator. Enter Y if the carrier is to receive an ANI ID indication that operator services were provided. Otherwise, enter N.
	OPTIONS	see subfield	Options. This field consists of subfield OPTION and refinements.

ATC trunk groups (continued)

Datafilling table TRKGRP (Sheet 8 of 8)

Field	Subfield or refinement	Entry	Explanation and action
	OPTION	BCNAME	Option. To specify the bearer-capability-name option, enter BCNAME and datafill refinement BCNAME. Option BCNAME is valid only for incoming and two-way trunk group types. 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 in the data schema section of this document for the list of available bearer capabilities. If field OPTION and refinement BCNAME are left blank, the default bearer capability of the central office is used. If a BC is not datafilled for an ATC type trunk group, the office default bearer capability defined by office parameter DEFAULT_BEARER_CAPABILITY (either SPEECH or 3_1KHZ) applies. Refer to table OFCENG in *Office Parameters Reference Manual* for more information on this office parameter. If the TRKGRP tuple is listed and the datafilled BC is the office default (SPEECH or 3_1KHZ), the BC option does not appear (on a MAP display).

Datafill example for table TRKGRP

The following example shows sample datafill for table TRKGRP.

MAP display example for table TRKGRP

```
GRPKEY
                                                                GRPINFO
------------------------------------------------------------------------
OGEACAR3
          ATC 21 TLD NCTC OG ITL MIDL NPRT NSCR 613 IC3 Y FGB COMB Y
OTWAON0202AT
        ATC 20 TLD NCRT IC IT MIDL NPRT NSCR 613 MCI N BELLI N COMB N
OTWAON2301T0
     ATC 23 TLD NCIT 2W IT MIDL NPRT NSCR 613 MCI Y BELLI Y 15 COMB N
```

Changing datafill for table TRKGRP

If office parameter TRK_OOS_CHK_ON in table OFCVAR is set to Y, all trunks in the trunk group must be taken out of service before changing the value of certain fields in table TRKGRP.

Datafilling table TRKSGRP

The following table shows the datafill specific to ATC for table TRKSGRP. Only those fields that apply directly to ATC are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table TRKSGRP (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 CLLI code assigned to the trunk group as datafilled in table CLLI.
	SGRP	0 or 1	Subgroup number. Enter the subgroup number assigned to the trunk group.
SGRPVAR		see subfields	Variable subgroup data. For trunk group type ATC with standard signaling, datafill subfields SIGDATA and DIR as shown below.
	SIGDATA	STD	Signaling data. Enter STD for standard signaling.
	DIR	IC, OG, or 2W	Direction. Enter IC for incoming, OG for outgoing, or 2W for two way. Datafill refinements IPULSTYP, ISTARTSG, OVLP, PSPDSEIZ, PARTDIAL, OPULSTYP, OSTARTSG, IDGTIME, NUMSTOPS, GLAREYD, CCONT, RNGBCK, ESUPR, SAT, REMBSY, DIALMODE, TRKGRDTM, and ECSELECT. Note that among these refinements, only those directly affected by NFA are described below.
	IPULSTYP	blank	Incoming type of pulsing. For incoming and two-way ATC trunk groups, leave this field blank.
	ISTARTSG	WK	Incoming start dial signal. For incoming and two-way ATC trunk groups, enter WK for wink start dial signal.

ATC trunk groups (continued)

Datafilling table TRKSGRP (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
	OPULSTYP	MF	Outgoing type of pulsing. For outgoing and two-way ATC trunk groups, enter MF for multifrequency pulsing.
	OSTARTSG	WK	Outgoing start dial signal. For outgoing and two-way ATC trunk groups, enter WK for wink start dial signal.

Datafill example for table TRKSGRP

The following example shows sample datafill for table TRKSGRP.

MAP display example for table TRKSGRP

```
                SGRPKEY      CARDCODE
SGRPVAR
                                                        SGRPVAR
------------------------------------------------------------
                OGEACAR3 0   DS1SIG
STD
                             OG MF WK 7 0 NO NO N N N 25 UNEQ
```

Changing datafill for table TRKSGRP

Use the standard table editor commands to change datafill for table TRKSGRP.

Datafilling table TRKMEM

The following table shows the datafill specific to ATC for table TRKMEM. Only those fields that apply directly to ATC are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table TRKMEM

Field	Subfield or refinement	Entry	Explanation and action
CLLI		alphanumeric (1 to 16 characters)	Common language location identifier. Enter the CLLI code assigned in table CLLI to the trunk group of which the trunk is a member.
EXTRKNM		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.
SGRP		0 or 1	Subgroup number. Enter the subgroup number to which the trunk is assigned.

Datafill example for table TRKMEM

The following example shows sample datafill for table TRKMEM.

MAP display example for table TRKMEM

```
CLLI          EXTRKNM  SGRP                              MEMVAR
-------------------------------------------------------------
OGEACAR3      101      0                          DTC 3 0 4 $
```

Changing datafill for table TRKMEM

Use the standard table editor commands to change datafill for table TRKMEM.

Black Box Fraud Prevention

Release applicability

TL08 and up

Prerequisites

Black Box Fraud Prevention has no functional group prerequisites.

Description

When a telephone call is made the following happens:

- the originating end outpulses the digits dialed
- the switches establish a two-way speech path between the originating end and the terminating end
- the called party answers the call
- the far end switch sends an answer supervision signal to the originating switch starting the billing process

Because call billing starts when answer supervision is received, any action that delays sending this signal will affect customer billing. This type of call fraud is termed Black Box Fraud.

Black Box Fraud Prevention modifies the call origination process so that the following happens;

- the originating end outpulses the required digits
- the switches establish a two-way speech path between the originating end and the terminating end
- the originating switch blocks the outgoing speech path
- a timer whose length is specified by the user, is started
- if answer supervision is received from the terminating end before the timer expires the outgoing speech path is unblocked, two-way calling is established, and the billing process started
- if the timer expires before answer supervision is received the call is taken down, trunk TRK OM NOANSWER is pegged and log TRK610 is generated

By blocking the outgoing speech path until the reception of answer supervision, and the start of billing, feature AJ4532/AJ4951 prevents Black Box Fraud.

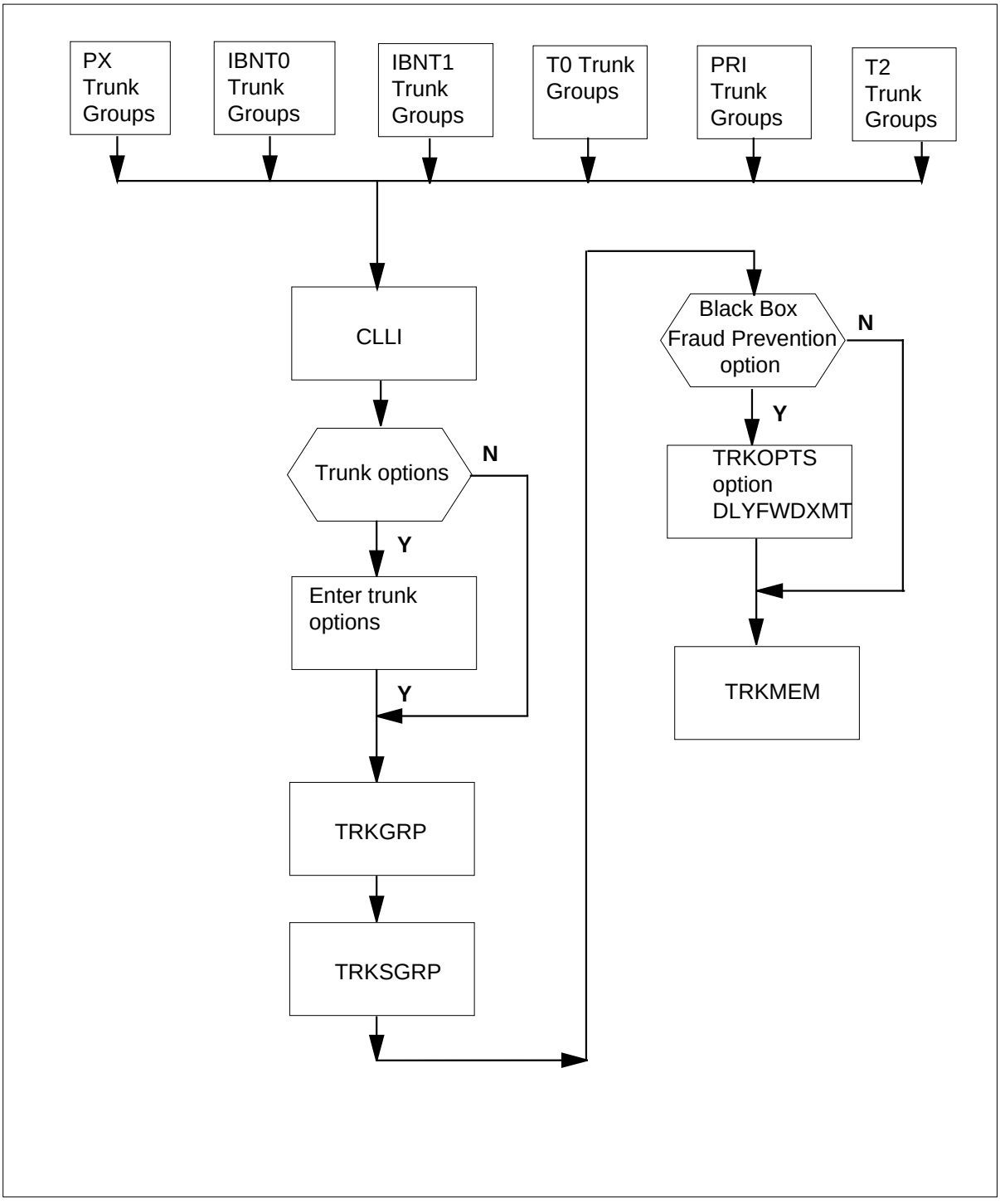
Black Box Fraud Prevention (continued)

Description

The following figure shows the datafill dependencies for Black Box Fraud Prevention.

Black Box Fraud Prevention (continued)

Datafill dependencies for Black Box Fraud Prevention



Black Box Fraud Prevention (continued)

Limitations and restrictions

Black Box Fraud Prevention

The Black Box Fraud Prevention feature supports the following types of trunk groups:

- digital PBX trunks (PX)
- outgoing IBN trunks (IBNTO)
- two-way IBN trunks (IBN2)
- outgoing local trunks (TO)
- two-way local trunks (T2)
- ISDN Primary Rate Interface Trunk Group Type (PRI)
- If option DLYFWDXMT is datafilled in table TRKOPTS, all trunk members of that trunk group must terminate to a DTC or an LTC. The exec line up in table LTCINV must be specified as DTCEX, DTCFX, or FXODTC.

Billing

Black Box Fraud Prevention does not affect billing.

Datafill sequence

The following table lists the tables used by Black Box Fraud Prevention. The tables are listed in the order in which they are to be datafilled.

Tables used by Black Box Fraud Prevention (Sheet 1 of 2)

Table	Purpose of table
CLLI	All supported trunk groups. The common language location identifier table uniquely identifies the far end of each announcement, tone, or trunk group.
AIODGRP	IBNT2 and PX trunk groups ONLY. The automatic identified outward dialing (AIOD) group table contains data used to define AIOD datalinks between a PBX and its host office. These links provide a means for billing outgoing calls from the PBX to individual PBX stations.
BCLIDGRP	IBNTO and IBNT2 trunk groups. The bulk calling line identification group table lists bulk calling line identification (BCLID) group numbers with their respective assigned feature and data channel links.
MRSANAME	
BCDEF	IBNT2 trunk group ONLY. The bearer capability definition table contains data that defines the various bearer capabilities that can be assigned to trunk groups.

Black Box Fraud Prevention (end)

Tables used by Black Box Fraud Prevention (Sheet 2 of 2)

Table	Purpose of table
TRKGRP	All supported trunk groups. The trunk group table contains customer-defined data associated with each trunk group.
CXGRP	PX trunk groups only. The customer group options table defines the options associated with a digital trunk group type PX.
TRKSGRP	All supported trunk groups. The trunk subgroup table contains supplementary information for each trunk group.
TRKOPTS	All supported trunk groups. The trunk option table contains data defining the options associated with this trunk group.
ISUPDEST	IBNTO and IBNT2 trunk groups only. The CCS7 ISDN user part destination table specifies ISUP routeset names for IBN ISUP trunk subgroups.
TRKMEM	All supported trunk groups. The trunk member table specifies the physical location of each trunk assigned to one of the trunk groups.
C7TRKMEM	IBNTO and IBNT2 trunk groups only. The CCS7 trunk member table lists CCS7 circuit identification codes that are assigned to IBN ISUP trunk members.

Datafilling

Refer to the required datafilling table for detailed datafilling instructions.

CA trunk groups

CA trunk group functionality codes

CA trunk groups have no functionality codes.

Release applicability

TL03 and up

Prerequisites

CA trunk groups have no functional group prerequisites.

Description

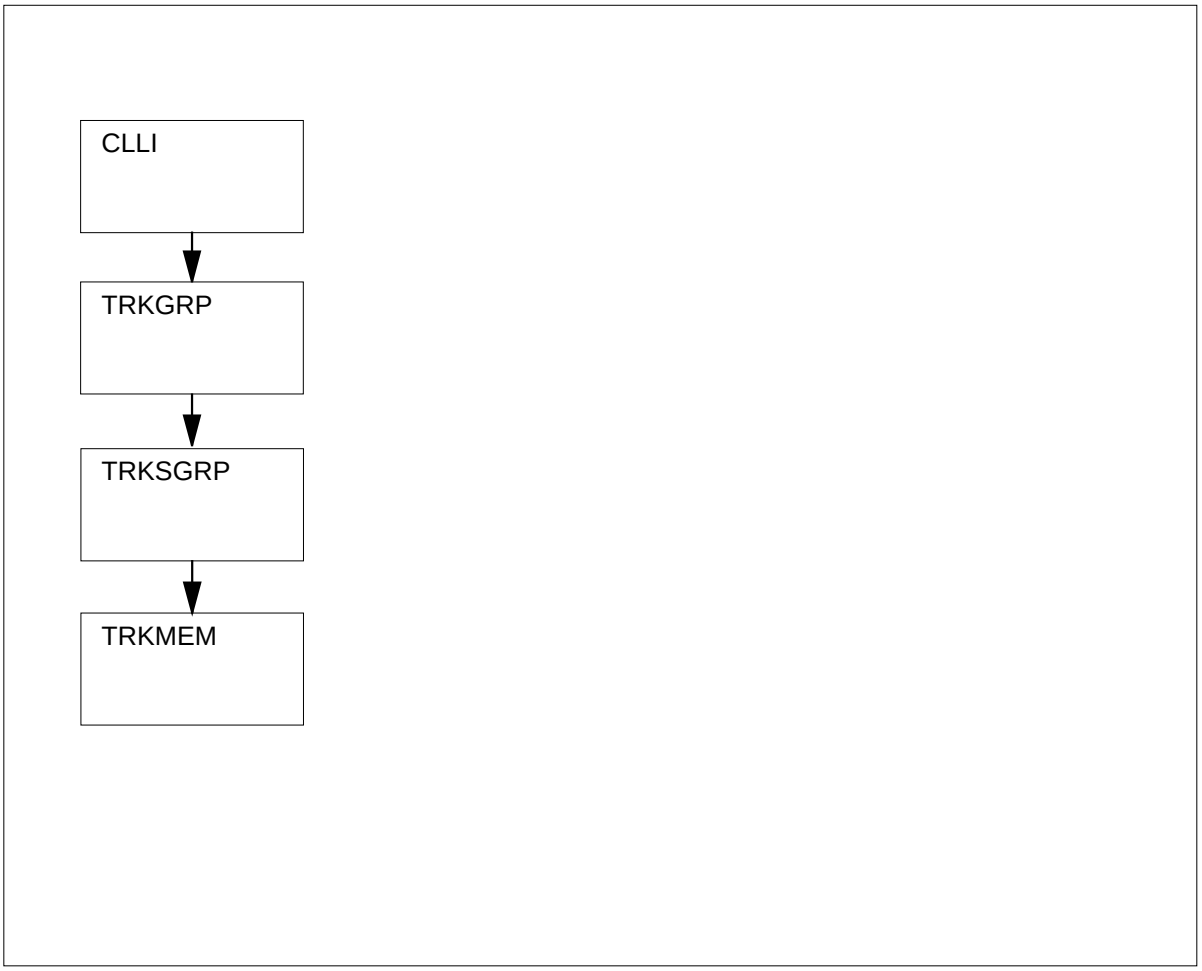
Trunk group type CA (come again signaling) is used in local switches for trunk groups that connect to Siemens Automatic Dialing System (ADDS) equipment. Outgoing CA trunks carry one-plus (1+), zero-plus (0+), and zero-minus (0-) calls. Each call is identified by a distinct identification (ID) digit that precedes the called number.

The hold type for this trunk group type is joint hold. With this hold type, the call is taken down when both the originator and the terminator are on-hook.

The following figure shows the datafill dependencies for CA trunk groups.

CA trunk groups (continued)

Datafill dependencies for CA trunk groups



Limitations and restrictions

CA trunk groups have no limitations or restrictions.

Billing

For information on billing, refer to the Bellcore format AMA translations section of this document.

CA trunk groups (continued)

Datafilling office parameters

The following table shows the office parameters used by CA trunk groups. For more information about office parameters, refer to *Office Parameters Reference Manual.*

Office parameters used by CA trunk groups

Table name	Parameter name	Explanation and action
OFCVAR	TRK_OOS_CHK_ON	This parameter specifies whether to check that the trunks in a trunk group are out of service before changing the values of specific fields in table TRKGRP by data modification order (DMO).

Datafill sequence

The following table lists the tables used by CA trunk groups. The tables are listed in the order in which they are to be datafilled.

Tables used by CA trunk groups

Table	Purpose of table
CLLI	The common language location identifier table uniquely identifies the far end of each announcement, tone, or trunk group.
TRKGRP	The trunk group table contains customer-defined data associated with each trunk group.
TRKSGRP	The trunk subgroup table contains supplementary information for each trunk group.
TRKMEM	The trunk member table specifies the physical location of each trunk assigned to one of the trunk groups.

The following table shows sample input for datafilling CA trunk groups.

Sample input for CA trunk groups

Table	Sample input
CLLI	OTWA011CA 51 125 $
TRKGRP	OTWA011CA CA 22 ELO NCRT IE 4 4 5
TRKSGRP	OTWAO11CA 0 DS1SIG STD IC MF DIALTONE N 30 30 TR NO N N N C UNEQ
TRKMEM	OTWAO11CA 109 0 DTC 1 1 17 $

CA trunk groups (continued)

Datafilling table CLLI

The following table shows the datafill specific to CA for table CLLI. Only those fields that apply directly to CA are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table CLLI

Field	Subfield or refinement	Entry	Explanation and action
CLLI		alphanumeric (1 to 16 characters)	Common language location identifier. Enter a CLLI code to uniquely identify the far end of the CA trunk group. Only alphabetic characters, numeric characters, and _ (underscores) can be used to datafill this field. The first character must be alphabetic. For optimum use, a CLLI code must contain not more than 12 characters, as only the first 12 characters are displayed on the MAP (maintenance and administration position) display. When a CLLI code is displayed in a log report, the entire 16-character CLLI code appears.

Datafill example for table CLLI

The following example shows sample datafill for table CLLI.

MAP display example for table CLLI

```
CLLI           ADNUM   TRKGRSIZ                    ADMININF
-------------------------------------------------------------
OTWA011CA       51      125                          $
```

Changing datafill for table CLLI

Use the standard table editor commands to change datafill for table CLLI.

Datafilling table TRKGRP

The following table shows the datafill specific to CA for table TRKGRP. Only those fields that apply directly to CA are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table TRKGRP

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 CLLI code assigned to the CA trunk group in table CLLI.
GRPINFO		see subfields	Variable group data. This field consists of subfields GRPTYP, TRAFSNO, PADGRP, NCCLS, TRAFCLS, ZEROMDIG, ZEROPDIG, and ONEPDIG. Note that among these subfields, only those directly affected by CA are described below. Refer to table TRKGRP in the data schema section of this document for information on an alternate structure for this field that results from the datafill of table CUSTFLDS.
	GRPTYP	CA	Group type. Enter CA to specify the group type for Siemens come again signaling.
	ZEROMDIG	0 to 9	Zero minus digit. Enter the ID digit to be prefixed to the digits outpulsed on operator calls (0-). 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 DMO.
	ZEROPDIG	0 to 9	Zero plus digit. Enter the ID digit to be prefixed to the called number on 0+ calls. 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 DMO.
	ONEPDIG	0 to 9	One plus digit. Enter the ID digit to be prefixed to the called number on 1+ calls. 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 DMO.

CA trunk groups (continued)

Datafill example for table TRKGRP

The following example shows sample datafill for table TRKGRP.

MAP display example for table TRKGRP

```
GRPKEY                                                  GRPINFO
--------------------------------------------------------------
OTWAO11CA                            CA 22 ELO NCRT IE 4 4 5
```

Changing datafill for table TRKGRP

If office parameter TRK_OOS_CHK_ON in table OFCVAR is set to Y, all trunks in the trunk group must be taken out of service before changing the value of certain fields in table TRKGRP.

Datafilling table TRKSGRP

The following table shows the datafill specific to CA for table TRKSGRP. Only those fields that apply directly to CA are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table TRKSGRP

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 CLLI code assigned to the CA trunk group as datafilled in table CLLI.
	SGRP	0 or 1	Subgroup number. Enter the subgroup number assigned to the trunk group.

Datafill example for table TRKSGRP

The following example shows sample datafill for table TRKSGRP.

MAP display example for table TRKSGRP

```
           SGRPKEY      CARDCODE
SGRPVAR
                                                        SGRPVAR
------------------------------------------------------------
           OTWAO11CA 0 DS1SIG
STD
                IC MF DIALTONE N 30 30 TR NO N N N C UNEQ
```

Changing datafill for table TRKSGRP

Use the standard table editor commands to change datafill for table TRKSGRP.

Datafilling table TRKMEM

The following table shows the datafill specific to CA for table TRKMEM. Only those fields that apply directly to CA are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table TRKMEM

Field	Subfield or refinement	Entry	Explanation and action
CLLI		alphanumeric (1 to 16 characters)	Common language location identifier. Enter the CLLI code assigned in table CLLI to the trunk group of which the trunk is a member.
EXTRKNM		0 to 9999	External trunk number. Enter the external trunk number that is assigned to the trunk.
SGRP		0 or 1	Subgroup number. Enter the subgroup number to which the trunk is assigned.

Datafill example for table TRKMEM

The following example shows sample datafill for table TRKMEM.

CA trunk groups (end)

MAP display example for table TRKMEM

```
CLLI          EXTRKNM  SGRP                              MEMVAR
------------------------------------------------------------
OTWAO11CA     109      0                           DTC 1 1 17 $
```

Changing datafill for table TRKMEM

Use the standard table editor commands to change datafill for table TRKMEM.

CELL trunk groups

CELL trunk group functionality codes

CELL trunk groups have no functionality codes.

Release applicability

TL03 and up

Prerequisites

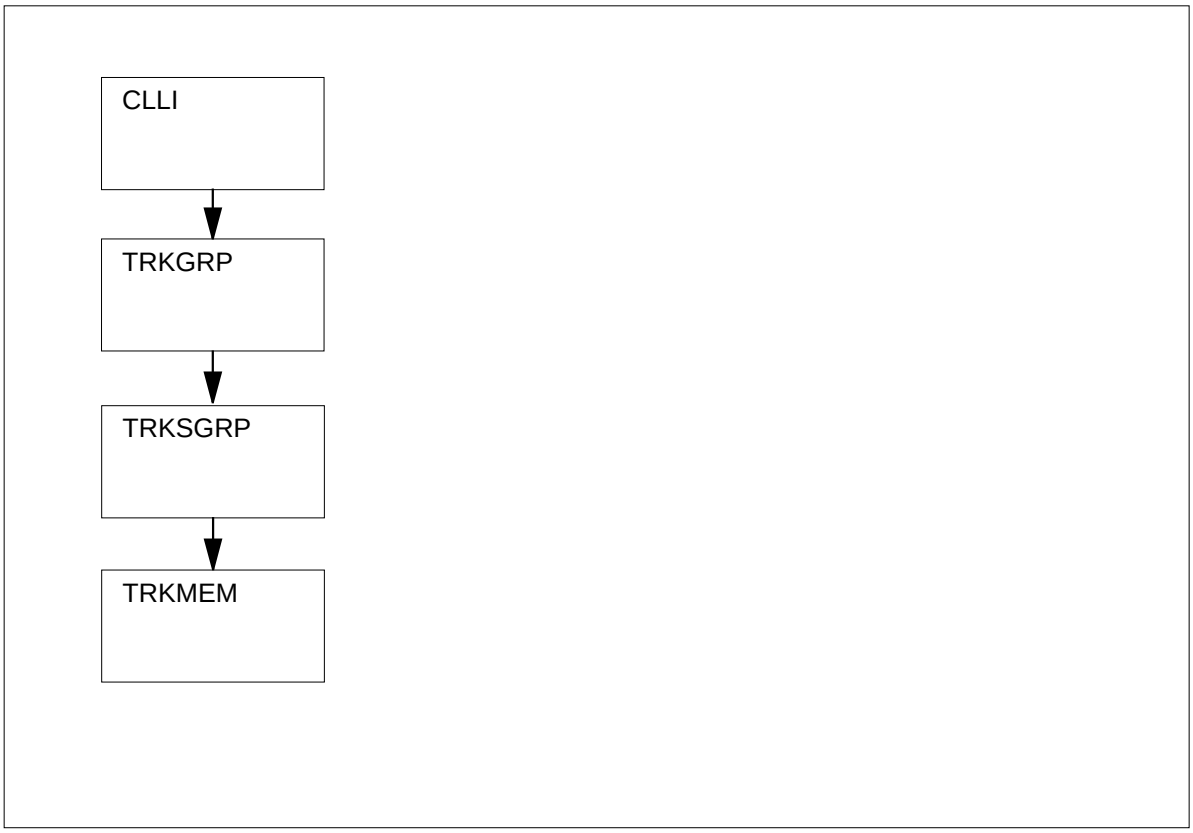
CELL trunk groups have no functional group prerequisites.

Description

Outgoing, incoming, and two-way cellular (CELL) trunks allow type 2A interconnections between a cellular mobile carrier (CMC) switch and an access tandem (AT) switch.

The following figure shows the datafill dependencies for CELL trunk groups.

Datafill dependencies for CELL trunk groups



CELL trunk groups (continued)

Limitations and restrictions

CELL trunk groups have no limitations or restrictions.

Billing

For information on billing, refer to the Bellcore format AMA translations section of this document.

Datafilling office parameters

The following table shows the office parameters used by CELL trunk groups. For more information about office parameters, refer to *Office Parameters Reference Manual.*

Office parameters used by CELL trunk groups

Table name	Parameter name	Explanation and action
OFCVAR	TRK_OOS_CHK_ON	This parameter specifies whether to check that the trunks in a trunk group are out of service before changing the values of specific fields in table TRKGRP by data modification order (DMO).

Datafill sequence

The following table lists the tables used by CELL trunk groups. The tables are listed in the order in which they are to be datafilled.

Tables used by CELL trunk groups

Table	Purpose of table
CLLI	The common language location identifier table uniquely identifies the far end of each announcement, tone, or trunk group.
TRKGRP	The trunk group table contains customer-defined data associated with each trunk group.
TRKSGRP	The trunk subgroup table contains supplementary information for each trunk group.
TRKMEM	The trunk member table specifies the physical location of each trunk assigned to one of the trunk groups.

CELL trunk groups (continued)

The following table shows sample input for datafilling CELL trunk groups.

Sample input for CELL trunk groups

Table	Sample input
CLLI	CMCABCAT 55 99 $
TRKGRP	CMCABCAT CELL 0 TLA NCRT 2W NIL MIDL 613 EA NSCR 613 6211234 N
TRKSGRP	CMCABCAT 0 DS1SIG STD IC MF DIALTONE N 30 30 TR NO N N N C UNEQ
TRKMEM	CMCABCAT 91 0 DTC 1 1 19 $

Datafilling table CLLI

The following table shows the datafill specific to CELL for table CLLI. Only those fields that apply directly to CELL are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table CLLI

Field	Subfield or refinement	Entry	Explanation and action
CLLI		alphanumeric (1 to 16 characters)	Common language location identifier. Enter a CLLI code to uniquely identify the far end of the CELL trunk group. Only alphabetic characters, numeric characters, and _ (underscores) can be used to datafill this field. The first character must be alphabetic. For optimum use, a CLLI code must contain not more than 12 characters, as only the first 12 characters are displayed on the MAP (maintenance and administration position) display. When a CLLI code is displayed in a log report, the entire 16-character CLLI code appears.

Datafill example for table CLLI

The following example shows sample datafill for table CLLI.

CELL trunk groups (continued)

MAP display example for table CLLI

```
CLLI            ADNUM   TRKGRSIZ                  ADMININF
-------------------------------------------------------------
CMCABCAT         55     99                          $
```

Datafilling table TRKGRP

The following table shows the datafill specific to CELL for table TRKGRP. Only those fields that apply directly to CELL are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table TRKGRP (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 CLLI code assigned to the CELL trunk group in table CLLI.
GRPINFO		see subfields	Variable group data. This field consists of subfields GRPTYP, TRAFSNO, PADGRP, NCCLS, DIR, TRAFCLS, SELSEQ, CONNGNPA, PRTNM, SCRNCL, SNPA, BILLNO, and CCWKVLD. Note that among these subfields, only those directly affected by CELL are described below. Refer to table TRKGRP in the data schema section of this document for information on an alternate structure for this field that results from the datafill of table CUSTFLDS.
	GRPTYP	CELL	Group type. Enter CELL to specify the cellular trunk group type.

Datafilling table TRKGRP (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
	DIR	IC, OG, or 2W	Direction. Enter the direction of traffic flow: IC (incoming), OG (outgoing), or 2W (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 DMO.
	CONNGNPA	numeric (3 digits)	Connecting numbering plan area. If the outpulsed digits are translated, enter the numbering plan area (NPA) code of the switch. Otherwise, enter 000. If the trunk group is incoming, this field is not required. Enter 000.
	BILLNO	numeric (up to 11 digits)	Billing number. Enter the directory number (DN) to be used as the CMC number in CMC billing records. If only seven digits are used, the SNPA field is used as the NPA of the CMC billing number.
	CCWKVLD	Y or N	Carrier connect wink. Enter N to indicate that the carrier connect acknowledgement (wink) in equal access international calls is not regenerated. Otherwise, enter Y. Most non-DMS access tandem switches and equal access end offices that are not equipped with a DMS switch cannot handle this wink.

Datafill example for table TRKGRP

The following example shows sample datafill for table TRKGRP.

MAP display example for table TRKGRP

```
GRPKEY
                                                        GRPINFO
------------------------------------------------------------
CMCABCAT
  CELL 0 TLA NCRT 2W NIL MIDL 613 PEA NSCR 613 6211234 N
```

CELL trunk groups (continued)

Changing datafill for table TRKGRP

If office parameter TRK_OOS_CHK_ON in table OFCVAR is set to Y, all trunks in the trunk group must be taken out of service before changing the value of certain fields in table TRKGRP.

Datafilling table TRKSGRP

The following table shows the datafill specific to CELL for table TRKSGRP. Only those fields that apply directly to CELL are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table TRKSGRP

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 CLLI code assigned to the trunk group as datafilled in table CLLI.
	SGRP	(0 or 1)	Subgroup number. Enter the subgroup number assigned to the trunk group.

Datafill example for table TRKSGRP

The following example shows sample datafill for table TRKSGRP.

MAP display example for table TRKSGRP

```
           SGRPKEY    CARDCODE
SGRPVAR
                                                        SGRPVAR
------------------------------------------------------------
          CMCABCAT 0 DS1SIG
STD
                 IC MF DIALTONE N 30 30 TR NO N N N C UNEQ
```

Changing datafill for table TRKSGRP

Use the standard table editor commands to change datafill for table TRKSGRP.

Datafilling table TRKMEM

The following table shows the datafill specific to CELL for table TRKMEM. Only those fields that apply directly to CELL are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table TRKMEM

Field	Subfield or refinement	Entry	Explanation and action
CLLI		alphanumeric (1 to 16 characters)	Common language location identifier. Enter the CLLI code assigned in table CLLI to the trunk group of which the trunk is a member.
EXTRKNM		(0 to 9999)	External trunk number. Enter the external trunk number that is assigned to the trunk.
SGRP		(0 or 1)	Subgroup number. Enter the subgroup number to which the trunk is assigned.

Datafill example for table TRKMEM

The following example shows sample datafill for table TRKMEM.

MAP display example for table TRKMEM

```
CLLI            EXTRKNM  SGRP                          MEMVAR
-------------------------------------------------------------
CMCABCAT        91       0                      DTC 1 1 19 $
```

Changing datafill for table TRKMEM

Use the standard table editor commands to change datafill for table TRKMEM.

CISANI trunk groups

Ordering codes

CISANI trunk groups have no ordering codes.

Release applicability

TL03 and up

Prerequisites

CISANI trunk groups have no functional group prerequisites.

Description

Trunk group type CISANI is used to distinguish toll automatic number identification (ANI) trunks from local and local tandem trunks in the Commonwealth of Independent States (CIS) telephony network. This trunk group is used by the international DMS for ICAMA calls.

Selectable translator types

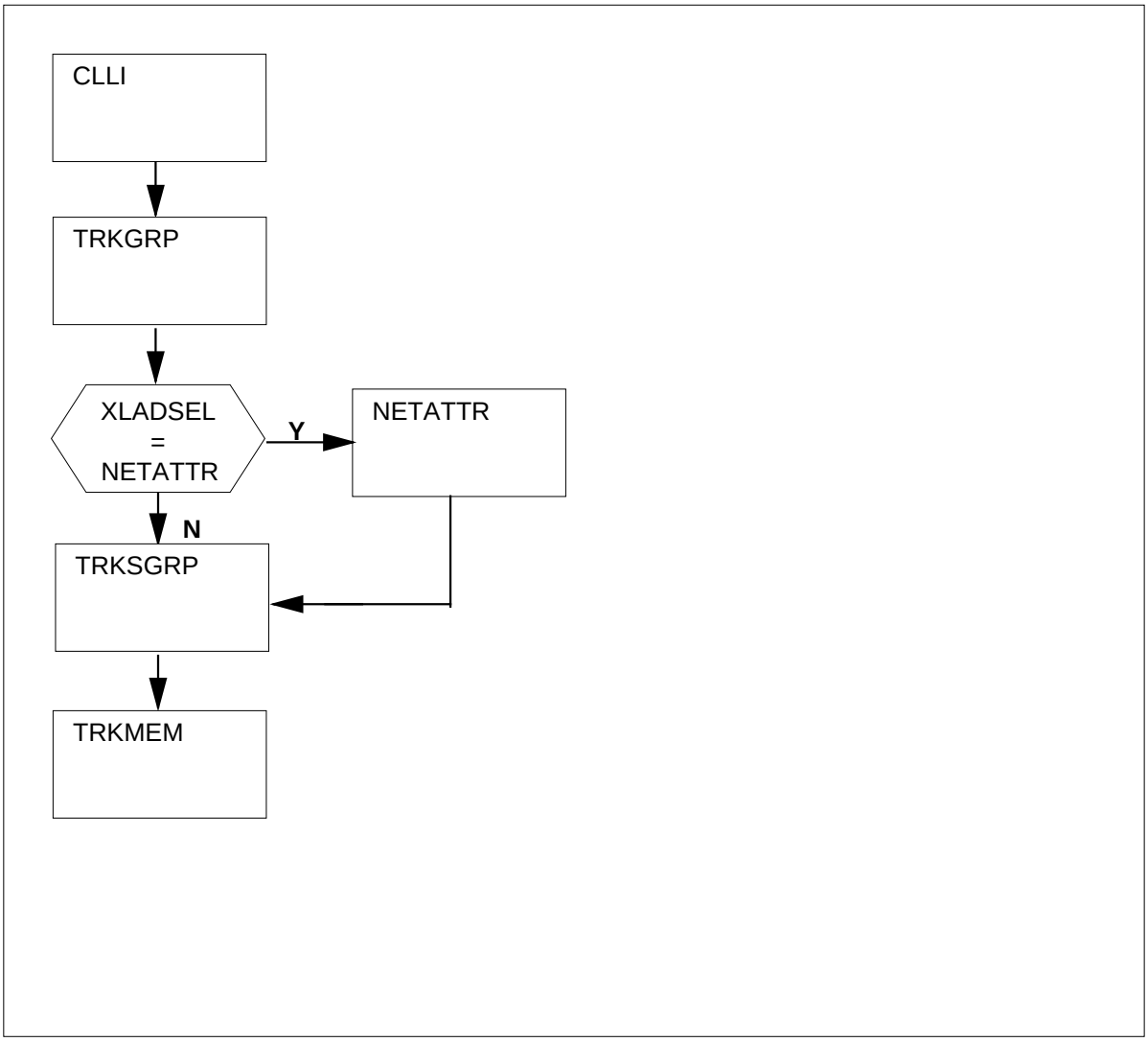
The translator type (for example, North American or universal translations) can be selected from the trunk group data.

The translation data selector NETATTR is an index into a new network attributes table. If this selector is used, translation data is datafilled in table NETATTR instead of table TRKGRP.

The following figure shows the datafill dependencies for CISANI trunk groups.

CISANI trunk groups (continued)

Datafill dependencies for CISANI trunk groups



Limitations and restrictions

CISANI trunk groups have no limitations or restrictions.

Billing

For information on billing, refer to the Bellcore format AMA translations section of this document.

CISANI trunk groups (continued)

Datafilling office parameters

The following table shows the office parameters used by CISANI trunk groups. For more information about office parameters, refer to *Office Parameters Reference Manual.*

Office parameters used by CISANI trunk groups

Table name	Parameter name	Explanation and action
OFCVAR	TRK_OOS_CHK_ON	This parameter specifies whether or not to check that the trunks in a trunk group are out of service before changing the values of specific fields in table TRKGRP by data modification order (DMO).

Datafill sequence

The following table lists the tables used by CISANI trunk groups. The tables are listed in the order in which they are to be datafilled.

Tables used by CISANI trunk groups

Table	Purpose of table
CLLI	The common language location identifier table uniquely identifies the far end of each announcement, tone, or trunk group.
TRKGRP	The trunk group table contains customer-defined data associated with each trunk group.
NETATTR	The network attributes table contains translation data and optional features associated with a network. This table can be used as an alternative to table TRKGRP for datafilling the trunk translation data.
TRKSGRP	The trunk subgroup table contains supplementary information for each trunk group.
TRKMEM	The trunk member table specifies the physical location of each trunk assigned to one of the trunk groups.

CISANI trunk groups (continued)

The following table shows sample input for datafilling CISANI trunk groups.

Sample input for CISANI trunk groups

Table	Sample input
CLLI	ICMFPP1BA 55 99 IM
TRKGRP	ICMFPP1BA CISANI 0 ELOD NCRT Y N NONE IC N UNIV PX MFPP MFPP 6 AMTCKE
NETATTR	1 UNIV PX ICCISANIICN NIL
TRKSGRP	ICMFPP1BA 0 P30CAS SIGSYS Y N DELDIAL IC LOCLNSIGDX LOCRGSIGDX NIL TERM M
TRKMEM	ICMFPP1BA 30 0 PDTC 1 1 0

Datafilling table CLLI

The following table shows the datafill specific to CISANI for table CLLI. Only those fields that apply directly to CISANI are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table CLLI

Field	Subfield or refinement	Entry	Explanation and action
CLLI		alphanumeric (1 to 16 characters)	Common language location identifier. Enter a CLLI code to uniquely identify the far end of the CISANI trunk group. Only alphabetic characters, numeric characters, and _ (underscores) can be used to datafill this field. The first character must be alphabetic. For optimum use, a CLLI code must not contain more than 12 characters, as only the first 12 characters are displayed on the maintenance and administration position (MAP). When a CLLI code is displayed in a log report, the entire 16-character CLLI code appears.

Datafill example for table CLLI

The following example shows sample datafill for table CLLI.

CISANI trunk groups (continued)

MAP display example for table CLLI

```
CLLI               ADNUM  TRKGRSIZ           ADMININF
-------------------------------------------------------
ICMFPP1BA           55     99                  MI
```

Changing datafill for table CLLI

Use the standard table editor commands to change datafill for table CLLI.

Datafilling table TRKGRP

The following table shows the datafill specific to CISANI for table TRKGRP. Only those fields that apply directly to CISANI are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table TRKGRP (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 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, SAT, ESUPR, TRFC, and DIRSEL. Note that among these subfields, only those directly affected by CISANI are described below.
	GRPTYP	CISANI	Group type. Enter CISANI to specify the trunk group type for Commonwealth of Independent States (CIS) ANI.
	SAT	Y or N	Satellite. Enter Y (yes) if the trunk group is set up to switch through satellite. Otherwise, enter N (no).
	DIRSEL	see subfield	Trunk selection. This field consists of subfield DIR and refinements.

CISANI trunk groups (continued)

Datafilling table TRKGRP (Sheet 2 of 4)

Field	Subfield or refinement	Entry	Explanation and action
	DIR	IC	Trunk direction. Enter IC to specify that the direction of the trunk group is incoming, and datafill refinements MCTANI, XLAD, DGNAME, CISDNSIZ, and CISTLTYP.
	XLAD	see subfield	Translation system. This field consists of subfield XLADSEL and refinements.
	XLADSEL	UNIV, NALT, or NETATTR	Translation selector. If the universal translation system is used, enter UNIV and datafill subfields XLASYS and XLANAME. If the North American translation system is used, enter NALT and datafill subfields PRTNM, SCRNCL, SNPA, and ORIGSRC. If this table indexes into table NETATTR, enter NETATTR and datafill subfield NETINDX.
	XLASYS	AC, AM, CT, DN, FA, FT, NSC, OFC, PX, or NIL	Translation system. Datafill this field if the entry in subfield XLADSEL is UNIV. Enter a character string to specify the name of the head table from which translations begin
	XLANAME	alphanumeric (1 to 8 characters)	Translation name. Datafill this field if the entry in subfield XLADSEL is UNIV. Enter a name from the code table that corresponds to the head table referenced by subfield XLASYS. If the entry in field XLASYS is NIL, leave this field blank.
	PRTNM	alphanumeric (1 to 4 characters)	Standard pretranslation name. Datafill this field if the entry in subfield XLADSEL is NALT. Enter the name of the standard pretranslator datafilled in table STDPRTCT to which translation is to route 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 (yes), all trunks in the group must be busy before the value of this field can be changed by data modification order (DMO).

CISANI trunk groups (continued)

Datafilling table TRKGRP (Sheet 3 of 4)

Field	Subfield or refinement	Entry	Explanation and action
	SCRNCL	alphanumeric (1 to 32 characters) or NSCR	Class of service screening table name. Datafill this field if the value in subfield XLADSEL is NALT. 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. Datafill this field if the value in subfield XLADSEL is NALT. 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. Datafill this field if the value in subfield XLADSEL is NALT. 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 table HNPACODE. Refer to subtable HNPACONT.HNPACODE, “Notes on Originating Source" in the data schema section of this document for more information.
	NETINDX	numeric (0 to 1023)	Network attribute index. Datafill this field if the entry in subfield XLADSEL is NETATTR. Enter a valid network attribute index from table NETATTR. No other translation data is required (since it is available in table NETATTR).

CISANI trunk groups (continued)

Datafilling table TRKGRP (Sheet 4 of 4)

Field	Subfield or refinement	Entry	Explanation and action
	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.
	CISDNSIZ	numeric (1 to 7)	CIS directory number size. Enter a numeric value to specify the number of digits in the originating subscribers directory number (DN) that are to be received in the ANI digits train. The number specified indicates the DN size in the numbering plan without prefix digits.
	CISTLTYP	AMTC23 AMTCKE or ARM20	CIS tolltype. Datafill this field to specify the type of automatic intercity telephone exchange (AMTC).

Datafill example for table TRKGRP

The following example shows sample datafill for table TRKGRP.

MAP display example for table TRKGRP

```
GRPKEY      GRPINFO
-------------------------------------------------------
ICMFPP1BA   CISANI 0 ELOD NCRT Y N NONE IC N UNIV PX MFPP
MFPP 6 AMTCKE
ICUIDPANI   CISANI 5 NPDGP NCRT N N NONE IC N NALT NPRT
NSCR 111 LCL UIDPTRK 5 ARM20
```

Changing datafill for table TRKGRP

If office parameter TRK_OOS_CHK_ON in table OFCVAR is set to Y, all trunks in the trunk group must be taken out of service before changing the value of certain fields in table TRKGRP.

CISANI trunk groups (continued)

Datafilling table NETATTR

The following table shows the datafill specific to CISANI for table NETATTR. Only those fields that apply directly to CISANI are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table NETATTR

Field	Subfield or refinement	Entry	Explanation and action
NETIDX		0 to 1023	Network index. Enter the index referenced by table TRKGRP.
XLAVAR		see subfield	Variable translation data. This field consists of subfield XLADSEL and its refinements. For a description of these fields, refer to the data schema section of this document.

Datafill example for table NETATTR

The following example shows sample datafill for table NETATTR.

MAP display example for table NETATTR

```
NETINDX       XLAVAR                                NETVAR
-------------------------------------------------------
1            UNIV  PX  ICCISANIICN                 NIL
```

Changing datafill for table NETATTR

Use the standard table editor commands to change datafill for table NETATTR.

Datafilling table TRKSGRP

The following table shows the datafill specific to CISANI for table TRKSGRP. Only those fields that apply directly to CISANI are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table TRKSGRP

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 CLLI code assigned to the trunk group as datafilled in table CLLI.
	SGRP	numeric(0 or 1)	Subgroup number. Enter the subgroup number assigned to the trunk group.

Datafill example for table TRKSGRP

The following example shows sample datafill for table TRKSGRP.

MAP display example for table TRKSGRP

```
       SGRPKEY              CARDCODE
SGRPVAR   SGRPVAR
-------------------------------------------------------------
       ICMFPP1BA 0          P30CAS
SIGSYS    Y N DELDIAL IC LOCLNSIGDX LOCRGSIGDX NIL TERM M
```

Changing datafill for table TRKSGRP

Use the standard table editor commands to change datafill for table TRKSGRP.

CISANI trunk groups (end)

Datafilling table TRKMEM

The following table shows the datafill specific to CISANI for table TRKMEM. Only those fields that apply directly to CISANI are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table TRKMEM

Field	Subfield or refinement	Entry	Explanation and action
CLLI		alphanumeric (1 to 16 characters)	Common language location identifier. Enter the CLLI code assigned in table CLLI to the trunk group of which the trunk is a member.
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.
SGRP		numeric (0 to 1)	Subgroup number. Enter the subgroup number to which the trunk is assigned.

Datafill example for table TRKMEM

The following example shows sample datafill for table TRKMEM.

MAP display example for table TRKMEM

```
CLLI          EXTRKNM  SGRP                  MEMVAR
-------------------------------------------------------
ICMFPP1BA     30       0                     PDTC 1 1 0  $
```

Changing datafill for table TRKMEM

Use the standard table editor commands to change datafill for table TRKMEM.

CLID From PX Trunks with Blocking Option (PXCLID)

Ordering codes

Functional group ordering code: CSTC0100

Functionality ordering code: Not Applicable

Release applicability

NA008 and up

CLID From PX Trunks with Blocking Option (PXCLID) was introduced in NA008.

Prerequisites

To operate, CLID From PX Trunks with Blocking Option (PXCLID) has the following prerequisites:

- BAS00003 BAS Generic
- ISP70001, Base ISUP
- RES00023 RES Calling Name Display Software

Description

The CLID From PX Trunks With Blocking Option (PXCLID) NA008 feature allows an operating company to store a single name for a PX trunk group, a directory number (DN) for a PX trunk group, or both on the host DMS end-office.

The PXCLID feature also provides the option of blocking the CLID on a per-trunk group basis, while still delivering the CLID information in the Initial Address Message (IAM) of the CCS, and the SETUP message of the Primary Rate Interface (PRI).

Operation

When a call originates from the PX trunk, the name and/or the DN information is sent to the called party on the host DMS end-office, or to the called party on a remote office connected through Common Channel Signaling No. 7 (CCS7) messaging.

Translations table flow

The CLID From PX Trunks with Blocking Option (PXCLID) translations tables are described in the following list:

- Table CLLI
- Table TRKGRP

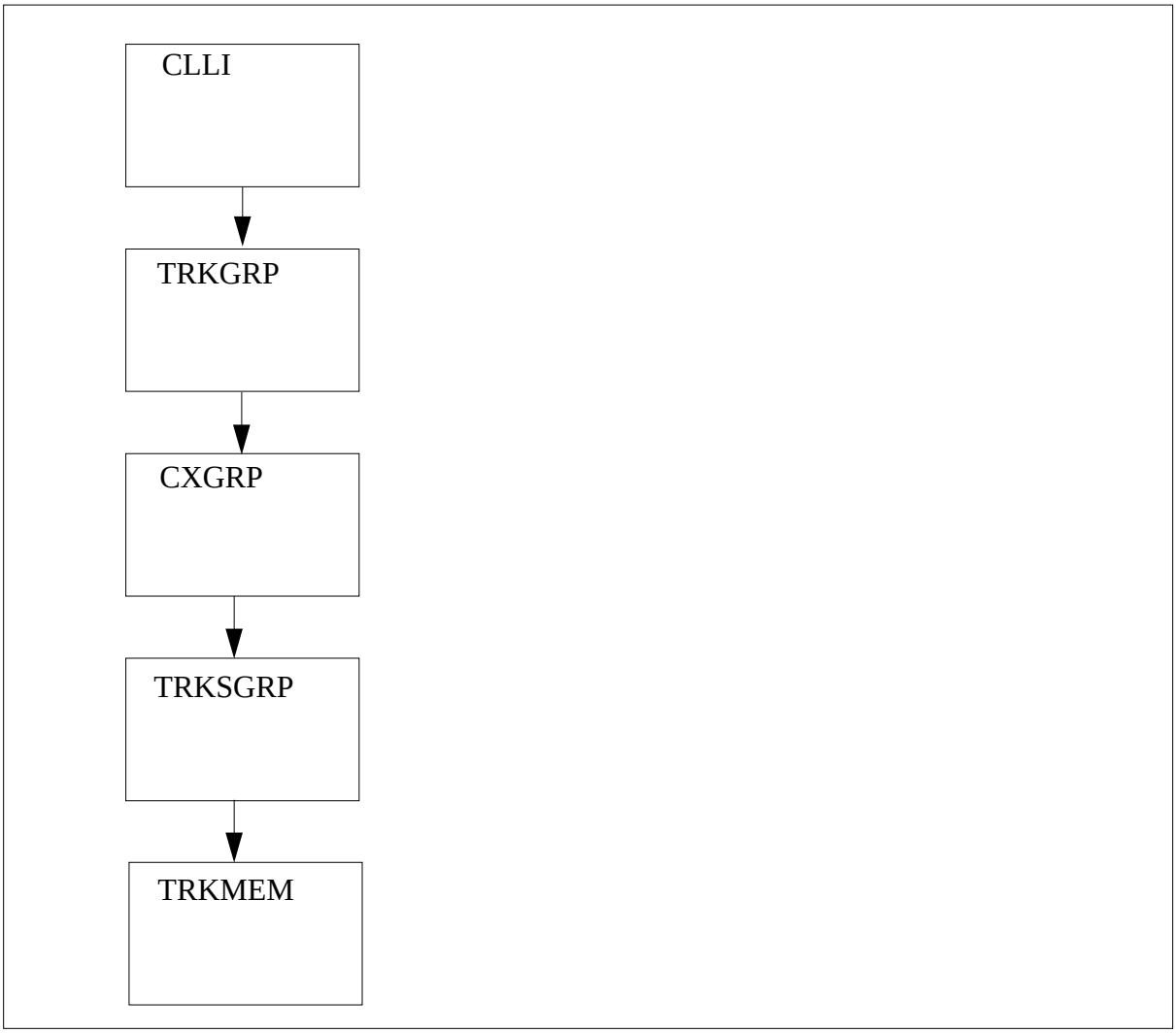
CLID From PX Trunks with Blocking Option (PXCLID) (continued)

- Table CXGRP
- Table TRKSGRP
- Table TRKMEM

The CLID From PX Trunks with Blocking Option (PXCLID) translation process is shown in the flowchart that follows.

CLID From PX Trunks with Blocking Option (PXCLID) (continued)

Table flow for CLID From PX Trunks with Blocking Option (PXCLID)



Datafill example for PXCLID (Sheet 1 of 2)

Datafill Table	Example data
CLLI	S5613PXTEST 1900 30 2W_PX_LOCAL_DIRECT_S5
TRKGRP	S5613PXTEST PX 0 ELO NCID 2W MI MIDL N P613 NSCR 613 LCL NONE NONE NLCA N N 32 NIL 6133310026 NODIALTN N N N $
CXGRP	32 N N N N N N (CNAM PXCLID_NAME) (CNUM 1123456789 N) $

CLID From PX Trunks with Blocking Option (PXCLID) (continued)

Datafill example for PXCLID (Sheet 2 of 2)

Datafill Table	Example data
TRKSGRP	S5613PXTEST 0 DS1SIG STD 2W MF WK N 30 30 MF WK 10 0 N NO NO N N N C 120 UNEQ $
TRKMEM	S5613PXTEST 1 0 DTC 19 17

Limitations and restrictions

The following limitations and restrictions apply to CLID From PX Trunks with Blocking Option (PXCLID):

- The PXCLID feature does not allow CLID blocking on a per-call or per-line basis. An entire PX trunk group must be set to blocking or The PXCLID feature does not allow CLID blocking or non-blocking of BOTH the calling name and calling number information.
- The PXCLID feature uses the Nortel proprietary method of Calling Name Delivery (CNAMD), and does not support the Transaction Capabilities Application Part (TCAP) method of CNAMD for intraswitch calls.
- The PXCLID feature does not support the connected name feature, which allows the called party's name to be displayed on the calling party's terminal equipment.
- The PXCLID feature restricts the range of the PXOPTION field in table CXGRP from 15 to 13.
- The PXCLID feature does not send the calling DN of a PX trunk over compucall links on calls originating from a PX trunk and terminating on an ACD agent on the same switch.

Interactions

The following paragraphs describe the interactions between CLID From PX Trunks with Blocking Option (PXCLID) and other functionalities.

Advanced Intelligent Network (AIN)

The AIN functionality enables end office call processing to use centralized service logic programs located at Service Control Points (SCP), which determine how AIN calls proceed for further call processing. Queries and responses are exchanged between a DMS SuperNode end office equipped with AIN functionality and the SCP using CCS7.

A PX trunk assigned the PXCLID feature adds the calling number to the TERMATT AIN trigger, on an intraswitch call.

CLID From PX Trunks with Blocking Option (PXCLID) (continued)

Anonymous Call Rejection (ACRJ)

The ACRJ feature prevents termination of anonymous calls to a subscriber's line and routes such calls to an announcement.

A PX trunk assigned the PXCLID feature routes to the ACRJ announcement when the blocking option of PXCLID is set to “Y".

Automatic Recall (AR)

Automatic Recall is a Custom Local Area Signaling Services (CLASS) feature, which allows the subscriber to recall the last incoming call by entering a feature code.

Automatic Recall recalls the PXCLID feature CLID DN (and not the DN of the originating agent), when it is activated.

Calling Name Delivery (CNAMD)

The CNAMD option allows the incoming caller's name plus the time and date of the call to be displayed on the customer premises equipment (CPE).

The PXCLID feature CLID name (and not the name of the originating agent) will be displayed when the CNAMD feature is present.

Calling Number Delivery (CND)

The CND option allows the incoming calling number plus the time and date of the call to be displayed on the customer premises equipment (CPE).

The PXCLID feature CLID DN (and not the DN of the originating agent) will be displayed when the CND feature is present.

Compucall Links on Automatic Call Distribution(ACD)

The Compucall product is comprised of DMS-100 software, and an intelligent link to an end-user's business computer. The Meridian product Automatic Call Distribution (ACD), along with the compucall product enables a nearly simultaneous presentation of voice call, coordinated with a call-related data screen, to a DMS-Meridian ACD agent.

The PXCLID feature does not send the CLID DN of a PX trunk over the compucall links.

Deluxe Spontaneous Call Waiting Identification (DSCWID)

The DSCWID option allows a subscriber to display calling party information on a Call Waiting (CWT) call.

CLID From PX Trunks with Blocking Option (PXCLID) (continued)

The PXCLID feature CLID name and DN (and not the DN or name of the originating agent) will be displayed when the DSCWID feature is present.

Dialable Directory Number (DDN)

Dialable Directory Number is a CLASS feature which enhances the CND feature by delivering the calling DN in the form required for the called party to return the call.

The PXCLID CLID DN (and not the DN of the originating agent) will be received in the correct dialable form when the DDN feature is present.

Distinctive Ringing/Call Waiting (DRCW)

The DRCW feature alerts the subscriber with a distinctive call waiting tone, or distinctive power ringing, when a call arrives from a previously identified DN. The identified DNs are programmed into a list using the Screening List Editing (SLE) feature. The standard call waiting tone or standard power ringing is applied on calls not identified in the DRCW list.

The PXCLID feature CLID DN will be recognized if programmed in the DRCW feature's list.

Feature Group Options (FTRGRP)

FTRGRP is a line option that allows the operating company to use a single service order command to assign a group of features to one agent. Through datafill the operating company defines a feature group and the features it uses, and then assigns the FTRGRP option (and therefore all the pre-defined features) to the new agent.

The PXCLID DN and CLID name are delivered to an agent assigned compatible DN and name display options through FTRGRP.

Network Name

A network name is associated with a Centrex customer group, when datafilled in table CUSTNTWK.

The PXCLID CLID name and DN are delivered to a terminating agent in the customer group, provided the CLID option is present in table CUSTNTWK.

Reason Display (REASDISP)

The REASDISP option, datafilled in table CUSTSTN, displays a datafillable reason when various features are invoked on an EBS or Meridian set.

If the PXCLID feature blocked the CLID from a PX trunk, the REASDISP of the terminating agent displays the appropriate reason.

CLID From PX Trunks with Blocking Option (PXCLID) (continued)

Name Display (NAMEDISP)

The name display option, datafilled in table CUSTSTN, displays a calling name on an EBS or Meridian set.

If the PXCLID feature has CLID name datafilled, the name is displayed on the terminating agent set.

Selective Call Acceptance (SCA)

The SCA feature allows the subscriber to selectively accept calls arriving from a limited set of DNs. The set DNs are programmed into a list using the Screening List Editing (SLE) feature. Rejected calls (calls not on the list) receive SCA treatment.

A PX trunk call is accepted only if the PXCLID CLID DN is programmed into the SCA DN set.

Selective Call Forwarding (SCF)

The SCF feature is an incoming call management feature which allows the subscriber to define a special list of DNs and a destination number. The defined numbers are programmed using the Screening List Editing (SLE) feature. Calls that terminate to the subscriber are forwarded if the DN of the originating station matches a DN on the SCF list.

A PX trunk call is forwarded only if the PXCLID CLID DN is programmed into the SCF list.

Selective Call Rejection (SCRJ)

The SCA feature allows the subscriber to selectively reject calls arriving from a limited set of DNs. The set DNs are programmed into a list using the Screening List Editing (SLE) feature. Rejected calls (calls on the list) receive SCRJ treatment.

A PX trunk call will be rejected only if the PXCLID CLID DN is programmed into the SCRJ DN set.

Service Groups (SVCGRP)

SVCGRP is a line option that consists of the two options Calling Line Identification (CLID and Name Display (NAMEDSP).

The PXCLID CLID name and DN are (and not the name and DN of the originating agent) are delivered to an agent with the SVCGRP feature.

CLID From PX Trunks with Blocking Option (PXCLID) (continued)

SUPPRESS

Table NETNAMES allows datafilling of a SUPPRESS option for the PUBLIC NETNAME, which results in the suppression of the name, the number or both for intraoffice and interswitch calls, or both.

The PXCLID CLID name, DN or both is suppressed if the SUPPRESS option is already datafilled in table NETNAMES of the end-office.

800 Service

The 800 service, also known as Inward Wide Area Telephone Service (INWATS), is an intertoll office service that allows the called party to pay for toll calls.

An 800 that call originates from a PX trunk group with the PXCLID feature and is routed over ISUP messaging provides the CLID DN information, which is sent in the 800 database query to the SCP.

When no CCS7connectivity exists between the PX trunk and the SSP end-office, the CLID information for the PX trunk will not be available to the SSP. In this case, the NPX and NXX of the calling party is obtained using existing 800 Service procedures, and sent in the 800 database query to the SCP.

Activation/deactivation by the end user

CLID From PX Trunks with Blocking Option (PXCLID) requires no activation or deactivation by the end user.

Billing

CLID From PX Trunks with Blocking Option (PXCLID) does not affect billing.

Station Message Detail Recording

CLID From PX Trunks with Blocking Option (PXCLID) does not affect Station Message Detail Recording.

Datafilling office parameters

CLID From PX Trunks with Blocking Option (PXCLID) does not affect office parameters.

CLID From PX Trunks with Blocking Option (PXCLID) (continued)

Datafill sequence

The following table lists the table or tables requiring datafill to provide PXCLID functionality.

Datafill tables required for CLID From PX Trunks with Blocking Option (PXCLID)

Table	Purpose of table
CXGRP	Contains option PXOPTION and refinements for PX trunk Calling Name, Calling Number and Block Presentation.

Datafilling table CXGRP

The following table shows the datafill specific to PXCLID for table CXGRP.

Datafilling table CXGRP

Field	Subfield or refinement	Entry	Explanation and action
PXOPTION		CNAM, CNUM	Customer Group Options. Enter CNAM for the calling name option. Enter CNUM for the calling number option.
	CLGNAME	1 through 15 characters	Calling Name. Enter the name of the PX trunk group to be displayed at the end-office CPE. If no name is to be datafilled, type "$".
	CLGNUM	10 digits	Calling Number. Enter the number of the PX trunk group to be displayed at the end-office CPE. If no number is to be datafilled, type "$".
	BLKPRES	Y or N	Block Presentation. Enter Y if the Calling Name, Calling Number, or both of the PX trunk group are to be blocked from the display of the CPE. ***Note:*** Entering "Y" to BLKPRES prompt blocks both the Calling Name and Calling Number, if datafilled.

Datafill example for table CXGRP

The following example shows sample datafill for table CXGRP.

Note: MAP display uses format pack.

CLID From PX Trunks with Blocking Option (PXCLID) (end)

MAP display example for table CXGRP

```
CUSTKEY SPB CTD FCTDNTER FCTDNTRA EWATS EWATSI PXOPTION

_____________________________________________________________________
32 Y 6133310027 N N N N N (CNAM PXCLID_NAME) (CNUM 8005551212 N) $
```

Error messages for table CXGRP

The following error messages apply to table CXGRP.

Error messages for table CXGRP

Error message	Explanation and action
TYPE OF CLGNAME IS FIFTEEN_CHAR_VECTOR	An entry has been made of more than 15 characters. Enter a calling name of 15 alphanumeric characters, or less.
TYPE CLGNUM IS TEN_DIGIT_REGISTER	An entry has been made which is more than 10 digits, or is non-numeric. Enter a 10 digit DN calling number.
CLGNUM MUST BE A 10 DIGIT DN	An entry has been made of less than 10 digits. Enter a 10 digit DN calling number.

Translation verification tools

CLID From PX Trunks with Blocking Option (PXCLID) does not modify translation verification tools.

SERVORD

CLID From PX Trunks with Blocking Option (PXCLID) does not affect SERVORD.

DA trunk groups

DA trunk group functionality codes

DA trunk groups have no functionality codes.

Release applicability

TL03 and up

Prerequisites

DA trunk groups have no functional group prerequisites.

Description

In a DMS-100 end office, outgoing trunk group type DA connects to a directory assistance charging system.

To ensure that automatic number identification (ANI) is outpulsed, set the type of call to operator assisted (OA) in the standard pretranslator for directory assistance (DA) (411).

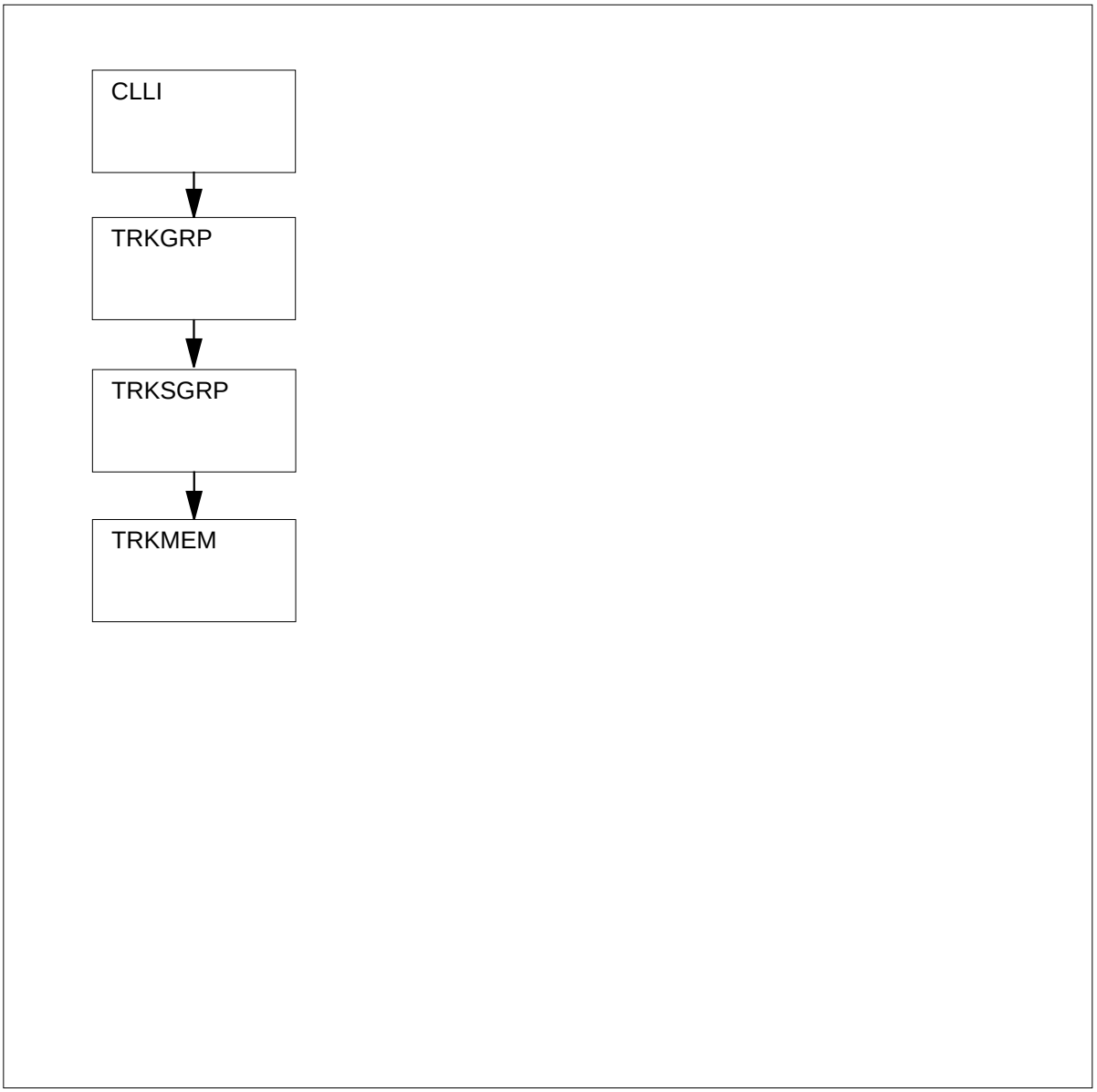
The ANI spill consists of the identification (ID) digit plus the billing number of the calling directory number (DN).

The hold type for this trunk group type is no hold, which means that the connection is taken down if either the originator or the terminator goes on-hook.

The following figure shows the datafill dependencies for DA trunk groups.

DA trunk groups (continued)

Datafill dependencies for DA trunk groups



Limitations and restrictions

DA trunk groups have no limitations or restrictions.

Billing

For information on billing, refer to the Bellcore format AMA translations section of this document.

DA trunk groups (continued)

Datafilling office parameters

The following table shows the office parameters used by DA trunk groups. For more information about office parameters, refer to *Office Parameters Reference Manual.*

Office parameters used by DA trunk groups

Table name	Parameter name	Explanation and action
OFCVAR	TOPS_411_RECORD_NPA_IN_AMA	If the value of this parameter is set to Y, 411 DA calls have the TERMINATING NPA field of the AMA record populated with 00XXC, where XXX is the NPA of the calling number, and the TERMINATING NUMBER field of the AMA record populated with 411000C. If the value of this parameter is left at the default of N, 411 DA calls produce AMA records with the TERMINATING NPA field equal to 00000C, and the TERMINATING NUMBER field equal to 000411C.

Datafill sequence

The following table lists the tables used by DA trunk groups. The tables are listed in the order in which they are to be datafilled.

Tables used by DA trunk groups

Table	Purpose of table
CLLI	The common language location identifier table uniquely identifies the far end of each announcement, tone, or trunk group.
TRKGRP	The trunk group table contains customer-defined data associated with each trunk group.
TRKSGRP	The trunk subgroup table contains supplementary information for each trunk group.
TRKMEM	The trunk member table specifies the physical location of each trunk assigned to one of the trunk groups.

DA trunk groups (continued)

The following table shows sample input for datafilling DA trunk groups.

Sample input for DA trunk groups

Table	Sample input
CLLI	HULLPQMC61BO 55 99 $
TRKGRP	HULLPQMC61BO DA 14 ELO NCRT DA Y
TRKSGRP	HULLPQMC61BO 0 DS1SIG STD OG MF WK 7 0 NO NO N N N 70 UNEQ
TRKMEM	HULLPQMC61BO 36 0 DCM 1 1 5 $

Datafilling table CLLI

The following table shows the datafill specific to DA for table CLLI. Only those fields that apply directly to DA are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table CLLI

Field	Subfield or refinement	Entry	Explanation and action
CLLI		alphanumeric (1 to 16 characters)	Common language location identifier. Enter a CLLI code to uniquely identify the far end of the DA trunk group. Only alphabetic characters, numeric characters, and _ (underscores) can be used to datafill this field. The first character must be alphabetic. For optimum use, a CLLI code must contain not more than 12 characters, as only the first 12 characters are displayed on the MAP (maintenance and administration position) display. When a CLLI code is displayed in a log report, the entire 16-character CLLI code appears.

Datafill example for table CLLI

The following example shows sample datafill for table CLLI.

MAP display example for table CLLI

```
CLLI            ADNUM   TRKGRSIZ                    ADMININF
-------------------------------------------------------------
HULLPQMC61B0     55     99                            $
```

Changing datafill for table CLLI

Use the standard table editor commands to change datafill for table CLLI.

Datafilling table TRKGRP

The following table shows the datafill specific to DA for table TRKGRP. Only those fields that apply directly to DA are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table TRKGRP

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 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, and AUDRING. Note that among these subfields, only those directly affected by DA are described below. Refer to table TRKGRP in the data schema section of this document for information on an alternate structure for this field that results from the datafill of table CUSTFLDS.
	GRPTYP	DA	Group type. Enter DA to specify the trunk group type for directory assistance charging trunks.
	AUDRING	Y or N	Audible ring. Enter Y if the switching unit is required to return audible ring to the originator. Otherwise, enter N.

DA trunk groups (continued)

Datafill example for table TRKGRP

The following example shows sample datafill for table TRKGRP.

MAP display example for table TRKGRP

```
GRPKEY                                                    GRPINFO
-------------------------------------------------------------------
HULLPQMC61BO                                  DA 14 ELO NCRT DA Y
```

Changing datafill for table TRKGRP

Use the standard table editor commands to change datafill for table TRKGRP.

Datafilling table TRKSGRP

The following table shows the datafill specific to DA for table TRKSGRP. Only those fields that apply directly to DA are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table TRKSGRP

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 CLLI code assigned to the trunk group as datafilled in table CLLI.
	SGRP	0 or 1	Subgroup number. Enter the subgroup number assigned to the trunk group.

Datafill example for table TRKSGRP

The following example shows sample datafill for table TRKSGRP.

MAP display example for table TRKSGRP

```
           SGRPKEY        CARDCODE
SGRPVAR
                                                          SGRPVAR
------------------------------------------------------------
           HULLPQMC61BO O DS1SIG
STD
                          OG MF WK 7 0 NO NO N N N 70 UNEQ
```

Changing datafill for table TRKSGRP

Use the standard table editor commands to change datafill for table TRKSGRP.

Datafilling table TRKMEM

The following table shows the datafill specific to DA for table TRKMEM. Only those fields that apply directly to DA are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table TRKMEM

Field	Subfield or refinement	Entry	Explanation and action
CLLI		alphanumeric (1 to 16 characters)	Common language location identifier. Enter the CLLI code assigned in table CLLI to the trunk group of which the trunk is a member.
EXTRKNM		0 to 9999	External trunk number. Enter the external trunk number that is assigned to the trunk.
SGRP		0 or 1	Subgroup number. Enter the subgroup number to which the trunk is assigned.

Datafill example for table TRKMEM

The following example shows sample datafill for table TRKMEM.

DA trunk groups (end)

MAP display example for table TRKMEM

```
CLLI            EXTRKNM  SGRP                          MEMVAR
-------------------------------------------------------------
HULLPQMC61BO    36       0                        DCM 1 1 5 $
```

Changing datafill for table TRKMEM

Use the standard table editor commands to change datafill for table TRKMEM.

DS0 trunk groups

DS0 trunk group functionality codes

DS0 trunk groups have no functionality codes.

Release applicability

TL03 and up

Prerequisites

DS0 trunk groups have no functional group prerequisites.

Description

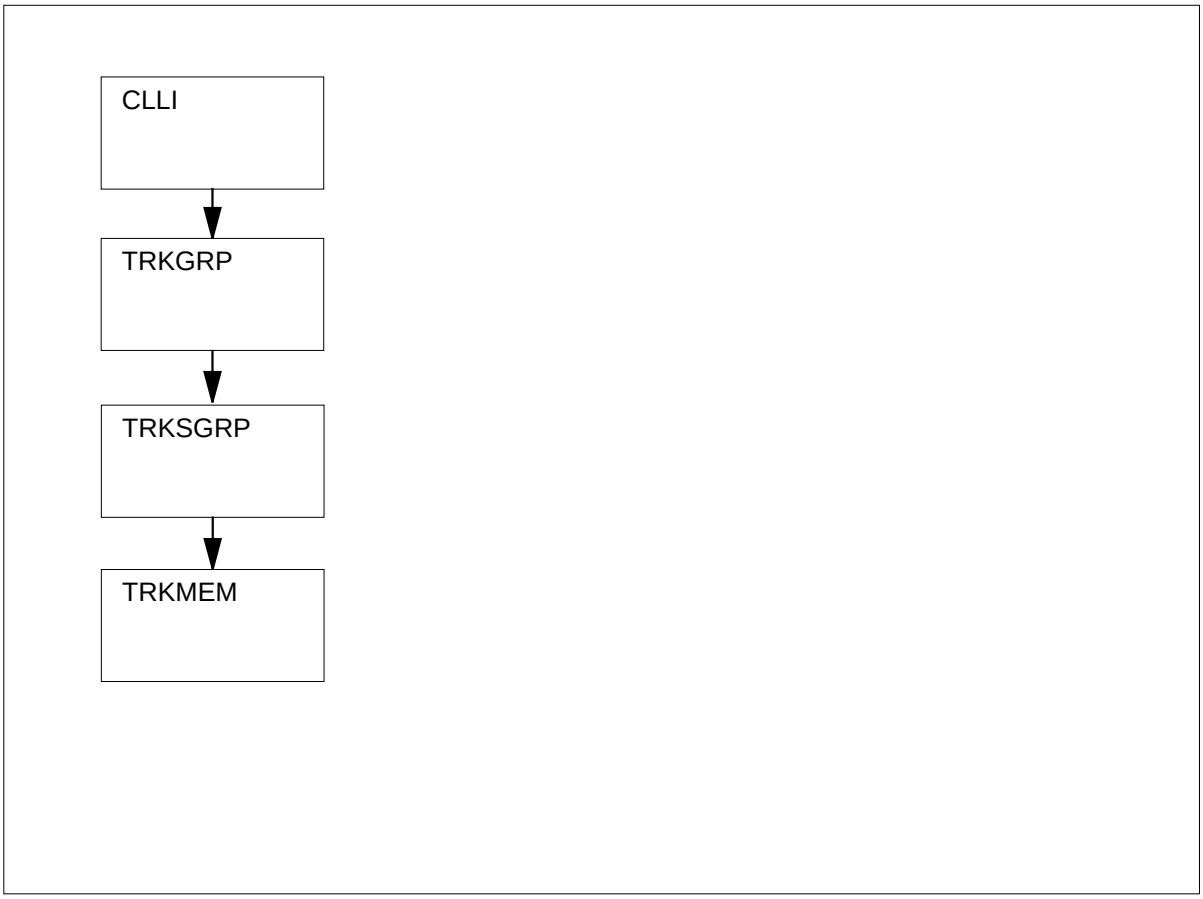
Trunk group type DS0 provides a service switching point (SSP) office with Common Channel Signaling 7 (CCS7) link access to a signaling transfer point (STP) node. In addition, the DS-0 links that interface to these nodes can respond to network-initiated maintenance action.

Trunk group type DS0 is used if a digital trunk controller (DTC) has DS-0 links. A DS-0 link consists of a single trunk and is not used for any call processing application.

The following figure shows the datafill dependencies for DS0 trunk groups.

DS0 trunk groups (continued)

Datafill dependencies for DS0 trunk groups



Limitations and restrictions

The following limitations and restrictions apply to DS0 trunk groups:

- Refer to the “Description" section.

Billing

DS0 trunk groups do not affect billing.

Datafilling office parameters

DS0 trunk tables do not affect office parameters.

DS0 trunk groups (continued)

Datafill sequence

The following table lists the tables used by DS0 trunk groups. The tables are listed in the order in which they are to be datafilled.

Tables used by DS0 trunk groups

Table	Purpose of table
CLLI	The common language location identifier table uniquely identifies the far end of each announcement, tone, or trunk group.
TRKGRP	The trunk group table contains customer-defined data associated with each trunk group.
TRKSGRP	The trunk subgroup table contains supplementary information for each trunk group.
TRKMEM	The trunk member table specifies the physical location of each trunk assigned to one of the trunk groups.

The following table shows sample input for datafilling DS0 trunk groups.

Sample input for DS0 trunk groups

Table	Sample input
CLLI	DS0TLINK 51 75 $
TRKGRP	DS0TLINK DS0 0 NPDGP NCRT
TRKSGRP	DS0TLINK 0 DS0SIG DS0TL
TRKMEM	DS0TLINK 1 0 DTC 1 5 1 $

DS0 trunk groups (continued)

Datafilling table CLLI

The following table shows the datafill specific to DS0 for table CLLI. Only those fields that apply directly to DS0 are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table CLLI

Field	Subfield or refinement	Entry	Explanation and action
CLLI		alphanumeric (1 to 16 characters)	Common language location identifier. Enter a CLLI code to uniquely identify the far end of the DS0 trunk group. Only alphabetic characters, numeric characters, and _ (underscores) can be used to datafill this field. The first character must be alphabetic. For optimum use, a CLLI code must contain not more than 12 characters, as only the first 12 characters are displayed on the MAP (maintenance and administration position) display. When a CLLI code is displayed in a log report, the entire 16-character CLLI code appears.

Datafill example for table CLLI

The following example shows sample datafill for table CLLI.

MAP display example for table CLLI

```
CLLI            ADNUM   TRKGRSIZ                    ADMININF
-------------------------------------------------------------
DS0TLINK         55      75                          $
```

Changing datafill for table CLLI

Use the standard table editor commands to change datafill for table CLLI.

Datafilling table TRKGRP

The following table shows the datafill specific to DS0 for table TRKGRP. Only those fields that apply directly to DS0 are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table TRKGRP

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 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. Note that among these subfields, only those directly affected by DS0 are described below. Refer to table TRKGRP in the data schema section of this document for information on an alternate structure for this field that results from the datafill of table CUSTFLDS.
	GRPTYP	DSO	Group type. Enter DS0 to specify the group type used for DS-0 links.

Datafill example for table TRKGRP

The following example shows sample datafill for table TRKGRP.

MAP display example for table TRKGRP

```
GRPKEY                                                  GRPINFO
-------------------------------------------------------------
DS0TLINK                                      DS0 0 NPDGP NCRT
```

Changing datafill for table TRKGRP

Use the standard table editor commands to change datafill for table TRKGRP.

DS0 trunk groups (continued)

Datafilling table TRKSGRP

The following table shows the datafill specific to DS0 for table TRKSGRP. Only those fields that apply directly to DS0 are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table TRKSGRP

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 CLLI code assigned to the trunk group as datafilled in table CLLI.
	SGRP	0 or 1	Subgroup number. Enter the subgroup number assigned to the trunk group.
CARDCODE		DS0SIG	Card code. Enter DS0SIG.
SGRPVAR		see subfield	Variable subgroup data. This field consists of subfield SIGDATA.
	SIGDATA	DS0TL	Signaling data. Enter DS0TL for DS0 transmission link signaling.

Datafill example for table TRKSGRP

The following example shows sample datafill for table TRKSGRP.

MAP display example for table TRKSGRP

```
          SGRPKEY    CARDCODE
SGRPVAR
-------------------------------------------------------
          DS0TLINK 0  DS0SIG
DS0TL
```

Changing datafill for table TRKSGRP

Use the standard table editor commands to change datafill for table TRKSGRP.

Datafilling table TRKMEM

The following table shows the datafill specific to DS0 for table TRKMEM. Only thosefields that apply directly to DS0 are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table TRKMEM

Field	Subfield or refinement	Entry	Explanation and action
CLLI		alphanumeric (1 to 16 characters)	Common language location identifier. Enter the CLLI code assigned in table CLLI to the trunk group of which the trunk is a member.
EXTRKNM		0 to 9999	External trunk number. Enter the external trunk number that is assigned to the trunk.
SGRP		0 or 1	Subgroup number. Enter the subgroup number to which the trunk is assigned.

Datafill example for table TRKMEM

The following example shows sample datafill for table TRKMEM.

MAP display example for table TRKMEM

```
CLLI         EXTRKNM  SGRP                              MEMVAR
-------------------------------------------------------------
DS0TLINK     1        0                           DTC 1 5 1 $
```

Changing datafill for table TRKMEM

Use the standard table editor commands to change datafill for table TRKMEM.

E911 trunk groups

E911 trunk group functionality codes

E911 trunk groups have no functionality codes.

Release applicability

TL03 and up

For SN06 (DMS), feature A89007692 (E911 ESCO Expansion) provides the capability to specify a 4-digit ESCO identifier.

Prerequisites

E911 trunk groups have no functional group prerequisites.

Description

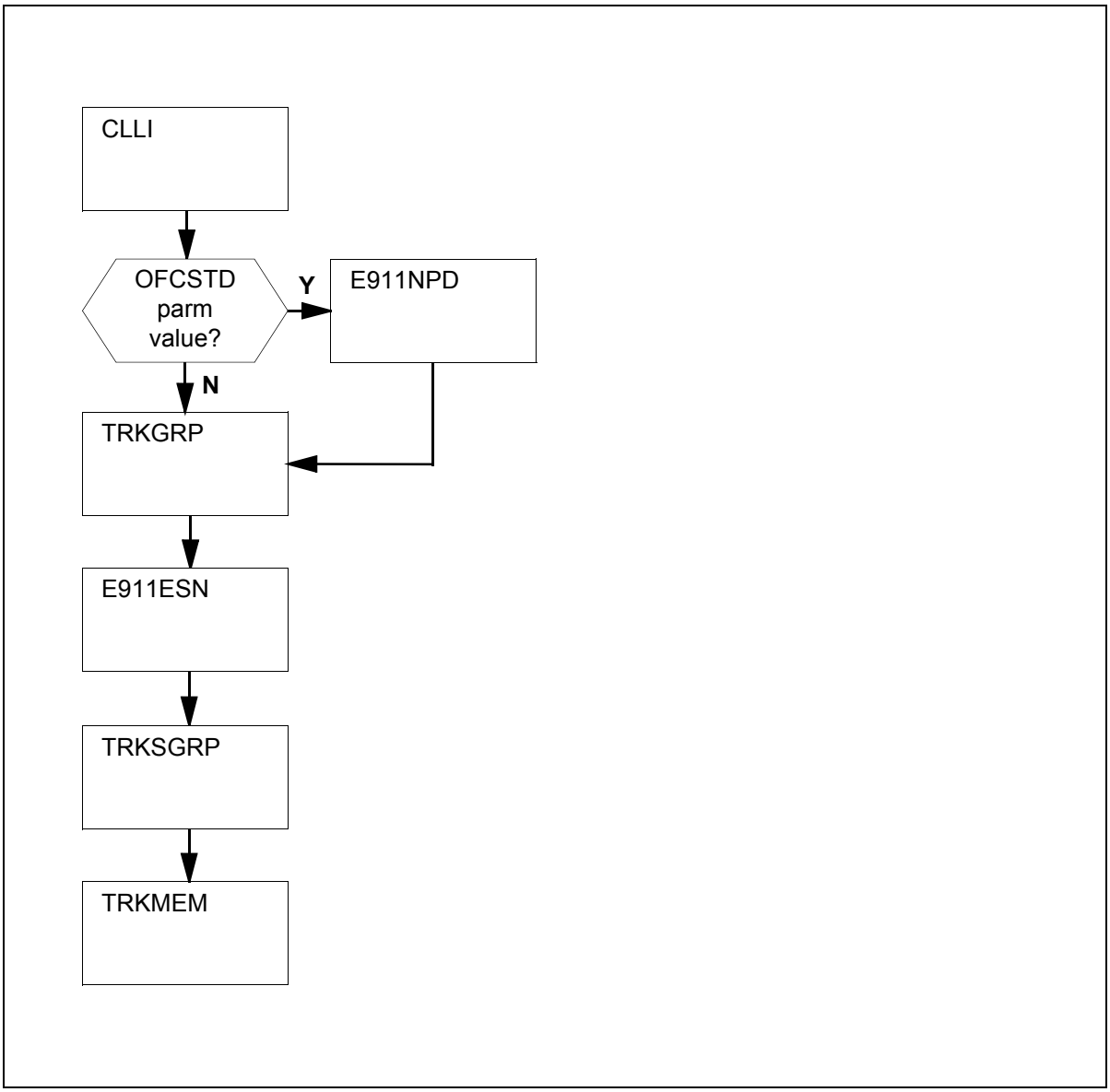
Trunk group type E911 (Enhanced 911 Emergency Service) is used for dedicated 911 trunks that are incoming to a tandem office.

E911 type trunks support both multifrequency (MF) and dial pulse (DP) signaling formats.

The following figure shows the datafill dependencies for E911 trunk groups.

E911 trunk groups (continued)

Datafill dependencies for E911 trunk groups



E911 trunk groups (continued)

Limitations and restrictions

The following limitations and restrictions apply to E911 trunk groups:

- If office parameter E911_PSAPS_USING_1_INFO_DIGIT in table OFCSTD is set to Y, table E911NPD must be datafilled prior to datafilling field NPA in table TRKGRP.
- An emergency service number (ESN) datafilled in table TRKGRP must also be datafilled in table E911ESN.
- A default ESN for the E911 trunk group must be datafilled in table E911ESN. Otherwise, calls on this trunk group cannot be routed and are sent to vacant code treatment.
- The maximum number of trunk subgroups that can be assigned is 4096.

Billing

For information on billing, refer to the Bellcore format AMA translations section of this document.

Datafilling office parameters

The following table shows the office parameters used by E911 trunk groups. For more information about office parameters, refer to *Office Parameters Reference Manual.*

Office parameters used by E911 trunk groups

Table name	Parameter name	Explanation and action
OFCSTD	E911_PSAPS_USING_1_INFO_DIGIT	This parameter specifies the type of automatic number identification (ANI) format recognized by the E911 tandem. Set the parameter to Y if one or more public safety answering points (PSAP) are connected to the E911 tandem using single-digit ANI information. The numbering plan digit (NPD) is specified in table E911NPD. Set the parameter to N if all PSAPs use three-digit ANI information. In this case, table E911NPD must be empty.

E911 trunk groups (continued)

Office parameters used by E911 trunk groups

Table name	Parameter name	Explanation and action
OFCSTD(cont)	E911_PSAP_REC_PRE_WK_TIME	This parameter specifies the time, in seconds, that an E911 tandem office waits for receipt of the ANI wink signal after seizing a trunk to the PSAP. The parameter range is 4 to 20. The default value is 4 (4 s).
OFCVAR	E911_CHECK_DEFAULT_ESN	Set the value of this parameter to Y to disallow the datafilling (in E911 trunk groups) of ESNs that are not found in table E911ESN. Leave the value at the default of N to allow datafilling of ESNs that are not found in table E911ESN.

Datafill sequence

The following table lists the E911 trunk groups. The tables are listed in the order in which they are to be datafilled.

E911 trunk groups

Table	Purpose of table
CLLI	The common language location identifier table uniquely identifies the far end of each announcement, tone, or trunk group.
E911NPD	The enhanced 911 numbering plan digit associates an NPD with the serving numbering plan area (SNPA) of the E911 trunk group.
TRKGRP	The trunk group table contains customer-defined data associated with each trunk group.
TRKSGRP	The trunk subgroup table contains supplementary information for each trunk group.
TRKMEM	The trunk member table specifies the physical location of each trunk assigned to one of the trunk groups.
E911ESN	The enhanced 911 emergency service number table associates an ESN with primary and secondary public safety answering points (PSAP).

E911 trunk groups (continued)

The following table shows sample input for datafilling E911 trunk groups.

Sample input for E911 trunk groups

Table	Sample input
CLLI	E911ICMF 51 225 $
E911NPD	0613
TRKGRP	E911ICMF E911 20 ELO NCRT 613 Y BELL 1 10 REV 848 123
TRKSGRP	E911ICMF 0 DS1SIG STD IC DP WK N 10 10 NO NO N N N M UNEQ
TRKMEM	E911ICMF 103 0 DCM 1 1 5
E911ESN	123 N CARYPOLICE CARYFIRE CARYAMBULANCE NONE NONE NONE NONE

Datafilling table CLLI

The following table shows the datafill specific to E911 for table CLLI. Only those fields that apply directly to E911 are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table CLLI

Field	Subfield or refinement	Entry	Explanation and action
CLLI		alphanumeric (1 to 16 characters)	Common language location identifier. Enter a CLLI code to uniquely identify the far end of the E911 trunk group. Only alphabetic characters, numeric characters, and _ (underscores) can be used to datafill this field. The first character must be alphabetic. For optimum use, a CLLI code must contain not more than 12 characters, as only the first 12 characters are displayed on the MAP (maintenance and administration position) display. When a CLLI code is displayed in a log report, the entire 16-character CLLI code appears.

Datafill example for table CLLI

The following example shows sample datafill for table CLLI.

E911 trunk groups (continued)

MAP display example for table CLLI

```
CLLI            ADNUM   TRKGRSIZ                    ADMININF
-------------------------------------------------------------
E911ICMF         51      225                          $
```

Changing datafill for table CLLI

Use the standard table editor commands to change datafill for table CLLI.

Datafilling table E911NPD

The following table shows the datafill specific to E911 for table E911NPD. Only those fields that apply directly to E911 are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table E911NPD

Field	Subfield or refinement	Entry	Explanation and action
NPD		0 to 3	Numbering plan digit. Enter a digit representing single information digit ANI.
SNPA		1 to 7 digits	Serving numbering plan area. Enter the SNPA, already datafilled in table HNPACONT, of the E911 trunk group incoming from the end office to the E911 office assigned to this numbering plan digit.

Datafill example for table E911NPD

The following example shows sample datafill for table E911NPD.

E911 trunk groups (continued)

MAP display example for table E911NPD

```
NPD    SNPA
-------------------------------------------------------
0      613
```

Changing datafill for table E911NPD

Use the standard table editor commands to change datafill for table E911NPD.

Datafilling table TRKGRP

The following table shows the datafill specific to E911 for table TRKGRP. Only those fields that apply directly to E911 are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table TRKGRP

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 CLLI code assigned to the trunk group as datafilled in table CLLI.
GRPINFO		see subfields	Variable group data. This field consists of subfields GRPTYP, TRAFSNO, PADGRP, NCCLS, SNPA, ORIGHOLD, SDATA, ANISEIZ, ANIPDIAL, ANIREQSG, ESCO and ESN. Note that subfields TRAFSNO, PADGRP, and NCCLS are not described below, because E911 does not modify their content.
	GRPTYP	E911	Group type. Enter E911 to specify the group type for enhanced 911 emergency service.
GRPINFO(cont)	SNPA	numeric(3 digits)	Serving numbering plan area. Enter the serving NPA of the E911 trunk group that has an NPD datafilled in table E911NPD.

E911 trunk groups (continued)

Datafilling table TRKGRP

Field	Subfield or refinement	Entry	Explanation and action
	ORIGHOLD	Y or N	Originator hold. Enter Y if the end office at which this trunk originated supports the operator hold function. Otherwise, enter N.
	SDATA	see subfield	Signaling data. This field consists of subfield SIGFMT and refinements.
	SIGFMT	AMR4, AMR5, or BELL	Signaling format. Enter the format of the ANI information that is incoming on the trunk. If the format type is AMR4, enter AMR4 and datafill refinement NCATDIGS. If the format type is AMR5, enter AMR5 and datfill refinement NCATDIGS. If the format type is BELL, enter BELL and datafill refinement INFODIGS.
	NCATDIGS	2 or 3	Number of category digits. Datafill this field if the value in field SIGMT is AMR4 or AMR5. Enter the number of category digits expected along with the ANI.
	INFODIGS	1 or 2	Information digits. Datafill this field if the value in field SIGMT is BELL. Enter the number of information digits expected along with the ANI.
	ANISEIZ	2 to 30	ANI seizure timing. Enter the time, in seconds, that the trunk waits for reception of the first ANI digit or signal after the ANI request signal.
	ANIPDIAL	2 to 30	ANI partial dial timing. Enter the time, in seconds, that the trunk waits for reception of each ANI digit or signal after the first digit.
GRPINFO(cont)	ANIREQSG	REV or WK	ANI request signal. Enter REV to specify that a reversal signal is used to request ANI information. This entry value is used for MF or DP signaling. Enter WK to specify that a wink signal is used to request ANI information. This entry value is used for PSAP signaling.

E911 trunk groups (continued)

Datafilling table TRKGRP

Field	Subfield or refinement	Entry	Explanation and action
	ESCO	0000 to 9999	Emergency service central office. Enter the number representing the end office at which the E911 trunk originated.
	ESN	000 to 999	Emergency service number. Enter the number associated with the emergency service zone (ESZ). This number is used to obtain the directory number (DN) of the primary PSAP to which the call is routed by default.

Datafill example for table TRKGRP

The following example shows sample datafill for table TRKGRP.

MAP display example for table TRKGRP

```
GRPKEY
                                                        GRPINFO
-------------------------------------------------------------
E911ICMF
         E911 20 ELO NCRT 613 Y BELL 1 10 10 REV 0848 123 $
E911ICNG
          E911 0 ELO NCRT 613 Y AMR4 3 10 10 REV 0847 005 $
```

Changing datafill for table TRKGRP

Use the standard table editor commands to change datafill for table TRKGRP.

E911 trunk groups (continued)

Datafilling table TRKSGRP

The following table shows the datafill specific to E911 for table TRKSGRP. Only those fields that apply directly to E911 are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table TRKSGRP

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 CLLI code assigned to the trunk group as datafilled in table CLLI.
	SGRP	0 or 1	Subgroup number. Enter the subgroup number assigned to the trunk group.

Datafill example for table TRKSGRP

The following example shows sample datafill for table TRKSGRP.

MAP display example for table TRKSGRP

```
           SGRPKEY     CARDCODE
SGRPVAR
                                                          SGRPVAR
-------------------------------------------------------------
           E911ICMF 0 DS1SIG
STD
                        IC DP WK N 10 10 NO NO N N N M UNEQ
```

Changing datafill for table TRKSGRP

Use the standard table editor commands to change datafill for table TRKSGRP.

Datafilling table TRKMEM

The following table shows the datafill specific to E911 for table TRKMEM. Only those fields that apply directly to E911 are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table TRKMEM

Field	Subfield or refinement	Entry	Explanation and action
CLLI		alphanumeric (1 to 16 characters)	Common language location identifier. Enter the CLLI code assigned in table CLLI to the trunk group of which the trunk is a member.
EXTRKNM		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.
SGRP		0 or 1	Subgroup number. Enter the subgroup number to which the trunk is assigned.

Datafill example for table TRKMEM

The following example shows sample datafill for table TRKMEM.

MAP display example for table TRKMEM

```
CLLI          EXTRKNM  SGRP                          MEMVAR
------------------------------------------------------------
E911ICMF      103      0                      DCM 1 1 5 $
```

Changing datafill for table TRKMEM

Use the standard table editor commands to change datafill for table TRKMEM.

E911 trunk groups (end)

Datafilling table E911ESN

The following table shows the datafill specific to E911 for table E911ESN. Only those fields that apply directly to E911 are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table E911ESN

Field	Subfield or refinement	Entry	Explanation and action
ESN		0 to 999	Emergency service number. Enter a three-digit number representing an ESZ.

Datafill example for table E911ESN

The following example shows sample datafill for table E911ESN.

MAP display example for table E911ESN

```
ESN  FLASH   PRIMPSAP    PSAP1        PSAP2
PSAP3 PSAP4  PSAP5  PSAP6
------------------------------------------------------------------------
123  N      CARYPOLICE  CARYFIRE     CARYAMBULANCE
NONE  NONE   NONE   NONE
```

Changing datafill for table E911ESN

Use the standard table editor commands to change datafill for table E911ESN.

ES trunk groups

ES trunk group functionality codes

ES trunk groups have no functionality codes.

Release applicability

TL03 and up

Prerequisites

ES trunk groups have no functional group prerequisites.

Description

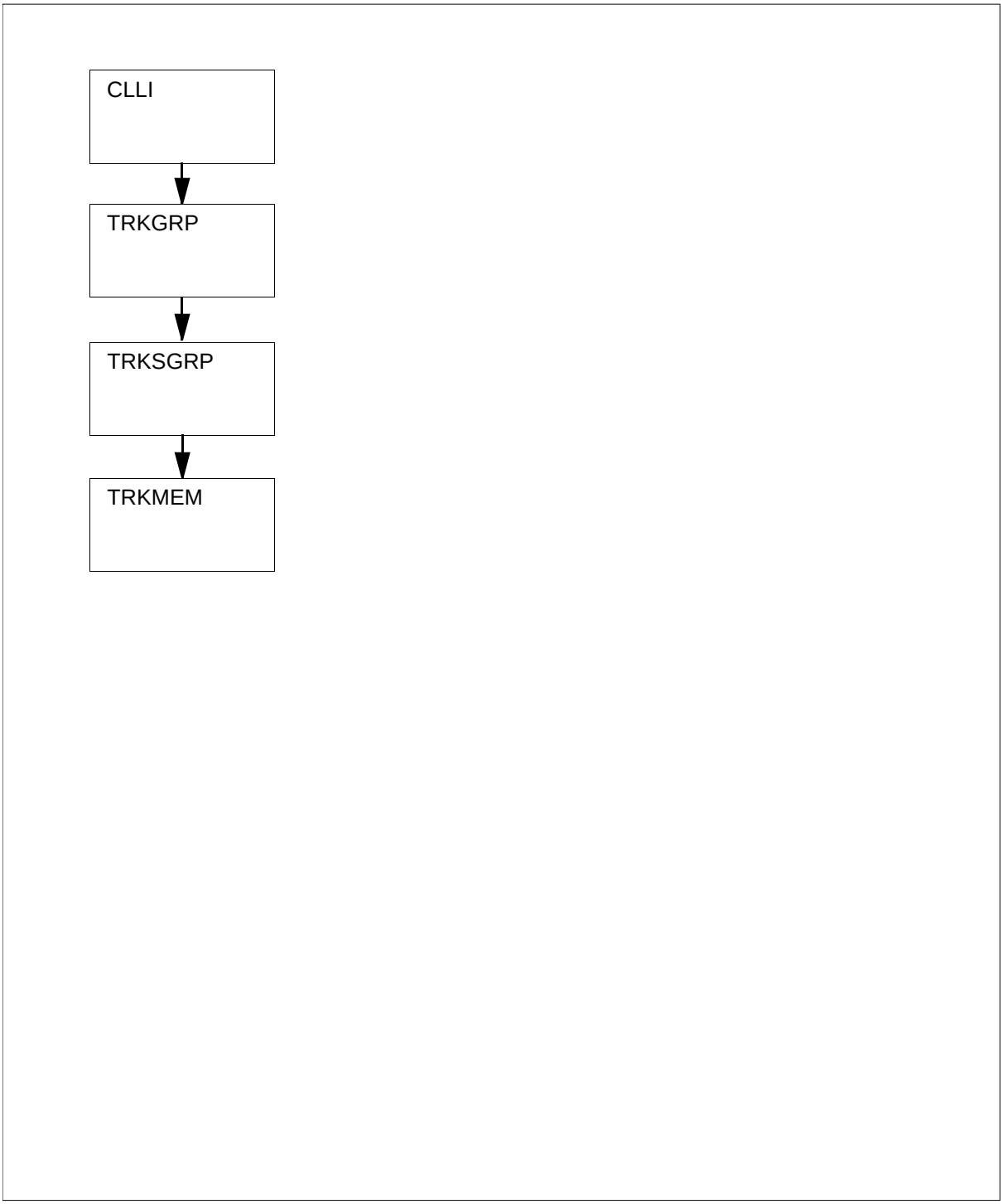
Outgoing trunk group type Emergency Service (ES) connects to an emergency service bureau (ESB) to provide emergency services.

Depending on the ESB setup, the trunk group can have automatic number identification (ANI) spill, outpulsing of the called number, or both ANI spill and called number outpulsing.

The following figure shows the datafill dependencies for ES trunk groups.

ES trunk groups (continued)

Datafill dependencies for ES trunk groups



ES trunk groups (continued)

Limitations and restrictions

ES trunk groups have no limitations and restrictions.

Billing

For information on billing, refer to the Bellcore format AMA translations section of this document.

Datafilling office parameters

The following table shows the office parameters used by ES trunk groups. For more information about office parameters, refer to *Office Parameters Reference Manual.*

Note: Office parameter SPILL_SPB_ON_ES_TRKS is eliminated from office table OFCVAR in NA009 and is replaced by new option SPBDN in table TRKGRP. When SPBDN is set to Y (YES), the Special Billing Directory Number (SPB DN) of the E911 caller is outpulsed over the ES trunk group.

Office parameters used by ES trunk groups

Table name	Parameter name	Explanation and action
OFCVAR	TRK_OOS_CHK_ON	This parameter specifies whether to check that the trunks in a trunk group are out of service before changing the values of specific fields in table TRKGRP by data modification order (DMO).

Datafill sequence

The following table lists the tables used by ES trunk groups. The tables are listed in the order in which they are to be datafilled.

Tables used by ES trunk groups

Table	Purpose of table
CLLI	The common language location identifier table uniquely identifies the far end of each announcement, tone, or trunk group.
TRKGRP	The trunk group table contains customer-defined data associated with each trunk group.

ES trunk groups (continued)

Tables used by ES trunk groups

Table	Purpose of table
TRKSGRP	The trunk subgroup table contains supplementary information for each trunk group.
TRKMEM	The trunk member table specifies the physical location of each trunk assigned to one of the trunk groups.

The following table shows sample input for datafilling ES trunk groups.

Sample input for ES trunk groups

Table	Sample input
CLLI	EMGY 55 175 $
TRKGRP	EMGY ES 49 NPDGP NCRT OG Y NIL MIDL 63 1000 HI 60 DC BY Y Y NOANI
TRKSGRP	EMGY 0 2X82AA STD OG MF WK 7 0 NO NO N N N 70 UNEQ
TRKMEM	EMGY100 0 TM8 11 4 2

Datafilling table CLLI

The following table shows the datafill specific to ES for table CLLI. Only those fields that apply directly to ES are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table CLLI

Field	Subfield or refinement	Entry	Explanation and action
CLLI		alphanumeric (1 to 16 characters)	Common language location identifier. Enter a CLLI code to uniquely identify the far end of the ES trunk group. Only alphabetic characters, numeric characters, and _ (underscores) can be used to datafill this field. The first character must be alphabetic. For optimum use, a CLLI code must contain not more than 12 characters, as only the first 12 characters are shown on the MAP (maintenance and administration position) display. When a CLLI code is displayed in a log report, the entire 16-character CLLI code appears.

Datafill example for table CLLI

The following example shows sample datafill for table CLLI.

MAP display example for table CLLI

```
CLLI            ADNUM   TRKGRSIZ                    ADMININF
-------------------------------------------------------------
EMGY             55      175                          $
```

Changing datafill for table CLLI

Use the standard table editor commands to change datafill for table CLLI.

Datafilling table TRKGRP

The following table shows the datafill specific to ES for table TRKGRP. Only those fields that apply directly to ES are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table TRKGRP

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 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, DIR, AUDRING, TRAFCLS, SELSEQ, FDISCTIM, ROHTT, DISCTON, INTTT, SWST, SWSTTN, RNGBK, CLI, and ANI. Note that among these subfields, only those directly affected by ES are described below. Refer to table TRKGRP in the data schema section of this document for information on an alternate structure for this field that results from the datafill of table CUSTFLDS.

ES trunk groups (continued)

Datafilling table TRKGRP

Field	Subfield or refinement	Entry	Explanation and action
	GRPTYP	ES	Group type. Enter ES to specify the emergency service trunk group type.
	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 DMO.
	AUDRING	Y or N	Audible ring. Enter Y if the switching unit is required to return audible ring to the originator. Otherwise, enter N.
	FDISCTIM	0 to 255	Forced disconnect timing. Enter the on-hook duration time, in 160-ms intervals, that must elapse prior to a disconnect being declared. For example, enter 50 to specify 8 s.
	ROHTT	1 to 1000	Rering off-hook tone timing. Enter a value to specify the time duration, in 10-ms intervals, that rering off-hook (ROH) tone is given. For example, enter 250 to specify 2.5 s. 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.
	DISCTON	HI or RO	Disconnect tone. Enter HI for high, or RO for reorder, to specify the type of tone that is sent to the emergency service bureau when the originator disconnects.
	INTTT	1 to 1000	Integrity tone time. Enter a value to specify the time duration, in 1-s intervals, that integrity tone (disconnect tone) is provided before a fault is declared. For example, enter 8 to specify 8 s. 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.

ES trunk groups (continued)

Datafilling table TRKGRP

Field	Subfield or refinement	Entry	Explanation and action
	SWST	AC ,DC, orADC	Switch-hook signal. Enter the type of switch-hook signal, AC, DC, or ADC. Selecting audible digital control (ADC) signal provides the tones capability that is associated with AC signaling, and the disconnect functionality that is associated with DC signaling. The ADC feature does not function if ES trunks are provisioned on a remote cluster controller (RCC) or a remote switching center (RSC) that connects to a 911 emergency service bureau serviced by a private branch exchange (PBX) switch. If value ADC is datafilled, use E & M signaling type trunk interface cards for the ES trunks. Also use E & M signaling type transmission equipment on the PBX for the 911 service bureau. Use E & M signaling handling equipment for ES trunks located on digital carrier modules (DCM), digital test sequences (DTC), or line trunk controllers (LTC).
	SWSTTN	LO or BY	Switch-hook status. Enter LO for tone type low, or BY for tone type busy, to specify the tone that is sent to the emergency service bureau if the originator disconnects.
	RNGBK	Y or N	Ringback signal. Enter Y if ringback signal is required. Otherwise, enter N.
	CLI	Y or N	Calling line identificaiton. Enter Y if calling line identification is required. Otherwise enter N.

ES trunk groups (continued)

Datafilling table TRKGRP

Field	Subfield or refinement	Entry	Explanation and action
	ANI	ANISPILL OUTPULSE orNOANI	Automatic number identification type. This field specifies the ANI type. Enter a value for this field as follows: If the translated dialed digits (for example, 911) followed by the ANI digits (the originator's number) are to be sent, enter ANISPILL. If only ANI digits are to be sent, enter OUTPULSE. If only the translated dialed digits are to be sent, enter NOANI. For ANI to be sent correctly, the type of call (field TYPCALL) must be operator assisted (OA) or direct dial (DD), except for calls originated by Meridian Digital Centrex (MDC) lines (for example, line class codes of IBN or PSET) that need a field TYPCALL value of OA. ANI is not compatible with Immediate Start Signal trunks. The call type is determined by the call originator (subscriber or incoming trunk group type) and can be redefined during digit translations. 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.
	BILLDN	Y or N	*Billing Directory Number* Enter Y to spill the PRI trunk group'sBILLDN over the ES trunk. Otherwise, enter N.
	SPBDN	Y or N	*Special Billing Directory Number* Enter Y to spill the Calling DN'sSPBDN over the ES trunk. Otherwise, enter N.

Datafill example for table TRKGRP

The following example shows sample datafill for table TRKGRP.

MAP display example for table TRKGRP

```
GRPKEY
                                                        GRPINFO
------------------------------------------------------------
EMGY
ES 49 NPDGP NCRT OG Y NIL MIDL 63 1000 HI 60 DC BY Y Y
NOANI
```

Changing datafill for table TRKGRP

If office parameter TRK_OOS_CHK_ON in table OFCVAR is set to Y, all trunks in the trunk group must be taken out of service before changing the value of certain fields in table TRKGRP.

Datafilling table TRKSGRP

The following table shows the datafill specific to ES for table TRKSGRP. Only those fields that apply directly to ES are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table TRKSGRP

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 CLLI code assigned to the trunk group as datafilled in table CLLI.
	SGRP	0 or 1	Subgroup number. Enter the subgroup number assigned to the trunk group.
	DIR	OG	Direction. Enter OG for the trunk group direction.

Datafill example for table TRKSGRP

The following example shows sample datafill for table TRKSGRP.

ES trunk groups (continued)

MAP display example for table TRKSGRP

```
           SGRPKEY    CARDCODE
SGRPVAR                                                    SGRPVAR
-------------------------------------------------------------------
            EMGY 0    2X82AA
STD
                    OG MF WK 7    0    NO NO N N N    70   UNEQ
```

Changing datafill for table TRKSGRP

Use the standard table editor commands to change datafill for table TRKSGRP.

Datafilling table TRKMEM

The following table shows the datafill specific to ES for table TRKMEM. Only those fields that apply directly to ES are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table TRKMEM

Field	Subfield or refinement	Entry	Explanation and action
CLLI		alphanumeric (1 to 16 characters)	Common language location identifier. Enter the CLLI code assigned in table CLLI to the trunk group of which the trunk is a member.
EXTRKNM		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.
SGRP		0 or 1	Subgroup number. Enter the subgroup number to which the trunk is assigned.

Datafill example for table TRKMEM

The following example shows sample datafill for table TRKMEM.

MAP display example for table TRKMEM

```
CLLI          EXTRKNM   SGRP                          MEMVAR
-------------------------------------------------------------
EMGY          100       0                         TM8 11 4 2
```

Changing datafill for table TRKMEM

Use the standard table editor commands to change datafill for table TRKMEM.

History

SN07 (DMS)

Subfield ANI amended to reflect non-compatibility with Immediate Start Signal trunks according to CR Q00838215-01.

GER2W trunk groups

GER2W trunk group functionality codes

GER2W trunk groups have no functionality codes.

Release applicability

TL03 and up

Prerequisites

GER2W trunk groups have no functional group prerequisites.

Description

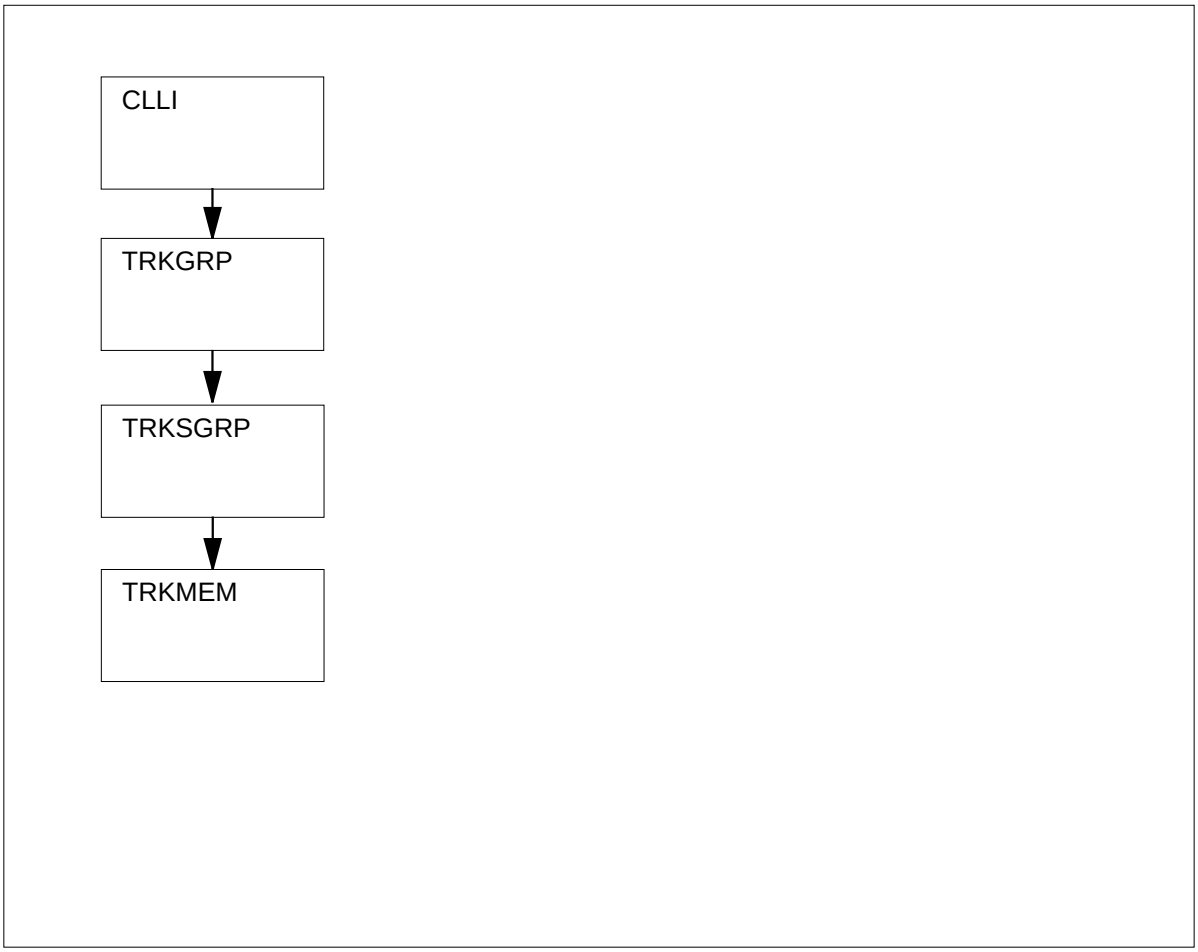
Trunk group type GER2W is required for the German Intelligent Network field trial in order to handle the requirements of 1TR7 ISDN user part (ISUP) signaling when the direction of the trunk group is two way.

Table TRKGRP defines the data associated with each trunk group interface. The GER2W refinements of type GRPTYP in table TRKGRP contain service and translation related data for two-way German 1TR7 ISUP trunks.

The following figure shows the datafill dependencies for GER2W trunk groups.

GER2W trunk groups (continued)

Datafill dependencies for GER2W trunk groups



Limitations and restrictions

The following limitations and restrictions apply to GER2W trunk groups:

- Table PXHEAD must be datafilled before table TRKGRP is datafilled for group type GER2W.

Billing

For information on billing, refer to the Bellcore format AMA translations section of this document.

Datafilling office parameters

GER2W trunk groups do not affect office parameters.

GER2W trunk groups (continued)

Datafill sequence

The following table lists the tables used by GER2W trunk groups. The tables are listed in the order in which they are to be datafilled.

Tables used by GER2W trunk groups

Table	Purpose of table
CLLI	The common language location identifier table uniquely identifies the far end of each announcement, tone, or trunk group.
TRKGRP	The trunk group table contains customer-defined data associated with each trunk group.
TRKSGRP	The trunk subgroup table contains supplementary information for each trunk group.
TRKMEM	The trunk member table specifies the physical location of each trunk assigned to one of the trunk groups.

The following table shows sample input for datafilling GER2W trunk groups.

Sample input for GER2W trunk groups

Table	Sample input
CLLI	GIS2W 55 160 $
TRKGRP	GIS2W GER2W 0 STDTK NCRT P58 N MIDL
TRKSGRP	GIS2W 0 DS1SIG G1TR7 ISUP 2W N 1 0
TRKMEM	GIS2W 101 0 IDTC 10 5 25

GER2W trunk groups (continued)

Datafilling table CLLI

The following table shows the datafill specific to GER2W for table CLLI. Only those fields that apply directly to GER2W are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table CLLI

Field	Subfield or refinement	Entry	Explanation and action
CLLI		alphanumeric (1 to 16 characters)	Common language location identifier. Enter a CLLI code to uniquely identify the far end of the GER2W trunk group. Only alphabetic characters, numeric characters, and _ (underscores) can be used to datafill this field. The first character must be alphabetic. For optimum use, a CLLI code must contain not more than 12 characters, as only the first 12 characters are displayed on the MAP (maintenance and administration position) display. When a CLLI code is displayed in a log report, the entire 16-character CLLI code appears.

Datafill example for table CLLI

The following example shows sample datafill for table CLLI.

MAP display example for table CLLI

```
CLLI            ADNUM   TRKGRSIZ                    ADMININF
-------------------------------------------------------------
GIS2W            55      160                          $
```

Changing datafill for table CLLI

Use the standard table editor commands to change datafill for table CLLI.

GER2W trunk groups (continued)

Datafilling table TRKGRP

The following table shows the datafill specific to GER2W for table TRKGRP. Only those fields that apply directly to GER2W are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table TRKGRP

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 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, and refinements PRTNM, PFXDIGS, and SELSEQ. Note that among these subfields, only those directly affected by GER2W are described below.
	GRPTYP	GER2W	Group type. Enter GER2W. This is the trunk group type for two-way 1TR7 trunks.
	PRTNM	alphanumeric (1 to 8 characters) or NIL	Standard pretranslator table name. The PX translation system, which consists of tables PXHEAD, PXCODE, and PXRTE, is used for ITR7 trunks. Enter a table name to specify the entry point into this pretranslation system. Enter NIL if the trunk is not usable for call processing.
	PFXDIGS	numeric (1 to 4 digits)	Digits to prefix. Enter any additional digits that are to be prefixed to the received digits.

Datafill example for table TRKGRP

The following example shows sample datafill for table TRKGRP.

GER2W trunk groups (continued)

MAP display example for table TRKGRP

```
GRPKEY                                                    GRPINFO
--------------------------------------------------------------------
GIS2W                          GER2W 0 STDTK NCRT P58 N MIDL
```

Changing datafill for table TRKGRP

Use the standard table editor commands to change datafill for table TRKGRP.

Datafilling table TRKSGRP

The following table shows the datafill specific to GER2W for table TRKSGRP. Only those fields that apply directly to GER2W are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table TRKSGRP (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 CLLI code assigned to the trunk group as datafilled in table CLLI.
	SGRP	numeric(0 or 1)	Subgroup number. Enter the subgroup number assigned to the trunk group.
CARDCODE		DS1SIG	Card code. Enter DS1SIG.
SGRPVAR	SIGDATA	G1TR7	Signaling data. Enter G1TR7 to specify G1TR7 signaling.

Datafilling table TRKSGRP (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
	DIR	2W	Direction. Enter 2W to specify the trunk group direction. The entry must match the entry in table TRKGRP.
	GLARECTL	Y, N, or blank	Glare control. If the entry in field DIR is 2W, datafill this field. Enter Y to control simultaneous seizures of 2W trunks. Y indicates that the circuits are under local control. Otherwise, enter N.

Datafill example for table TRKSGRP

The following example shows sample datafill for table TRKSGRP.

MAP display example for table TRKSGRP

```
           SGRPKEY    CARDCODE
SGRPVAR
                                                        SGRPVAR
-------------------------------------------------------------
           GIS2W 0    DS1SIG
G1TR7
                                                ISUP   2W   N   1 0
```

Changing datafill for table TRKSGRP

Use the standard table editor commands to change datafill for table TRKSGRP.

GER2W trunk groups (end)

Datafilling table TRKMEM

The following table shows the datafill specific to GER2W for table TRKMEM. Only those fields that apply directly to GER2W are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table TRKMEM

Field	Subfield or refinement	Entry	Explanation and action
CLLI		alphanumeric (1 to 16 characters)	Common language location identifier. Enter the CLLI code assigned in table CLLI to the trunk group of which the trunk is a member.
EXTRKNM		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.
SGRP		0 or 1	Subgroup number. Enter the subgroup number to which the trunk is assigned.

Datafill example for table TRKMEM

The following example shows sample datafill for table TRKMEM.

MAP display example for table TRKMEM

```
CLLI          EXTRKNM   SGRP                          MEMVAR
------------------------------------------------------------
GIS2W         101       0                    IDTC 10 5 25
```

Changing datafill for table TRKMEM

Use the standard table editor commands to change datafill for table TRKMEM.

GERIC trunk groups

GERIC trunk group functionality codes

BAS00003

Release applicability

TL03 and up

Prerequisites

GERIC trunk groups have no functional group prerequisites.

Description

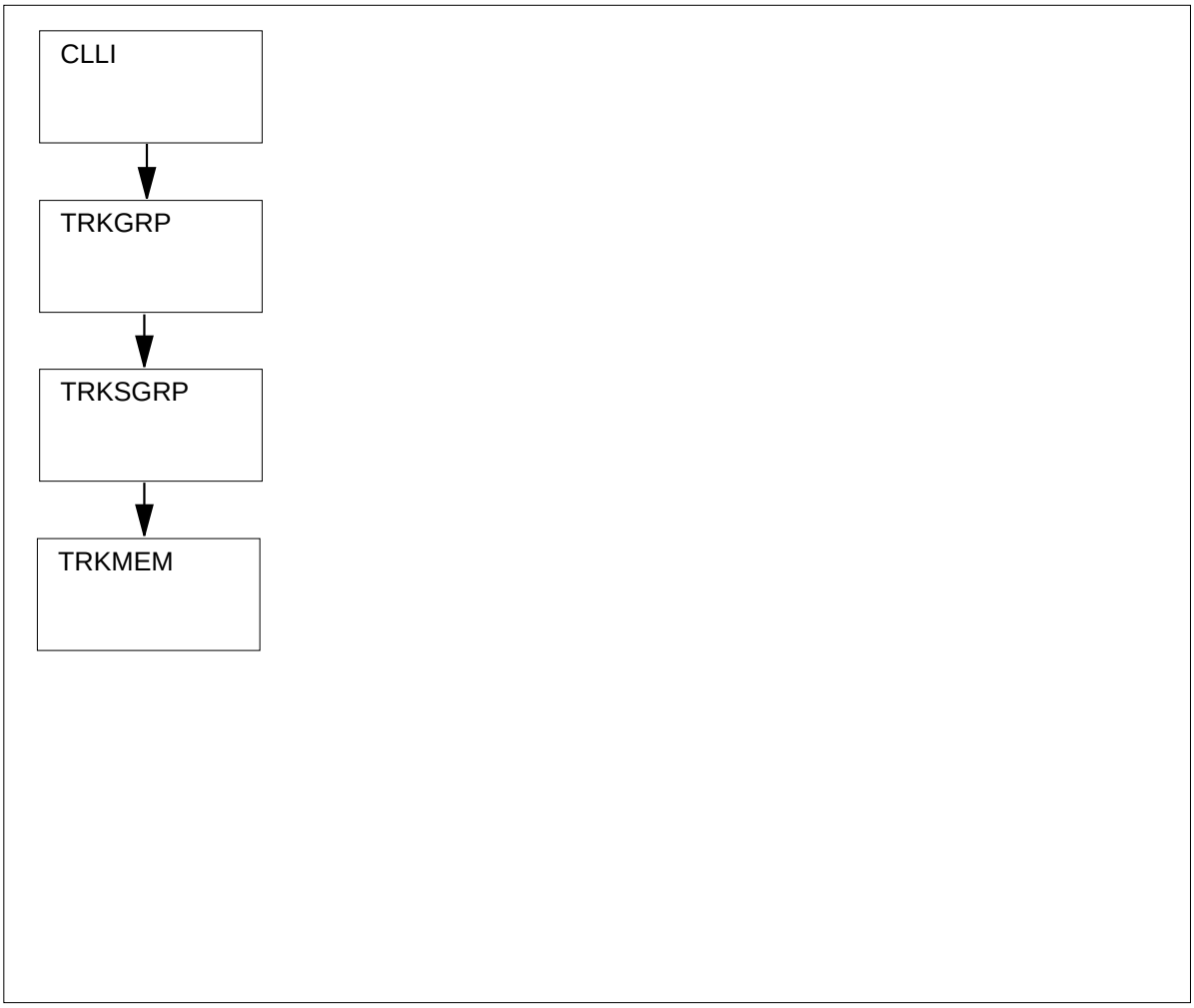
Trunk group type GERIC is required for the German Intelligent Network field trial in order to handle the requirements of 1TR7 ISDN user part (ISUP) signaling when the direction of the trunk group is incoming.

Table TRKGRP defines the data associated with each trunk group interface. The GERIC refinements of type GRPTYP in table TRKGRP contain service and translation related data for incoming German 1TR7 ISUP trunks.

The following figure shows the datafill dependencies for GERIC trunk groups.

GERIC trunk groups (continued)

Datafill dependencies for GERIC trunk groups



Limitations and restrictions

The following limitations and restrictions apply to GERIC trunk groups:

- Table PXHEAD must be datafilled before table TRKGRP is datafilled for group type GERIC.

Billing

For information on billing, refer to the Bellcore format AMA translations section of this document.

Datafilling office parameters

GERIC trunk groups do not affect office parameters.

GERIC trunk groups (continued)

Datafill sequence

The following table lists the tables used by GERIC trunk groups. The tables are listed in the order in which they are to be datafilled.

Tables used by GERIC trunk groups

Table	Purpose of table
CLLI	The common language location identifier table uniquely identifies the far end of each announcement, tone, or trunk group.
TRKGRP	The trunk group table contains customer-defined data associated with each trunk group.
TRKSGRP	The trunk subgroup table contains supplementary information for each trunk group.
TRKMEM	The trunk member table specifies the physical location of each trunk assigned to one of the trunk groups.

The following table shows sample input for datafilling GERIC trunk groups.

Sample input for GERIC trunk groups

Table	Sample input
CLLI	GISIC 55 160 $
TRKGRP	GISIC GERIC 0 STDTK NCRT P58 N
TRKSGRP	GISIC DS1SIG G1TR7 ISUP IC 1 0
TRKMEM	GISIC 101 0 IDTC 10 5 25

GERIC trunk groups (continued)

Datafilling table CLLI

The following table shows the datafill specific to GERIC for table CLLI. Only those fields that apply directly to GERIC are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table CLLI

Field	Subfield or refinement	Entry	Explanation and action
CLLI		alphanumeric (1 to 16 characters)	Common language location identifier. Enter a CLLI code to uniquely identify the far end of the GERIC trunk group. Only alphabetic characters, numeric characters, and _ (underscores) can be used to datafill this field. The first character must be alphabetic. For optimum use, a CLLI code must contain not more than 12 characters, as only the first 12 characters are displayed on the MAP (maintenance and administration position) display. When a CLLI code is displayed in a log report, the entire 16-character CLLI code appears.

Datafill example for table CLLI

The following example shows sample datafill for table CLLI.

MAP display example for table CLLI

```
 CLLI          ADNUM  TRKGRSIZ                    ADMININF
-------------------------------------------------------------
GISIC              55       160                          $
```

Changing datafill for table CLLI

Use the standard table editor commands to change datafill for table CLLI.

GERIC trunk groups (continued)

Datafilling table TRKGRP

The following table shows the datafill specific to GERIC for table TRKGRP. Only those fields that apply directly to GERIC are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table TRKGRP

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 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, and refinements PRTNM and PFXDIGS. Note that among these subfields, only those directly affected by GERIC are described below.
	GRPTYP	GERIC	Group type. Enter GERIC. This is the trunk group type for incoming 1TR7 trunks.
	PRTNM	alphanumeric (1 to 8 characters) or NIL	Standard pretranslator table name. The PX translation system, which consists of tables PXHEAD, PXCODE, and PXRTE, is used for ITR7 trunks. Enter a table name to specify the entry point into this pretranslation system. Enter NIL if the trunk is not usable for call processing.
	PFXDIGS	numeric (1 to 4 digits)	Digits to prefix. Enter any additional digits that are to be prefixed to the received digits.

Datafill example for table TRKGRP

The following example shows sample datafill for table TRKGRP.

GERIC trunk groups (continued)

MAP display example for table TRKGRP

```
GRPKEY                                          GRPINFO
---------------------------------------------------------
 GISIC                         GERIC 0 STDTK NCRT P58 N
```

Changing datafill for table TRKGRP

Use the standard table editor commands to change datafill for table TRKGRP.

Datafilling table TRKSGRP

The following table shows the datafill specific to GERIC for table TRKSGRP. Only those fields that apply directly to GERIC are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table TRKSGRP

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 CLLI code assigned to the trunk group as datafilled in table CLLI.
	SGRP	(0 or 1)	Subgroup number. Enter the subgroup number assigned to the trunk group.
CARDCODE		DS1SIG	Card code. Enter DS1SIG.
SGRPVAR		see subfield	Variable subgroup data. This field consists of subfield SIGDATA and refinement DIR.
	SIGDATA	G1TR7	Signaling data. Enter G1TR7 to specify G1TR7 signaling.
	DIR	IC	Direction. Enter IC to specify the trunk group direction. The entry must match the entry in table TRKGRP.

Datafill example for table TRKSGRP

The following example shows sample datafill for table TRKSGRP.

MAP display example for table TRKSGRP

```
           SGRPKEY    CARDCODE
SGRPVAR
                                                          SGRPVAR
-------------------------------------------------------------
           GISIC 0     DS1SIG
  G1TR7
                                                    ISUP  IC 1 0
```

Changing datafill for table TRKSGRP

Use the standard table editor commands to change datafill for table TRKSGRP.

Datafilling table TRKMEM

The following table shows the datafill specific to GERIC for table TRKMEM. Only those fields that apply directly to GERIC are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table TRKMEM

Field	Subfield or refinement	Entry	Explanation and action
CLLI		alphanumeric (1 to 16 characters)	Common language location identifier. Enter the CLLI code assigned in table CLLI to the trunk group of which the trunk is a member.
EXTRKNM		(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.
SGRP		(0 or 1)	Subgroup number. Enter the subgroup number to which the trunk is assigned.

Datafill example for table TRKMEM

The following example shows sample datafill for table TRKMEM.

GERIC trunk groups (end)

MAP display example for table TRKMEM

```
 CLLI       EXTRKNM  SGRP                              MEMVAR
-------------------------------------------------------------
GISIC           101     0                 IDTC  10   5  25
```

Changing datafill for table TRKMEM

Use the standard table editor commands to change datafill for table TRKMEM.

GEROG trunk groups

GEROG trunk group functionality codes

GEROG trunk groups have no functionality codes.

Release applicability

TL03 and up

Prerequisites

GEROG trunk groups have no functional group prerequisites.

Description

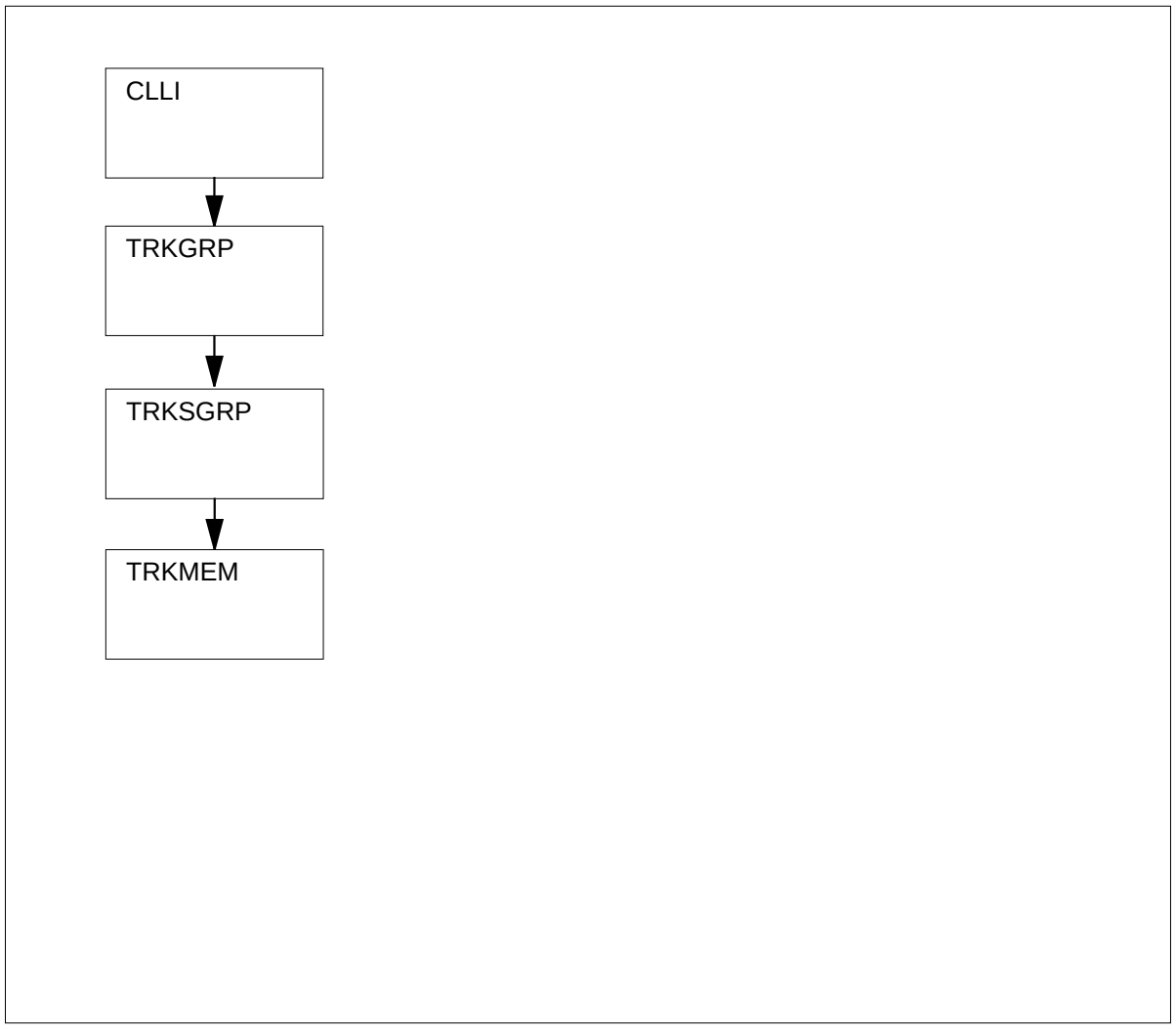
Trunk group type GEROG is required for the German Intelligent Network field trial in order to handle the requirements of 1TR7 ISDN user part (ISUP) signaling when the direction of the trunk group is outgoing.

Table TRKGRP defines the data associated with each trunk group interface. The GEROG refinements of type GRPTYP in table TRKGRP contain service and translation related data for outgoing German 1TR7 ISUP trunks.

The following figure shows the datafill dependencies for GEROG trunk groups.

GEROG trunk groups (continued)

Datafill dependencies for GEROG trunk groups



Limitations and restrictions

GEROG trunk groups have no limitations or restrictions.

Billing

For information on billing, refer to the Bellcore format AMA translations section of this document.

Datafilling office parameters

GEROG trunk groups do not affect office parameters.

GEROG trunk groups (continued)

Datafill sequence

The following table lists the tables used by GEROG trunk groups. The tables are listed in the order in which they are to be datafilled.

Tables used by GEROG trunk groups

Table	Purpose of table
CLLI	The common language location identifier table uniquely identifies the far end of each announcement, tone, or trunk group.
TRKGRP	The trunk group table contains customer-defined data associated with each trunk group.
TRKSGRP	The trunk subgroup table contains supplementary information for each trunk group.
TRKMEM	The trunk member table specifies the physical location of each trunk assigned to one of the trunk groups.

The following table shows sample input for datafilling GEROG trunk groups.

Sample input for GEROG trunk groups

Table	Sample input
CLLI	GISOG 55 160 $
TRKGRP	GISOG GEROG 0 STDTK NCRT MIDL
TRKSGRP	GISOG DS1SIG G1TR7 ISUP OG 7 0
TRKMEM	GISOG 100 0 IDTC 10 5 25

GEROG trunk groups (continued)

Datafilling table CLLI

The following table shows the datafill specific to GEROG for table CLLI. Only those fields that apply directly to GEROG are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table CLLI

Field	Subfield or refinement	Entry	Explanation and action
CLLI		alphanumeric (1 to 16 characters)	Common language location identifier. Enter a CLLI code to uniquely identify the far end of the GEROG trunk group. Only alphabetic characters, numeric characters, and _ (underscores) can be used to datafill this field. The first character must be alphabetic. For optimum use, a CLLI code must contain not more than 12 characters, as only the first 12 characters are displayed on the MAP (maintenance and administration position) display. When a CLLI code is displayed in a log report, the entire 16-character CLLI code appears.

Datafill example for table CLLI

The following example shows sample datafill for table CLLI.

MAP display example for table CLLI

```
CLLI           ADNUM  TRKGRSIZ                    ADMININF
-------------------------------------------------------------
GISOG           55     160                           $
```

Changing datafill for table CLLI

Use the standard table editor commands to change datafill for table CLLI.

Datafilling table TRKGRP

The following table shows the datafill specific to GEROG for table TRKGRP. Only those fields that apply directly to GEROG are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table TRKGRP

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 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, and refinement SELSEQ. Note that among these subfields, only those directly affected by GEROG are described below.
	GRPTYP	GEROG	Group type. Enter GEROG. This is the trunk group type for outgoing 1TR7 trunks.

Datafill example for table TRKGRP

The following example shows sample datafill for table TRKGRP.

MAP display example for table TRKGRP

```
GRPKEY                                                GRPINFO
------------------------------------------------------------
GISOG                                 GEROG 0 STDTK NCRT MIDL
```

Changing datafill for table TRKGRP

Use the standard table editor commands to change datafill for table TRKGRP.

GEROG trunk groups (continued)

Datafilling table TRKSGRP

The following table shows the datafill specific to GEROG for table TRKSGRP. Only those fields that apply directly to GEROG are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table TRKSGRP

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 CLLI code assigned to the trunk group as datafilled in table CLLI.
	SGRP	0 or 1	Subgroup number. Enter the subgroup number assigned to the trunk group.
CARDCODE		DS1SIG	Card code. Enter DS1SIG.
SGRPVAR		see subfield	Variable subgroup data. This field consists of subfield SIGDATA and refinement DIR.
	SIGDATA	G1TR7	Signaling data. Enter G1TR7 to specify G1TR7 signaling.
	DIR	OG	Direction. Enter OG to specify the trunk group direction. The entry must match the entry in table TRKGRP.

Datafill example for table TRKSGRP

The following example shows sample datafill for table TRKSGRP.

MAP display example for table TRKSGRP

```
          SGRPKEY    CARDCODE
SGRPVAR
                                                        SGRPVAR
-------------------------------------------------------------
          GISOG 0    DS1SIG
G1TR7
                                              ISUP OG     7     0
```

Changing datafill for table TRKSGRP

Use the standard table editor commands to change datafill for table TRKSGRP.

Datafilling table TRKMEM

The following table shows the datafill specific to GEROG for table TRKMEM. Only those fields that apply directly to GEROG are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table TRKMEM

Field	Subfield or refinement	Entry	Explanation and action
CLLI		alphanumeric (1 to 16 characters)	Common language location identifier. Enter the CLLI code assigned in table CLLI to the trunk group of which the trunk is a member.
EXTRKNM		0 to 9999	External trunk number. Enter the external trunk number that is assigned to the trunk.
SGRP		0 or 1	Subgroup number. Enter the subgroup number to which the trunk is assigned.

Datafill example for table TRKMEM

The following example shows sample datafill for table TRKMEM.

MAP display example for table TRKMEM

```
CLLI            EXTRKNM   SGRP                          MEMVAR
-------------------------------------------------------------
GISOG           100       0                       IDTC 10 5 25
```

Changing datafill for table TRKMEM

Use the standard table editor commands to change datafill for table TRKMEM.

IBN2 trunk groups

IBNT2 trunk group functionality codes

BAS00003

Release applicability

TL03 and up

Prerequisites

IBNT2 trunk groups have no functional group prerequisites.

Description

In a Meridian Digital Centrex (MDC) end office, Integrated Business Network (IBN) trunk groups connect other MDC offices to provide one- or two-way access between IBN customer groups.

There are three types of IBN trunk groups: incoming (IBNTI), outgoing (IBNTO), and two way (IBNT2). Each trunk group is assigned a code in table CLLI.

Each trunk group must be assigned to a customer group.

ISDN user part IBN trunk groups

ISDN user part (ISUP) IBN trunk groups are datafilled in much the same manner as basic IBN trunk groups. The following table shows datafill restrictions that apply to certain fields in table TRKGRP for ISUP IBNT2 trunk groups.

ISUP IBNT2 trunk group field values in table TRKGRP (Sheet 1 of 2)

Field name	Value	Notes
DISCTSEL	0	ISUP trunks currently use 200-ms disconnect filter timing.
DTI	N	Digit collection is not supported.
TES	N	Toll essential service is not supported.
FDN	N	FX toll denied service is not supported.
FDV	N	FX toll diverted service is not supported.
FLASH	N	Flash capability is not supported.
DPX	N	Data path loop extension is not supported.
PREEMPT	N	For Northern Telecom use only.

IBN2 trunk groups (continued)

ISUP IBNT2 trunk group field values in table TRKGRP (Sheet 2 of 2)

Field name	Value	Notes
MTR	N	Meter reception is not supported.
AIODOPT	N	Automatic identified outward dialing (AIOD) is not supported

After table TRKGRP is datafilled, an IBN trunk group is identified as an ISUP trunk group by setting field SIGDATA in table TRKSGRP to C7UP.

In table TRKSGRP, for any one trunk group, it is not possible to have one trunk subgroup datafilled with C7UP signaling and the other datafilled with non-C7UP signaling.

The MDC switch will reject the TRKSGRP tuple for an ISUP IBN trunk that does not have the appropriate datafill in table TRKGRP.

The following error message is generated to indicate any datafill errors in tables TRKGRP and TRKSGRP:

```
TUPLE IS NOT ACCEPTABLE FOR ISUP SIGNALING
```

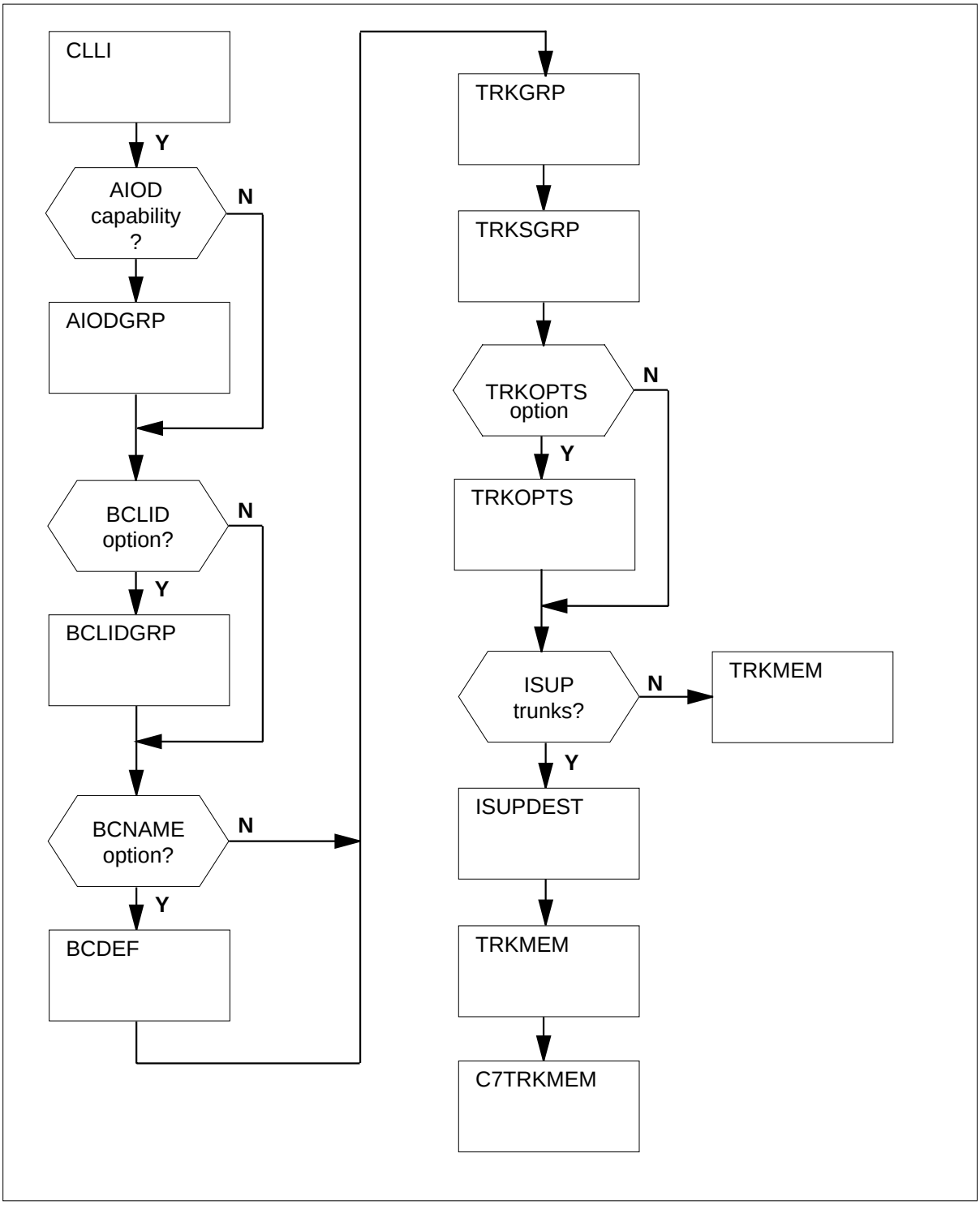
After table TRKSGRP is datafilled, table ISUPDEST must be datafilled in order to identify the routeset associated with the ISUP IBN trunk subgroup. After table ISUPDEST is datafilled, trunks can be added to table TRKMEM in the normal manner.

Table C7TRKMEM must be datafilled to associate the ISUP IBN trunks with a circuit identification code.

The following figure shows the datafill dependencies for IBNT2 trunk groups.

IBN2 trunk groups (continued)

Datafill dependencies for IBNT2 trunk groups



IBN2 trunk groups (continued)

Limitations and restrictions

The following limitations and restrictions apply to IBNT2 trunk groups:

- If parameter TRK_OOS_CHK_ON in table OFCVAR is set to Y, all trunks in the group must be busied before changing the value of table TRKGRP fields CUSTNAME, SUBGRPNO, NCOS, SUPV, INTRAGRP, DIGIT0, DIGIT1, DTI, TES, TRC, ALTNCOS, LSCFN, ALTLSCFN, LSCINCPT, and ALSCINCP by data modification order (DMO).
- If digital trunks are used by digital data, they must have the pad group set to 0 (zero) in both directions.
- The Station Message Detail Recording (SMDR) feature can only be provided if the switching unit has the option SMDR_OFFICE set to Y in table OFCOPT.
- Refer to the “Description" section for restrictions related to ISUP IBN trunks.
- If option DLYFWDXMT is datafilled in table TRKOPTS, all trunk members of that trunk group must terminate to a DTC or an LTC. The exec line up in table LTCINV must be specified as DTCEX, DTCFX, or FXODTC.

Refer to table TRKGRP (type IBNT2) in the data schema section of this document for more information on general datafill requirements for IBN trunk groups.

Billing

For information on billing, refer to the Bellcore format AMA translations section of this document.

IBN2 trunk groups (continued)

Datafilling office parameters

The following table shows the office parameters used by IBNT2 trunk groups. For more information about office parameters, refer to *Office Parameters Reference Manual.*

Office parameters used by IBNT2 trunk groups

Table name	Parameter name	Explanation and action
OFCENG	NUM_IBN_IXLA_ EXT_BLOCKS	Enter the maximum number of MDC world system (international) translation extension blocks required for the engineering interval. The value entered here determines the maximum number of calls that can route to universal translations from MDC at any one time. The value should be equal to the maximum number of outgoing MDC (trunk group type IBNTO) trunks that carry international direct distance dialing (IDDD) through automatic route selection (ARS) traffic that can be reached when translating through table PXHEAD.
OFCOPT	FLEXIBLE_ DIGIT_ ANALYSIS	This parameter specifies whether the Flexible Digit Analysis feature is enabled. Flexible digit analysis improves digit collection on Centrex PCM30 line group controllers (PLGC). Enter Y. The default value is N.
OFCVAR	TRK_OOS_ CHK_ON	This parameter specifies whether a check is made if the trunks in a trunk group are out of service when changing the values of specific fields in the table TRKGRP by DMO.

Datafill sequence

The following table lists the tables used by IBNT2 trunk groups. The tables are listed in the order in which they are to be datafilled.

Tables used by IBNT2 trunk groups (Sheet 1 of 2)

Table	Purpose of table
CLLI	The common language location identifier table uniquely identifies the far end of each announcement, tone, or trunk group.
AIODGRP	The automatic identified outward dialing (AIOD) group table contains data used to define AIOD datalinks between a PBX and its host office. These links provide a means for billing outgoing calls from the PBX to individual PBX stations.
BCLIDGRP	The bulk calling line identification group table lists bulk calling line identification (BCLID) group numbers with their respective assigned features and data channel links.

IBN2 trunk groups (continued)

Tables used by IBNT2 trunk groups (Sheet 2 of 2)

Table	Purpose of table
BCDEF	The bearer capability definition table contains data that defines the various bearer capabilities that can be assigned to trunk groups.
TRKGRP	The trunk group table contains customer-defined data associated with each trunk group.
TRKSGRP	The trunk subgroup table contains supplementary information for each trunk group.
TRKOPTS	The trunk options table contains data that is used to define the options that are associated with this trunk group.
ISUPDEST	The CCS7 ISDN user part destination table specifies ISUP routeset names for IBN ISUP trunk subgroups.
TRKMEM	The trunk member table specifies the physical location of each trunk assigned to one of the trunk groups.
C7TRKMEM	The CCS7 trunk member table lists CCS7 circuit identification codes that are assigned to IBN ISUP trunk members.

The following table shows sample input for datafilling IBNT2 trunk groups.

Sample input for IBNT2 trunk groups

Table	Sample input
CLLI	NTLAUR 51 375 $
AIODGRP	BNRCAR TREATMENT 2
BCLIDGRP	12 N 15195551212 FIRST Y Y N N Y N HOST 001 0 01 10 $
BCDEF	56KDATA RESDIG CIRCUIT NETWORK DTU NONE Y 56KBS
TRKGRP	NTLAUR IBNT2 0 ACO NCBN BNRMC 3 MIDL 4 6132265400 ANSDISC 0 Y 7 8 N N N Y 0 5 Y 5 5 4 5 N N N N N N N N N NATL BCLID 12 BCNAME 56KDATA FACTYPE CCSA $
TRKSGRP	NTLAUR 0 DS1SIG C7UP 2W N N UNEQ NONE Q764 THRH 10 TORONTO4 1 SGRPYLD Y
ISUPDEST	NTLAUR 0 C7RTESET2
TRKMEM	NTLAUR 101 0 DTC 4 5 18
C7TRKMEM	NTLAUR 101 128

IBN2 trunk groups (continued)

Datafilling table CLLI

The following table shows the datafill specific to IBNT2 for table CLLI. Only those fields that apply directly to IBNT2 are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table CLLI

Field	Subfield or refinement	Entry	Explanation and action
CLLI		alphanumeric (1 to 16 characters)	Common language location identifier. Enter a CLLI code to uniquely identify the far end of the IBNT2 trunk group. Only alphabetic characters, numeric characters, and _ (underscores) can be used to datafill this field. The first character must be alphabetic. For optimum use, a CLLI code must contain not more than 12 characters, as only the first 12 characters are displayed on the MAP (maintenance and administration position) display. When a CLLI code is displayed in a log report, the entire 16-character CLLI code appears.

Datafill example for table CLLI

The following example shows sample datafill for table CLLI.

MAP display example for table CLLI

```
  CLLI          ADNUM  TRKGRSIZ                    ADMININF
-------------------------------------------------------------
NTLAUR             51      375                           $
```

Changing datafill for table CLLI

Use the standard table editor commands to change datafill for table CLLI.

Datafilling table AIODGRP

The following table shows the datafill specific to IBNT2 for table AIODGRP. Only fields that apply directly to IBNT2 are shown. For a description of other fields, refer to the data schema section of this document.

Datafilling table AIODGRP

Field	Subfield or refinement	Entry	Explanation and action
AIODGRP		alphanumeric (1 to 16 characters)	Automatic identified outward dialing group. Enter the code that is assigned in table CLLI and represents the name of the AIOD group.
FAILDEF		RECORD or TREATMENT	Automatic identified outward dialing failure default. This field defines the action taken if the AIOD message is not received. Enter RECORD if the call is allowed to proceed, but is billed to the default private branch exchange (PBX) number or the PBX special billing number. Enter TREATMENT if a call is routed to the automatic identified outward dialing failure (AIFL) treatment.
TIMEOUT		0 to 3	Automatic identified outward dialing time out. Enter the length of time, in 1-s increments, that call processing is to wait if the AIOD message is late.

Datafill example for table AIODGRP

The following example shows sample datafill for table AIODGRP.

MAP display example for table AIODGRP

```
AIODGRP       FAILDEF       TIMEOUT
------------------------------------------------------
 BNRCAR     TREATMENT             2
```

Changing datafill for table AIODGRP

Use the standard table editor commands to change datafill for table AIODGRP.

IBN2 trunk groups (continued)

Datafilling table BCLIDGRP

The following table shows the datafill specific to IBNT2 for table BCLIDGRP. Only fields that apply directly to IBNT2 are shown. For a description of other fields, refer to the data schema section of this document.

Datafilling table BCLIDGRP

Field	Subfield or refinement	Entry	Explanation and action
BCGRPNUM		0 to 2047	Bulk calling group number. Enter the BCLID group number. This is the index into the table. Assign the group numbers in numerical order so that data store usage is minimized.

Datafill example for table BCLIDGRP

The following example shows sample datafill for table BCLIDGRP.

MAP display example for table BCLIDGRP

```
BCGRPNUM USP      BILLDN DNDISP  DATE  TIME  INTRAGRP  CFIND  BSYSEND
DSP800DN                                                    BCLNKLEN
_____________________________________________________________________
      12   N  15195551212  FIRST     Y     Y        N      N        Y
       N                                          HOST 001 0 01 10 $
```

Changing datafill for BCLIDGRP

Use the standard table editor commands to change datafill for table BCLIDGRP.

Datafilling table BCDEF

The following table shows the datafill specific to IBNT2 for table BCDEF. Only those fields that apply directly to IBNT2 are shown. For a description of the other fields, refer to the data schema section of this document.

IBN2 trunk groups (continued)

Datafilling table BCDEF (Sheet 1 of 3)

Field	Subfield or refinement	Entry	Explanation and action
BCNAME		3_1KHZ, 7_1KHZ, 56KDATA, 64KDATA, 64KX25, 64_RATE_ AD_DATA, DATAUNIT, NILBC, SPEECH, or VOICE_ DATA	Bearer capability name. This subfield is the key to the table. It specifies a user-defined name that describes the bearer capability (BC) and can describe the low layer capability. Enter 3_1KHZ for the default BC for calls originated from trunks other than primary rate interface (PRI), ISUP, intermachine trunk (IMT), and dedicated access line (DAL). This BC is used primarily for the transport of speech and voiceband data. Enter 7_1HKZ for voice band high quality audio and voice band data. This BC is used for high quality audio applications such as music. It can also be used for voiceband data. Enter 56KDATA for the basic 56-kbit data adapted for 64-kbit data. This is the North American typical data rate. This BC uses only 7 bits of data sampled at 8000 times per second for the 56-kbit rate. The eighth bit of every octet is 1 so that an all 0 (zero) octet does not occur and cause the problems that can occur with 64KDATA.

Datafilling table BCDEF (Sheet 2 of 3)

Field	Subfield or refinement	Entry	Explanation and action
			Enter 64KDATA for ISDN circuit switched packet data calls. This BC is 64-kbit/s of clear channel data. This BC uses all of the 64 kbit bandwidth for data and 16 consecutive 0s (zero) can occur. Most operating companies in North America use 56 kbit/s data transport due to the problems that can occur with North American repeaters if 16 consecutive 0s (zeros) are received. Techniques such as B8ZS can be used on the data to alleviate the problem. Enter 64KX25 for packet data calls in the X.25 packet network. The data is encoded according to X.25 protocol. Enter 64_RATE_AD_DATA if the data stream contains fewer than 64 kbit/s and the stream is bit-stuffed to a 64-kbit data rate. This BC is used for applications where the data rate is less than 64 kbit/s (2400, 4800, 9600, 19 600, 16 000, 32 000, 48 000) and the remaining bandwidth on the channel is stuffed according to the proper CCITT protocols regarding rate-adaption. Enter DATAUNIT for the basic 56KDATA adapted for 64KDATA on primarily non-ISDN data units. This BC is equivalent to the 56KDATA BC. Enter NILBC if bearer capability is not required for the call, for example, plain ordinary telephone service (POTS) calls.

IBN2 trunk groups (continued)

Datafilling table BCDEF (Sheet 3 of 3)

Field	Subfield or refinement	Entry	Explanation and action
			Enter SPEECH for the default BC for calls originated from 500/2500 sets, electronic business sets (Northern Telecom multikey business set), or attendant consoles (Northern Telecom IBN attendant console). This BC is also assigned to calls over trunks. This BC is used primarily for the transport of speech. It can also be used to transport voiceband data, if voice compression techniques are not used on the data. Enter VOICE_DATA for backward compatibility with the DMS-250 feature AD0499 (DAL and IMT Switched 56 KB Data and Multiple PINs per Auth CP), available in feature packages NTX222AB [DMS-250 Call Processing Type II] and NTX222BA (DMS-250 Call Processing [Type II]). This BC is used on the DMS-250 switch only.

Datafill example for table BCDEF

The following example shows sample datafill for table BCDEF.

MAP display example for table BCDEF

```
 BCNAME                                                  BCDATA
-------------------------------------------------------------
56KDATA           RESDIG CIRCUIT NETWORK DTU NONE Y 56KBS
```

Changing datafill for table BCDEF

Use the standard table editor commands to change datafill for table BCDEF.

Datafilling table TRKGRP

The following table shows the datafill specific to IBNT2 for table TRKGRP. Only those fields that apply directly to IBNT2 are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table TRKGRP

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 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, CUSTNAME, SUBGRPNO, SELSEQ, NCOS, BILLDN, SUPV, DISCTSEL, INTRAGRP, DIGIT0, DIGIT1, DTI, TES, CDR, SMDR, TRC, ALTNCOS, TRKDSR, LSCFN, ALTLSCFN, LSCINCPT, ALSCINCP, IGA, FDN, FDV, FLASH, DPX, PREEMPT, AIODOPT, REORIG, OFFNETOPT, COFFTYP, and OPTIONS. Refer to table TRKGRP (type IBNT2) in the data schema section of this document for a description of these subfields.
	GRPTYP	IBNT2	Group type. Enter IBNT2. This is the trunk group type for two-way IBN trunks.

Datafill example for table TRKGRP

The following example shows sample datafill for table TRKGRP.

MAP display example for table TRKGRP

```
GRPKEY
                                                                GRPINFO
------------------------------------------------------------------------
NTLAUR
  IBNT2 0 ACO NCBN BNRMC 3 MIDL 4 6132265400 ANSDISC 0 Y 7 8 N N N Y 0
5 Y 5 5 4 5 N N N N N N N N N NATL BCLID 12 BCNAME 56KDATA FACTYPE
CCSA $
```

IBN2 trunk groups (continued)

Changing datafill for table TRKGRP

If office parameter TRK_OOS_CHK_ON in table OFCVAR is set to Y, all trunks in the trunk group must be taken out of service before changing the value of certain fields in table TRKGRP.

Datafilling table TRKSGRP

The following table shows the datafill specific to IBNT2 for table TRKSGRP. Only those fields that apply directly to IBNT2 are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table TRKSGRP

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 CLLI code assigned to the trunk group as datafilled in table CLLI.
	SGRP	(0 or 1)	Subgroup number. Enter the subgroup number assigned to the trunk group.
CARDCODE		DS1SIG	Card code. Enter DS1SIG.
SGRPVAR		see subfield	Variable subgroup data. This field consists of subfield SIGDATA and refinement DIR.
	SIGDATA	C7UP	Signaling data. Enter C7UP for IBN ISUP trunk groups.
	DIR	2W	Direction. Enter 2W to specify the trunk group direction as two way. The entry must match the entry in table TRKGRP.

Datafill example for table TRKSGRP

The following example shows sample datafill for table TRKSGRP.

MAP display example for table TRKSGRP

```
          SGRPKEY    CARDCODE
SGRPVAR
                                                        SGRPVAR
------------------------------------------------------------
         NTLAUR 0     DS1SIG
   C7UP
       2W N N UNEQ NONE Q764 THRH 10 TORONTO4 1 SGRPYLD Y
```

Changing datafill for table TRKSGRP

Use the standard table editor commands to change datafill for table TRKSGRP.

Datafilling table TRKOPTS

The following table shows the datafill specific to IBNT2 for table TRKOPTS. Only those fields that apply directly to IBNT2 are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table TRKOPTS

Field	Subfield or refinement	Entry	Explanation and action
CLLI		alphanumeric (1 to 16 characters)	Common language location identifier. Enter the CLLI code of this trunk group.
	OPTNAME	DLYFWD-XMT	Option code, enter DLYFWDXMT, delay forward transmission.
	TIMEOUT	0, 1, 2, 3, 4, or 5	Specifies the maximum time the system will wait for an answer supervision signal before taking down the speech path. A timeout value of 0 will prevent the timeout timer from starting. The forward speech path will be blocked until an answer supervision signal is received or one of the parties goes onhook. Time is specified in minutes.

Datafill example for table TRKOPTS

The following example shows sample datafill for table TRKOPTS.

IBN2 trunk groups (continued)

MAP display example for table TRKOPTS

```
  CLLI                OPTNAME           OPTINFO

------------------------------------------------------------
IBN2_MONTREAL      DLYFWDXMT           DLYFWDXMT  3

WARNING: This option will block the forward speech path
until an answer message is returned from the far-end
trunk. If no answer message is received, the forward
speech path is never established.

TUPLE TO BE CHANGED:
IBN2_MONTREAL  DLYFWDXMT  DLYFWDXMT   3
ENTER Y TO CONFIRM, N TO REJECT OR E TO EDIT
Y
TUPLE CHANGED
JOURNAL FILE INACTIVE
```

Changing datafill for table TRKOPTS

Use the standard table editor commands to change datafill for table TRKOPTS.

Datafilling table ISUPDEST

The following table shows the datafill specific to IBNT2 for table ISUPDEST. Only those fields that apply directly to IBNT2 are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table ISUPDEST (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
DESTKEY		see subfields	Destination key. This field consists of subfields CLLI and SGRP.
	CLLI	alphanumeric (1 to 16 characters)	Common language location identifier. Enter the CLLI code assigned to the ISUP, BTUP, or MBTUP trunk subgroup in table CLLI.

Datafilling table ISUPDEST (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
	SGRP	0 or 1	Subgroup number. Enter the number assigned to the trunk subgroup.
ISUPROUT		alphanumeric (1 to 16 characters)	CCS7 ISDN user part routeset name. Enter the routeset name that provides the network and point code information from table C7RTESET. This specifies the portion of the signaling network identifier (SNID) that is logically associated with this trunk group. The routeset name entered here must already be datafilled in table C7TRTESET.

Datafill example for table ISUPDEST

The following example shows sample datafill for table ISUPDEST.

MAP display example for table ISUPDEST

```
  DESTKEY                  ISUPROUT
-------------------------------------------------------
 NTLAUR 0                C7RTESET2
```

Changing datafill for table ISUPDEST

Use the standard table editor commands to change datafill for table ISUPDEST.

IBN2 trunk groups (continued)

Datafilling table TRKMEM

The following table shows the datafill specific to IBNT2 for table TRKMEM. Only those fields that apply directly to IBNT2 are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table TRKMEM

Field	Subfield or refinement	Entry	Explanation and action
CLLI		alphanumeric (1 to 16 characters)	Common language location identifier. Enter the CLLI code assigned in table CLLI to the trunk group of which the trunk is a member.
EXTRKNM		(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.
SGRP		(0 or 1)	Subgroup number. Enter the subgroup number to which the trunk is assigned.

Datafill example for table TRKMEM

The following example shows sample datafill for table TRKMEM.

MAP display example for table TRKMEM

```
  CLLI         EXTRKNM    SGRP                          MEMVAR
-------------------------------------------------------------
NTLAUR             101       0                      DTC 4 5 18
```

Changing datafill for table TRKMEM

Use the standard table editor commands to change datafill for table TRKMEM.

Datafilling table C7TRKMEM

The following table shows the datafill specific to IBNT2 for table C7TRKMEM. Only those fields that apply directly to IBNT2 are shown. For

a description of the other fields, refer to the data schema section of this document.

Datafilling table C7TRKMEM

Field	Subfield or refinement	Entry	Explanation and action
MEMKEY		see subfields	Member key. This field consists of subfields CLLI and MEMNAME.
	CLLI	alphanumeric (1 to 16 characters)	Common language location identifier. Enter the code assigned in table CLLI to the trunk group that the trunk is a member of.
	MEMNAME	(0 to 9999)	Trunk member number. Enter the member number assigned to the trunk. This number is assigned in field EXTRKNM of table TRKMEM.
CIC		(0 to 16383)	CCS7 circuit identification code. Enter a digit to represent the CIC of the trunk circuit. Allocation CICs contiguously (top down, bottom up, or both) makes the most efficient use of data store. For CCITT trunks, the valid range is limited to 0 to 4095.

Datafill example for table C7TRKMEM

The following example shows sample datafill for table C7TRKMEM.

MAP display example for table C7TRKMEM

```
    MEMKEY    CIC
-------------------------------------------------------
NTLAUR 101    128
```

Changing datafill for table C7TRKMEM

Use the standard table editor commands to change datafill for table C7TRKMEM.

IBNTI trunk groups

IBNTI trunk group functionality codes

IBNTI trunk groups have no functionality codes.

Release applicability

TL03 and up

Prerequisites

IBNTI trunk groups have no functional group prerequisites.

Description

In a Meridian Digital Centrex (MDC) end office, IBN trunk groups connect other MDC offices to provide one- or two-way access between IBN customer groups.

There are three types of IBN trunk groups: incoming (IBNTI), outgoing (IBNTO), and two way (IBNT2). Each trunk group is assigned a code in table CLLI.

Each trunk group must be assigned to a customer group.

ISDN user part IBN trunk groups

ISDN user part (ISUP) IBN trunk groups are datafilled in much the same manner as basic IBN trunk groups. The following table shows datafill restrictions that apply to certain fields in table TRKGRP for ISUP IBNTI trunk groups.

ISUP IBNTI trunk group field values in table TRKGRP

Field name	Value	Notes
DISCTSEL	0	ISUP trunks currently use 200-ms disconnect filter timing.
DTI	N	Digit collection is not supported.
TES	N	Toll essential service is not supported.
PREEMPT	N	For Northern Telecom use only.
AIODOPT	N	Automatic identified of outward dialing (AIOD) is not supported.

After datafilling table TRKGRP, an IBN trunk group is identified as an ISUP trunk group by setting field SIGDATA in table TRKSGRP to C7UP.

IBNTI trunk groups (continued)

In table TRKSGRP, for any one trunk group, it is not possible to have one trunk subgroup datafilled with C7UP signaling and the other datafilled with non-C7UP signaling.

The MDC switch will reject the TRKSGRP tuple for an ISUP IBN trunk that does not have the appropriate datafill in table TRKGRP.

The following error message is generated to indicate any datafill errors in tables TRKGRP and TRKSGRP:

```
TUPLE IS NOT ACCEPTABLE FOR ISUP SIGNALING
```

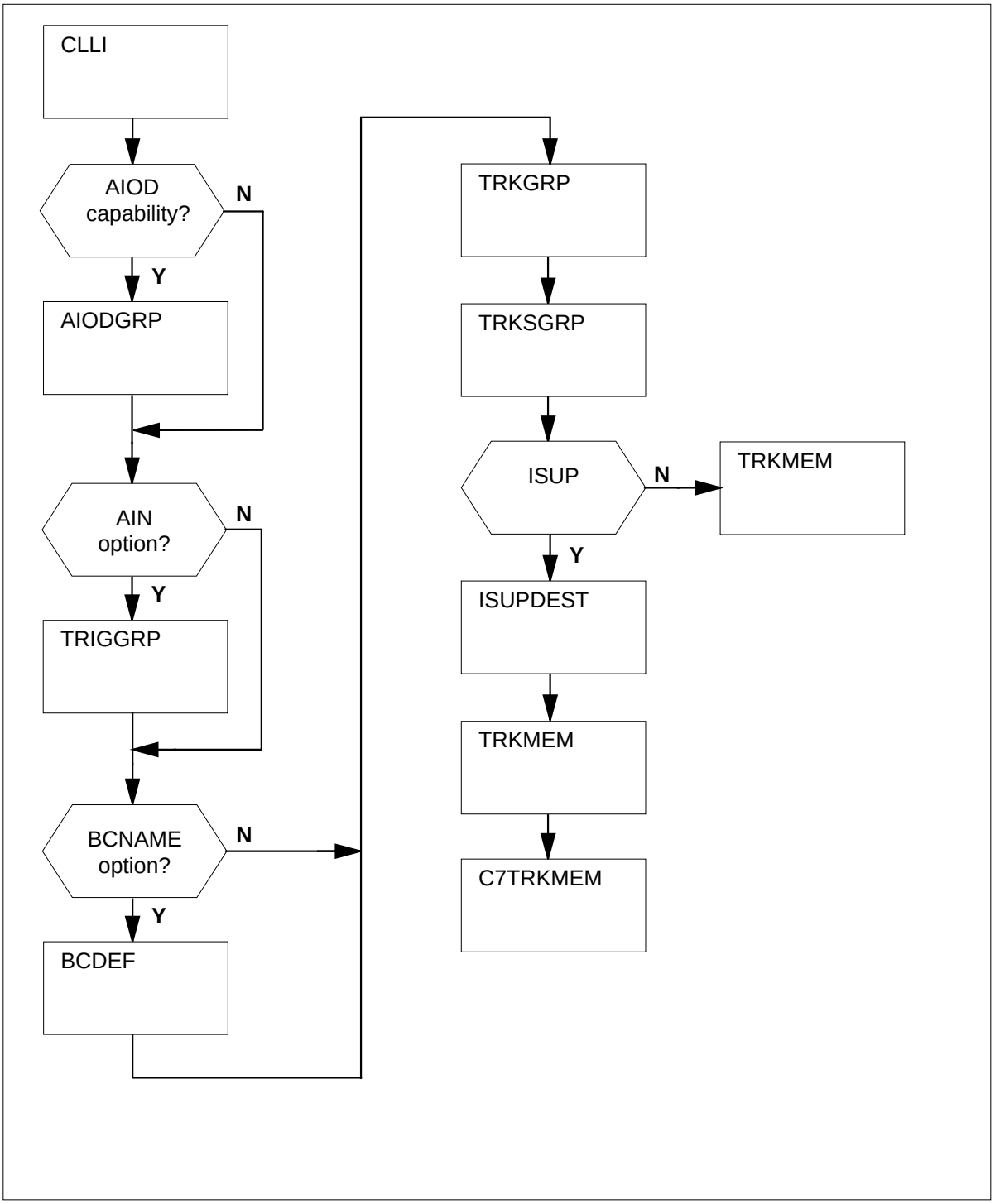
After table TRKSGRP is datafilled, table ISUPDEST must be datafilled in order to identify the routeset associated with the ISUP IBN trunk subgroup. After table ISUPDEST is datafilled, trunks can be added to table TRKMEM in the normal manner.

Table C7TRKMEM must be datafilled to associate the ISUP IBN trunks with a circuit identification code.

The following figure shows the datafill dependencies for IBNTI trunk groups.

IBNTI trunk groups (continued)

Datafill dependencies for IBNTI trunk groups



IBNTI trunk groups (continued)

Limitations and restrictions

The following limitations and restrictions apply to IBNTI trunk groups:

- If parameter TRK_OOS_CHK_ON in table OFCVAR is set to Y, all trunks in the group must be busied before changing the value of table TRKGRP fields CUSTNAME, SUBGRPNO, NCOS, SUPV, INTRAGRP, DIGIT0, DIGIT1, DTI, TES, TRC, ALTNCOS, LSCFN, ALTLSCFN, LSCINCPT, and ALSCINCP by data modification order (DMO).
- If digital trunks are used by digital data, they must have the pad group set to 0 (zero) in both directions.
- The Station Message Detail Recording (SMDR) feature can only be provided if the switching unit has the option SMDR_OFFICE set to Y in table OFCOPT.
- Refer to the “Description" section for restrictions related to ISUP IBN trunks.

Refer to table TRKGRP (type IBNTI) in the data schema section of this document for more information on general datafill requirements for IBN trunk groups.

Billing

For information on billing, refer to the Bellcore format AMA translations section of this document.

IBNTI trunk groups (continued)

Datafilling office parameters

The following table shows the office parameters used by IBNTI trunk groups. For more information about office parameters, refer to *Office Parameters Reference Manual.*

Office parameters used by IBNTI trunk groups

Table name	Parameter name	Explanation and action
OFCENG	NUM_IBN_IXLA_EXT_BLOCKS	Enter the maximum number of MDC world system (international) translation extension blocks required for the engineering interval. The value entered here determines the maximum number of calls that can route to universal translations from MDC at any one time. The value should be equal to the maximum number of outgoing MDC (trunk group type IBNTO) trunks that carry international direct distance dialing (IDDD) through automatic route selection (ARS) traffic that can be reached when translating through table PXHEAD.
OFCOPT	FLEXIBLE_DIGIT_ANALYSIS	This parameter specifies whether the Flexible Digit Analysis feature is enabled. Flexible digit analysis improves digit collection on Centrex PCM30 line group controllers (PLGC). Enter Y. The default value is N.
	SMDR_OFFICE	This parameter specifies whether the switching unit has the Station Message Detail Recording (SMDR) feature.
OFCVAR	TRK_OOS_CHK_ON	This parameter specifies whether a check is made if the trunks in a trunk group are out of service when changing the values of specific fields in the table TRKGRP by DMO.

IBNTI trunk groups (continued)

Datafill sequence

The following table lists the tables used by IBNTI trunk groups. The tables are listed in the order in which they are to be datafilled.

Tables used by IBNTI trunk groups

Table	Purpose of table
CLLI	The common language location identifier table uniquely identifies the far end of each announcement, tone, or trunk group.
AIODGRP	The automatic identified outward dialing (AIOD) group table contains data used to define AIOD datalinks between a private branch exchange (PBX) and its host office. These links provide a means for billing outgoing calls from the PBX to individual PBX stations.
TRIGGRP	The trigger group table defines advanced intelligent network (AIN) behaviour that may be applied to IBNTI trunk groups.
BCDEF	The bearer capability definition table contains data that defines the various bearer capabilities that can be assigned to trunk groups.
TRKGRP	The trunk group table contains customer-defined data associated with each trunk group.
TRKSGRP	The trunk subgroup table contains supplementary information for each trunk group.
ISUPDEST	The CCS7 ISDN user part destination table specifies ISUP routeset names for IBN ISUP trunk subgroups.
TRKMEM	The trunk member table specifies the physical location of each trunk assigned to one of the trunk groups.
C7TRKMEM	The CCS7 trunk member table lists CCS7 circuit identification codes that are assigned to IBN ISUP trunk members.

The following table shows sample input for datafilling IBNTI trunk groups.

Sample input for IBNTI trunk groups (Sheet 1 of 2)

Table	Sample input
CLLI	NTBRAN 55 375 $
AIODGRP	BNRCAR TREATMENT 2
TRIGGRP	AINGRP1 ORIGATT OFFHKIMM DG AINEADIG $ XLA1 $
BCDEF	56KDATA RESDIG CIRCUIT NETWORK DTU NONE Y 56KBS

IBNTI trunk groups (continued)

Sample input for IBNTI trunk groups (Sheet 2 of 2)

Table	Sample input
TRKGRP	NTBRAN IBNTI 0 ACO NCRT BNRMC 0 6 N ANSDISC 0 N 7 N N N Y N 1 7 N N N N N SAT $ NATL AIN AINGRP1 BCNAME 56KDATA FACTYPE TDMTT $
TRKSGRP	NTBRAN 0 DS1SIG C7UP IC N N UNEQ NONE Q764 THRH TORONTO4 1
ISUPDEST	NTBRAN 0 C7RTESET2
TRKMEM	NTBRAN 101 0 DTC 10 5 24 $
C7TRKMEM	NTBRAN 101 121

Datafilling table CLLI

The following table shows the datafill specific to IBNTI for table CLLI. Only those fields that apply directly to IBNTI are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table CLLI

Field	Subfield or refinement	Entry	Explanation and action
CLLI		alphanumeric (1 to 16 characters)	Common language location identifier. Enter a CLLI code to uniquely identify the far end of the IBNTI trunk group. Only alphabetic characters, numeric characters, and _ (underscores) can be used to datafill this field. The first character must be alphabetic. For optimum use, a CLLI code must contain not more than 12 characters, as only the first 12 characters are displayed on the MAP (maintenance and administration position) display. When a CLLI code is displayed in a log report, the entire 16-character CLLI code appears.

Datafill example for table CLLI

The following example shows sample datafill for table CLLI.

MAP display example for table CLLI

```
CLLI              ADNUM   TRKGRSIZ                    ADMININF
-------------------------------------------------------------
NTBRAN             55      375                          $
```

Changing datafill for table CLLI

Use the standard table editor commands to change datafill for table CLLI.

Datafilling table AIODGRP

The following table shows the datafill specific to IBNTI for table AIODGRP. Only those fields that apply directly to IBNTI are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table AIODGRP

Field	Subfield or refinement	Entry	Explanation and action
AIODGRP		alphanumeric (1 to 16 characters)	Automatic identified outward dialing group. Enter the code that is assigned in table CLLI and represents the name of the AIOD group.
FAILDEF		RECORD or TREATMENT	Automatic identified outward dialing failure default. This field defines the action taken if the AIOD message is not received. Enter RECORD if the call is allowed to proceed, but is billed to the default PBX number or the PBX special billing number. Enter TREATMENT if a call is routed to the automatic identified outward dialing failure (AIFL) treatment.
TIMEOUT		0 to 3	Automatic identified outward dialing time out. Enter the length of time, in 1 s increments, that call processing is to wait if the AIOD message is late.

Datafill example for table AIODGRP

The following example shows sample datafill for table AIODGRP.

IBNTI trunk groups (continued)

MAP display example for table AIODGRP

```
AIODGRP      FAILDEF      TIMEOUT
-------------------------------------------------------
BNRCAR        TREATMENT   2
```

Changing datafill for table AIODGRP

Use the standard table editor commands to change datafill for table AIODGRP.

Datafilling table TRIGGRP

The following table shows the datafill specific to IBNTI for table TRIGGRP. Only those fields that apply directly to IBNTI are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table TRIGGRP

Field	Subfield or refinement	Entry	Explanation and action
TRIGNAME		alphanumeric (up to 16 characters)	Advanced intelligent network trigger name. Enter the trigger name used to define a group of trigger behaviors. Table TRIGGRP associates a symbolic name to a grouping of subscribed trigger detection points (TDP) and their triggers. The symbolic name is bound against a type, an AIN group identifier, to be used in subscription tables.

Datafill example for table TRIGGRP

The following example shows sample datafill for table TRIGGRP.

MAP display example for table TRIGGRP

```
KEY       TRIGGER
                                                          TRIGDATA
-----------------------------------------------------------------------
AINGRP1   ORIGATT
                                    (OFFHKIM ( DG AINEADIG ) $ XLA1) $
```

IBNTI trunk groups (continued)

Changing datafill for table TRIGGRP

Use the standard table editor commands to change datafill for table TRIGGRP.

IBNTI trunk groups (continued)

Datafilling table BCDEF

The following table shows the datafill specific to IBNTI for table BCDEF. Only those fields that apply directly to IBNTI are shown. For a description of the other fields, refer to the data schema section of this document.

IBNTI trunk groups (continued)

Datafilling table BCDEF (Sheet 1 of 3)

Field	Subfield or refinement	Entry	Explanation and action
BCNAME		3_1KHZ, 7_1KHZ, 56KDATA, 64KDATA, 64KX25, 64_RATE_ AD_DATA, DATAUNIT, NILBC, SPEECH, or VOICE_ DATA	Bearer capability name. This subfield is the key to the table. It specifies a user-defined name that describes the bearer capability (BC) and can describe the low layer capability. Enter 3_1KHZ for the default BC for calls originated from trunks other than primary rate interface (PRI), ISDN user part (ISUP), intermachine trunk (IMT), and dedicated access line (DAL). This BC is used primarily for the transport of speech and voiceband data. Enter 7_1HKZ for voice band high quality audio and voice band data. This BC is used for high quality audio applications such as music. It can also be used for voiceband data. Enter 56KDATA for the basic 56-kbit data adapted for 64-kbit data. This is the North American typical data rate. This BC uses only 7 bits of data sampled at 8000 times per second for the 56-kbit rate. The eighth bit of every octet is 1, so that an all 0 (zero) octet does not occur and cause the problems that can occur with 64KDATA.

IBNTI trunk groups (continued)

Datafilling table BCDEF (Sheet 2 of 3)

Field	Subfield or refinement	Entry	Explanation and action
			Enter 64KDATA for ISDN circuit switched packet data calls. This BC is 64 kbit/s of clear channel data. This BC uses all of the 64-kbit bandwidth for data and 16 consecutive 0s (zero) can occur. Most operating companies in North America use 56-kbit/s data transport because of the problems that can occur with North American repeaters if 16 consecutive 0s (zeros) are received. Techniques such as B8ZS can be used on the data to alleviate the problem. Enter 64KX25 for packet data calls in the X.25 packet network. The data is encoded according to X.25 protocol. Enter 64_RATE_AD_DATA if the data stream contains less than 64 kbit/s and the stream is bit-stuffed to a 64-kbit/s data rate. This BC is used for applications where the data rate is less than 64 kbit/s (2400, 4800, 9600, 19 600, 16 000, 32 000, 48 000) and the remaining bandwidth on the channel is stuffed according to the CCITT protocols regarding rate adaption. Enter DATAUNIT for the basic 56KDATA adapted for 64KDATA on primarily non-ISDN data units. This BC is equivalent to the 56KDATA BC. Enter NILBC if bearer capability is not required for the call, for example, plain ordinary telephone service (POTS) calls.

Datafilling table BCDEF (Sheet 3 of 3)

Field	Subfield or refinement	Entry	Explanation and action
			Enter SPEECH for the default BC for calls originated from 500/2500 sets, electronic business sets (Northern Telecom multikey business set), or attendant consoles (Northern Telecom Integrated Business Network [IBN] attendant console). This BC is also assigned to calls over trunks. This BC is used primarily for the transport of speech. It can also be used to transport voiceband data, if voice compression techniques are not used on the data. Enter VOICE_DATA for backward compatibility with the DMS-250 feature AD0499 (DAL and IMT Switched 56 KB Data and Multiple PINs per Auth CP), available in feature packages NTX222AB [DMS-250 Call Processing Type II] and NTX222BA (DMS-250 Call Processing [Type II]). This BC is used only on the DMS-250 switch.

Datafill example for table BCDEF

The following example shows sample datafill for table BCDEF.

MAP display example for table BCDEF

```
BCNAME                                                  BCDATA
-------------------------------------------------------------
56KDATA           RESDIG CIRCUIT NETWORK DTU NONE Y 56KBS
```

Changing datafill for table BCDEF

Use the standard table editor commands to change datafill for table BCDEF.

IBNTI trunk groups (continued)

Datafilling table TRKGRP

The following table shows the datafill specific to IBNTI for table TRKGRP. Only those fields that apply directly to IBNTI are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table TRKGRP

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 the following subfields: GRPTYP, TRAFSNO, PADGRP, NCCLS, CUSTNAME, SUBGRPNO, NCOS, BILLDN, SUPV, DISCTSEL, INTRAGRP, DIGIT0, DIGIT1, DTI, TES, CDR, SMDR, TRC, ALTNCOS, TRKDSR, PREEMPT, AIODOPT, REORIG, OFFNETOPT, CALLCHR, COFFTYP, and OPTIONS. Refer to table TRKGRP (type IBNTI) in the data schema section of this document for a description of these subfields.
	GRPTYP	IBNTI	Group type. Enter IBNTI. This is the group type for incoming IBN trunks.

Datafill example for table TRKGRP

The following example shows sample datafill for table TRKGRP.

MAP display example for table TRKGRP

```
GRPKEY
                                                        GRPINFO
-------------------------------------------------------------
NTBRAN
IBNTI 0 ACO NCRT BNRMC 0 6 N ANSDISC 0 N 7 N N N Y N 1 7
N N N N N SAT $ NATL ANI ANIGRP1 BCNAME 56KDATA FACTYPE
TDMTT $
```

Changing datafill for table TRKGRP

If office parameter TRK_OOS_CHK_ON in table OFCVAR is set to Y, all trunks in the trunk group must be taken out of service before changing the value of certain fields in table TRKGRP.

Datafilling table TRKSGRP

The following table shows the datafill specific to IBNTI for table TRKSGRP. Only those fields that apply directly to IBNTI are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table TRKSGRP

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 CLLI code assigned to the trunk group as datafilled in table CLLI.
	SGRP	0 or 1	Subgroup number. Enter the subgroup number assigned to the trunk group.
CARDCODE		DS1SIG	Card code. Enter DS1SIG.
SGRPVAR		see subfield	Variable subgroup data. This field consists of subfield SIGDATA and refinement DIR.
	SIGDATA	C7UP	Signaling data. Enter C7UP for IBN ISUP trunk groups.
	DIR	IC	Direction. Enter IC to specify the trunk group direction as incoming. The entry must match the entry in table TRKGRP.

Datafill example for table TRKSGRP

The following example shows sample datafill for table TRKSGRP.

IBNTI trunk groups (continued)

MAP display example for table TRKSGRP

```
           SGRPKEY    CARDCODE
SGRPVAR
                                                          SGRPVAR
-----------------------------------------------------------------
           NTBRAN 0   DS1SIG
C7UP
                   IC N N UNEQ NONE Q764 THRH     TORONTO4 1
```

Changing datafill for table TRKSGRP

Use the standard table editor commands to change datafill for table TRKSGRP.

Datafilling table ISUPDEST

The following table shows the datafill specific to IBNTI for table ISUPDEST. Only those fields that apply directly to IBNTI are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table ISUPDEST

Field	Subfield or refinement	Entry	Explanation and action
DESTKEY		see subfields	Destination key. This field consists of subfields CLLI and SGRP.
	CLLI	alphanumeric (1 to 16 characters)	Common language location identifier. Enter the CLLI code assigned to the ISUP, BTUP, or MBTUP trunk subgroup in table CLLI.
	SGRP	0 or 1	Subgroup number. Enter the number assigned to the trunk subgroup.
ISUPROUT		alphanumeric (1 to 16 characters)	CCS7 ISDN user part routeset name. Enter the routeset name that provides the network and point code information from table C7RTESET. This specifies the portion of the signaling network identifier (SNID) that is logically associated with this trunk group. The routeset name entered here must already be datafilled in table C7TRTESET.

Datafill example for table ISUPDEST

The following example shows sample datafill for table ISUPDEST.

MAP display example for table ISUPDEST

```
DESTKEY      ISUPROUT
-------------------------------------------------------
NTBRAN 0     C7RTESET2
```

Changing datafill for table ISUPDEST

Use the standard table editor commands to change datafill for table ISUPDEST.

Datafilling table TRKMEM

The following table shows the datafill specific to IBNTI for table TRKMEM. Only those fields that apply directly to IBNTI are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table TRKMEM

Field	Subfield or refinement	Entry	Explanation and action
CLLI		alphanumeric (1 to 16 characters)	Common language location identifier. Enter the CLLI code assigned in table CLLI to the trunk group of which the trunk is a member.
EXTRKNM		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.
SGRP		0 or 1	Subgroup number. Enter the subgroup number to which the trunk is assigned.

Datafill example for table TRKMEM

The following example shows sample datafill for table TRKMEM.

IBNTI trunk groups (continued)

MAP display example for table TRKMEM

```
CLLI           EXTRKNM  SGRP                              MEMVAR
-------------------------------------------------------------------
NTBRAN         101      0                          DTC 10 5 24 $
```

Changing datafill for table TRKMEM

Use the standard table editor commands to change datafill for table TRKMEM.

Datafilling table C7TRKMEM

The following table shows the datafill specific to IBNTI for table C7TRKMEM. Only those fields that apply directly to IBNTI are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table C7TRKMEM

Field	Subfield or refinement	Entry	Explanation and action
MEMKEY		see subfields	Member key. This field consists of subfields CLLI and MEMNAME.
	CLLI	alphanumeric (1 to 16 characters)	Common language location identifier. Enter the code assigned in table CLLI to the trunk group that the trunk is a member of.
	MEMNAME	0 to 9999	Trunk member number. Enter the member number assigned to the trunk. This number is assigned in field EXTRKNM of table TRKMEM.
CIC		0 to 16383	CCS7 circuit identification code. Enter a digit to represent the CIC of the trunk circuit. Allocate CICs contiguously (top down, bottom up, or both) to make the most efficient use of data store. For CCITT trunks, the valid range is limited to 0 to 4095.

Datafill example for table C7TRKMEM

The following example shows sample datafill for table C7TRKMEM.

MAP display example for table C7TRKMEM

```
MEMKEY        CIC
------------------------------------------------------
NTBRAN 101    121
```

Changing datafill for table C7TRKMEM

Use the standard table editor commands to change datafill for table C7TRKMEM.

IBNTO trunk groups

IBNTO trunk group functionality codes

BAS00003

Release applicability

TL03 and up

Prerequisites

IBNTO trunk groups have no functional group prerequisites.

Description

In a Meridian Digital Centrex (MDC) end office, IBN trunk groups connect other MDC offices to provide one- or two-way access between IBN customer groups.

There are three types of IBN trunk groups: incoming (IBNTI), outgoing (IBNTO), and two way (IBNT2). Each trunk group is assigned a code in table CLLI.

Each trunk group must be assigned to a customer group.

ISDN user part IBN trunk groups

ISDN user part (ISUP) IBN trunk groups are datafilled in much the same manner as basic IBN trunk groups. The following table shows datafill restrictions that apply to certain fields in table TRKGRP for ISUP IBNTO trunk groups.

ISUP IBNTO trunk group field values in table TRKGRP

Field name	Value	Notes
DISCTSEL	0	ISUP trunks currently use 200-ms disconnect filter timing.
FDN	N	FX toll denied service is not supported.
FDV	N	FX toll diverted service is not supported.
FLASH	N	Flash capability is not supported.
PREEMPT	N	For Northern Telecom use only.
MTR	N	Meter reception is not supported.

After datafilling table TRKGRP, an IBN trunk group is identified as an ISUP trunk group by setting field SIGDATA in table TRKSGRP to C7UP.

IBNTO trunk groups (continued)

In table TRKSGRP, for any one trunk group, it is not possible to have one trunk subgroup datafilled with C7UP signaling and the other datafilled with non-C7UP signaling.

The MDC switch will reject the TRKSGRP tuple for an ISUP IBN trunk that does not have the appropriate datafill in table TRKGRP.

The following error message is generated to indicate any datafill errors in tables TRKGRP and TRKSGRP:

```
TUPLE IS NOT ACCEPTABLE FOR ISUP SIGNALING
```

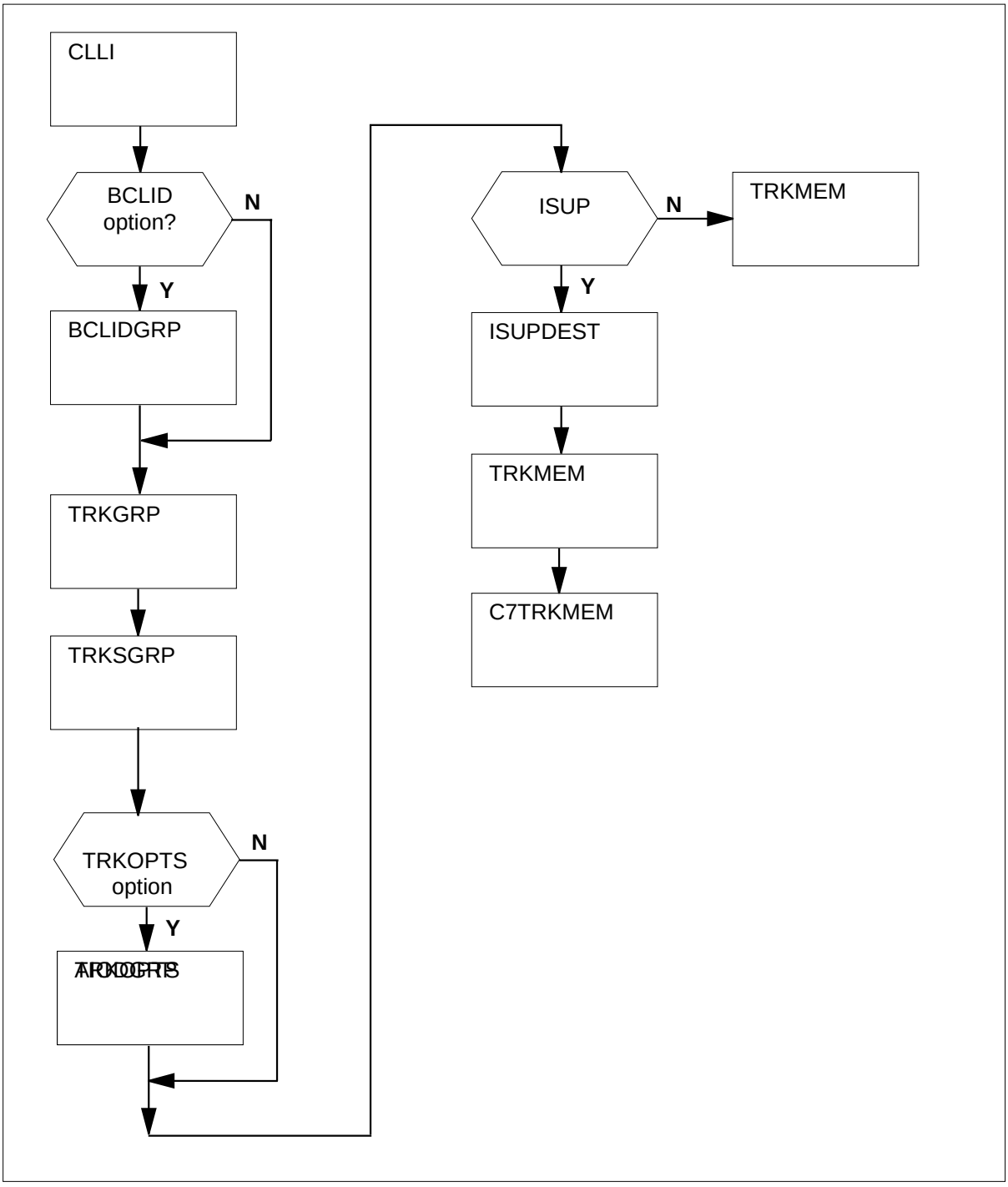
After table TRKSGRP is datafilled, table ISUPDEST must be datafilled in order to identify the routeset associated with the ISUP IBN trunk subgroup. After table ISUPDEST is datafilled, trunks can be added to table TRKMEM in the normal manner.

Table C7TRKMEM must be datafilled to associate the ISUP IBN trunks with a circuit identification code.

The following figure shows the datafill dependencies for IBNTO trunk groups.

IBNTO trunk groups (continued)

Datafill dependencies for IBNTO trunk groups



IBNTO trunk groups (continued)

Limitations and restrictions

The following limitations and restrictions apply to IBNTO trunk groups:

- If parameter TRK_OOS_CHK_ON in table OFCVAR is set to Y, all trunks in the group must be busied before changing the value of table TRKGRP fields CUSTNAME, SUBGRPNO, NCOS, SUPV, INTRAGRP, DIGIT0, DIGIT1, DTI, TES, TRC, ALTNCOS, LSCFN, ALTLSCFN, LSCINCPT, and ALSCINCP by data modification order (DMO).
- If digital trunks are used by digital data, they must have the pad group set to 0 (zero) in both directions.
- The Station Message Detail Recording (SMDR) feature can only be provided if the switching unit has the option SMDR_OFFICE set to Y in table OFCOPT.
- Refer to the “Description" section for restrictions related to ISUP IBN trunks.
- If option DLYFWDXMT is datafilled in table TRKOPTS, all trunk members of that trunk group must terminate to a DTC or an LTC. The exec line up in table LTCINV must be specified as DTCEX, DTCFX, or FXODTC.

Refer to table TRKGRP (type IBNTI) in the data schema section of this document for more information on general datafill requirements for IBN trunk groups.

Billing

For information on billing, refer to the “Bellcore format AMA translations" section of this document.

IBNTO trunk groups (continued)

Datafilling office parameters

The following table shows the office parameters used by IBNTO trunk groups. For more information about office parameters, refer to *Office Parameters Reference Manual.*

Office parameters used by IBNTO trunk groups

Table name	Parameter name	Explanation and action
OFCENG	NUM_IBN_ IXLA_EXT_BLOC KS	Enter the maximum number of MDC world system (international) translation extension blocks required for the engineering interval. The value entered here determines the maximum number of calls that can route to universal translations from MDC at any one time. The value should be equal to the maximum number of outgoing MDC (trunk group type IBNTO) trunks that carry international direct distance dialing (IDDD) through automatic route selection (ARS) traffic that can be reached when translating through table PXHEAD.
OFCOPT	FLEXIBLE_ DIGIT_ANALYSIS	This parameter specifies whether the Flexible Digit Analysis feature is enabled. Flexible digit analysis improves digit collection on Centrex PCM30 line group controllers (PLGC). Enter Y. The default value is N.
OFCVAR	TRK_OOS_ CHK_ON	This parameter specifies whether a check is made if the trunks in a trunk group are out of service when changing the values of specific fields in the table TRKGRP by DMO.

Datafill sequence

The following table lists the tables used by IBNTO trunk groups. The tables are listed in the order in which they are to be datafilled.

Tables used by IBNTO trunk groups (Sheet 1 of 2)

Table	Purpose of table
CLLI	The common language location identifier table uniquely identifies the far end of each announcement, tone, or trunk group.
BCLIDGRP	The bulk calling line identification group table lists Bulk Calling Line Identification (BCLID) group numbers with their respective assigned features and data channel links.
TRKGRP	The trunk group table contains customer-defined data associated with each trunk group.
TRKSGRP	The trunk subgroup table contains supplementary information for each trunk group.

IBNTO trunk groups (continued)

Tables used by IBNTO trunk groups (Sheet 2 of 2)

Table	Purpose of table
TRKOPTS	The trunk options table contains data that is used to define the options associated with this trunk group.
ISUPDEST	The CCS7 ISDN user part destination table specifies ISUP routeset names for IBN ISUP trunk subgroups.
TRKMEM	The trunk member table specifies the physical location of each trunk assigned to one of the trunk groups.
C7TRKMEM	The CCS7 trunk member table lists CCS7 circuit identification codes that are assigned to IBN ISUP trunk members.

The following table shows sample input for datafilling IBNTO trunk groups.

Tables used by IBNTO trunk groups

Table	Sample input
CLLI	NTBELL 55 300 $
BCLIDGRP	12 N 15195551212 FIRST Y Y N N Y N HOST 001 0 01 10 $
TRKGRP	NTBELL IBNTO 0 ACO NCBN BNRMC 2 ASEQ ANSDISC 0 Y 5 5 4 5 N N N N N N N NATL BCLID 12 FACTYPE TDMTT $
TRKSGRP	NTBELL 0 DS1SIG C7UP OG N N UNEQ NONE Q764 THRH 10 TORONTO4 1
ISUPDEST	NTBELL 0 C7RTESET1
TRKMEM	NTBELL 101 0 DTC 6 1 9 $
C7TRKMEM	NTBELL 101 122

IBNTO trunk groups (continued)

Datafilling table CLLI

The following table shows the datafill specific to IBNTO for table CLLI. Only those fields that apply directly to IBNTO are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table CLLI

Field	Subfield or refinement	Entry	Explanation and action
CLLI		alphanumeric (1 to 16 characters)	Common language location identifier. Enter a CLLI code to uniquely identify the far end of the IBNTO trunk group. Only alphabetic characters, numeric characters, and _ (underscores) can be used to datafill this field. The first character must be alphabetic. For optimum use, a CLLI code must contain not more than 12 characters, as only the first 12 characters are displayed on the MAP (maintenance and administration position) display. When a CLLI code is displayed in a log report, the entire 16-character CLLI code appears.

Datafill example for table CLLI

The following example shows sample datafill for table CLLI.

MAP display example for table CLLI

```
  CLLI          ADNUM  TRKGRSIZ                    ADMININF
-------------------------------------------------------------
NTBELL              55       300                          $
```

Changing datafill for table CLLI

Use the standard table editor commands to change datafill for table CLLI.

Datafilling table BCLIDGRP

The following table shows the datafill specific to IBNTO for table BCLIDGRP. Only those fields that apply directly to IBNTO are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table BCLIDGRP

Field	Subfield or refinement	Entry	Explanation and action
BCGRPNUM		0 to 2047	Bulk calling group number. Enter the BCLID group number. This is the index into the table. Assign the group numbers in numerical order so that data store usage is minimized.

Datafill example for table BCLIDGRP

The following example shows sample datafill for table BCLIDGRP.

MAP display example for table BCLIDGRP

```
BCGRPNUM USP     BILLDN DNDISP DATE TIME INTRAGRP CFIND       BSYSEND
DSP800DN                                                     BCLNKLEN
_____________________________________________________________________
      12   N 15195551212  FIRST    Y    Y       N     N             Y
       N                                          HOST 001 0 01 10 $
```

Changing datafill for BCLIDGRP

Use the standard table editor commands to change datafill for table BCLIDGRP.

IBNTO trunk groups (continued)

Datafilling table TRKGRP

The following table shows the datafill specific to IBNTO for table TRKGRP. Only those fields that apply directly to IBNTO are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table TRKGRP

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 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, CUSTNAME, SUBGRP, SELSEQ, SUPV, DISCTSEL, INTRAGRP, LSCFN, ALTLSCFN, LSCINCPT, ALSCINCP, IGA, FDN, FDV, FLASH, PREEMPT, MTR, COFFTYP, and OPTIONS. Refer to table TRKGRP (type IBNTO) in the data schema section of this document for a description of these subfields.
	GRPTYP	IBNTO	Group type. Enter IBNTO. This is the trunk group type for outgoing Integrated Business Network (IBN) trunks.

Datafill example for table TRKGRP

The following example shows sample datafill for table TRKGRP.

MAP display example for table TRKGRP

```
GRPKEY
                                                        GRPINFO
-------------------------------------------------------------
NTBELL
        IBNTO 0 ACO NCBN BNRMC 2 ASEQ ANSDISC 0 Y 5 5 4 5
N N N N N N NATL BCLID 12 FACTYPE TDMTT $
```

Changing datafill for table TRKGRP

If office parameter TRK_OOS_CHK_ON in table OFCVAR is set to Y, all trunks in the trunk group must be taken out of service before changing the value of certain fields in table TRKGRP.

Datafilling table TRKSGRP

The following table shows the datafill specific to IBNTO for table TRKSGRP. Only those fields that apply directly to IBNTO are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table TRKSGRP

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 CLLI code assigned to the trunk group as datafilled in table CLLI.
	SGRP	(0 or 1)	Subgroup number. Enter the subgroup number assigned to the trunk group.
CARDCODE		DS1SIG	Card code. Enter DS1SIG.
SGRPVAR		see subfield	Variable subgroup data. This field consists of subfield SIGDATA and refinement DIR.
	SIGDATA	C7UP	Signaling data. Enter C7UP for IBN ISUP trunk groups.
	DIR	OG	Direction. Enter OG to specify the trunk group direction as outgoing. The entry must match the entry in table TRKGRP.

Datafill example for table TRKSGRP

The following example shows sample datafill for table TRKSGRP.

IBNTO trunk groups (continued)

MAP display example for table TRKSGRP

```
           SGRPKEY    CARDCODE
SGRPVAR                                                    SGRPVAR
-----------------------------------------------------------------
          NTBELL 0      DS1SIG
   C7UP
                    OG N N UNEQ NONE Q764 THRH 10 TORONTO4 1
```

Changing datafill for table TRKSGRP

Use the standard table editor commands to change datafill for table TRKSGRP.

Datafilling table TRKOPTS

The following table shows the datafill specific to IBNTO for table TRKOPTS. Only those fields that apply directly to IBNTO are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table TRKOPTS

Field	Subfield or refinement	Entry	Explanation and action
CLLI		alphanumeric (1 to 16 characters)	Common language location identifier. Enter the CLLI code of this trunk group.
	OPTNAME	DLYFWD-XMT	Option code, enter DLYFWDXMT, delay forward transmission.
	TIMEOUT	0, 1, 2, 3, 4, or 5	Specifies the maximum time the system will wait for an answer supervision signal before taking down the speech path. A timeout value of 0 prevents the timeout timer from starting. The forward speech path will be blocked until an answer supervision signal is received or one of the parties goes onhook. Time is specified in minutes.

Datafill example for table TRKOPTS

The following example shows sample datafill for table TRKOPTS.

MAP display example for table TRKOPTS

```
  CLLI                  OPTNAME              OPTINFO

------------------------------------------------------------
IBNTO_MONTREAL        DLYFWDXMT          DLYFWDXMT   2
WARNING: This option will block the forward speech path
until an answer message is returned from the far-end
trunk. If no answer message is received, the forward
speech path will never be established.

TUPLE TO BE CHANGED:
IBNTO_MONTREAL  DLYFWDXMT  DLYFWDXMT  2
ENTER Y TO CONFIRM, N TO REJECT OR E TO EDIT
Y
TUPLE CHANGED
JOURNAL FILE INACTIVE
```

Changing datafill for table TRKOPTS

Use the standard table editor commands to change datafill for table TRKOPTS.

Datafilling table ISUPDEST

The following table shows the datafill specific to IBNTO for table ISUPDEST. Only those fields that apply directly to IBNTO are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table ISUPDEST (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
DESTKEY		see subfields	Destination key. This field consists of subfields CLLI and SGRP.
	CLLI	alphanumeric (1 to 16 characters)	Common language location identifier. Enter the CLLI code assigned to the ISUP, BTUP, or MBTUP trunk subgroup in table CLLI.

IBNTO trunk groups (continued)

Datafilling table ISUPDEST (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
	SGRP	0 or 1	Subgroup number. Enter the number assigned to the trunk subgroup.
ISUPROUT		alphanumeric (1 to 16 characters)	CCS7 ISDN user part routeset name. Enter the routeset name that provides the network and point code information from table C7RTESET. This specifies the portion of the signaling network identifier (SNID) that is logically associated with this trunk group. The routeset name entered here must already be datafilled in table C7TRTESET.

Datafill example for table ISUPDEST

The following example shows sample datafill for table ISUPDEST.

MAP display example for table ISUPDEST

```
  DESTKEY      ISUPROUT
-------------------------------------------------------
 NTBELL 0    C7RTESET1
```

Changing datafill for table ISUPDEST

Use the standard table editor commands to change datafill for table ISUPDEST.

Datafilling table TRKMEM

The following table shows the datafill specific to IBNTO for table TRKMEM. Only those fields that apply directly to IBNTO are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table TRKMEM

Field	Subfield or refinement	Entry	Explanation and action
CLLI		alphanumeric (1 to 16 characters)	Common language location identifier. Enter the CLLI code assigned in table CLLI to the trunk group of which the trunk is a member.
EXTRKNM		(0 to 9999)	External trunk number. Enter the external trunk number that is assigned to the trunk.
SGRP		(0 or 1)	Subgroup number. Enter the subgroup number to which the trunk is assigned.

Datafill example for table TRKMEM

The following example shows sample datafill for table TRKMEM.

MAP display example for table TRKMEM

```
  CLLI         EXTRKNM  SGRP                          MEMVAR
-------------------------------------------------------------
NTBELL             101     0                    DTC 6 1 9 $
```

Changing datafill for table TRKMEM

Use the standard table editor commands to change datafill for table TRKMEM.

Datafilling table C7TRKMEM

The following table shows the datafill specific to IBNTO for table C7TRKMEM. Only those fields that apply directly to IBNTO are shown. For

IBNTO trunk groups (end)

a description of the other fields, refer to the data schema section of this document.

Datafilling table C7TRKMEM

Field	Subfield or refinement	Entry	Explanation and action
MEMKEY		see subfields	Member key. This field consists of subfields CLLI and MEMNAME.
	CLLI	alphanumeric (1 to 16 characters)	Common language location identifier. Enter the code assigned in table CLLI to the trunk group that the trunk is a member of.
	MEMNAME	(0 to 9999)	Trunk member number. Enter the member number assigned to the trunk. This number is assigned in field EXTRKNM of table TRKMEM.
CIC		(0 to 16383)	CCS7 circuit identification code. Enter a digit to represent the circuit identification code (CIC) of the trunk circuit. Allocate CICs contiguously (top down, bottom up, or both) to make the most efficient use of data store. For CCITT trunks, the valid range is limited to 0 to 4095.

Datafill example for table C7TRKMEM

The following example shows sample datafill for table C7TRKMEM.

MAP display example for table C7TRKMEM

```
    MEMKEY    CIC
-------------------------------------------------------
NTBELL 101    122
```

Changing datafill for table C7TRKMEM

Use the standard table editor commands to change datafill for table C7TRKMEM.

IET trunk groups

IET trunk group functionality codes

IET trunk groups have no functionality codes.

Release applicability

TL03 and up

Prerequisites

IET trunk groups have no functional group prerequisites.

Description

The interworking for interexchange trunks (IET) is provided for by datafilling the following tables:

- CLLI
- TRKGRP
- TRKSGRP
- TKSIGSYS
- TRKMEM
- call processing universal translations tables (head, code, and route)

The trunk group is first identified in table CLLI. Table TRKGRP is then used to identify the translations system to be used for call processing.

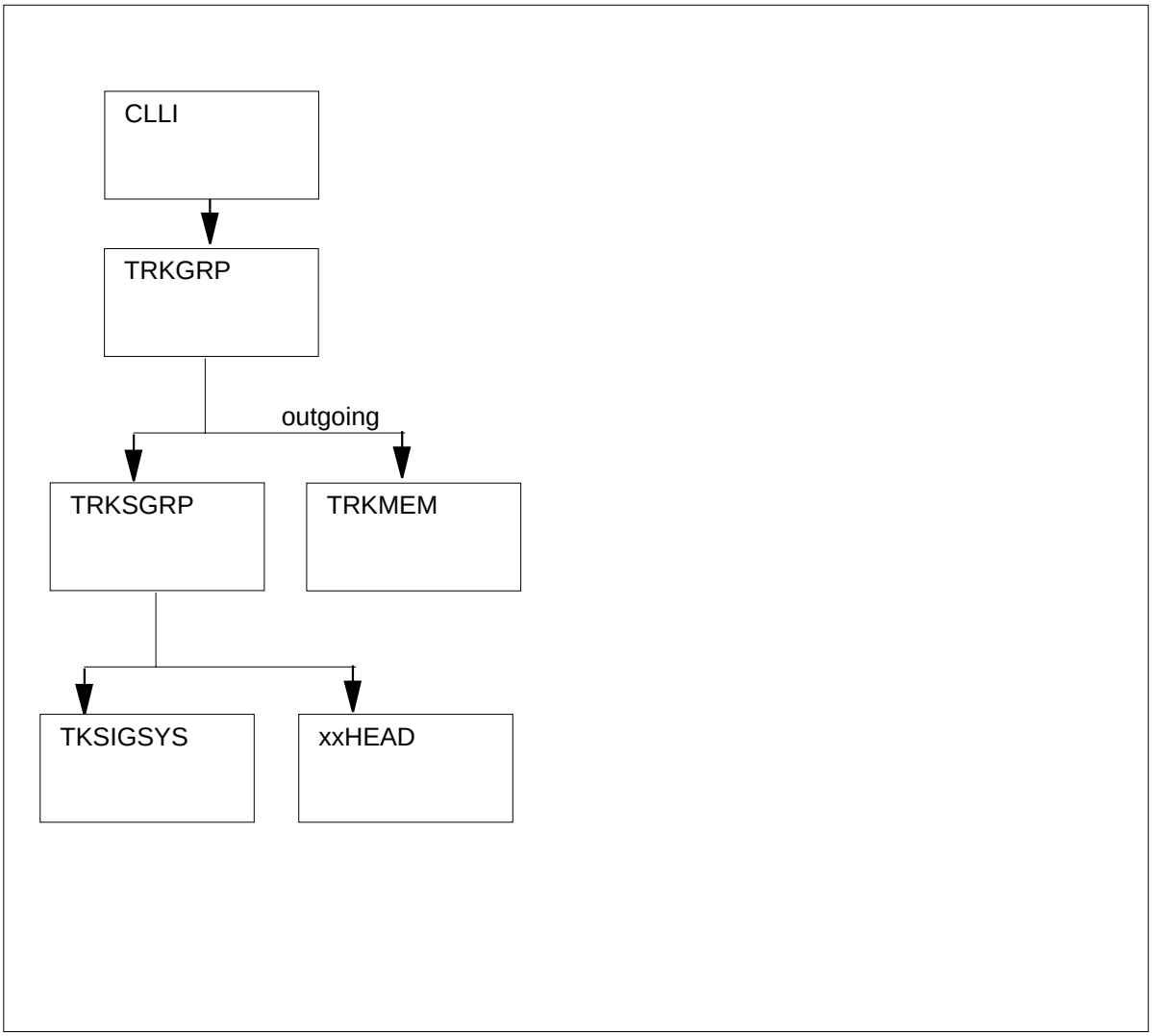
Table TRKSGRP is accessed after table TRKGRP using the common language location identifier (CLLI) code to determine the signaling protocol used by the trunk that transports the call. From table TRKSGRP, trunking dataflow advances to table TKSIGSYS for additional signaling parameters. The value from table TRKSGRP, field TKICSSI (for incoming trunks) or field TKOCSSI (for outgoing trunks), indexes field TKSIGIDX in table TKSIGSYS.

Table TRKMEM is accessed to determine the physical location of the circuit transporting the call. The CLLI code identifies the specific trunk.

The following figure shows the datafill dependencies for IET trunk groups.

IET trunk groups (continued)

Datafill dependencies for IET trunk groups



Limitations and restrictions

IET trunk groups have no limitations or restrictions.

Billing

For information on billing, refer to the Bellcore format AMA translations section of this document.

Datafilling office parameters

IET trunk groups do not affect office parameters.

IET trunk groups (continued)

Datafill sequence

The following table lists the tables used by IET trunk groups. The tables are listed in the order in which they are to be datafilled.

Datafill tables required for IET trunk groups

Table	Purpose of table
CLLI	The common language location identifier table identifies uniquely each announcement, tone and trunk group present in, or used by, the switch.
TRKGRP	The trunk group table lists data associated with a specific incoming, outgoing, or two-way call processing, test, or maintenance trunk group.
TKSIGSYS	The trunk signaling system table defines further signaling refinements through trunk signaling parameters that must be datafilled.
TRKSGRP	The trunk subgroup table defines the signaling protocol used by the call processing, test, or maintenance trunks.
TRKMEM	The trunk member table defines the physical location of all trunk circuits in the switch.
Note: Both an incoming and outgoing call processing trunk group type of interexchange trunk (IET) must be identified in tables TRKGRP, TRKSGRP, and TKSIGSYS.	

The following table lists example datafill for IET trunk groups.

Datafill example for IET trunk groups

Datafill table	Example data
CLLI	ICITRK01 401 24 IC_TRUNK_01 $
TRKGRP	ICTRK01 IET 0 NPDGP NCRT IC UNIV PX DMS200 $
TKSIGSYS	ABCDEFIC NTTMF IC 0 15 27 1 25 Y $
TRKSGRP	ICTRK01 0 DS1SIG JSTD IC MF RA Y ABCDEFIC $
TRKMEM	ICTRK01 1211 0 PDTC 0 11 1 $

Datafilling table CLLI

Table CLLI is a naming table containing codes that uniquely identify announcements, tones, and trunk groups used by the DMS-100 switch during call progression, call termination, maintenance, and testing. A maximum of 8192 trunk groups can be identified in table CLLI. Trunk group names must

IET trunk groups (continued)

be added to this table before they can be referenced by any other international DMS-100 table.

Table CLLI should include all call processing trunk groups, including international access lines and trunks, maintenance and test trunks, all tones, digital recorded announcement machines (DRAM), alarm distributor and scan groups, and announcements.

The following table shows the datafill specific to IET for table CLLI. Only those fields that apply directly to IET are shown. For a description of the other fields, refer to table CLLI in the data schema section of this document.

Datafilling table CLLI

Field	Subfield or refinement	Entry	Explanation and action
CLLI		alphanumeric (1 to 16 characters)	Common language location identifier. Enter a CLLI code to uniquely identify the far end of the IET trunk group. Only alphabetic characters, numeric characters, and _ (underscores) can be used to datafill this field. The first character must be alphabetic.

Datafill example for table CLLI

The following example shows sample datafill for table CLLI.

MAP display example for table CLLI

```
CLLI      ADNUM   TRKGRSIZ        ADMININF
-------------------------------------------------------
ICTRK01   401     24              IC_TRUNK_01
TRKLPBK   24      0               TRUNK_LOOP_BACK
NWMSC     8       100             NWM_SCAN_POINT
DRAM0     52      10              DRAM_CONTROLLER_0
OGTRK01   104     72              OG_TRUNK_01
```

Changing datafill for table CLLI

Use the standard table editor commands to change datafill for table CLLI.

Datafilling table TRKGRP

Table TRKGRP (trunk group) lists data associated with a specific incoming, outgoing, or two-way call processing, test, or maintenance trunk group. Each type of trunk group has a unique group type and data format.

IET trunk groups (continued)

Table TRKGRP is pointed to from table CLLI. Each trunk or line defined here must first be datafilled in table CLLI.

The following table shows the datafill specific to IET for table TRKGRP. Only those fields that apply directly to IET are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table TRKGRP (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 1 to 16 alphanumeric characters that uniquely identify the far end of the IET trunk group as documented in table CLLI.
GRPINFO			Variable group information. This field consists of subfields GRPTYP, TRAFSNO, PADGRP, NCCLS, and DIR. Note that among these subfields, only those directly affected by IET are described below.
	GRPTYP	IET	Group type. Enter IET for the interexchange trunk group type.
	DIR	IC or OG	Direction. Enter the direction of traffic flow on the trunk group. IC specifies an incoming trunk and OG specifies an outgoing trunk. If the entry is IC, datafill subfields SELSEQ, XLADSEL, XLASYS and XLANAME. If the entry is OG, datafill subfield SELSEQ.
Note: When defining incoming trunks, the fields XLASEL (translations selector), XLASYS (translator system) and XLANAME (translation name) point to a routing head table where the next step in translations occurs.			

IET trunk groups (continued)

Datafilling table TRKGRP (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
	SELSEQ	LIDL, MIDL, ASEQ, DSEQ, CWCTH, or CCWCTH	Seclection sequence. Enter the selection sequence. • LIDL (least idle) • MIDL (most idle) • ASEQ (ascending) • DSEQ (descending) • CWCTH (clockwise) • CCWCTH (counterclockwise) MIDL is the recommended value for IET trunks.
	XLADSEL	UNIV	Translations selector. Enter UNIV to specify universal translations.
	XLASYS	AC, PX, CT, FA, FT, OFC, AM, NIL, or NSC	Translation system. Enter the name of the translations system that is used first to screen the incoming digits for any calls coming in over this trunk group. • AC (access code) • PX (prefix) • CT (country code) • FA (foreign area (city code) • FT (utility code) • OFC (office code) • AM (ambiguous code) • NIL (no translations system) • NSC (number services code)
	XLANAME	alphanumeric (1 to 12 characters)	Translation name. Enter the 1- to 12-character translator name in the system named in XLASYS for translations use.
Note: When defining incoming trunks, the fields XLASEL (translations selector), XLASYS (translator system) and XLANAME (translation name) point to a routing head table where the next step in translations occurs.			

Datafill example for table TRKGRP

The following example shows sample datafill for table TRKGRP.

MAP display example for table TRKGRP

```
GRPKEY                                                    GRPINFO
_____________________________________________________________________
ICTRK01                IET  0 NPDGP NCRT IC UNIV PX DMS200
OGTRK01                           IET 0 NPDGP NCRT OG MIDL
```

Changing datafill for table TRKGRP

Use the standard table editor commands to change datafill for table TRKGRP.

Datafilling table TRKSGRP

Table TRKSGRP (trunk subgroup) defines the signaling protocol used by the call processing, test, or maintenance trunks.

Table TRKSGRP is pointed to from table TRKGRP by the clli code in field GRPKEY. It can create up to two subgroups in each trunk group. The fields in this table are both hardware- and software-oriented.

The following table shows the datafill specific to IET for table TRKSGRP. Only those fields that apply directly to IET are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table TRKSGRP (Sheet 1 of 3)

Field	Subfield or refinement	Entry	Explanation and action
SGRPKEY			Subgroup key. This field consists of subfields CLLI and SGRP.
	CLLI	alphanumeric (1 to 16 characters)	Common language location identifier. Enter a CLLI code that identifies the trunk group the subgroup belongs to.
Note: Field TKICSSI for incoming trunks and field TKOGSSI for outgoing trunks point to table TKSIGSYS for further signaling information for the trunk.			

IET trunk groups (continued)

Datafilling table TRKSGRP (Sheet 2 of 3)

Field	Subfield or refinement	Entry	Explanation and action
	SGRP	0 or 1	Subgroup. Enter 0 or 1 to identify the subgroup number, defined in table TRKMEM, that is associated with each circuit. Use 1 only if two signaling types are required in a trunk group.
CARDCODE		DS1SIG	Card code. Enter DS1SIG for IET trunk groups.
SGRPVAR		see subfields	Subgroup variable. This field consists of subfields SIGDATA and DIR.
	SIGDATA	JSTD	Signaling data. Enter JSTD for IET trunk groups.
	DIR	IC or OG	Direction. Enter the direction of traffic flow on the trunk subgroup. IC indicates an incoming trunk and OG indicates an outgoing trunk. This field must be the same as the DIR field in tables TRKGRP and TKSIGSYS for the associated tuple. If the entry for field DIR is IC datafill subfields IPULSTYP, ISTARSG, REMBSY, and TKICSSI. If the entry for field DIR is OG datafill subfields OPULSTYP, OSTARTSG, REMBSY, and TKOGSSI.
	IPULSTYP	MF	Incoming pulse type. Enter the incoming type of pulsing. For IET trunks, the field must be set to MF (multifrequency).
	ISTARTSG	RA	Incoming start signal. Enter the incoming start dial signaling. For IET trunks, the field must be set to RA (register attached).
	REMBSY	Y or N	Remote make busy. Enter Y or N for remote make busy. Y indicates that a blocking signal should be sent on an incoming trunk if the trunk is made manually busy.

Note: Field TKICSSI for incoming trunks and field TKOGSSI for outgoing trunks point to table TKSIGSYS for further signaling information for the trunk.

IET trunk groups (continued)

Datafilling table TRKSGRP (Sheet 3 of 3)

Field	Subfield or refinement	Entry	Explanation and action
	TKICSSI	alphanumeric 1 to 16 characters	Enter 1-to-16 characters to specify the index to table TKSIGSYS. The associated tuple in table TKSIGSYS must be datafilled before datafilling this subgroup tuple.
	OPULSTYP	MF	Outgoing pulse type. Enter the outgoing type of pulsing. For IET trunks, this field must be set to MF.
	OSTARTSG	RA	Outgoing start signal. Enter the type of outgoing start dial signaling. For IET trunks, the field must be set to RA (register attached).
	REMBSY	Y or N	Remote make busy. Enter Y or N to indicate if a blocking signal should be sent on an incoming trunk if the trunk is made manually busy.
	TKOGSSI	alphanumeric 1 to 16 characters	Enter 1 to 16 characters to specify the index to table TKSIGSYS. The associated tuple in TKSIGSYS must be datafilled before datafilling this subgroup tuple.
Note: Field TKICSSI for incoming trunks and field TKOGSSI for outgoing trunks point to table TKSIGSYS for further signaling information for the trunk.			

Datafill example for table TRKSGRP

The following example shows sample datafill for table TRKSGRP.

MAP display example for table TRKSGRP

```
         SGRPKEY     CARDCODE
SGRPVAR
                                                        SGRPVAR
-------------------------------------------------------------
         ICTRK01 0   DS1SIG
JSTD
                                          IC MF    RA Y ABCDEFIC
```

Changing datafill for table TRKSGRP

Use the standard table editor commands to change datafill for table TRKSGRP.

IET trunk groups (continued)

Datafilling table TKSIGSYS

Table TKSIGSYS (trunk signaling system) allows further signaling refinements by adding trunk signaling parameters to be datafilled. A tuple in table TKSIGSYS is referenced by an index in table TRKSGRP for each subgroup that uses a signaling selector supported in table TKSIGSYS.

Each tuple in this table contains parameters associated with a specific signaling system. These parameters are generally timers associated with specific signals. This table arrangement allows trunk subgroups associated with different trunk groups to use the same signaling system and the same set of signaling parameters, by having each of the trunk subgroup tuples (from table TRKSGRP) reference the same tuple in table TKSIGSYS.

The following table shows the datafill specific to IET for table TKSIGSYS. Only those fields that apply directly to IET are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table TKSIGSYS (Sheet 1 of 3)

Field	Subfield or refinement	Entry	Explanation and action
TKSIGIDX		alphanumeric (1 to 16 characters)	Trunk signaling index. Enter a 1- to 16-character value from field TKICISSI or TKOGSSI, from table TRKSGRP, which is used to index this table.
TKSSVAR		see subfields	This field consists of subfields TKSIGTYP and DIR. Depending on the datafill in DIR, other subfields are prompted.
	TKSIGTYP	NTTMF	Enter NTTMF. This entry is applicable to IET trunk groups only.
	DIR	IC or OG	Direction. Enter the direction of traffic flow on the trunk subgroup. IC indicates an incoming trunk and OG indicates an outgoing trunk. This field must be the same as the DIR field in tables TRKGRP and TRKSGRP for the associated tuple. If the entry for this field is IC, datafill subfields SRATDEL, RMAXKPDL, RMINCLF, RCLFDEL, RMAXDGDL, and TRDENBL. If the entry for this field is OG datafill subfields RMINRAT, RMINPTS, SMAXKP, SADRDEL, SMAXDIG, SDIGDEL, SDGCMPLT, SMAXST, RMSPTSDL and RRLCDEL.

IET trunk groups (continued)

Datafilling table TKSIGSYS (Sheet 2 of 3)

Field	Subfield or refinement	Entry	Explanation and action
	SRATDEL	0 to 255	Send preregister attached delay. Enter the time delay, in 10-ms units, between recognizing a seizure and sending a register attached signal. The default is 0.
	RMAXKPDL	1 to 40	Receive maximum key pulse delay. Enter the maximum amount of time in between sending the register attached signal and receiving the key pulse signal. The default is 0.
	RMINCLF	2 to 255 s	Receive minimum clear forward. Enter the minimum amount of time between receiving and recognizing the clear forward signal. The value represents a 10-ms unit. The default is 27.
	RCLFDEL	1 to 40 s	Receive clear forward delay. Enter the time delay between sending clear back (CLB) and going into lockout state. The default is 1.
	RMAXDGDL	1 to 40 s	Receive maximum digits delay. Enter the maximum amount of time between the start of KP and end of stop (ST) signals for receiving the address digits. The default is 20.
	TRDENBL	Y or N	Timed release disconnect enable. Enter Y or N. Y enables the RCLFDEL timer and SCLFDEL on outgoing trunks.
	RMINRAT	2 to 255 ms	Receive minimum register attached (RAT). Enter the minimum time between receiving and recognizing a RAT signal. The value represents a 10-ms unit. The default is 7.
	RMINPTS	2 to 255 ms	Receive minimum proceed to send (PTS). Enter the minimum time between receiving and recognizing a PTS signal. The value represents a 10-ms unit. The default is 7.
	SMAXKP	4 to 255 ms	Send maximum key pulse (KP). Enter the maximum KP duration. The value represents a 10-ms unit. The default is 100.

IET trunk groups (continued)

Datafilling table TKSIGSYS (Sheet 3 of 3)

Field	Subfield or refinement	Entry	Explanation and action
	SADRDEL	3 to 255 ms	Send address delay. Enter the time delay between reception of PTS and sending the first digit of the address. The value represents a 10-ms unit. The default is 16.
	SMAXDIG	5 to 255 ms	Send maximum digit. Enter the maximum length of each digit pulse. The value represents a 10-ms unit. The default is 4.
	SDIGDEL	3 to 255 ms	Send digit delay. Enter the interdigital time delay. The value represents a 10-ms unit. The default is 4.
	SDGCMPLT	3 to 255 ms	Send digit completion. Enter the time delay between the last address digit and the ST signal. The default value is 4.
	SMAXST	5 to 255 ms	Send maximum ST. Enter the maximum ST pulse duration. The default is 7.
	RMXPTSDL	1 to 40 s	Receive maximum proceed to send delay. Enter the maximum waiting time between sending a seizure signal and receiving a PTS signal. The default is 10.
	RRLCDEL	20 to 255 ms	Receive release complete (RLC) delay. Enter the wait time for the RLC signal to be returned after CLF is sent. The value represents a 10-ms unit. The default is 100.

Datafill example for table TKSIGSYS

The following example shows sample datafill for table TKSIGSYS.

MAP display example for table TKSIGSYS

```
TKSIGIDX                                                    TKSSVAR
_____________________________________________________________________
ABCDEFIC                      ABCMF IC   0  15  27  1  25  Y
ABCDEFOG          ABCMF OG   7  7  100  16 7 4 4 7 10 100
```

Changing datafill for table TKSIGSYS

Changes do not affect subsequent calls until all affected trunks are busied, then returned to service (RTS). Perform the following procedure to change datafill for table TKSIGSYS.

Changing datafill for table TKSIGSYS

At the MAP terminal

1 Access the TTP level of the MAP display by typing

`>MAPCI;MTC;TRKS;TTP`

and pressing the Enter key.

2 Post the trunk group by typing

`>POST G trunk_group_clli`

and pressing the Enter key.

where

trunk_group_clli
is the 1- to 16-character CLLI code assigned to the trunk group

3 Manually busy all trunks in the trunk group by typing

`>BSY ALL`

and pressing the Enter key.

Response:

```
STATE CHANGED
```

4 Make the required datafill changes for the trunk group using standard table editor commands.

5 Return the trunk group to service by typing

`>RTS ALL`

and pressing the Enter key.

Response:

```
STATE CHANGED
```

If	Do
passed	step 6
failed	step 7

6 Verify the tuple change.

7 Check for and clear any alarms that have occurred.

8 You have completed this procedure.

IET trunk groups (continued)

Datafilling table TRKMEM

The following table shows the datafill specific to IET for table TRKMEM. Only those fields that apply directly to IET are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table TRKMEM

Field	Subfield or refinement	Entry	Explanation and action
CLLI		alphanumeric (1 to 16 characters)	Common language location identifier. Enter the code assigned in table CLLI to the trunk group of which this trunk is a member.
EXTRKNM		0000 to 9999	External trunk. Enter a four-digit number in the range 0000 to 9999 to identify the external trunk number. For trunk members using the auto-identified outward dialing (AIOD) option, the external trunk number must be unique over all trunks and lines using the same AIOD group.
SGRP		0 or 1	Subgroup. Enter 0 or 1 to identify the subgroup number. This field should be the same as the subgroup number assigned in table TRKSGRP.
MEMVAR		see subfields	Member variables. Enter variable data for trunk members. This field consists of subfield PMTYPE and the refinements for PMTYPE.
	PMTYPE	PDTC	Peripheral module type. Enter PDTC as the peripheral module type on which the trunk is mounted.
	DEQNO	0 to 511	Digital equipment number. Enter a number from 0 to 511 to identify the digital equipment module number to which the trunk group member is assigned.
	DEQCKTNO	0 to 19	Digital equipment circuit board number. Enter a number from 0 to 19 to identify the digital equipment circuit board number to which the trunk group member is assigned.
	DEQCKTTS	1 to 30	Digital equipment circuit board time slot number. Enter a number from 1 to 30 to identify the digital equipment circuit board time slot number to which the trunk group member is assigned.

Datafill example for table TRKMEM

The following example shows sample datafill for table TRKMEM.

MAP display example for table TRKMEM

CLLI	EXDTRKNM	SGRP	MEMVAR
ICTRK01	1211	0	PDTC 0 11 1

Changing datafill for table TRKMEM

Use the standard table editor commands to change datafill for table TRKMEM.

INT101 trunk groups

Ordering codes

INT101 trunk groups have no ordering codes.

Release applicability

TL03 and up

Prerequisites

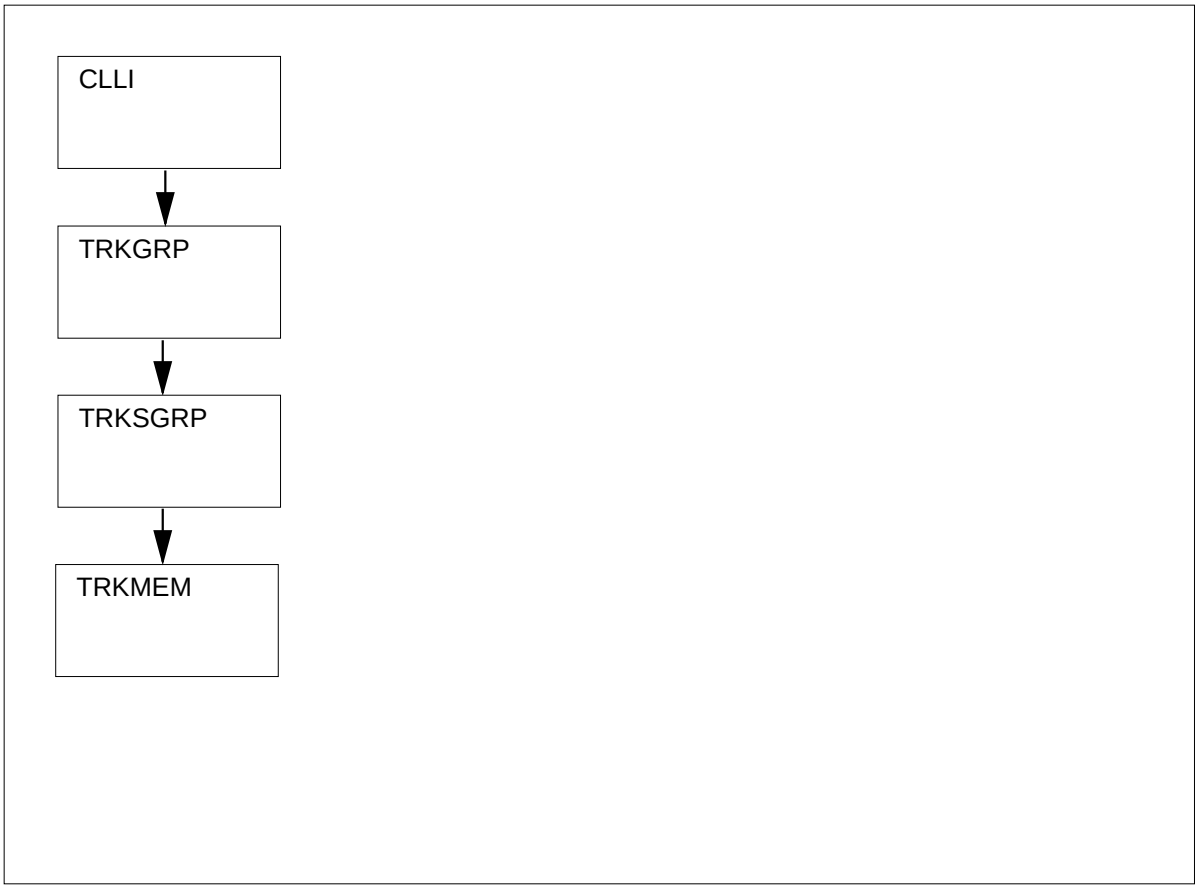
INT101 trunk groups have no functional group prerequisites.

Description

In a DMS-300 gateway office, incoming or outgoing trunk group type INT101 is used for the international 101 test.

The following figure shows the datafill dependencies for INT101 trunk groups.

Datafill dependencies for INT101 trunk groups



INT101 trunk groups (continued)

Limitations and restrictions

The following limitations and restrictions apply to INT101 trunk groups:

- Dial pulse (DP), DIGITONE (DT), and multifrequency (MF) dialing types are allowed on incoming INT101 trunk groups.
- A switching unit must be equipped with DT or MF receivers for DT or MF reception, respectively.

Billing

For information on billing, refer to the Bellcore format AMA translations section of this document.

Datafilling office parameters

The following table shows the office parameters used by INT101 trunk groups. For more information about office parameters, refer to *Office Parameters Reference Manual.*

Office parameters used by INT101 trunk groups

Table name	Parameter name	Explanation and action
OFCVAR	TRK_OOS_CHK_ON	This parameter specifies whether to check that the trunks in a trunk group are out of service before changing the values of specific fields in table TRKGRP by data modification order (DMO).

Datafill sequence

The following table lists the tables used by INT101 trunk groups. The tables are listed in the order in which they are to be datafilled.

Tables used by INT101 trunk groups

Table	Purpose of table
CLLI	The common language location identifier table uniquely identifies the far end of each announcement, tone, or trunk group.
TRKGRP	The trunk group table contains customer-defined data associated with each trunk group.
TRKSGRP	The trunk subgroup table contains supplementary information for each trunk group.
TRKMEM	The trunk member table specifies the physical location of each trunk assigned to one of the trunk groups.

INT101 trunk groups (continued)

The following table shows sample input for datafilling INT101 trunk groups.

Sample input for INT101 trunk groups

Table	Sample input
CLLI	IC101 51 125 MI
TRKGRP	IC101 INT101 0 NPDGP NCRT CC02 SCOM IP22 ZX1Z MIDL IC N
TRKSGRP	IC101 0 DS1SIG STD IC MF DIALTONE N 10 10 NO NO N N N C UNEQ
TRKMEM	IC101 77 0 DTC 16 7 4

Datafilling table CLLI

The following table shows the datafill specific to INT101 for table CLLI. Only those fields that apply directly to INT101 are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table CLLI

Field	Subfield or refinement	Entry	Explanation and action
CLLI		alphanumeric (1 to 16 characters)	Common language location identifier. Enter a CLLI code to uniquely identify the far end of the INT101 trunk group. Only alphabetic characters, numeric characters, and _ (underscores) can be used to datafill this field. The first character must be alphabetic. For optimum use, a CLLI code must contain not more than 12 characters, as only the first 12 characters are displayed on the MAP (maintenance and administration position) display. When a CLLI code is displayed in a log report, the entire 16-character CLLI code appears.

Datafill example for table CLLI

The following example shows sample datafill for table CLLI.

MAP display example for table CLLI

```
CLLI    ADNUM    TRKGRSIZ                          ADMININF
-------------------------------------------------------------
IC101   51       125                               MI
```

Changing datafill for table CLLI

Use the standard table editor commands to change datafill for table CLLI.

Datafilling table TRKGRP

The following table shows the datafill specific to INT101 for table TRKGRP. Only those fields that apply directly to INT101 are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table TRKGRP (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 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, CCTRNSL, SCRNCL, PRTNUM, CDRCLASS, SELSEQ, and DIR_DEP. Note that among these subfields, only those directly affected by INT101 are described below.
	GRPTYP	INT101	Group type. Enter INT101 for the Gateway 101 test trunk group type.
	CCTRNSL	alphanumeric (1 to 4 characters)	Country code translator name. If trunk direction is incoming and country code translation is required, enter the country code translator name assigned to the international 101 test trunk group by the operating company. Otherwise, enter NCTR for no country code translation.

INT101 trunk groups (continued)

Datafilling table TRKGRP (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
	CDRCLASS	alphanumeric (1 to 4 characters)	Call detail recorder class. Enter the call detail recorder class of the Gateway 101 test trunk group, as defined by the operating company. Up to 31 classes can be assigned. Each class is represented by a name. If no call detail recorder class is required, enter NCDR (no call detail recording).
	SELSEQ	MIDL	Select sequence. This field not required for this trunk group. Enter MIDL.
	DIR_DEP	see subfield	Direction dependent refinement. This field consists of subfield DIR and (for incoming trunk groups) refinement CCPC.
	DIR	IC or OG	Direction. This field specifies the trunk group direction. For incoming traffic, enter IC and datafill refinement CCPC. For outgoing traffic, enter OG (no refinements apply).
	CCPC	alphanumeric (0 to 15 or N)	Common calling party category. Datafill this field if the value in field DIR is IC. Enter the common calling party category for the T101 test line or enter N if no common calling party category is applicable.

Datafill example for table TRKGRP

The following example shows sample datafill for table TRKGRP.

MAP display example for table TRKGRP

```
GRPKEY
GRPINFO
------------------------------------------------------------
IC101
INT101 0 NPDGP NCRT CC02 SCOM IP22 ZX1Z MIDL IC N
```

Changing datafill for table TRKGRP

If office parameter TRK_OOS_CHK_ON in table OFCVAR is set to Y, all trunks in the trunk group must be taken out of service before changing the value of certain fields in table TRKGRP.

Datafilling table TRKSGRP

The following table shows the datafill specific to INT101 for table TRKSGRP. Only those fields that apply directly to INT101 are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table TRKSGRP

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 CLLI code assigned to the trunk group as datafilled in table CLLI.
	SGRP	0 or 1	Subgroup number. Enter the subgroup number assigned to the trunk group.

Datafill example for table TRKSGRP

The following example shows sample datafill for table TRKSGRP.

MAP display example for table TRKSGRP

```
          SGRPKEY   CARDCODE
SGRPVAR SGRPVAR
-------------------------------------------------------
          IC101 0   DS1SIG
STD     IC MF DIALTONE N 10 10 NO NO N N N C UNEQ
```

Changing datafill for table TRKSGRP

Use the standard table editor commands to change datafill for table TRKSGRP.

INT101 trunk groups (end)

Datafilling table TRKMEM

The following table shows the datafill specific to INT101 for table TRKMEM. Only those fields that apply directly to INT101 are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table TRKMEM

Field	Subfield or refinement	Entry	Explanation and action
CLLI		alphanumeric (1 to 16 characters)	Common language location identifier. Enter the CLLI code assigned in table CLLI to the trunk group of which the trunk is a member.
EXTRKNM		0 to 9999	External trunk number. Enter the external trunk number that is assigned to the trunk.
SGRP		0 to 1	Subgroup number. Enter the subgroup number to which the trunk is assigned.

Datafill example for table TRKMEM

The following example shows sample datafill for table TRKMEM.

MAP display example for table TRKMEM

```
CLLI        EXTRKNM  SGRP                    MEMVAR
-------------------------------------------------------
IC101        77       0                      DTC 16 7 4 $
```

Changing datafill for table TRKMEM

Use the standard table editor commands to change datafill for table TRKMEM.

IR trunk groups

Ordering codes

IR trunk groups have no ordering codes.

Release applicability

TL03 and up

Prerequisites

IR trunk groups have no functional group prerequisites.

Description

In a DMS-100 end office, outgoing trunk group type IR connects with an intercept, information, or repair desk. No digits are transmitted on an IR trunk.

The following figure shows the datafill dependencies for IR trunk groups.

Datafill dependencies for IR trunk groups

IR trunk groups (continued)

Limitations and restrictions

IR trunk groups have no limitations or restrictions.

Billing

For information on billing, refer to the Bellcore format AMA translations section of this document.

Datafilling office parameters

IR trunk groups do not affect office parameters.

Datafill sequence

The following table lists the tables used by IR trunk groups. The tables are listed in the order in which they are to be datafilled.

Tables used by IR trunk groups

Table	Purpose of table
CLLI	The common language location identifier table uniquely identifies the far end of each announcement, tone, or trunk group.
TRKGRP	The trunk group table contains customer-defined data associated with each trunk group.
TRKSGRP	The trunk subgroup table contains supplementary information for each trunk group.
TRKMEM	The trunk member table specifies the physical location of each trunk assigned to one of the trunk groups.

The following table shows sample input for datafilling IR trunk groups.

Sample input for IR trunk groups

Table	Sample input
CLLI	OTWAON23T05O 51 120 MI
TRKGRP	OTWAON23T05O IR 15 ELO NCOT RS Y
TRKSGRP	OTWAON23T05O 0 DS1SIG STD OG NP IM 0 0 NO NO N N N 5 UNEQ
TRKMEM	OTWAON23T05O 101 0 DTC 11 18 23

Datafilling table CLLI

The following table shows the datafill specific to IR for table CLLI. Only those fields that apply directly to IR are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table CLLI

Field	Subfield or refinement	Entry	Explanation and action
CLLI		alphanumeric (1 to 16 characters)	Common language location identifier. Enter a CLLI code to uniquely identify the far end of the IR trunk group. Only alphabetic characters, numeric characters, and _ (underscores) can be used to datafill this field. The first character must be alphabetic. For optimum use, a CLLI code must contain not more than 12 characters, as only the first 12 characters are displayed on the MAP (maintenance and administration position) display. When a CLLI code is displayed in a log report, the entire 16-character CLLI code appears.

Datafill example for table CLLI

The following example shows sample datafill for table CLLI.

MAP display example for table CLLI

```
CLLI            ADNUM  TRKGRSIZ                ADMININF
-------------------------------------------------------
OTWAON23T05O     51     120                     MI
```

Changing datafill for table CLLI

Use the standard table editor commands to change datafill for table CLLI.

IR trunk groups (continued)

Datafilling table TRKGRP

The following table shows the datafill specific to IR for table TRKGRP. Only those fields that apply directly to IR are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table TRKGRP

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 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 and AUDRING. Note that among these subfields, only those directly affected by IR are described below.
	GRPTYP	IR	Group type. Enter IR to specify the trunk group type for an outgoing trunk group with no outpulsing.
	AUDRING	Y or N	Audible ring. Enter Y if the switching unit is required to return audible ring to the originator. Otherwise, enter N.

Datafill example for table TRKGRP

The following example shows sample datafill for table TRKGRP.

MAP display example for table TRKGRP

```
GRPKEY                      GRPINFO
-------------------------------------------------------
OTWAON23T05O                IR 15 ELO NCOT RS Y
```

Changing datafill for table TRKGRP

Use the standard table editor commands to change datafill for table TRKGRP.

Datafilling table TRKSGRP

The following table shows the datafill specific to IR for table TRKSGRP. Only those fields that apply directly to IR are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table TRKSGRP

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 CLLI code assigned to the trunk group as datafilled in table CLLI.
	SGRP	0 or 1	Subgroup number. Enter the subgroup number assigned to the trunk group.

Datafill example for table TRKSGRP

The following example shows sample datafill for table TRKSGRP.

MAP display example for table TRKSGRP

```
SGRPKEY         CARDCODE
SGRPVAR            SGRPVAR
------------------------------------------------------
OTWAON23T05O 0 DS1SIG
STD                OG NP IM 0 0 NO NO N N N 5 UNEQ
```

Changing datafill for table TRKSGRP

Use the standard table editor commands to change datafill for table TRKSGRP.

IR trunk groups (end)

Datafilling table TRKMEM

The following table shows the datafill specific to IR for table TRKMEM. Only those fields that apply directly to IR are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table TRKMEM

Field	Subfield or refinement	Entry	Explanation and action
CLLI		alphanumeric (1 to 16 characters)	Common language location identifier. Enter the CLLI code assigned in table CLLI to the trunk group of which the trunk is a member.
EXTRKNM		0 to 9999	External trunk number. Enter the external trunk number that is assigned to the trunk.
SGRP		0 to 1	Subgroup number. Enter the subgroup number to which the trunk is assigned.

Datafill example for table TRKMEM

The following example shows sample datafill for table TRKMEM.

MAP display example for table TRKMEM

```
CLLI            EXTRKNM  SGRP             MEMVAR
------------------------------------------------------
OTWAON23T05O    101      0                DTC 11 18 23
```

Changing datafill for table TRKMEM

Use the standard table editor commands to change datafill for table TRKMEM.

IS trunk groups

Ordering codes

IS trunk groups have no ordering codes.

Release applicability

TL03 and up

Prerequisites

IS trunk groups have no functional group prerequisites.

Description

In a DMS toll or end office, incoming trunk group type IS is used to route calls, upon seizure, to an outgoing trunk group.

Calls are routed through table OFRT at the route index specified for the trunk group. Table OFRT permits digit prefixing where appropriate.

Calls from several incoming trunk groups of type IS can be datafilled to go out on one common trunk group.

The following figure shows the datafill dependencies for IS trunk groups.

IS trunk groups (continued)

Datafill dependencies for IS trunk groups

Limitations and restrictions

IS trunk groups have no limitations or restrictions.

Billing

For information on billing, refer to the Bellcore format AMA translations section of this document.

Datafilling office parameters

The following table shows the office parameters used by IS trunk groups. For more information about office parameters, refer to *Office Parameters Reference Manual.*

Office parameters used by IS trunk groups

Table name	Parameter name	Explanation and action
OFCVAR	TRK_OOS_CHK_ON	This parameter specifies whether to check that the trunks in a trunk group are out of service before changing the values of specific fields in table TRKGRP by data modification order (DMO).

Datafill sequence

The following table lists the tables used by IS trunk groups. The tables are listed in the order in which they are to be datafilled.

Tables used by IS trunk groups

Table	Purpose of table
CLLI	The common language location identifier table uniquely identifies the far end of each announcement, tone, or trunk group.
TRKGRP	The trunk group table contains customer-defined data associated with each trunk group.
TRKSGRP	The trunk subgroup table contains supplementary information for each trunk group.
TRKMEM	The trunk member table specifies the physical location of each trunk assigned to one of the trunk groups.

The following table shows sample input for datafilling IS trunk groups.

Sample input for IS trunk groups

Table	Sample input
CLLI	OTWAON23SG11 51 75 MI
TRKGRP	OTWAON23SG11 IS 21 ELO NCRT TO MIDL IC 613 OFRT 10 N
TRKSGRP	OTWAON23SG11 0 DS1SIG STD IC NP IM N NO NO N N N UNEQ
TRKMEM	OTWAON23SG11 123 0 DTC 4 5 6

IS trunk groups (continued)

Datafilling table CLLI

The following table shows the datafill specific to IS for table CLLI. Only those fields that apply directly to IS are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table CLLI

Field	Subfield or refinement	Entry	Explanation and action
CLLI		alphanumeric (1 to 16 characters)	Common language location identifier. Enter a CLLI code to uniquely identify the far end of the IS trunk group. Only alphabetic characters, numeric characters, and _ (underscores) can be used to datafill this field. The first character must be alphabetic. For optimum use, a CLLI code must contain not more than 12 characters, as only the first 12 characters are displayed on the MAP (maintenance and administration position) display. When a CLLI code is displayed in a log report, the entire 16-character CLLI code appears.

Datafill example for table CLLI

The following example shows sample datafill for table CLLI.

MAP display example for table CLLI

```
CLLI            ADNUM   TRKGRSIZ              ADMININF
-------------------------------------------------------
OTWAON23SG11     51      75                    MI
```

Changing datafill for table CLLI

Use the standard table editor commands to change datafill for table CLLI.

Datafilling table TRKGRP

The following table shows the datafill specific to IS for table TRKGRP. Only those fields that apply directly to IS are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table TRKGRP (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 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, SELSEQ, DIR, SNPA, TUPID, and J. Note that among these subfields, only those directly affected by IS are described below. Refer to table TRKGRP in the data schema section of this document for information on an alternate structure for this field that results from the datafill of table CUSTFLDS.
	GRPTYP	IS	Group type. Enter IS to specify the tandem switching no digits incoming trunk group type.
	DIR	IC or 2W	Trunk direction. Datafill this field to specify the trunk group direction. If the trunk direction is incoming, enter IC. If the trunk direction is two way, enter 2W. 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 DMO.
	SNPA	numeric (3 digits)	Serving numbering plan area. Enter the serving numbering plan area (NPA) code to which the trunk group belongs.
	TUPID	see subfields	Tuple identification. This field consists of subfields TABID and KEY.

IS trunk groups (continued)

Datafilling table TRKGRP (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
GRPINFO (cont)	TABID	AOSS, AOSSAMA, IBNRTE, IBNRT2, IBNRT3, IBNRT4, OFRT, OFR2, OFR3, OFR4, RRTE, TOPSAMA, TOPS, or TTL4	Table name. Enter the name of the table to which translation is to route.
	KEY	0 to 1023or0 to 7	Key. Enter the route reference index within the table to which translation is to route. For all tables except TTL4, enter a value from 0 to 1023. For table TTL4, the valid entry range is 0 to 7. Entries outside this range are not valid for TTL4.
	J	Y or N	Joint control. Enter Y if joint party control is required (that is, if both parties must disconnect to disconnect the call). Otherwise, enter N to specify calling party control.

Datafill example for table TRKGRP

The following example shows sample datafill for table TRKGRP.

MAP display example for table TRKGRP

```
GRPKEY          GRPINFO
-------------------------------------------------------
OTWAON23SG11    IS 21 ELO NCRT TO MIDL IC 613 OFRT 10 N $
```

Changing datafill for table TRKGRP

If office parameter TRK_OOS_CHK_ON in table OFCVAR is set to Y, all trunks in the trunk group must be taken out of service before changing the value of certain fields in table TRKGRP.

Datafilling table TRKSGRP

The following table shows the datafill specific to IS for table TRKSGRP. Only those fields that apply directly to IS are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table TRKSGRP

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 CLLI code assigned to the trunk group as datafilled in table CLLI.
	SGRP	0 or 1	Subgroup number. Enter the subgroup number assigned to the trunk group.

Datafill example for table TRKSGRP

The following example shows sample datafill for table TRKSGRP.

MAP display example for table TRKSGRP

```
SGRPKEY          CARDCODE
SGRPVAR  SGRPVAR
-------------------------------------------------------
OTWAON23SG11 0  DS1SIG
STD      IC NP IM N NO NO N N N UNEQ
```

Changing datafill for table TRKSGRP

Use the standard table editor commands to change datafill for table TRKSGRP.

IS trunk groups (end)

Datafilling table TRKMEM

The following table shows the datafill specific to IS for table TRKMEM. Only those fields that apply directly to IS are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table TRKMEM

Field	Subfield or refinement	Entry	Explanation and action
CLLI		alphanumeric (1 to 16 characters)	Common language location identifier. Enter the CLLI code assigned in table CLLI to the trunk group of which the trunk is a member.
EXTRKNM		0 to 9999	External trunk number. Enter the external trunk number that is assigned to the trunk.
SGRP		0 to 1	Subgroup number. Enter the subgroup number to which the trunk is assigned.

Datafill example for table TRKMEM

The following example shows sample datafill for table TRKMEM.

MAP display example for table TRKMEM

```
CLLI            EXTRKNM  SGRP            MEMVAR
-------------------------------------------------------
OTWAON23SG11    123      0               DTC 4 5 6
```

Changing datafill for table TRKMEM

Use the standard table editor commands to change datafill for table TRKMEM.

IT trunk groups

IT trunk group functionality codes

IT trunk groups have no functionality codes.

Release applicability

TL03 and up

Prerequisites

IT trunk groups have no functional group prerequisites.

Description

In a DMS switch toll or end office, two-way, incoming, or outgoing trunk group type IT (intertoll) connects another toll or end office to carry toll access, toll completing, and toll tandem traffic.

If the advanced intelligent network (AIN) option is specified for the trunk group in table TRKGRP, then an AIN group name is referenced from table TRIGGRP.

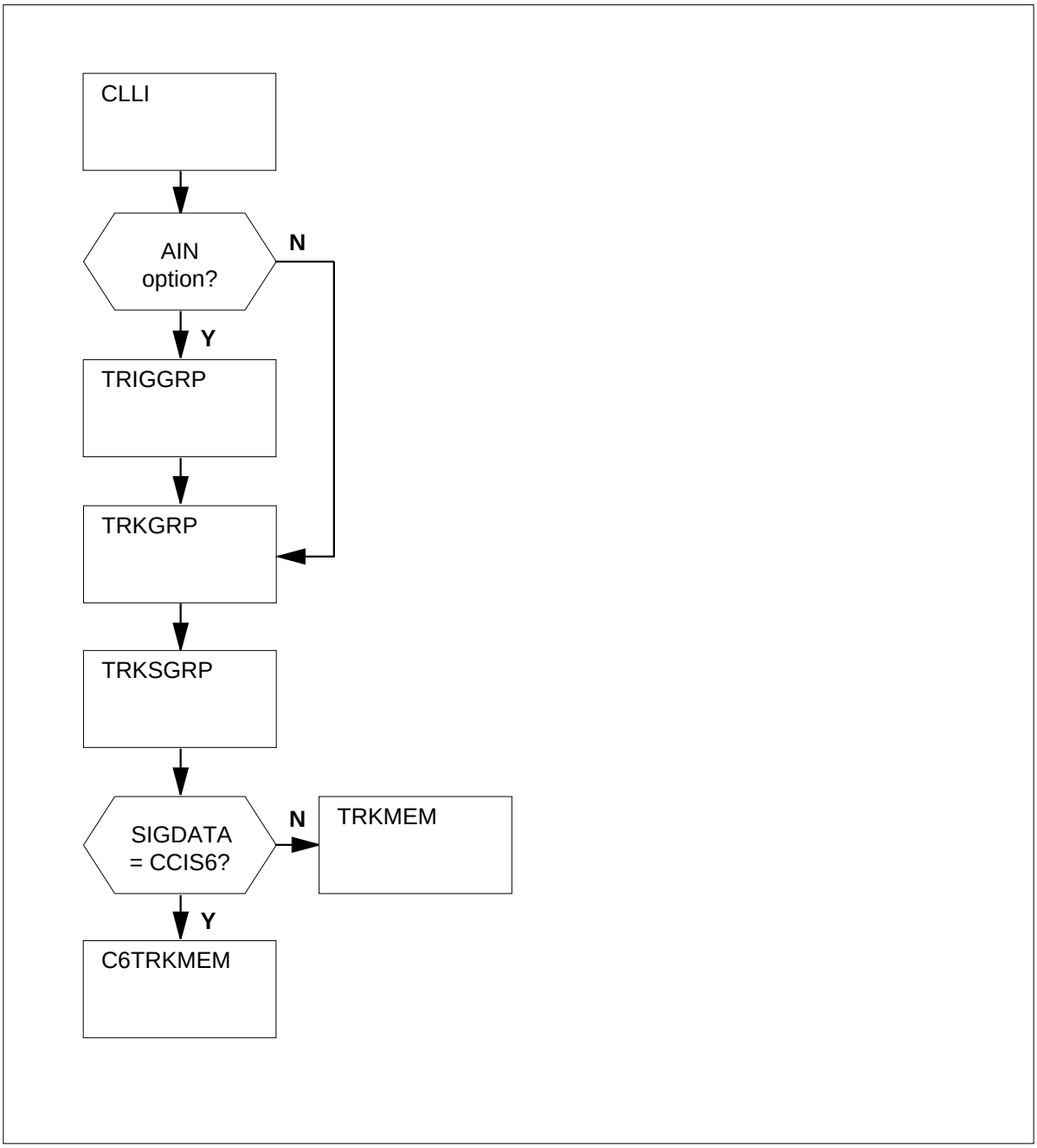
If the trunk group has common channel interoffice signaling (CCIS) supplementary information, then trunk members are assigned in table C6TRKMEM.

The 105 test line can be datafilled as an IT trunk group type in offices that do not have software package NTX052AB (Remote Office Test Line [ROTL]) and do not have trunk group type T105.

The following figure shows the datafill dependencies for IT trunk groups.

IT trunk groups (continued)

Datafill dependencies for IT trunk groups



Limitations and restrictions

The following limitations and restrictions apply to IT trunk groups:

- If overlap outpulsing is required on incoming or two-way dial pulse (DP) trunk groups, field OVLP in table TRKSGRP must be set to Y.
- Overlap outpulsing can apply only between incoming and two-way intertoll trunk groups and outgoing and two-way intertoll, local, and Integrated Business Network (IBN) trunk groups.
- The standard digit manipulation defined for selector S in the route reference subtables is applicable to outgoing and two-way intertoll trunk groups, except when a call is routed from table STDPRTCT.
- If no outpulsing is required, fields OPULSTYP and OSTARTSG in table TRKSGRP have the values of DP and IM (immediate dial), respectively. The route reference index for this trunk group uses the nonstandard format (N) and deletes all digits.
- Trunk option BCNAME in table TRKGRP is valid only for incoming and two-way trunk groups.

Datafilling office parameters

The following table shows the office parameters used by IT trunk groups. For more information about office parameters, refer to the *Office Parameters Reference Manual.*

Office parameters used by IT trunk groups

Table name	Parameter name	Explanation and action
OFCVAR	TRK_OOS_CHK_ON	This parameter specifies whether to check that the trunks in a trunk group are out of service before changing the values of specific fields in table TRKGRP by data modification order (DMO).

IT trunk groups (continued)

Datafill sequence

The following table lists the IT trunk groups. The tables are listed in the order in which they are to be datafilled.

IT trunk groups

Table	Purpose of table
CLLI	The common language location identifier table uniquely identifies the far end of each announcement, tone, or trunk group.
TRIGGRP	The trigger group table defines AIN behaviour that may be applied to IT trunk groups.
TRKGRP	The trunk group table contains customer-defined data that is associated with each trunk group.
TRKSGRP	The trunk subgroup table contains supplementary information for each trunk group.
TRKMEM	The trunk member table specifies the physical location of each trunk assigned to one of the trunk groups.
C6TRKMEM	The CCIS6 trunk member table assigns signaling channel slots for IT trunk groups that have common channel interoffice signaling.

The following table shows sample input for datafilling IT trunk groups.

Sample input for IT trunk groups

Table	Sample input
CLLI	OTWAON2301TO 101 225 PH_43_IT
TRIGGRP	AINGRP1 ORIGATT OFFHKIMM DG AINEADIG $ XLA1 $
TRKGRP	OTWAON2301TO IT 23 TLD NCIT 2W IT WIDEBAND ASEQ FIRSTFIT FIXED 613 NPRT NSCR 613 025 N N AIN AINGRP1
TRKSGRP	OTWAON2301TO 0 DS1SIG STD 2W DP WK N 30 30 MF WK 7 0 Y NO NO N N N M 70 UNEQ
TRKMEM	OTWAON2301TO 103 0 DCM 1 1 5 $
C6TRKMEM	CCIS404A 0 0 2 1

Datafilling table CLLI

The following table shows the datafill specific to IT for table CLLI. Only those fields that apply directly to IT are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table CLLI

Field	Subfield or refinement	Entry	Explanation and action
CLLI		alphanumeric (1 to 16 characters)	Common language location identifier. Enter a CLLI code to uniquely identify the far end of the IT trunk group. Only alphabetic characters, numeric characters, and _ (underscores) can be used to datafill this field. The first character must be alphabetic. For optimum use, a CLLI code must contain not more than 12 characters, as only the first 12 characters are shown on the MAP display. When a CLLI code is displayed in a log report, the entire 16-character CLLI code appears.

Datafill example for table CLLI

The following example shows sample datafill for table CLLI.

MAP display example for table CLLI

```
CLLI              ADNUM   TRKGRSIZ                              ADMININF
-------------------------------------------------------------------------
OTWAON2301TO      101     225                                   PH_43_IT
```

Changing datafill for table CLLI

Use the standard table editor commands to change datafill for table CLLI.

IT trunk groups (continued)

Datafilling table TRIGGRP

The following table shows the datafill specific to IT for table TRIGGRP. Only those fields that apply directly to IT are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table TRIGGRP

Field	Subfield or refinement	Entry	Explanation and action
TRIGNAME		alphanumeric (up to 16 characters)	Advanced intelligent network trigger name. Enter the trigger name used to define a group of trigger behaviors. Table TRIGGRP associates a symbolic name to a grouping of subscribed trigger detection points (TDP) and their triggers. The symbolic name is bound against a type, an AIN group identifier, to be used in subscription tables.

Datafill example for table TRIGGRP

The following example shows sample datafill for table TRIGGRP.

MAP display example for table TRIGGRP

```
KEY         TRIGGER
                                                                TRIGDATA
-------------------------------------------------------------------------
AINGRP1     ORIGATT
                                        (OFFHKIM ( DG AINEADIG ) $ XLA1) $
```

Changing datafill for table TRIGGRP

Use the standard table editor commands to change datafill for table TRIGGRP.

Datafilling table TRKGRP

The following table shows the datafill specific to IT for table TRKGRP. Only those fields that apply directly to IT are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table TRKGRP (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 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, DIRDATA, TRAFCLS, SELSEQ, CONNGNPA, PRTNM, SCRNCL, SNPA, TERMTC, TOLLCOMP, CCWKVLD, and OPTIONS. Note that among these subfields, only those directly affected by IT are described in this table. Refer to table TRKGRP in the data schema section of this document for information on an alternate structure for this field that results from the datafill of table CUSTFLDS.
	DIRDATA	see subfield	Direction data. This field consists of subfield DIR.
	DIR	IC, OG, or 2W	Direction. Specify the direction of traffic flow on the trunk group. 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, all trunks in the group must be busy before changing the value of this field by DMO.

IT trunk groups (continued)

Datafilling table TRKGRP (Sheet 2 of 6)

Field	Subfield or refinement	Entry	Explanation and action
	SELSEQ	ASEQ, CWCTH, CCWCTH, DSEQ, LIDL, MIDL, or WIDEBAND	Select sequence. For incoming IT trunk groups, enter MIDL to specify the most idle trunk group selection method. Entries other than MIDL are not valid (sequential selection does not apply to incoming trunk groups). For outgoing IT trunk groups, if feature package NTX244AB (Enhanced Sequential Trunk Hunting) is present, then sequential selection applies. Enter • CWCTH for clockwise or CCWCTH for counterclockwise circular trunk hunting from the most recently released trunk in the trunk group, based on the order of trunk members in table TRKMEM • ASEQ for ascending or DSEQ descending sequential selection, based on the order of trunk members in table TRKMEM • WIDEBAND and datafill refinements WBSELSEQ, WBGRPING, and WBSEARCH to specify DS-0s selection sequence, timeslot arrangement types, and time slot search method If sequential selection does not apply, enter MIDL for most idle trunk group selection. For two-way IT trunk groups, if the far end is a link list switcher with MIDL (most idle) or LIDL (least idle) trunk selection, enter LIDL or MIDL, respectively. If the far end is not a link list switcher and sequential selection does not apply, enter MIDL. If the far end is not a link list switcher and sequential selection applies (feature package NTX244AB [Enhanced Sequential Trunk Hunting] must be present), enter CWCTH, CCWTCH, ASEQ, DSEQ, or WIDEBAND, as described previously, for outgoing trunk groups.

Datafilling table TRKGRP (Sheet 3 of 6)

Field	Subfield or refinement	Entry	Explanation and action
			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. Refer to table TRKGRP in the data schema section of this document for additional information on field SELSEQ.
	WBSELSEQ	ASEQ or DSEQ	Wideband selection sequence. Datafill this field if the entry in field SELSEQ is WIDEBAND. Enter ASEQ to specify that the wideband trunks are selected in ascending order from the first idle trunk on the search list, or enter DSEQ to specify that they are selected in descending order from the last idle trunk on the search list. The order of trunks in the search list is determined by the order in which the trunk groups are datafilled in table TRKMEM.
	WBGRPING	FIXED or FLOATING	Wideband boundary preference. Datafill this field if the entry in field SELSEQ is WIDEBAND. Enter the wideband boundary preference. The value FIXED specifies that only the idle trunks within a specific time slot frame are selected. This value is valid only for local exchange carriers (LEC). The value FLOATING specifies that any number of consecutive idle trunks in a trunk group are selected.

IT trunk groups (continued)

Datafilling table TRKGRP (Sheet 4 of 6)

Field	Subfield or refinement	Entry	Explanation and action
	WBSEARCH	BESTFIT or FIRSTFIT	Wideband search. Datafill this field if the entry in field SELSEQ is WIDEBAND. Enter the wideband search algorithm. The value BESTFIT finds the smallest segment of idle channels (DS-0s) among trunks (DS-1s) within a trunk group to accommodate a wideband call, according to the boundary preference (FIXED or FLOATING) specified. FIRSTFIT finds the first segment of idle DS-0s that can accommodate a wideband call, according to the boundary preference specified.
	CONNGNPA	numeric (3 digits)	Connecting numbering plan area. For incoming IT trunk groups, this field is not required. Enter 000. For outgoing or two-way IT trunk groups, enter the numbering plan area (NPA) code of the switching unit where the transmitted digits are translated.
	TERMTC	numeric (3 digits)	Terminating toll center. For incoming IT trunk groups, terminating toll center is not applicable. Enter 000. For outgoing or two-way IT trunk groups, if the switching unit in which the transmitted digits are translated is assigned a terminating toll center code, enter the terminating toll center code. Otherwise, enter 000.
	TOLLCOMP	Y or N	Toll completing. Enter Y if the trunk group is toll completing; otherwise, enter N.
	CCWKVLD	Y or N	Carrier connect wink valid. Enter Y if carrier-connect winks in international equal access (EA) calls are regenerated. Otherwise, enter N. Since most non-DMS equal access end offices (EAEO) and access tandems (AT) cannot handle this wink, the value N should be datafilled in these cases.

Datafilling table TRKGRP (Sheet 5 of 6)

Field	Subfield or refinement	Entry	Explanation and action
	OPTIONS	see subfield	Options. Datafill up to three multiples of subfield OPTION and the corresponding refinements for the desired trunk option. Enter $ (dollar sign) to indicate the end of the options vector. Refinements consist of AIN, BCNAME, CHGNUM and LNP.
	OPTION	AIN BCNAME or CHGNUM orLNP	Option. To specify the AIN option, enter AIN and datafill refinement AINGRP. 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. Option CHGNUM requires datafill refinement CHGNO_TRAPTYPE. Enter TRAFTYPE {PBX_ALL} for refinement CHGNO_TRAPTYPE. To provision the Location Routing Number (LRN) against the trunk group, enter LNP (for Local Number Portability). This option only applies to trunk group types: IT, SC, TI, and T2. Option LNP consists of subfield LRN. A Location Routing Number (LRN) is used to indicate the direction in which to route an LNP call. It consists of the Home NPA-NXX dialing pattern that is associated with the switch to which it routes. Enter a $ dollar sign if no options apply.
	LRN	ten-digit DN	This is a ten-digit directory number (DN) that denotes a default LRN for the trunk group. This DN is used to generate a Jurisdiction Information Parameter (JIP) if one is not present on the incoming Initial Address Message (IAM) of the trunk group. ***Note:*** Enter a dollar sign ($) to indicate that no default LRN is present for the trunk group.

IT trunk groups (continued)

Datafilling table TRKGRP (Sheet 6 of 6)

Field	Subfield or refinement	Entry	Explanation and action
	AINGRP	alphanumeric (1 to 16 characters)	Advanced intelligent network group. If the entry in field OPTION is AIN, enter the AIN group to be used by this trunk group. The AIN group name must be datafilled in table TRIGGRP. Since AIN is subscribed to on a customer group basis, the AIN behavior specified by AINGRP applies to every member of the customer group.
	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 in the data schema section of this document 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.

Datafill example for table TRKGRP

The following example shows sample datafill for table TRKGRP.

MAP display example for table TRKGRP

```
GRPKEY
                                                                GRPINFO
------------------------------------------------------------------------
OTWAON0202TO
    IT 20 TLD NCRT IC IT MIDL 000 NPRT NSCR 613 000 N N BCNAME 56KDATA
CHGNUM $

OTWAO11MG00
          IT 21 TLD NCTC OG TC MIDL 613 NPRT NSCR 613 000 Y N CHGNUM $
```

The following example shows sample datafill for table TRKGRP option LNP.

MAP display example for table TRKGRP option LNP

```
GRPKEY
                                                                GRPINFO
------------------------------------------------------------------------

AL7ITICS7
 IT 0 ELO NCRT IC NIL MIDL 909 ATI NSCR 501 000 N N (LNP 9198513361) $
```

Changing datafill for table TRKGRP

If office parameter TRK_OOS_CHK_ON in table OFCVAR is set to Y, all trunks in the trunk group must be taken out of service before changing the value of certain fields in table TRKGRP.

Datafilling table TRKSGRP

The following table shows the datafill specific to IT for table TRKSGRP. Only those fields that apply directly to IT are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table TRKSGRP

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 CLLI code assigned to the trunk group as datafilled in table CLLI.
	SGRP	0 or 1	Subgroup number. Enter the subgroup number assigned to the trunk group.

Datafill example for table TRKSGRP

The following example shows sample datafill for table TRKSGRP.

IT trunk groups (continued)

MAP display example for table TRKSGRP

```
SGRPKEY        CARDCODE
SGRPVAR
                                                                  SGRPVAR
_____________________________________________________________________________
OTWAON2301TO 0 DS1SIG
STD
                     2W DP WK N 30 30 MF WK 7 0 Y NO NO N N N M 70 UNEQ
```

Changing datafill for table TRKSGRP

Use the standard table editor commands to change datafill for table TRKSGRP.

Datafilling table TRKMEM

The following table shows the datafill specific to IT for table TRKMEM. Only those fields that apply directly to IT are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table TRKMEM

Field	Subfield or refinement	Entry	Explanation and action
CLLI		alphanumeric (1 to 16 characters)	Common language location identifier. Enter the CLLI code assigned in table CLLI to the trunk group of which the trunk is a member.
EXTRKNM		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.
SGRP		0 or 1	Subgroup number. Enter the subgroup number to which the trunk is assigned.

Datafill example for table TRKMEM

The following example shows sample datafill for table TRKMEM.

MAP display example for table TRKMEM

```
CLLI          EXTRKNM   SGRP                              MEMVAR
_____________________________________________________________
OTWAON2301TO  103       0                           DCM 1 1 5 $
```

Changing datafill for table TRKMEM

Use the standard table editor commands to change datafill for table TRKMEM.

Datafilling table C6TRKMEM

The following table shows the datafill specific to IT for table C6TRKMEM. Only those fields that apply directly to IT are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table C6TRKMEM

Field	Subfield or refinement	Entry	Explanation and action
MEMKEY		see subfields	Member key. This field consists of subfields CLLI and MEMNAME.
	CLLI	alphanumeric (1 to 16 characters)	Common language location identifier. Enter the CLLI code assigned in table CLLI to the CCIS IT trunk group of which the trunk is a member.
	MEMNAME	0 to 9999	External trunk number. Enter the external trunk number assigned to the CCIS trunk.
LAYER		0 to 29	Layer. Enter the layer number within the office. Entries outside the range 0 to 29 are not valid.
BAND		0 to 511	Band. Enter the band number within the office.
CKT		0 to 15	Circuit. Enter the circuit number within the band.

Datafill example for table C6TRKMEM

The following example shows sample datafill for table C6TRKMEM.

IT trunk groups (end)

MAP display example for table C6TRKMEM

```
MEMKEY          LAYER   BAND   CKT
_____________________________________________________________
CCIS404A 0       0       2      1
```

Changing datafill for table C6TRKMEM

Use the standard table editor commands to change datafill for table C6TRKMEM.

ITL2 trunk groups

Ordering codes

ITL2 trunk groups have no ordering codes.

Release applicability

TL03 and up

Prerequisites

ITL2 trunk groups have no functional group prerequisites.

Description

International 102 test trunks (ITL2) are used for test calls in switches configured for ITL2 groups with a milliwatt supply of 1020 Hz and balance termination test.

Each ITL2 consists of an NT1X00AF (102 terminating-10dB testline) card, and is represented in table CLLI by pseudo-CLLI INTL102T.

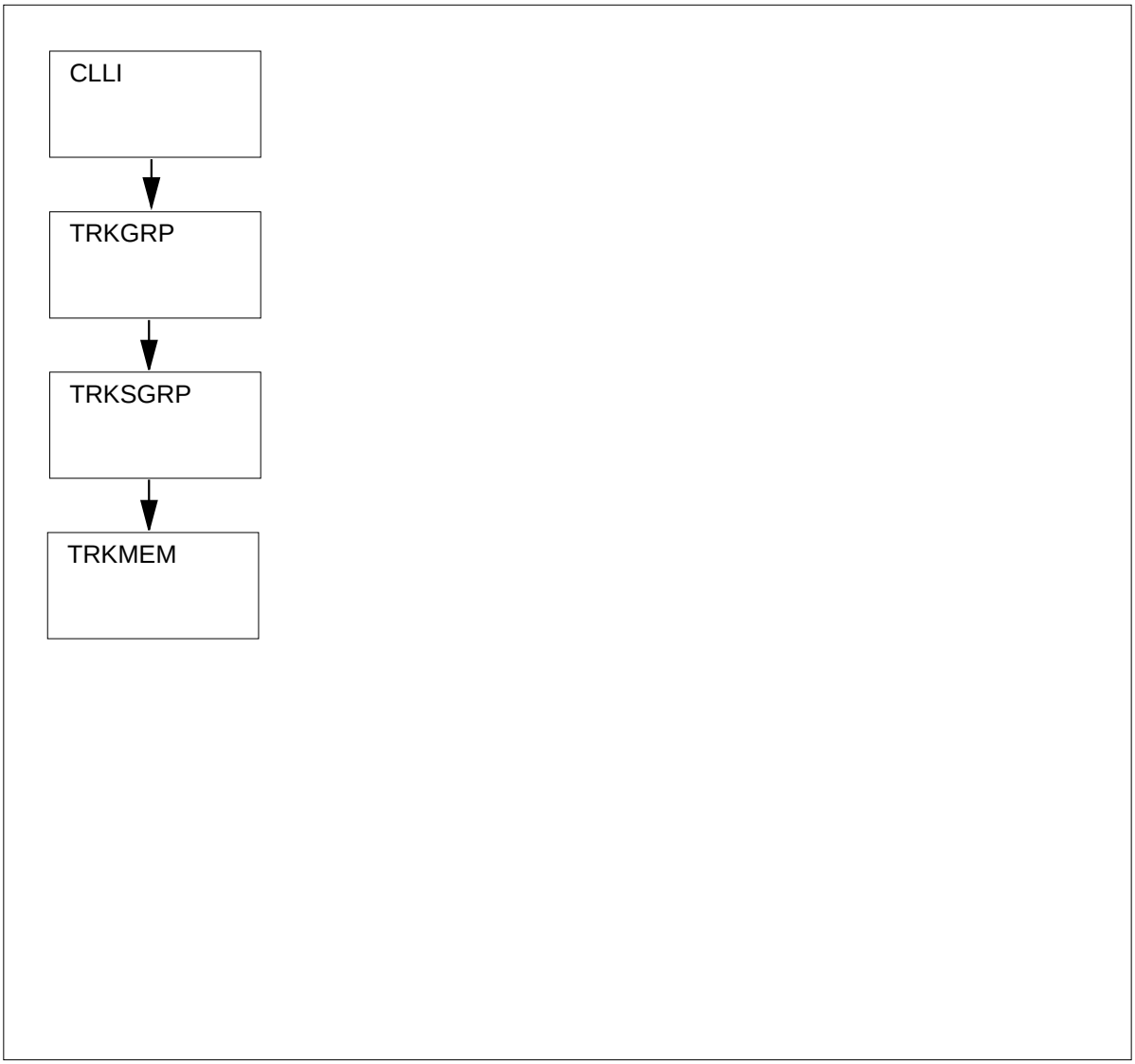
The trunk group members assigned to this trunk group are listed in table TRKMEM with CLLI INTL102T.

For related information, refer to trunk group type MAINT.

The following figure shows the datafill dependencies for ITL2 trunk groups.

ITL2 trunk groups (continued)

Datafill dependencies for ITL2 trunk groups



Limitations and restrictions

ITL2 trunk groups have no limitations or restrictions.

Billing

ITL2 trunk groups do not affect billing.

Datafilling office parameters

ITL2 trunk groups do not affect office parameters.

ITL2 trunk groups (continued)

Datafill sequence

The following table lists the tables used by ITL2 trunk groups. The tables are listed in the order in which they are to be datafilled.

Tables used by ITL2 trunk groups

Table	Purpose of table
CLLI	The common language location identifier table uniquely identifies the far end of each announcement, tone, or trunk group.
TRKGRP	The trunk group table contains customer-defined data associated with each trunk group.
TRKSGRP	The trunk subgroup table contains supplementary information for each trunk group.
TRKMEM	The trunk member table specifies the physical location of each trunk assigned to one of the trunk groups.

The following table shows sample input for datafilling ITL2 trunk groups.

Sample input for ITL2 trunk groups

Table	Sample input
CLLI	INTL102T 51 5 MI
TRKGRP	INTL102T ITL2 0 TLD NCRT BMW 1X00AF
TRKSGRP	INTL102T 0 DS1SIG STD OG NP IM 0 0 NO NO N N N UNEQ
TRKMEM	INTL102T 4 0 PDTC 3 0 1 $

ITL2 trunk groups (continued)

Datafilling table CLLI

The following table shows the datafill specific to ITL2 for table CLLI. Only those fields that apply directly to ITL2 are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table CLLI

Field	Subfield or refinement	Entry	Explanation and action
CLLI		alphanumeric (1 to 16 characters)	Common language location identifier. Enter a CLLI code to uniquely identify the far end of the ITL2 trunk group. Only alphabetic characters, numeric characters, and _ (underscores) can be used to datafill this field. The first character must be alphabetic. For optimum use, a CLLI code must contain not more than 12 characters, as only the first 12 characters are displayed on the MAP (maintenance and administration position) display. When a CLLI code is displayed in a log report, the entire 16-character CLLI code appears.

Datafill example for table CLLI

The following example shows sample datafill for table CLLI.

MAP display example for table CLLI

```
CLLI        ADNUM  TRKGRSIZ                    ADMININF
-------------------------------------------------------
INTL102T     51     5                          MI
```

Changing datafill for table CLLI

Use the standard table editor commands to change datafill for table CLLI.

Datafilling table TRKGRP

The following table shows the datafill specific to ITL2 for table TRKGRP. Only those fields that apply directly to ITL2 are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table TRKGRP

Field	Subfield or refinement	Entry	Explanation and action
GRPKEY		see subfield	Group key. This field consists of subfield CLLI.
	CLLI	INTL102T	Common language location identifier. Enter INTL102T to specify the CLLI code for international 102 test trunks.
GRPINFO		see subfields	Variable group data. This field consists of subfields GRPTYP, TRAFSNO, PADGRP, NCCLS, MWSPRVSN and MWDBLEVL. Note that among these subfields, only those directly affected by INTL2 are described below. Refer to table TRKGRP in the data schema section of this document for information on an alternate structure for this field that results from the datafill of table CUSTFLDS.
	GRPTYP	ITL2	Group type. Enter ITL2 to specify the group type for international 102 test trunks.
	MWSPRVSN	BMW LMW SMW or TMW	Milliwatt supervision. Datafill this field to specify the required milliwatt supervision type as outlined below: • Enter BMW for 100 balance supervision. • Enter LMW for 102 local supervision. • Enter SMW for 102 steady supervision. • Enter TMW for 102 toll supervision.
	MWDBLEVL	1X00AF	Milliwatt dB level. Enter 1X00AF.

Datafill example for table TRKGRP

The following example shows sample datafill for table TRKGRP.

ITL2 trunk groups (continued)

MAP display example for table TRKGRP

```
GRPKEY              GRPINFO
-------------------------------------------------------
INTL102T            ITL2 0 TLD NCRT BMW 1X00AF
```

Changing datafill for table TRKGRP

Use the standard table editor commands to change datafill for table TRKGRP.

Datafilling table TRKSGRP

The following table shows the datafill specific to ITL2 for table TRKSGRP. Only those fields that apply directly to ITL2 are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table TRKSGRP

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 CLLI code assigned to the trunk group as datafilled in table CLLI.
	SGRP	0 or 1	Subgroup number. Enter the subgroup number assigned to the trunk group.

Datafill example for table TRKSGRP

The following example shows sample datafill for table TRKSGRP.

MAP display example for table TRKSGRP

```
SGRPKEY        CARDCODE
SGRPVAR     SGRPVAR
-------------------------------------------------------
INTL102T 0      DS1SIG
STD         OG NP IM 0 0 NO NO N N N UNEQ
```

Changing datafill for table TRKSGRP

Use the standard table editor commands to change datafill for table TRKSGRP.

Datafilling table TRKMEM

The following table shows the datafill specific to ITL2 for table TRKMEM. Only those fields that apply directly to ITL2 are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table TRKMEM

Field	Subfield or refinement	Entry	Explanation and action
CLLI		alphanumeric (1 to 16 characters)	Common language location identifier. Enter the CLLI code assigned in table CLLI to the trunk group of which the trunk is a member.
EXTRKNM		0 to 9999	External trunk number. Enter the external trunk number that is assigned to the trunk.
SGRP		0 or 1	Subgroup number. Enter the subgroup number to which the trunk is assigned.

Datafill example for table TRKMEM

The following example shows sample datafill for table TRKMEM.

ITL2 trunk groups (end)

MAP display example for table TRKMEM

```
CLLI      EXTRKNM    SGRP                  MEMVAR
-------------------------------------------------------
INTL102T  4          0                     PDTC 3 0 1
```

Changing datafill for table TRKMEM

Use the standard table editor commands to change datafill for table TRKMEM.

ITOPS trunk groups

ITOPS trunk groups ordering codes

ITOPS trunk groups have no ordering codes.

Release applicability

TL03 and up

Prerequisites

ITOPS trunk groups have no functional group prerequisites.

Description

In a DMS international office, outgoing trunk group type International traffic operator position system (ITOPS) interfaces with an international TOPS office for calls requiring the services of an ITOPS operator.

In a DMS ITOPS office, incoming trunk group type ITOPS interfaces with a DMS international office for calls requiring an ITOPS operator's services.

The signaling format used in this trunk group is in accordance with ITOPS requirements such as:

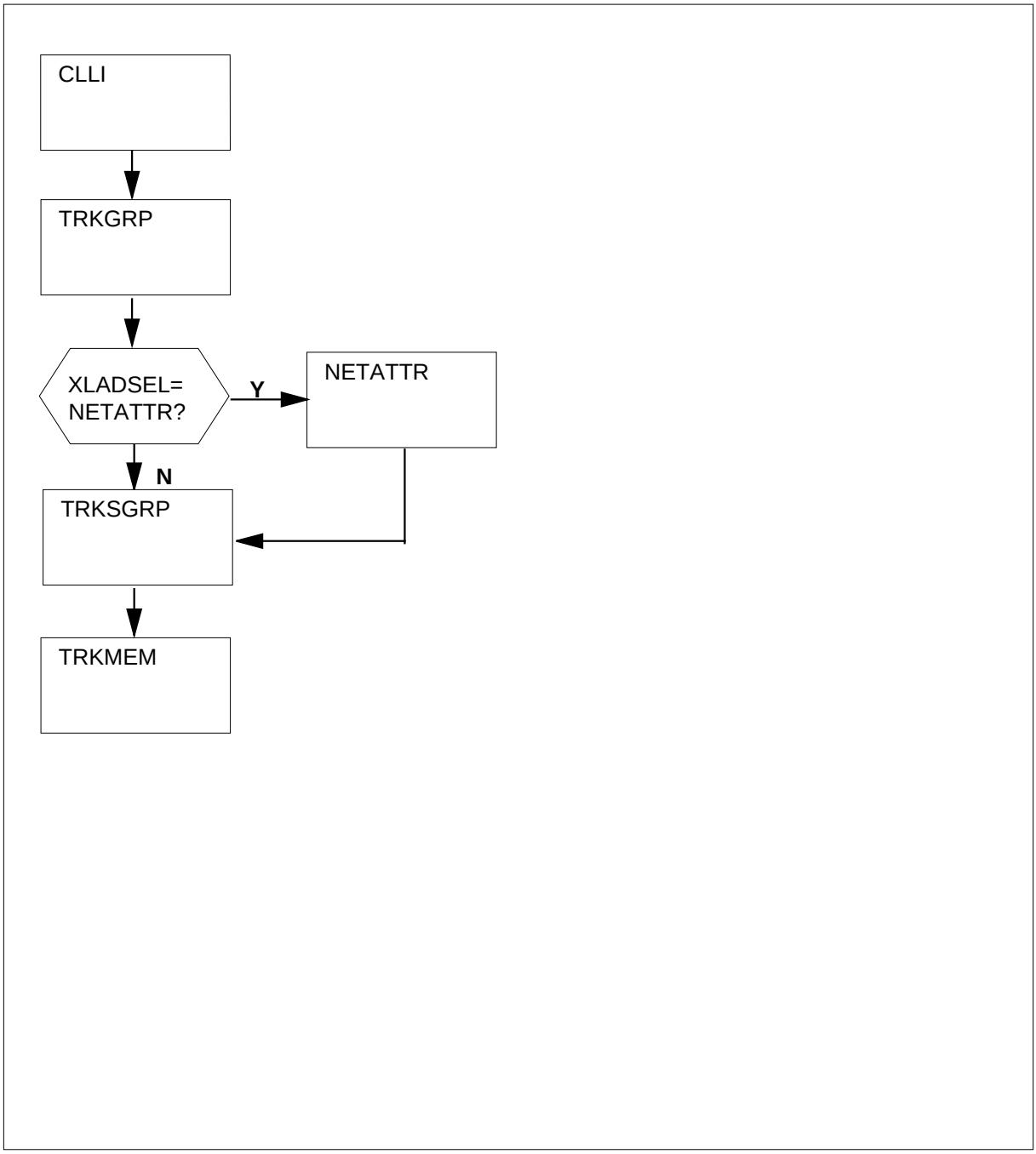
- Operator control of disconnect: Operator control of disconnect is used on outgoing trunks from a local end office (EO) to a toll ofice (TO) with ITOPS positions. This facility enables ITOPS operators to have control of the calling and the called parties involved in a call. When the calling party disconnects (an on-hook signal is sent from the EO to the TO), the EO does not initiate disconnect until it receives an on-hook signal from the TO. This onhook signal is under ITOPS operator control.
- RGF (Ring forward) signal: This signal is used by an ITOPS operator at the originating TO to re-call the ITOPS operator at the terminating TO in a previously established connection. It is a wink signal sent in the forward direction.
- RGB (Ringback) signal: This signal is used by an ITOPS operator at the terminating TO to re-call the ITOPS operator at the originating TO in a previously established connection. This signal is also used by an ITOPS operator to ring a calling party that has disconnected. It is a wink signal sent in the backward direction.

For ITOPS signaling requirements, a line signaling system can support either delay dial or wink start.

The following figure shows the datafill dependencies for ITOPS trunk groups.

ITOPS trunk groups (continued)

Datafill dependencies for ITOPS trunk groups



ITOPS trunk groups (continued)

Limitations and restrictions

The following limitations and restrictions apply to ITOPS trunk groups:

- The translation data selector NETATTR is an index into a new network attributes table. If this selector is used, datafill translation data in table NETATTR instead of table TRKGRP.

Billing

For information on billing, refer to the Bellcore format AMA translations section of this document.

Datafilling office parameters

The following table shows the office parameters used by ITOPS trunk groups. For more information about office parameters, refer to *Office Parameters Reference Manual.*

Office parameters used by ITOPS trunk groups

Table name	Parameter name	Explanation and action
OFCVAR	TRK_OOS_CHK_ON	This parameter specifies whether or not to check that the trunks in a trunk group are out of service before changing the values of specific fields in table TRKGRP by data modification order (DMO).

Datafill sequence

The following table lists the ITOPS trunk groups. The tables are listed in the order in which they are to be datafilled.

ITOPS trunk groups (Sheet 1 of 2)

Table	Purpose of table
CLLI	The common language location identifier table uniquely identifies the far end of each announcement, tone, or trunk group.
TRKGRP	The trunk group table contains customer-defined data associated with each trunk group.
NETATTR	The network attributes table contains translation data and optional features associated with a network. This table can be used as an alternative to table TRKGRP for datafilling the trunk translation data.

ITOPS trunk groups (continued)

ITOPS trunk groups (Sheet 2 of 2)

Table	Purpose of table
TRKSGRP	The trunk subgroup table contains supplementary information for each trunk group.
TRKMEM	The trunk member table specifies the physical location of each trunk assigned to one of the trunk groups.

The following table shows sample input for datafilling ITOPS trunk groups.

Sample input for ITOPS trunk groups

Table	Sample input
CLLI	ICFRANI 52 32 SATOVER_CLLI
TRKGRP	ICFRANI ITOPS 0 ELOA NCRT N N IC UNIV PX ICANICN 0 STDINTL 7
NETATTR	1 UNIV PX ICFRANIICN NIL
TRKSGRP	ICFRANI 0 P30CAS STD IC NP WK 7 0 NO NO N N N 70 UNEQ
TRKMEM	ICFRANI 103 0 DTC 1 5 1

Datafilling table CLLI

The following table shows the datafill specific to ITOPS for table CLLI. Only those fields that apply directly to ITOPS are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table CLLI

Field	Subfield or refinement	Entry	Explanation and action
CLLI		alphanumeric (1 to 16 characters)	Common language location identifier. Enter a CLLI code to uniquely identify the far end of the ITOPS trunk group. Only alphabetic characters, numeric characters, and _ (underscores) can be used to datafill this field. The first character must be alphabetic. For optimum use, a CLLI code must not contain more than 12 characters, as only the first 12 characters are displayed on the maintenance and administration position (MAP). When a CLLI code is displayed in a log report, the entire 16-character CLLI code appears.

Datafill example for table CLLI

The following example shows sample datafill for table CLLI.

MAP display example for table CLLI

```
CLLI              ADNUM  TRKGRSIZ        ADMININF
------------------------------------------------------
ICFRANI           152    32              SATOVER_CLLI
```

Changing datafill for table CLLI

Use the standard table editor commands to change datafill for table CLLI.

ITOPS trunk groups (continued)

Datafilling table TRKGRP

The following table shows the datafill specific to ITOPS for table TRKGRP. Only those fields that apply directly to ITOPS are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table TRKGRP (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 identifierEnter the 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, SAT, ESUPR, and DIRSEL. Note that among these subfields, only those directly affected by ITOPS are described below. Refer to section “General field information" in table TRKGRP in the data schema section of this document for information concerning an alternate structure for this field that results from the datafill of table CUSTFLDS.
	GRPTYP	ITOPS	Group type. Enter ITOPS for the International TOPS trunk group type. response.
	SAT	Y or N	Satellite. Enter Y (yes) if the trunk group is set up to switch through satellite. Otherwise, enter N (no).
	DIRSEL	see subfield	Trunk selection. This field consists of subfield DIR and refinements.
	DIR	IC or OG	Trunk direction. This field specifies the trunk group direction. For incoming trunk groups, enter IC and datafill refinements XLAD, DISPLAY, ANIFMT, and ANIDNSIZ. For outgoing trunk groups, enter OG and datafill refinements SELSEQ, ANIFMT, and ANIDNSIZ.
	XLAD	see subfield	Translation system. This field consists of subfield XLADSEL and refinements.

ITOPS trunk groups (continued)

Datafilling table TRKGRP (Sheet 2 of 3)

Field	Subfield or refinement	Entry	Explanation and action
	XLADSEL	UNIV, NALT, or NETATTR	Translation selector. If the universal translation system is used, enter UNIV and datafill refinement XLAAREA. If the North American translation system is used, enter NALT and datafill subfields PRTNM, SCRNCL, SNPA, and ORIGSRC. If this table indexes into table NETATTR, enter NETATTR and datafill subfield NETINDX.
	XLARREA	see subfield	Translation system. This field consists of subfields XLASYS and XLANAME. Datafill these subfields if the entry in subfield XLADSEL is UNIV.
	XLASYS	AC, AM, CC, CT, CTY, DN, FA, FT, NSC, OFC, PX, or NIL	Translation system. Datafill this field if the entry in subfield XLADSEL is UNIV. Enter a character string to specify the name of the head table from which translations begin.
	XLANAME	alphanumeric (1 to 8 characters)	Translation name. Datafill this field if the entry in subfield XLADSEL is UNIV. Enter a name from the code table that belongs to the head table referenced by subfield XLASYS. If the entry in field XLASYS is NIL, leave this field blank.
	PRTNM	alphanumeric (1 to 4 characters)	Standard pretranslation name. Datafill this field if the entry in subfield XLADSEL is NALT. Enter the name of the standard pretranslator datafilled in table STDPRTCT to which translation is to route 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 (yes), all trunks in the group must be busy before the value of this field can be changed by data modification order (DMO).

ITOPS trunk groups (continued)

Datafilling table TRKGRP (Sheet 3 of 3)

Field	Subfield or refinement	Entry	Explanation and action
	SCRNCL	alphanumeric (1 to 32 characters)or NSCR	Class of service screening table name. Datafill this field if the value in subfield XLADSEL is NALT. 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. Datafill this field if the value in subfield XLADSEL is NALT. 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. Datafill this field if the value in subfield XLADSEL is NALT. 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 table HNPACODE. Refer to subtable HNPACONT.HNPACODE, “Notes on Originating Source" in the data schema section of this document for more information.
	NETINDX	numeric (0 to 1023)	Network attribute index. Datafill this field if the entry in subfield XLADSEL is NETATTR. Enter a valid network attribute index from table NETATTR. No other translation data is required (since it is available in table NETATTR).

Datafill example for table TRKGRP

The following example shows sample datafill for table TRKGRP.

MAP display example for table TRKGRP

```
GRPKEY   GRPINFO
_____________________________________________________________
OGTOANI  ITOPS 10 ELOA NCRT N N OG MIDL STDINTL 7
ICFRANI  ITOPS  0 ELOA NCRT N N IC UNIV PX ICANICN 0
        STDINTL 7
```

Changing datafill for table TRKGRP

If office parameter TRK_OOS_CHK_ON in table OFCVAR is set to Y, all trunks in the trunk group must be taken out of service before changing the value of certain fields in table TRKGRP.

Datafilling table NETATTR

The following table shows the datafill specific to ITOPS for table NETATTR. Only those fields that apply directly to ITOPS are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table NETATTR

Field	Subfield or refinement	Entry	Explanation and action
NETIDX		0 to 1023	Network index. Enter the index referenced by table TRKGRP.
XLAVAR		see subfield	Variable translation data. This field consists of subfield XLADSEL and its refinements. For a description of these fields, refer to the data schema section of this document.

Datafill example for table NETATTR

The following example shows sample datafill for table NETATTR.

ITOPS trunk groups (continued)

MAP display example for table NETATTR

```
NETINDX   XLAVAR                                    NETVAR
-------------------------------------------------------------
1         UNIV  PX  ICFRANIICN                      NIL
```

Changing datafill for table NETATTR

Use the standard table editor commands to change datafill for table NETATTR.

Datafilling table TRKSGRP

The following table shows the datafill specific to ITOPS for table TRKSGRP. Only those fields that apply directly to ITOPS are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table TRKSGRP

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 CLLI code assigned to the trunk group as datafilled in table CLLI.
	SGRP	numeric (0 or 1)	Subgroup number. Enter the subgroup number assigned to the trunk group.
	CARDCODE	P30CAS	Card code. Enter P30CAS for an international extended multiprocessor system (XMS) based peripheral module (IXPM) trunk with pulse code modulation 30 (PCM30).

Datafill example for table TRKSGRP

The following example shows sample datafill for table TRKSGRP.

MAP display example for table TRKSGRP

```
           SGRPKEY      CARDCODE
SGRPVAR         SGRPVAR
-------------------------------------------------------
           ICFRANI 0    P30CAS
STD             OG NP WK 7 0 NO NO N N N 70 UNEQ
```

Changing datafill for table TRKSGRP

Use the standard table editor commands to change datafill for table TRKSGRP.

Datafilling table TRKMEM

The following table shows the datafill specific to ITOPS for table TRKMEM. Only those fields that apply directly to ITOPS are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table TRKMEM

Field	Subfield or refinement	Entry	Explanation and action
CLLI		alphanumeric (1 to 16 characters)	Common language location identifier. Enter the CLLI code assigned in table CLLI to the trunk group of which the trunk is a member.
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.
SGRP		numeric (0 to 1)	Subgroup number. Enter the subgroup number to which the trunk is assigned.

Datafill example for table TRKMEM

The following example shows sample datafill for table TRKMEM.

ITOPS trunk groups (end)

MAP display example for table TRKMEM

```
CLLI              EXTRKNM   SGRP            MEMVAR

-------------------------------------------------------
ICFRANI           103        0              DTC 1 5 1
```

Changing datafill for table TRKMEM

Use the standard table editor commands to change datafill for table TRKMEM.

LOOPA trunk groups

Ordering codes

LOOPA trunk groups have no ordering codes.

Release applicability

TL03 and up

Prerequisites

LOOPA trunk groups have no functional group prerequisites.

Description

Trunk group type LOOPA is used in switches that are configured for loop-around testing.

Each loop-around test unit consists of a trunk card with product engineering code (PEC) NT2X75AA (loop around test line).

Each A-law loop-around test line consists of a trunk card with PEC NT2X75BA.

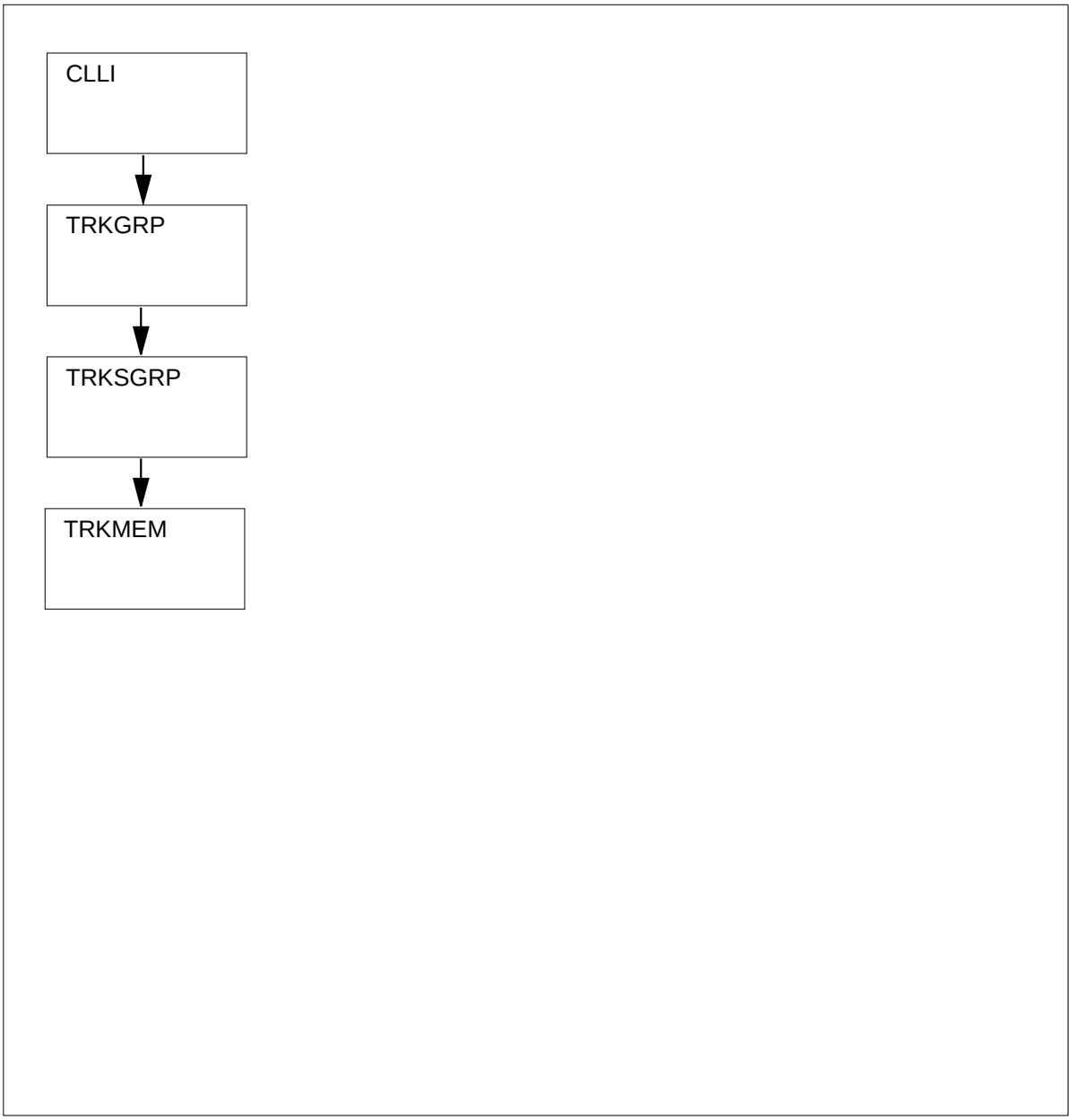
The trunk card consists of two circuits. The even-numbered circuit is assigned to the loop port 1 trunk group and is represented in table CLLI by the pseudo-common language location identifier (pseudo-CLLI) LOOPA1. The odd-numbered circuit is assigned to the loop-around port 2 trunk group and is represented in table CLLI by the pseudo-CLLI LOOPA2.

Provision only one of these circuits in a switch.

The following figure shows the datafill dependencies for LOOPA trunk groups.

LOOPA trunk groups (continued)

Datafill dependencies for LOOPA trunk groups



Limitations and restrictions

LOOPA trunk groups have no limitations or restrictions.

Billing

LOOPA trunk groups do not affect billing.

LOOPA trunk groups (continued)

Datafilling office parameters

The following table shows the office parameters used by LOOPA trunk groups. For more information about office parameters, refer to *Office Parameters Reference Manual.*

Office parameters used by LOOPA trunk groups

Table name	Parameter name	Explanation and action
OFCVAR	TRK_OOS_CHK_ON	This parameter specifies whether to check that the trunks in a trunk group are out of service before changing the values of specific fields in table TRKGRP by data modification order (DMO).

Datafill sequence

The following table lists the tables used by LOOPA trunk groups. The tables are listed in the order in which they are to be datafilled.

Tables used by LOOPA trunk groups

Table	Purpose of table
CLLI	The common language location identifier table uniquely identifies the far end of each announcement, tone, or trunk group.
TRKGRP	The trunk group table contains customer-defined data associated with each trunk group.
TRKSGRP	The trunk subgroup table contains supplementary information for each trunk group.
TRKMEM	The trunk member table specifies the physical location of each trunk assigned to one of the trunk groups.

The following table shows sample input for datafilling LOOPA trunk groups.

Sample input for LOOPA trunk groups

Table	Sample input
CLLI	LOOPA1 51 1 LOOP-AROUND_PORT1
TRKGRP	LOOPA1 LOOPA 0 TLD NCRT 2X75BA
TRKSGRP	LOOPA1 0 2X75BA STD OG NP IM 0 0 NO NO N N N 1 UNEQ
TRKMEM	LOOPA1 0 0 MTM 10 10

LOOPA trunk groups (continued)

Datafilling table CLLI

The following table shows the datafill specific to LOOPA for table CLLI. Only those fields that apply directly to LOOPA are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table CLLI

Field	Subfield or refinement	Entry	Explanation and action
CLLI		alphanumeric (1 to 16 characters)	Common language location identifier. Enter a CLLI code to uniquely identify the far end of the LOOPA trunk group. Only alphabetic characters, numeric characters, and _ (underscores) can be used to datafill this field. The first character must be alphabetic. For optimum use, a CLLI code must contain not more than 12 characters, as only the first 12 characters are displayed on the MAP (maintenance and administration position) display. When a CLLI code is displayed in a log report, the entire 16-character CLLI code appears.

Datafill example for table CLLI

The following example shows sample datafill for table CLLI.

MAP display example for table CLLI

```
CLLI     ADNUM  TRKGRSIZ          ADMININF
-------------------------------------------------------
LOOPA1   51     1                 LOOP-AROUND_PORT1
```

Changing datafill for table CLLI

Use the standard table editor commands to change datafill for table CLLI.

Datafilling table TRKGRP

The following table shows the datafill specific to LOOPA for table TRKGRP. Only those fields that apply directly to LOOPA are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table TRKGRP

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 pseudo-CLLI code for the line loop test unit trunk group.
GRPINFO		see subfields	Variable group data. This field consists of subfields GRPTYP, TRAFSNO, PADGRP, NCCLS, and CARDCODE. Note that among these subfields, only those directly affected by LOOPA are described below.
	GRPTYP	LOOPA	Group type. Enter LOOPA to specify the line loop test unit trunk group type.
	CARDCODE	2X75AAor2X 75BA	Cardcode. Enter the PEC for the LOOPA trunk group as outlined below. Enter 2X75AA for the line loop test unit. Enter 2X75BA for the A-law loop-around test line. 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 DMO.

Datafill example for table TRKGRP

The following example shows sample datafill for table TRKGRP.

MAP display example for table TRKGRP

```
GRPKEY                              GRPINFO
-------------------------------------------------------
LOOPA1                              LOOPA 0 TLD NCRT 2X75BA
```

LOOPA trunk groups (continued)

Changing datafill for table TRKGRP

If office parameter TRK_OOS_CHK_ON in table OFCVAR is set to Y, all trunks in the trunk group must be taken out of service before changing the value of certain fields in table TRKGRP.

Datafilling table TRKSGRP

The following table shows the datafill specific to LOOPA for table TRKSGRP. Only those fields that apply directly to LOOPA are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table TRKSGRP

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 CLLI code assigned to the trunk group as datafilled in table CLLI.
	SGRP	0 or 1	Subgroup number. Enter the subgroup number assigned to the trunk group.

Datafill example for table TRKSGRP

The following example shows sample datafill for table TRKSGRP.

MAP display example for table TRKSGRP

```
         SGRPKEY      CARDCODE
SGRPVAR                    SGRPVAR
-------------------------------------------------------
         LOOPA1 0     2X75BA
STD
                           OG NP IM 0 0 NO NO N N N 1 UNEQ
```

Changing datafill for table TRKSGRP

Use the standard table editor commands to change datafill for table TRKSGRP.

Datafilling table TRKMEM

The following table shows the datafill specific to LOOPA for table TRKMEM. Only those fields that apply directly to LOOPA are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table TRKMEM

Field	Subfield or refinement	Entry	Explanation and action
CLLI		alphanumeric (1 to 16 characters)	Common language location identifier. Enter the CLLI code assigned in table CLLI to the trunk group of which the trunk is a member.
EXTRKNM		0 to 9999	External trunk number. Enter the external trunk number that is assigned to the trunk.
SGRP		0 to 1	Subgroup number. Enter the subgroup number to which the trunk is assigned.

Datafill example for table TRKMEM

The following example shows sample datafill for table TRKMEM.

MAP display example for table TRKMEM

```
CLLI      EXTRKNM  SGRP                    MEMVAR
-------------------------------------------------------
LOOPA1    0        0                       MTM 10 10
```

Changing datafill for table TRKMEM

Use the standard table editor commands to change datafill for table TRKMEM.

LP4W trunk groups

Ordering codes

LP4W trunk groups have no ordering codes.

Release applicability

TL03 and up

Prerequisites

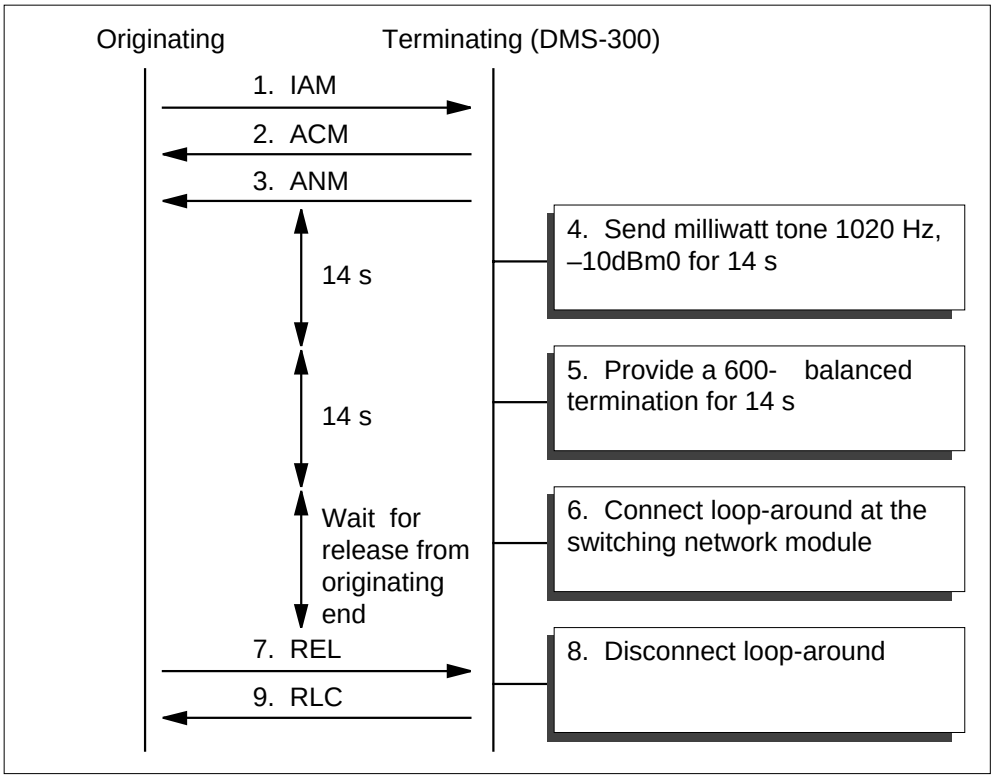
LP4W trunk groups have no functional group prerequisites.

Description

The four-wire digital loop test line (LP4W) trunk group is used for performing terminating and originating loop-around tests on CCITT No.7 ISDN user part (ISUP) trunks in a DMS-300 switch.

The following figure illustrates the terminating digital loop-around test line test protocol. It illustrates the CCITT No.7 ISUP messages involved in setting up and clearing down the test call.

Terminating digital loop-around test line test protocol



The CCITT No.7 ISUP trunk at the terminating DMS-300 gateway switching unit can be either an incoming or two-way trunk. Test access is permitted if the trunk is in any one of the following trunk states: IDL (idle), MB (manual busy), RMB (remote manual busy), or SB (system busy).

The NT1X00 test trunk located in a maintenance trunk module (MTM) is used as the test equipment for generating the milliwatt tone, and for providing the 60 Ω balanced termination. The NT1X00 test trunk satisfies the CCITT Red Book Volume IV section 3.0 specifications for tone source characteristics and impedance.

Terminating test line test protocol

Figure 1 illustrates the terminating test line test protocol listed below:

1. When the ISUP trunk under test (TUT) receives an initial address message (IAM), it acknowledges it with an address complete message (ACM) followed by an answer message (ANM).
2. The ISUP TUT is then connected through the DMS switching network to a free NT1X00 test trunk. The NT1X00 test trunk provides a 60 Ω balanced termination to the receive (RX) direction of the four-wire digital trunk and transmits a milliwatt tone of 1020 Hz at -10dBm0 (decibels at the zero transmission level point) out on the transmit (TX) direction. The milliwatt tone lasts for 14 s.
3. The milliwatt tone is terminated at the end of the 14-s interval, and the NT1X00 test trunk presents a 600 Ω balanced termination to the TX direction for the next 14 s.
4. At the end of the second interval, the 600 Ω terminations at both the TX and RX direction of the ISUP trunk are disconnected. Finally, the TX and the RX directions are connected (looped around) with the switching network digital pad set to 0dBr (relative decibel) level. The loopback point is at the DMS-300 network module (NM).
5. The looped around condition is maintained until the ISUP TUT receives a release message (REL) from the originating switch. When this message is received, the looped around is released and the ISUP TUT is idled. A release complete message (RLC) is also returned to the originating switching unit.

Error handling - terminating test line occupied

When access is gained to the terminating digital loop-around test line, an ANM message is returned to the originating switch as illustrated in the previous figure . If the terminating test line is occupied, a busy indication is returned to the originating end. For the ISUP TUT, based on datafillable options in a DMS-300 switching unit, either a REL message, with cause indicator being

LP4W trunk groups (continued)

equal to USER BUSY `00010001', or a tone or an announcement is returned to the far-end switching unit.

Error handling - terminating test line unequipped

When a digital loop-around test line access code is received at a DMS-300 terminating switching unit, it is expected to be routed to a terminating digital loop-around test line. However, if the translation datafill for the test line is either missing or incomplete, an unallocated number signal is returned to the far-end switching unit. As for the ISUP TUT considered here, based on user datafillable options in a DMS-300 switch, a REL message, with cause indicator being equal to UNALLOCATED (UNASSIGNED) NUMBER `00000001', or a tone or an announcement is returned to the far-end switch.

Force releasing the terminating digital loop-around test line

While the terminating digital loop-around test line is carrying out its test protocol, and in call processing busy (CPB) state, the test line can be forced release from the TTP (trunk test position) level of the MAP (maintenance and administration position) using the TTP command FRLS (force release).

Automatic loop-around timeout

In the ISUP TUT loop-around mode, the call can be taken down by the terminating switch when the time-out expires.

The timeout is datafilled as a switching unit parameter LOOP_AROUND_TIMEOUT_IN_MIN in table OFCVAR.

Calling party's category

The calling party's category parameter field of the incoming IAM message is expected to be set to 00001101 (ISUP CALLING PARTY'S CATEGORY TEST CALL).

Trunk group type for the terminating digital loop-around test line

A trunk group type, LP4W, is introduced for the terminating digital loop-around test line to a DMS-300 gateway switch.

Field GRPINFO for the LP4W trunk group type consists of two fields that enable maintenance personnel to specify the tone cadence and tone characteristics (that is, both frequency and level) of the milliwatt tone. Field MWSPRVSN enables maintenance personnel to specify the type of supervision to be used for the milliwatt tone. This translates itself directly to the tone cadence.

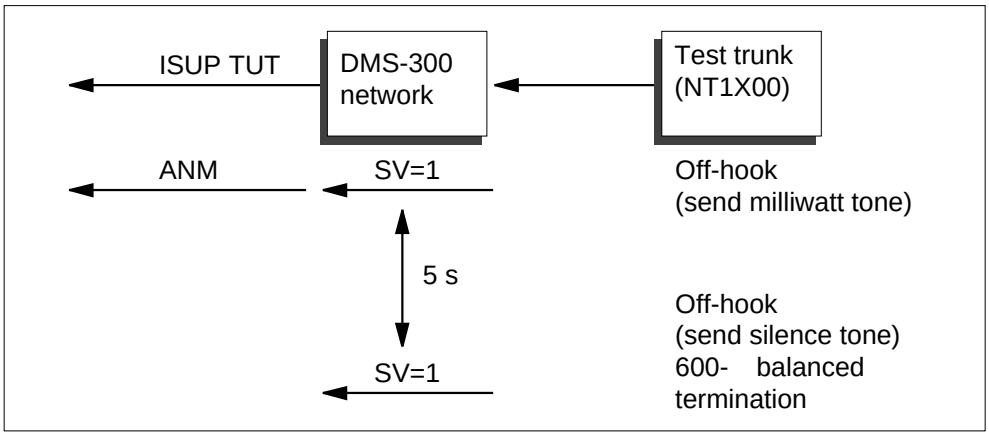
LP4W trunk groups (continued)

The following is a list of the possible supervision types that can be selected:

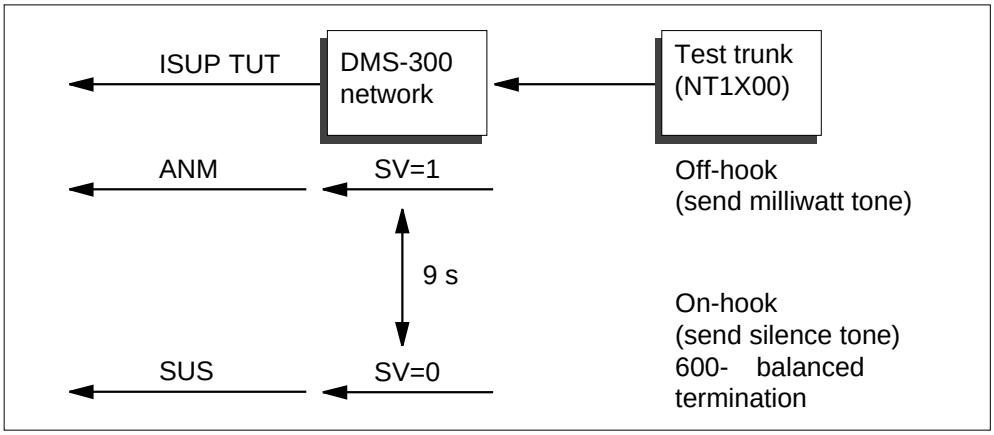
- BMW
- TMW
- LMW
- IMW
- NMW

The following Figures illustrate the tone cadence of each of these supervision types, and also the relationship between the test line responder terminal state and the CCITT No.7 ISUP messages.

Tone cadence for BMW supervision type

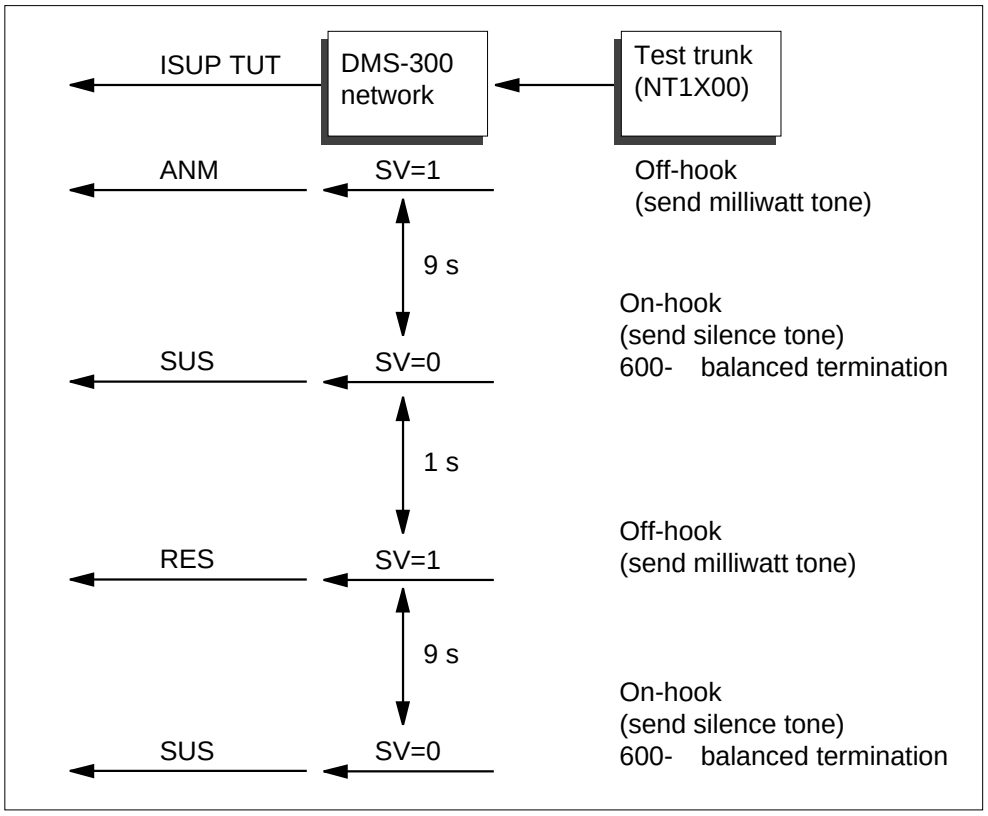


Tone cadence for TMW supervision type



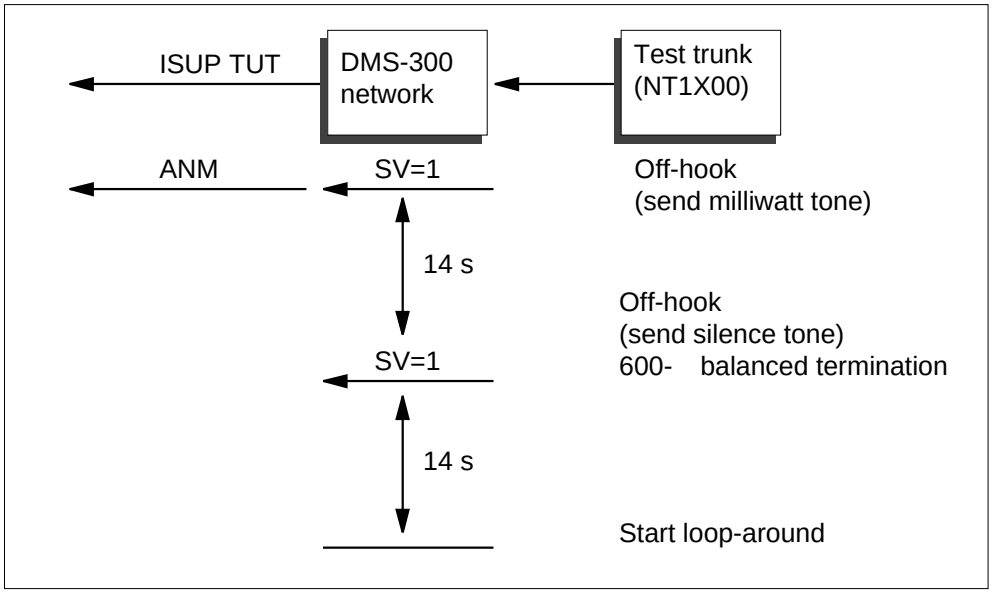
LP4W trunk groups (continued)

Tone cadence for LMW supervision type



LP4W trunk groups (continued)

Tone cadence for IMW supervision type



Note: For LMW supervision, the pattern is repeated indefinitely. As shown in the figures, on-hook and off-hook represent the terminal state of the terminating test line as seen by the peripheral module (PM). This does not cause the originator and terminator to become idle. Actual on-hook or disconnect that can cause both originator and terminator to become idle, can be brought about by the originating trunk going on-hook.

The supervision type IMW satisfies the CCITT Red Book specification of milliwatt tone.

The supervision type NMW allows for applications at the originating switch that do not require milliwatt tone or quiet termination before going into loop-around mode.

If one of the supervision types BMW, TMW, or LMW is chosen, loop-around of the ISUP TUT is not carried out. Loop-around of the ISUP TUT is only carried out if IMW or NMW supervision type is chosen.

If the terminating digital loop-around test line is used in combination with the originating digital loop-around test line, the IMW supervision type is used. However, for other applications at the originating switch, maintenance personnel have the freedom to use other supervision types.

LP4W trunk groups (continued)

The other field is the MWTTCLLI that contains one of the fixed CLLI pseudo codes of the NT1X00 test trunks. This enables the incoming test call to be routed to the correct test equipment (that is, a NT1X00 circuit).

Address information

According to the CCITT Red Book Volume IV Fascicle IV.4 Rec.O.11 section 2.4.2, the test line access code for the digital loop-around test line is 66. The two-digit test line access code is expected to be found in the address parameter field of the received IAM message.

Translation datafill

For incoming CCITT #7 ISUP test call, the N7TS international pretranslator is used for routing calls to the terminating test line.

Terminating digital loop-around test line responder

The NT1X00 test trunk (digital loop-around test line responder) located in a maintenance trunk module (MTM) is used for providing the milliwatt tone and the 600 Ω balance impedance. There are several versions of this test trunk. Each version of this test trunk corresponds to a specific milliwatt tone characteristic, as shown in the following table.

Versions of the NT1X00 test trunk card

Version	Frequency	Level
NT1X00AA and AB	1004 Hz ±0.02 Hz	0 dBm ± 0.01 dB
NT1X00AE	1020 Hz ± 0.02 Hz	-10 dBm ± 0.01 dB
NT1X00AF	1004 Hz ± 0.02 Hz	-10 dBm ± 0.01 dB
NT1X00AG	1004 Hz ± 0.02 Hz	-20 dBm ± 0.01 dB
NT1X00AH	1004 Hz ± 0.02 Hz	-15 dBm ± 0.01 dB

In order to satisfy the CCITT Red Book recommendation, card NT1X00AE is used. However, other NT1X00 card versions can be used.

There are specific fixed pseudo CLLI codes for each version of the NT1X00 test trunk.

LP4W trunk groups (continued)

The table below lists the fixed CLLI pseudo codes and their card versions.

Fixed CLLI pseudo cards and NT1X00 card versions

Fixed pseudo CLLI code	NT1X00 card version
MWTTAA	NT1X00AA
MWTTAB	NT1X00AB
MWTTAE	NT1X00AE
MWTTAF	NT1X00AF
MWTTAG	NT1X00AG
MWTTAH	NT1X00AH

Originating digital loop-around test line

The CCITT Red Book does not specify precisely what facilities must be provided at the calling end of a digital loop-around test line test. However, this feature provides the facilities at the originating switch to perform automatic measurements of far-to-near loss and noise, as well as near-to-far loss and noise of a CCITT No.7 ISUP TUT.

Digital loop-around test line code

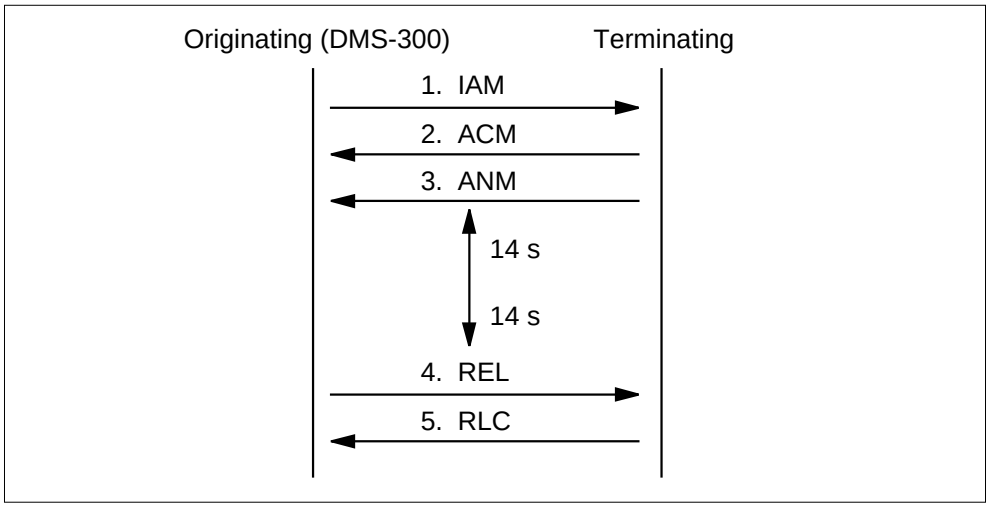
A new test line code is introduced by this feature for accessing the digital loop-around test line at the far end switching unit. The new test line code is TL01.

Originating digital loop-around test line test protocol

The following figure illustrates the CCITT No.7 ISUP messages involved in the setting up and clearing down of the test call.

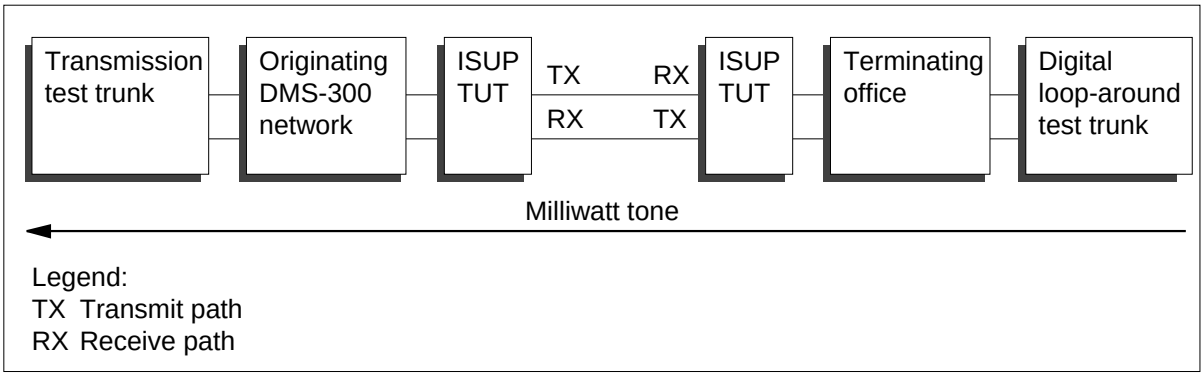
LP4W trunk groups (continued)

Common procedures of an ISUP test call



After the ANM is received from the far-end switch, the terminating digital loop-around test line then sends a milliwatt tone for 14 s followed by 14 s of quiet termination. The originating switch uses TTTS for far-to-near transmission loss measurements during the first 14-s interval, and carries out far-to-near noise measurements during the second 14-s interval. The DMS-300 originating switch makes reference to table MWDATA for the expected milliwatt tone frequency and level to be transmitted from the terminating switch. The far-to-near transmission loss measurement is illustrated in the following figure.

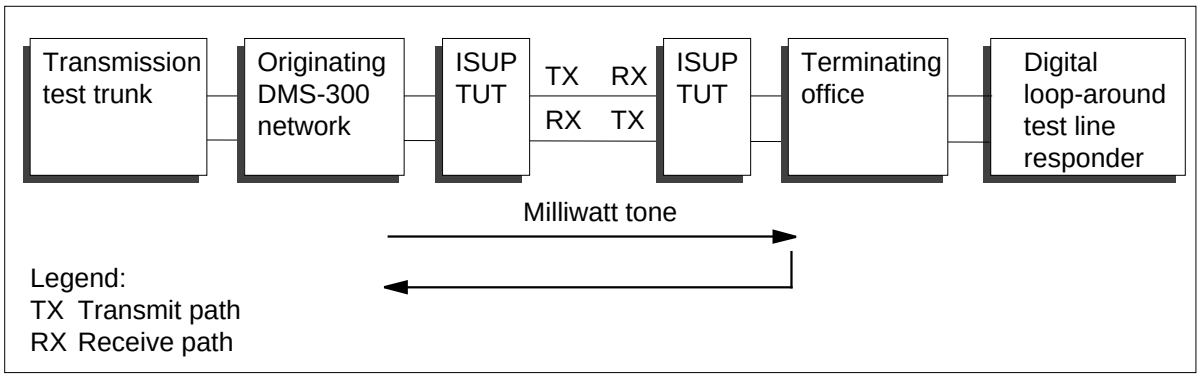
Far-to-near transmission loss measurement



After 14 s of sending out milliwatt tone and then another 14 s of quiet termination provided by the terminating digital loop-around test line, the test line responder connects its receive path to the transmit path (loop-around). During this interval, the originating switch uses a TTT to send out a milliwatt

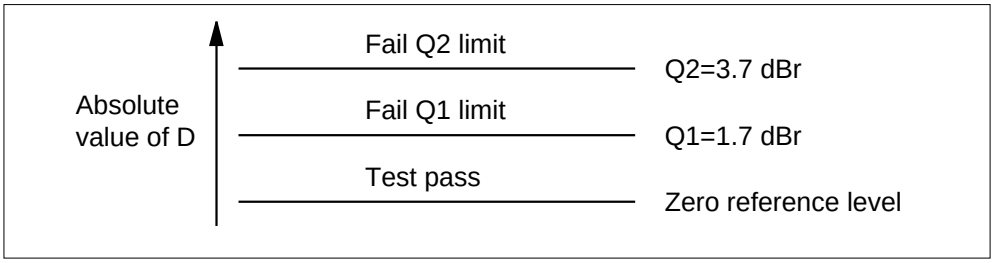
tone for 5 s on its transmit path and measures the milliwatt tone on its receive path. The originating DMS-300 switching unit makes reference to table MWDATA for the frequency and level of the milliwatt tone to be transmitted. The same milliwatt tone as that from the terminating switch is used. After 5 s of milliwatt tone, the TTT provides 5 s of quiet termination at its transmit path, and measures the noise level at its receive path. The following figure illustrates the transmission loss measurement during this period. The transmission loss measurement over the looped-back ISUP TUT enables the near-to-far loss and noise to be calculated.

Transmission loss measurement over the loop-ed back trunk



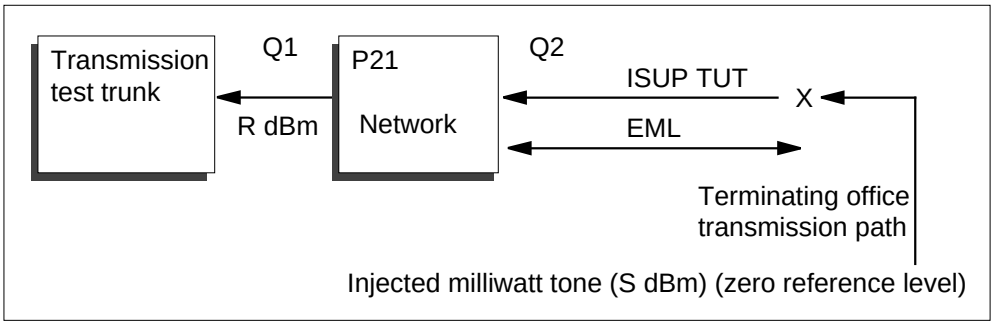
The TTT is used for transmission loss and noise measurement. When it is used for transmission loss measurement as shown in the following figure, the measured far-to-near loss is compared against the expected measured loss (EML) value of the ISUP TUT. The EML value is stored in subtable CLLIMTCE.DIAGDATA against the ISUP TUT. The deviation of the far-to-near loss from the EML value is compared against fixed Q1 and Q2 thresholds. If the deviation exceeds either one of the thresholds, the transmission loss test is considered as failure. The originating digital loop-around test line stops and provides a log report of the measured results at the TTP level of the MAP.

Far-to-near transmission loss calculation



LP4W trunk groups (continued)

Far-to-near transmission loss measurement



In the following figures, the far-to-near transmission loss value is calculated with the following equation:

$$L = \{S \pm R \pm P\}$$

$$D = \{L \pm EML\}$$

where

R
is the measured milliwatt power level in dBm

S
is transmitted milliwatt power level in dBm

L
is far-to-near loss in dBr

D
is deviation of the far-to-near loss from EML

EML
is expected measured loss

Q1
is 1.7 dBr

Q2
is 3.7 dBr

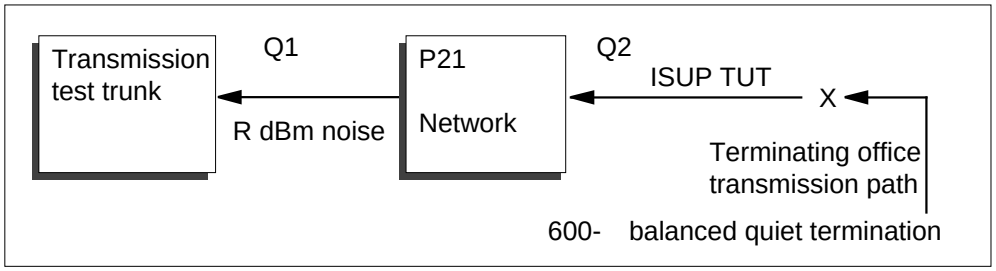
P
the switching network pad loss in the receive direction (that is, from the originating ISUP TUT to the TTT)

The nominal value of the transmitted milliwatt signal power level is obtained from table MWDATA at the originating switch.

LP4W trunk groups (continued)

Referring to the following figure, the TTT is used for far-to-near noise power measurement. The measured noise power level is compared against the thresholds found in subtable CLLIMTCE.DIAGDATA. (These values are the noise level maintenance limit (NML) and the noise immediate action limit (NIAL); both limits are stored against the ISUP TUT.) If the measured noise power levels exceeded either one of the two thresholds, the test stops, and a log is reported at the TTP MAP level.

Far-to-near noise measurement



In the following figure, the TTT is used for transmitting the milliwatt tone in its transmit path, and for measuring the transmitted milliwatt tone at its receive path. This is during the interval when the ISUP TUT is looped-around at the far-end switch. The measured transmitted milliwatt power level is the sum of near-to-far loss and far-to-near loss. Since the far-to-near loss was already obtained from the previous interval, the near-to-far loss can be calculated with the following equation:

$$LT = \{S \pm R \pm P12 - P21\}$$

but

$$LT = \{LNF + LFN\}$$

therefore

$$LNF = \{LT \pm LFN\}$$

$$D = \{LNF \pm EML\}$$

where:

D
is deviation from the EML

LP4W trunk groups (continued)

EML
is expected measured loss

LFN
is far-to-near loss

LNF
is near-to-far loss

LT
is total looped around circuit loss

P12
is switching network loss in the transmit direction

P21
is switching network loss in the receive direction

Q1
is 1.7 dBr

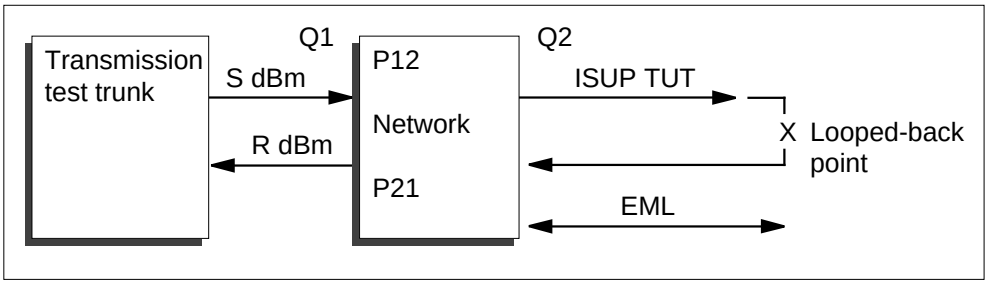
Q2
is 3.7 dBr

R
is measured transmitted milliwatt signal power

S
is transmitted milliwatt signal power

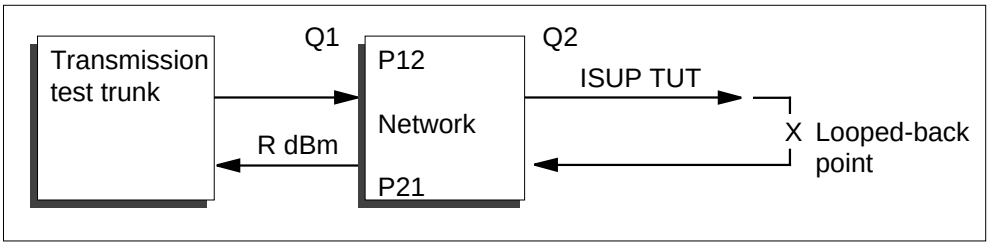
The absolute value of deviation D is again compared with the Q1 and Q2 thresholds to determine the pass or failure of the looped-around transmission test.

Transmission loss measurement over looped-back trunk



LP4W trunk groups (continued)

Noise measurement over looped-back trunk



In the following figure,the TTT is used for providing 600 Ω balanced termination as well as for measuring the noise power in the looped-back circuit. The near-to-far noise power is compared against the NML and NIAL limits to determine the success or failure of the looped-around noise test.

Note: The Q1 and Q2 thresholds are internally preset values when the test is invoked from the TTP level of the MAP. However, Q1 and Q2 thresholds can be changed from their defaults values when the test is scheduled from the ATT level of the MAP.

Presentation of test line results

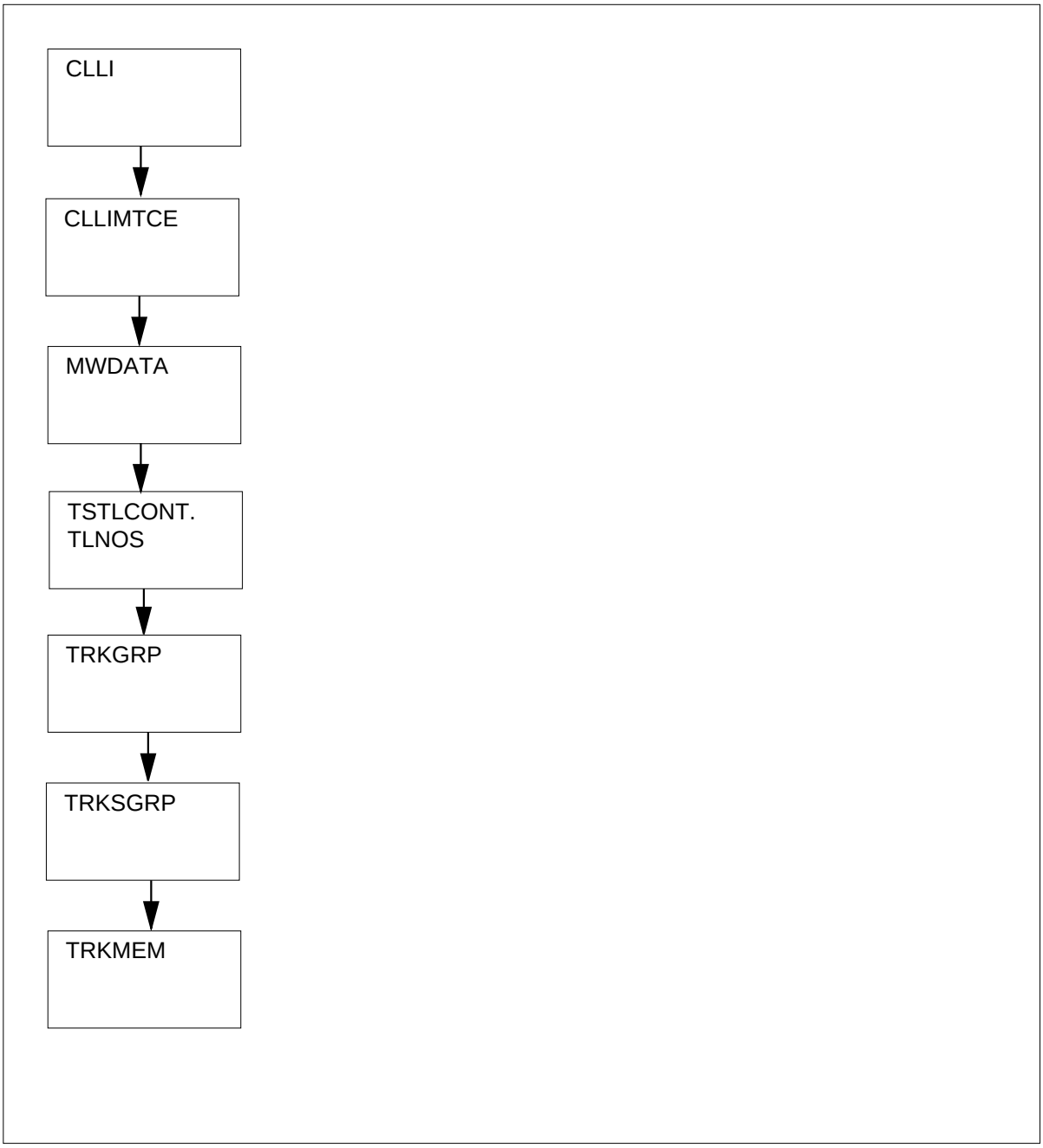
If the digital loop-around test line test is to be run manually from the TTP level of the MAP, the test line result is displayed at the MAP.

ATT 123 log report registers the digital loop-around test line test result if run from the ATT level of the MAP. The ATT 123 log report is routed to the specified output console through the DMS log report system.

The following figure shows the datafill dependencies for LP4W trunk groups.

LP4W trunk groups (continued)

Datafill dependencies for LP4W trunk groups



Limitations and restrictions

The following limitations and restrictions apply to LP4W trunk groups:

- For a given version of the NT1X00 test trunk, an equipment pool is set up by datafilling the trunk circuit in tables CLLI, CLLIMTCE, TRKGRP, TRKSGRP, and TRKMEM. The same pseudo code must be used in each of the tables listed in the previous paragraph if the equipment pool is to be set up.
- Field GRPINFO for the LP4W trunk group type consists of two fields that enable maintenance personnel to specify the tone cadence and tone characteristics (that is, both frequency and level) of the milliwatt tone.
  - — Field MWSPRVSN enables maintenance personnel to specify the type of supervision to be used for the milliwatt tone. This translates itself directly to the tone cadence.
  - — Field MWTTCLLI contains one of the fixed CLLI pseudo codes of the NT1X00 test trunks. This enables the incoming test call to be routed to the correct test equipment (that is, a NT1X00 circuit).
- In table TRKGRP, the trunk group type for the NT1X00 test trunk is MAINT. This is consistent with other test equipment in the switches such as transmission test trunk (TTT), and transmission test unit (TTU). The card code entered in table TRKGRP is checked against the fixed pseudo CLLI code. If the card code is not a valid one for the given fixed pseudo CLLI, the table control rejects the data tuple entry request.
- The data in table TRKSGRP is automatically datafilled by the system table control once the CLLI is entered in table TRKGRP.
- The following datafill is required for the originating test line:
  - — The test line address information is stored in subtable TSTLCONT.TLNOS. The index to access table TSTLCONT is stored against field TSTNOIND of table CLLIMTCE.
  - — The test line number to be outpulsed is stored against the new test line code for digital loop-around test line test. The test line number consists of a KP (key-pulse) digit, a discrimination digit, a two-digit address, and an ST (signaling terminal) digit.
  - — For a given trunk group in a DMS-300 switch, there is always a data tuple entry in table CLLIMTCE. Table MWDATA is indexed by field MWIDX of table CLLIMTCE. Consequently, for a given ISUP TUT, the originating switch can access table MWDATA for the milliwatt reference value through the corresponding trunk group MWIDX entry in table CLLIMTCE.

LP4W trunk groups (continued)

Billing

For information on billing, refer to the Bellcore format AMA translations section of this document.

Datafilling office parameters

The following table shows the office parameters used by LP4W trunk groups. For more information about office parameters, refer to *Office Parameters Reference Manual.*

Office parameters used by LP4W trunk groups

Table name	Parameter name	Explanation and action
OFCVAR	LOOP_AROUND_TIMEOUT_IN_MIN	This parameter specifies the timeout provided as a safeguard to prevent the digital looparound test call connection from being held up indefinitely if the originating office fails to clear the call.

Datafill sequence

The following table lists the tables used by LP4W trunk groups. The tables are listed in the order in which they are to be datafilled.

used by LP4W trunk groups

Table	Purpose of table
CLLI	The common language location identifier table uniquely identifies the far end of each announcement, tone, or trunk group.
TRKGRP	The trunk group table contains customer-defined data associated with each trunk group.
CLLIMTCE	The common language location identifier maintenance table contains information that enables the operating company to peform DMS service testing.
MWDATA	The milliwat data table contains milliwat values that are required for the office.
TSTLCONT.TLNOS	The test line number subtable contains the test line names and their associated codes.
TRKSGRP	The trunk subgroup table contains supplementary information for each trunk group.
TRKMEM	The trunk member table specifies the physical location of each trunk assigned to one of the trunk groups.

LP4W trunk groups (continued)

The following table shows sample input for datafilling LP4W trunk groups.

Sample input for LP4W trunk groups

Table	Sample input
CLLI	ICFRANI 52 32 SATOVER_CLLI
TRKGRP	ICFRANI LP4W 0 ELOA NCRT N N IC UNIV PX ICANICN 0 STDINTL 7
CLLIMTCE	T120 T120 5 10 15 NSS 0 0 N N (0)
MWDATA	0 0 MWDATA
TSTLCONT.TL NOS	T100 1191 N
TRKSGRP	ICFRANI 0 P30CAS STD IC NP WK 7 0 NO NO N N N 70 UNEQ
TRKMEM	ICFRANI 103 0 DTC 1 5 1

Datafilling table CLLI

The following table shows the datafill specific to LP4W for table CLLI. Only those fields that apply directly to LP4W are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table CLLI

Field	Subfield or refinement	Entry	Explanation and action
CLLI		alphanumeric (1 to 16 characters)	Common language location identifier. Enter a CLLI code to uniquely identify the far end of the LP4W trunk group. Only alphabetic characters, numeric characters, and _ (underscores) can be used to datafill this field. The first character must be alphabetic. For optimum use, a CLLI code must not contain more than 12 characters, as only the first 12 characters are displayed on the maintenance and administration position (MAP). When a CLLI code is displayed in a log report, the entire 16-character CLLI code appears.

LP4W trunk groups (continued)

Datafill example for table CLLI

The following example shows sample datafill for table CLLI. A free CLLI code is picked for the naming of the terminating digital loop-around test line. For this example, the CLLI name DLPATL is chosen for illustration purposes.

The example shows the requirements for declaring a terminating digital loop-around test line to a DMS-300 gateway switch.

MAP display example for table CLLI

```
CLLI   ADNUM  TRKGRSIZ  ADMININF
-------------------------------------------------------
DLPATL 152    0        FOUR_WIRE_DIGITAL_LOOP_TEST_LINE
```

Changing datafill for table CLLI

Use the standard table editor commands to change datafill for table CLLI.

Datafilling table CLLIMTCE

The following table shows the datafill specific to LP4W for table CLLIMTCE. Only those fields that apply directly to LP4W are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table CLLIMTCE

Field	Subfield or refinement	Entry	Explanation and action
CLLI		alphanumeric (1 to 16 characters)	Common language location identifier. Enter the CLLI code assigned in table CLLI to the trunk group of which the trunk is a member.
	MWIDX	0 to 9	Milliwat data table index. Enter the valid entry from table MWDATA. Refer to the data schema section of this document for more information on table MWDATA.
	TSTNOIND	0 to 164	Test number table index. Enter the valid entry from table TSTLCONT. Refer to the data schema section of this document for more information on table TSTLCONT

Datafill example for table CLLIMTCE

The following example shows sample datafill for table CLLIMTCE.

MAP display example for table CLLIMTCE

```
CLLI SCLLI MINALM MAJALM CRITALM SYNCTYPE
TSTNOIND MWIDX SIGTST PRFXDIGS DIAGDATA
-------------------------------------------------------
T120 T120  5      10     15      NSS
0         0    N      N        (0)
```

Changing datafill for table CLIMTCE

Use the standard table editor commands to change datafill for table CLLIMTCE.

Datafilling table MWDATA

The following table shows the datafill specific to LP4W for table MWDATA. Only those fields that apply directly to LP4W are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table MWDATA

Field	Subfield or refinement	Entry	Explanation and action
IDXKEY		0 to 9	Milliwat index key. Enter the milliwat index. Do not leave this field blank.

Datafill example for table MWDATA

The following example shows sample datafill for table MWDATA.

MAP display example for table MWDATA

```
IDXKEY  MWDATA
-------------------------------------------------------
0 0     MWDATA
```

LP4W trunk groups (continued)

Changing datafill for table MWDATA

Use the standard table editor commands to change datafill for table MWDATA.

Datafilling subtable TSTLCONT.TLNOS

The following table shows the datafill specific to LP4W for subtable TSTLCONT.TLNOS. Only those fields that apply directly to LP4W are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling subtable TSTLCONT.TLNOS

Field	Subfield or refinement	Entry	Explanation and action
TESTLINE		alphanumeric (4 characters)	Test line name. Enter the standard DMS test line name.
TLNUMBER		0 to 9,B to F(up to 18 characters)	Test line number. If the switch is other than a DMS-300, enter the digits of the test line number that are to be outpulsed (excluding the prefix digits from table CLLIMTCE). Refer to table TSTLCONT.TLNOS in the data schema section of this document for more information.

Datafill example for subtable TSTLCONT.TLNOS

The following example shows sample datafill for subtable TSTLCONT.TLNOS.

MAP display example for subtable TSTLCONT.TLNOS

```
TESTLINE  TLNUMBER  TL_MFC_OG_SIG
------------------------------------------------------
T100      1191       N
```

Changing datafill for subtable TSTLCONT.TLNOS

Use the standard table editor commands to change datafill for subtable TSTLCONT.TLNOS.

Datafilling table TRKGRP

The following table shows the datafill specific to LP4W for table TRKGRP. Only those fields that apply directly to LP4W are shown. For a description of the other fields, refer to the data schema section of this document.

The initial milliwatt tone and quiet termination returned from the terminating switch can be disabled by using the NMW supervision type when setting up the terminating digital loop-around test line.

Datafilling table TRKGRP (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 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 MWTTCLU. Note that among these subfields, only those directly affected by LP4W are described below. Refer to section “General field information" in table TRKGRP in the data schema section of this document for information on an alternate structure for this field that results from the datafill of table CUSTFLDS.
	GRPTYP	LP4W	Group type. Enter the group type, LP4W, for the terminating four-wire digital loop test line trunk group.

LP4W trunk groups (continued)

Datafilling table TRKGRP (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
	MWSPRVSN	BMW, TMW, LMW, IMW, or NMW	Milliwatt supervision. Enter one of the following supervision types: • BMW: loop-around of the ISUP trunk under test is not performed • TMW: loop-around of the ISUP trunk under test is not performed • LMW: loop-around of the ISUP trunk under test is not performed • IMW: satisfies the CCITT Red Book specification of milliwatt tone • NMW: allows for applications at the originating switch that do not require milliwatt tone nor quiet termination before entering the loop-around mode. ***Note:*** Supervision type IMW must be used if a terminating digital loop-around test line is used in combination with the originating digital loop-around test line, as described in the “Functional description" section. However, for other applications at the originating switch, maintenance personnel can choose any of the other supervision types as required.
	MWTTCLLI	MWTTAA MWTTAB MWTTAE MWTTAF MWTTAG MWTTAH	Milliwatt test termination common language location identifier. Enter one of the fixed pseudo common language location identifier (CLLI) codes that specify the version of the NT1X00 test trunk. This enables the incoming test call to be routed to the correct test equipment (a 1X00 circuit) and determines the milliwatt tone characteristics (transmitted power level and frequency).

Datafill example for table TRKGRP

The following example shows sample datafill for table TRKGRP.

The example shows the requirements for declaring a terminating digital loop-around test line to a DMS-300 gateway switch.

The terminating digital loop-around trunk group type LP4W must be entered in field GRPTYP of table TRKGRP. The LP4W trunk group type is used to uniquely identify the DLPATL CLLI as a terminating digital loop-around test line in the DMS-300 gateway switch.

MAP display example for table TRKGRP

```
GRPKEY                GRPINFO
------------------------------------------------------
DLPATL                LP4W 0 NPDGP NCRT IMW MWATTAE
```

Changing datafill for table TRKGRP

Use the standard table editor commands to change datafill for table TRKGRP.

Datafilling table TRKSGRP

The following table shows the datafill specific to LP4W for table TRKSGRP. Only those fields that apply directly to LP4W are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table TRKSGRP

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 CLLI code assigned to the trunk group as datafilled in table CLLI.
	SGRP	numeric (0 or 1)	Subgroup number. Enter the subgroup number assigned to the trunk group.

Datafill example for table TRKSGRP

The following example shows sample datafill for table TRKSGRP.

LP4W trunk groups (continued)

MAP display example for table TRKSGRP

```
SGRPKEY    CARDCODE
SGRPVAR       SGRPVAR
-------------------------------------------------------
DLPATL 0   1X00AA
STD           OG NP WK 0 0 NO NO N N N 17
```

Changing datafill for table TRKSGRP

The data in table TRKSGRP is automatically datafilled by the system table control once the CLLI is entered in table TRKGRP.

Datafilling table TRKMEM

The following table shows the datafill specific to LP4W for table TRKMEM. Only those fields that apply directly to LP4W are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table TRKMEM

Field	Subfield or refinement	Entry	Explanation and action
CLLI		alphanumeric (1 to 16 characters)	Common language location identifier. Enter the CLLI code assigned in table CLLI to the trunk group of which the trunk is a member.
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.
SGRP		numeric (0 to 1)	Subgroup number. Enter the subgroup number to which the trunk is assigned.

Datafill example for table TRKMEM

The following example shows sample datafill for table TRKMEM.

MAP display example for table TRKMEM

```
CLLI            EXTRKNM    SGRP            MEMVAR
-------------------------------------------------------
DLPATL           0          0              MTM 6 2
```

Changing datafill for table TRKMEM

Use the standard table editor commands to change datafill for table TRKMEM.

LPBK trunk groups

Ordering codes

LPBK trunk groups have no ordering codes.

Release applicability

TL03 and up

Prerequisites

LPBK trunk groups have no functional group prerequisites.

Description

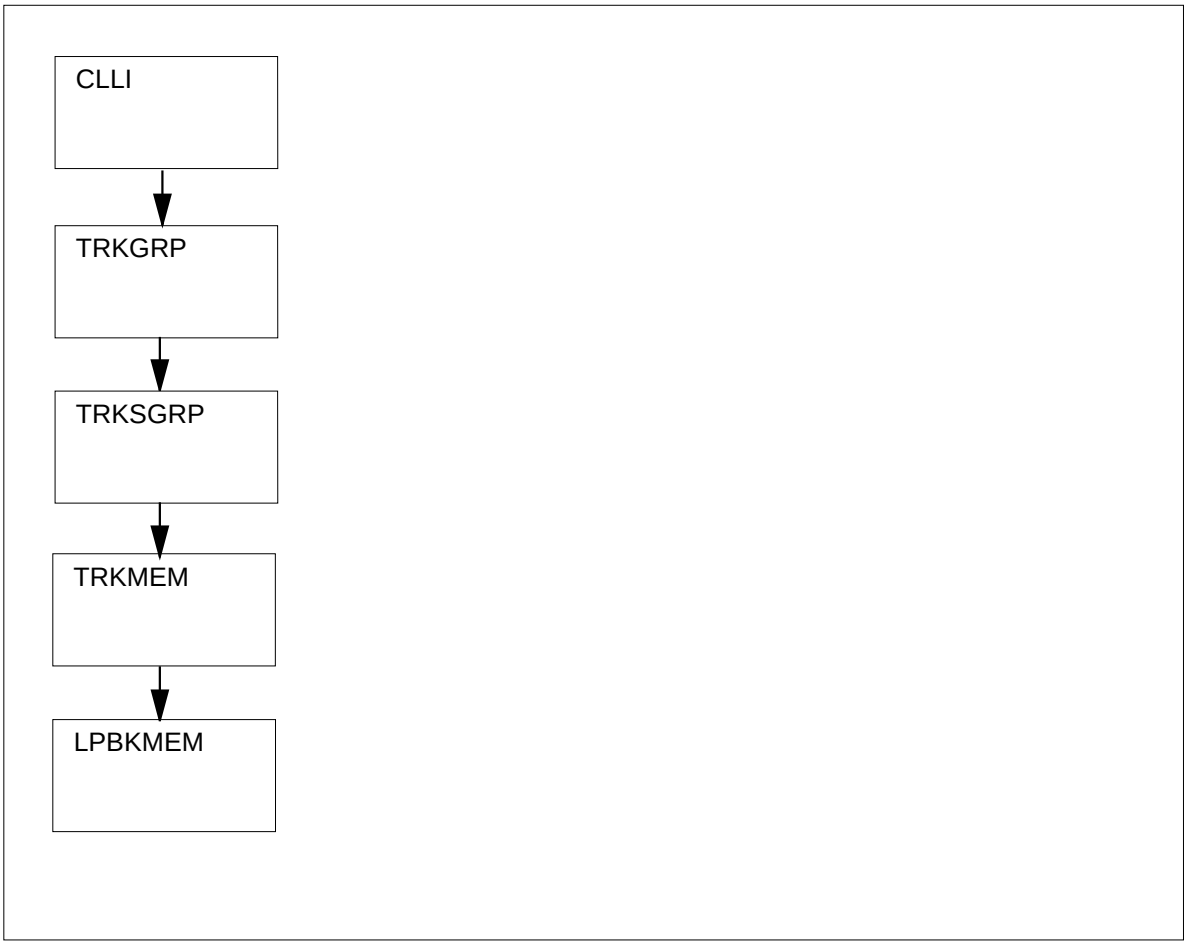
In a DMS ISDN office, incoming and outgoing trunk group type Loopback (LPBK) provides a means of connecting two agents in the same office in situations in which a call between the two agents is not possible using other loopback facilities. The call between the two agents is split into two legs.

- The first leg of the call selects an outgoing LPBK trunk to terminate the original call. The outgoing trunk loops back to the same office to come in as an incoming trunk of trunk group type LPBK.
- The second leg of the call connects the incoming LPBK trunk to the terminating agent.

The following figure shows the datafill dependencies for LPBK trunk groups.

LPBK trunk groups (continued)

Datafill dependencies for LPBK trunk groups



Limitations and restrictions

The following restrictions are imposed on the data that can be specified in table TRKSGRP for subgroups associated with loopback (LPBK) trunk groups:

- Field SIGDATA (signaling data) must be set to STD to indicate that standard signaling is used. If any other type of signaling is entered in this field, the tuple is rejected and an error message is generated.
- Field DIR (trunk direction) must be set to correspond with the direction (either OG or IC) specified for the loopback trunk group in table TRKGRP. Entries other than DIR = OG or DIR = IC are not valid. If a different

LPBK trunk groups (continued)

direction is specified, the tuple is rejected and an error message is generated.

- All other fields, with the exception of TRKGDTIM (trunk guard time), set the default to appropriate values. If values other than those expected are specified in any of these fields, the tuple is still accepted, but the entries are changed to their default values and a warning message is generated. For outgoing trunk subgroups, the value of field TRKGDTIM is specified by the user.

Billing

LPBK trunk groups do not affect billing.

Datafilling office parameters

The following table shows the office parameters used by LPBK trunk groups. For more information about office parameters, refer to *Office Parameters Reference Manual.*

Office parameters used by LPBK trunk groups

Table name	Parameter name	Explanation and action
OFCVAR	TRK_OOS_CHK_ON	This parameter specifies whether to check that the trunks in a trunk group are out of service before changing the values of specific fields in table TRKGRP by data modification order (DMO).

Datafill sequence

The following table lists the tables used by LPBK trunk groups. The tables are listed in the order in which they are to be datafilled.

Tables used by LPBK trunk groups (Sheet 1 of 2)

Table	Purpose of table
CLLI	The common language location identifier table uniquely identifies the far end of each announcement, tone, or trunk group.
TRKGRP	The trunk group table contains customer-defined data associated with each trunk group.
TRKSGRP	The trunk subgroup table contains supplementary information for each trunk group.

LPBK trunk groups (continued)

Tables used by LPBK trunk groups (Sheet 2 of 2)

Table	Purpose of table
TRKMEM	The trunk member table specifies the physical location of each trunk assigned to one of the trunk groups.
LPBKMEM	The loopback trunk member table specifies the location of both the outgoing end and the incoming end of each loopback trunk member.

The following table shows sample input for datafilling LPBK trunk groups.

Sample input for LPBK trunk groups

Table	Sample input
CLLI	OTWAONLPOG01 51 1 MI
TRKGRP	OTWAONLPOG01 LPBK 14 ELO NCRT OG
TRKSGRP	OTWAONLPOG01 0 DS1SIG OG DP IM 0 0 NO NO N N Y 160 UNEQ
TRKMEM	OTWAONLPOG01 0 0 DTCI 2 1 6
LPBKMEM	OTWAONLPOG01 0 OTWAONLPIC02 0

LPBK trunk groups (continued)

Datafilling table CLLI

The following table shows the datafill specific to LPBK for table CLLI. Only those fields that apply directly to LPBK are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table CLLI

Field	Subfield or refinement	Entry	Explanation and action
CLLI		alphanumeric (1 to 16 characters)	Common language location identifier. Enter a CLLI code to uniquely identify the far end of the LPBK trunk group. Only alphabetic characters, numeric characters, and _ (underscores) can be used to datafill this field. The first character must be alphabetic. For optimum use, a CLLI code must contain not more than 12 characters, as only the first 12 characters are displayed on the MAP (maintenance and administration position) display. When a CLLI code is displayed in a log report, the entire 16-character CLLI code appears.

Datafill example for table CLLI

The following example shows sample datafill for table CLLI.

MAP display example for table CLLI

```
CLLI            ADNUM  TRKGRSIZ       ADMININF
-------------------------------------------------------
OTWAONLPOG01     51     1             MI
```

Changing datafill for table CLLI

Use the standard table editor commands to change datafill for table CLLI.

LPBK trunk groups (continued)

Datafilling table TRKGRP

The following table shows the datafill specific to LPBK for table TRKGRP. Only those fields that apply directly to LPBK are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table TRKGRP (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 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, and LPBKINFO. Note that among these subfields, only those directly affected by LPBK are described below.
	GRPTYP	LPBK	Group type. Enter LPBK to specify the loopback trunk group type.
	LPBKINFO	see subfields	Loopback group data. This field consists of selector DIR and refinements.
	DIR	IC or OG	Trunk group direction. This field specifies the direction of the loopback trunks in this trunk group. If the group consists of the incoming ends of loopback trunk, enter IC and datafill refinements PRTNM and SNPA. If the group consists of the outgoing ends of loopback trunks, enter OC (no refinements are applicable). Any entry value other than IC or OG is not valid.

LPBK trunk groups (continued)

Datafilling table TRKGRP (Sheet 2 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, all trunks in the group must be busy before the value of this field can be changed by 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.

Datafill example for table TRKGRP

The following example shows sample datafill for table TRKGRP.

MAP display example for table TRKGRP

```
GRPKEY                        GRPINFO
------------------------------------------------------
OTWAONLPOG01                  LPBK 14 ELO NCRT OG
OTWAONLPIC02                  LPBK 15 ELO NCRT IC INC2 613
```

Changing datafill for table TRKGRP

If office parameter TRK_OOS_CHK_ON in table OFCVAR is set to Y, all trunks in the trunk group must be taken out of service before changing the value of certain fields in table TRKGRP.

Datafilling table TRKSGRP

The following tables show the datafill specific to LPBK for table TRKSGRP. Only those fields that apply directly to LPBK are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table TRKSGRP

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 CLLI code assigned to the trunk group as datafilled in table CLLI.
	SGRP	0 or 1	Subgroup number. Enter the subgroup number assigned to the trunk group.
SGRPVAR	SIGDATA	STD	Signaling data. Enter STD for standard signaling.

Tables 1 and 2 provide a description of the default datafill for LPBK trunks in table TRKSGRP.

Defaults for incoming (IC) LPBK trunk subgroups (Sheet 1 of 2)

Field name	Description	Entry	Meaning
IPULSETYP	incoming type of pulsing	DP	dial pulse
ISTARTSG	incoming start dial tone	IM	immediate dial
OVLP	overlap outpulsing	N	no overlap outpulsing
PSPDSEIZ	PSPD on seizure timing	2	2 s
PARTDIAL	partial dial timing	2	2 s
CCONT	coin control	NO	no coin control
RNGBCK	ringback	NO	no ringback
ESUPR	echo suppressor	N	no echo suppression
SAT	satellite	N	no satellite switching

LPBK trunk groups (continued)

Defaults for incoming (IC) LPBK trunk subgroups (Sheet 2 of 2)

Field name	Description	Entry	Meaning
REMBSY	remote make busy	Y	remote make busy assigned
DIALMODE	dial mode	C	customer dialed

Defaults for outgoing (OG) LPBK trunk subgroups

Field name	Description	Entry	Meaning
OPULSETYP	outgoing type of pulsing	DP	dial pulse
OSTARTSG	outgoing start dial signal	IM	immediate dial
IDIGTIME	inter-digital timing	0	set to 0 (zero)
NUMSTOPS	number of stops/goes	0	set to 0 (zero)
CCONT	coin control	NO	no coin control
RNGBCK	ringback	NO	no ringback
ESUPR	echo suppressor	N	no echo suppression
SAT	satellite	N	no satellite
REMBSY	remote make busy	Y	remote make busy assigned

Datafill example for table TRKSGRP

The following example shows sample datafill for table TRKSGRP.

MAP display example for table TRKSGRP

```
SGRPKEY          CARDCODE
SGRPVAR               SGRPVAR
-------------------------------------------------------
OTWAONLPOG01 0   DS1SIG
STD                   OG DP IM 0 0 NO NO N N Y 160 UNEQ
```

Changing datafill for table TRKSGRP

Use the standard table editor commands to change datafill for table TRKSGRP.

Datafilling table TRKMEM

The following table shows the datafill specific to LPBK for table TRKMEM. Only those fields that apply directly to LPBK are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table TRKMEM

Field	Subfield or refinement	Entry	Explanation and action
CLLI		alphanumeric (1 to 16 characters)	Common language location identifier. Enter the CLLI code assigned in table CLLI to the trunk group of which the trunk is a member.
EXTRKNM		0 to 9999	External trunk number. Enter the external trunk number that is assigned to the trunk.
SGRP		0 to 1	Subgroup number. Enter the subgroup number to which the trunk is assigned.

Datafill example for table TRKMEM

The following example shows sample datafill for table TRKMEM.

MAP display example for table TRKMEM

```
CLLI           EXTRKNM  SGRP          MEMVAR
-------------------------------------------------------
OTWAONLPOG01   0        0             DTCI 2 1 6
```

Changing datafill for table TRKMEM

Use the standard table editor commands to change datafill for table TRKMEM.

LPBK trunk groups (continued)

Datafilling table LPBKMEM

The following table shows the datafill specific to LPBK for table LPBKMEM. Only those fields that apply directly to LPBK are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table LPBKMEM

Field	Subfield or refinement	Entry	Explanation and action
OGTRKID		see subfields	Outgoing loopback trunk identifier. This field is the key to the table. It identifies the location of the outgoing end of a loopback trunk. Members specified in this field must be of group type LPBK and have a direction of OG (outgoing). This field consists of subfields CLLI and MEMNAME.
	CLLI	alphanumeric (1 to 16 characters)	Common language location identifier. Enter the CLLI code assigned in table CLLI to the trunk group of which the outgoing end of the loopback trunk is a member.
	MEMNAME	0 to 9999	Member name. Enter the external trunk number assigned to the outgoing loopback trunk.
ICTRKID		see subfields	Incoming loopback trunk identifier. Members specified in this field must be of group type LPBK and have a direction of IC (incoming). This field consists of subfields CLLI and EXTRKNM.
	CLLI	alphanumeric (1 to 16 characters)	Common language location identifier. Enter the CLLI code assigned in table CLLI to the trunk group of which the incoming end of the loopback trunk is a member.
	EXTRKNM	0 to 9999	External trunk number. Enter the external trunk number that is assigned to the outgoing loopback trunk.

Datafill example for table LPBKMEM

The following example shows sample datafill for table LPBKMEM.

MAP display example for table LPBKMEM

```
OGTRKID          ICTRKID
-------------------------------------------------------
OTWAONLPOG01 0   OTWAONLPIC02 0
```

Changing datafill for table LPBKMEM

Use the standard table editor commands to change datafill for table LPBKMEM.

MAINT trunk groups

Ordering codes

MAINT trunk groups have no ordering codes.

Release applicability

TL03 and up

Prerequisites

MAINT trunk groups have no functional group prerequisites.

Description

The trunk group types that are used for maintenance and test purposes are listed below. The maintenance (MAINT) trunk group types are described in this section. The ITL2, LOOPA, SOCKT, and TTL2 trunk group types are each described in a separate section of this document.

Maintenance and test trunk group types (Sheet 1 of 2)

Trunk group type	Pseudo CLLI	Title
ITL2	INTL192T	International 102 test trunk
LOOPA	LOOPAILOOPA2	Line loop test unit and A-law loop-around test line
MAINT	DCLTONE	Dialable cable-locator tone
MAINT	DTU	Digital test unit
MAINT	ESADGTR	Emergency stand-alone Digitone receivers
MAINT	HSET	Position headset
MAINT	JACK	Position jack
MAINT	LTU	Line test unit
MAINT	MONTALK	Monitor-and-talk
MAINT	MTU	Metallic (or multiline) test unit
MAINT	TERM108	108 test line
MAINT	TTT	Trunk test transmission
MAINT	TTU	Terminating transmission test unit

Maintenance and test trunk group types (Sheet 2 of 2)

Trunk group type	Pseudo CLLI	Title
MAINT	SPARExxxxxx	Spare trunk groups
SOCKT	OCKT	Transmission terminating trunk group
SOCKT	SCKT	Transmission terminating trunk group
TTL2	-	Terminating 102 test line

The trunk subgroup data for the trunk groups, excluding subgroup 1 of the trunk group with pseudo-common language location identifier (CLLI) TTU, is produced automatically by the trunk group datafill. This data is shown in table 2.

Automatically produced trunk subgroup data (Sheet 1 of 2)

Field	Value
CLLI	see note
SGRP	0
CARDCODE	see note
SIGDATA	see note
DIR	OG
OPULSTYP	NP
OSTARTSG	WK
IDGTIME	2
NUMSTOPS	0
CCONT	MW
RNGBCK	IB
ESUPR	N

Note: The values for these fields are defined in the description of field names for table TRKSGRP in the data schema section of this document. If the value in field CLLI is SOCKT, field OSTARTSG in table TRKSGRP has value IM. If the value in field CLLI is TERM102T, fields OPULSETYP and OSTARTSG in table TRKSGRP have values MF and WK, respectively.

MAINT trunk groups (continued)

Automatically produced trunk subgroup data (Sheet 2 of 2)

Field	Value
SAT	N
REMBSY	N
DIALMODE	blank
TRKGDTIM	16
Note: The values for these fields are defined in the description of field names for table TRKSGRP in the data schema section of this document. If the value in field CLLI is SOCKT, field OSTARTSG in table TRKSGRP has value IM. If the value in field CLLI is TERM102T, fields OPULSETYP and OSTARTSG in table TRKSGRP have values MF and WK, respectively.	

Pseudo-CLLI DCLTONE (dialable cable-locator tone)

A dialable cable-locator tone trunk (pseudo-CLLI DCLTONE) is physically connected to a tone generator and is used to locate a specific tip-and-ring cable pair among the cables in a pedestal.

DTU (digital test unit trunk group)

The digital test unit (DTU) performs Bit Error Rate Tests (BERT) and Offhook Balnet Tests (OHBT). The DTU is located on a NT4X23AA or NT4X45AA card.

ESADGTR (emergency stand-alone Digitone receivers)

An emergency stand-alone Digitone receiver is used in a switch with remote operation and the Emergency Stand-alone (ESA) feature.

Each emergency stand-alone Digitone receiver consists of an NT2X48AB (digital four-channel receiver) card.

A maximum of four circuits can be assigned on each remote service module (RSM), and they must be assigned to circuits 2, 3, 4, and 5.

Note: Digitone receivers in the RSM must always be in the installation busy state. This is necessary for the ESA option.

HSET (position headset trunk group)

The position headset trunk group (HSET) is required in switches with test or maintenance positions.

Each member of the trunk group consists of a trunk circuit with one of the following cards:

- NT2X72AA (four-wire E and M type 1 interface, 600- trunk circuit)
- NT2X88AA (four-wire E and M interface, 600- trunk circuit)
- NT5X30AA (101 communication test line circuit)

Trunk circuit card NT2X72AA or NT2X88AA must be used if this trunk group is used for service analysis or if the trunk circuit connects directly to the network.

If service analysis is not provided or the trunk circuit is connected to a 1A2 key set, an NT5X30AA card can be used.

One circuit is required for each MAP (maintenance and administration position) terminal or terminal test position (TTP). The trunks are assigned alternately for MAPs and TTPs, that is, external trunk 0 is automatically assigned to the first entry in table TERMDEV (MAP) and trunk 1 is automatically assigned to the second entry in table TERMDEV (TTP01).

Refer to table SAUSERS for information relating to the assignment of headset circuits to the Service Analysis feature.

JACK (position jack trunk group)

The position jack trunk group is required in switches with test or maintenance positions.

For a local or combined local and toll switches, each member of the trunk group consists of a trunk circuit with an NT1X54AA (jack ended trunk circuit pack).

For a toll switch, each member of the trunk group consists of a trunk circuit with an NT2X72AA card, which is preferred, or an NT2X88AA card.

Three circuits are required for each TTP or MAP terminal. The trunks are assigned alternately for MAPs and TTPs: external trunks 0 to 2 are automatically assigned to the first entry in table TERMDEV (MAP), trunks 3 to 5 are automatically assigned to the second entry in table TERMDEV (TTP01).

LTU (line test unit trunk group)

The line test unit is used for switches with LTU trunk groups.

MAINT trunk groups (continued)

Each member of the trunk group consists of an odd-numbered line loop test unit (an NT2X10AA (line test unit analog) card), and its associated even-numbered line loop test unit (an NT2X11AA (line test unit digital) card).

In a stand-alone host or switch, provision one circuit for each group of up to 6400 lines plus one more circuit. For example, in a switch with 9600 lines, provision three circuits.

At each remote site, provision a minimum of one circuit for each 6400 lines.

The LTUs are assigned to horizontals of the metallic test access minibar switch in table MTAHORIZ.

For the NT2X90AB card associated with the line test unit, refer to the monitor-and-talk (MONTALK) trunk group.

MONTALK (monitor-and-talk trunk group)

The monitor-and-talk trunk group is required in switches equipped with line test units (LTU). Refer to pseudo-CLLI LTU in field CLLI of table TRKGRP (MAINT) in the data schema section of this document.. One monitor-and-talk trunk circuit NT2X90AB (incoming and outgoing test trunk) card is used for each LTU at the stand-alone switch or remote site.

MTU (metallic [or multiline] test unit trunk group)

The metallic or multiline test unit (MTU) is similar to the line test unit (LTU).

In a North America switch, the MTU is an NT2X11BA (multiline test unit) card. In a non-North American switch, the MTU is an NT4X97AA (metallic test unit controller) card.

TERM108 (108 test line trunk group)

The 108 test line is used in switches that are configured for testing echo suppressors.

TTT (trunk test transmission trunk group)

The trunk test transmission (TTT) trunk group is used in switching units with trunk test transmission trunk groups.

Each member of the trunk group consists of an NT1X90AA (test signal generator) card and its associated NT2X96AA (PCM level meter) card.

TTU (terminating transmission test unit trunk group)

The terminating transmission test unit (TTU) trunk group is used in switches with terminating transmission test unit trunk groups.

MAINT trunk groups (continued)

Each member of the trunk group consists of a control and signal generator, with a product engineering code (PEC) of NT2X47AA (transmission test module control signal generator) or NT2X47AC (transmission test unit controller), and the associated NT2X56AA or NT2X56AB (transmission test module digital filter) card.

The NT2X47AC and NT2X56AB cards developed for the Automatic Transmission Measurement System (ATMS) can functionally replace the existing NT2X47AA and NT2X56AA cards. Both pairs of cards can exist in the same switch. However, NT2X47AA must be paired with NT2X56AA and NT2X47AC must be paired with NT2X56AB.

The Automatic Transmission Measurement System [ATMS]) feature can be provided in existing switches by adding sufficient NT2X47AC and NT2X56AB cards for the ATMS feature.

The existing NT2X47AA and NT2X56AA cards do not need to be retrofitted in order to provide the ATMS feature.

Although the ATMS cards can be selected for regular TTU functions, this should be done only if non-ATMS TTU cards are not available.

The ATMS feature can only be provided in switches with feature Automatic Trunk Test.

SPARE (spare trunk groups)

All spare trunks in the switch must be listed against a pseudo-CLLI of SPAREXXXXXX, where XXXXXX is the PEC of the spare trunk group. For example, if there are spare trunks with a PEC of NT2X83AA, the CLLI for these spare trunks is SPARE2X83AA in table CLLI.

To change a trunk member from a working group to a spare group, or from a spare group to a working group, refer to table TRKMEM in the data schema section of this document.

The following figure shows the datafill dependencies for MAINT trunk groups.

MAINT trunk groups (continued)

Datafill dependencies for MAINT trunk groups

Limitations and restrictions

The following limitations or restrictions apply to MAINT trunk groups.

- The emergency stand-alone Digitone receiver trunk group is represented in table CLLI by pseudo-CLLI ESADGTR and in table TRKGRP with the trunk group type MAINT. Use card code ESADGT for this trunk group.
- The position headset trunk group (HSET) is represented in table CLLI by pseudo-CLLI HSET, and in table TRKGRP with trunk group type MAINT.
- The position jack trunk group is represented in table CLLI by pseudo-CLLI JACK and in table TRKGRP by trunk group type MAINT.
- If a digital trunk group is datafilled in table TRKGRP, the default value JACK 1 is automatically datafilled in table TRKSGRP, field SGRPKEY.
- Each member of the LTU trunk group consists of an NT2X10AA card and an NT2X11AA card. Since these two cards always reside in adjacent slots in the remote service or maintenance trunk module, and function as one unit, specify only 2X11AA as the PEC entry in table TRKGRP.
- The line test unit is represented in table CLLI by the pseudo-CLLI LTU and in table TRKGRP by the trunk group type MAINT.

MAINT trunk groups (continued)

- Trunk group type MAINT and an NT2X72AA card is required as input for the JACK trunk group. No subgroup data is required from the operating company; the trunk subgroup data is automatically produced with default values.
- Make the trunk circuit number for the monitor-and-talk trunk group in table TRKMEM the same as its associated LTU number.
- The monitor-and-talk trunk group has a pseudo-CLLI of MONTALK.
- The trunk test transmission (TTT) trunk group is represented in table CLLI by the pseudo-CLLI TTT and in table TRKGRP by trunk group type MAINT.
- Each member of the TTU trunk group consists of an NT1X90AA (test signal generator) card and its associated NT2X96AA (PCM level meter) card. Since these two cards always reside in adjacent slots in the maintenance trunk module and function as a single unit, only PEC 2X96AA is specified in table TRKGRP.
- The terminating transmission test unit (TTU) trunk group is represented in table CLLI by pseudo-CLLI TTU and in table TRKGRP by trunk group type MAINT.
- Each member of the TTU trunk group consists of a NT2X47AA or NT2X47AC card and a NT2X56AA or NT2X56AB card. Since these two cards always reside in adjacent slots in the maintenance trunk module and function as a single unit, only PEC 2X47AA or 2X47AC is specified in table TRKGRP.
- If the switch has a mixture of NT2X47AA and NT2X47AC cards, specify card code NT2X47AA in table TRKGRP.
- The TTU trunk subgroup data for subgroup 0 in table TRKSGRP is automatically produced for the NT2X47AA card by table control.
- All NT2X47AA cards are assigned to subgroup 0 (zero) in table TRKMEM.
- The CLLI TTU, trunk group type MAINT, and PEC NT2X47AA are required as input for the TTU trunk group.
- No TTU subgroup data is required from the operating company. The trunk subgroup data is automatically produced with default values.

MAINT trunk groups (continued)

- Datafill TTU trunks with PEC NT2X47AC as follows:
  - — Assign card NT2X47AC to subgroup 1 and provide the data for table TRKSGRP.
  - — Assign all members with NT2X47AC cards to subgroup 1 in table TRKMEM.
  - — Specify the odd-numbered circuit for the NT2X47AA or NT2X47AC trunk card in table TRKMEM. Although this type of trunk card has only one circuit, with an even circuit number, software requires the odd-numbered circuit (even circuit number + 1) to be specified.
- All spare trunks in the switch must be listed against a pseudo-CLLI of SPAREXXXXXX, where XXXXXX is the PEC of the spare trunk group. For example, if there are spare trunks with a PEC of NT2X83AA, the CLLI for these spare trunks is SPARE2X83AA in table CLLI.
- To change a trunk member from a working group to a spare group, or from a spare group to a working group, refer to table TRKMEM in the data schema section of this document.
- Each 108 test line circuit consists of two NT2X88AA cards, and is represented in table CLLI by pseudo-CLLI TERM108.

Billing

MAINT trunk groups do not affect billing.

Datafilling office parameters

The following table shows the office parameters used by MAINT trunk groups. For more information about office parameters, refer to *Office Parameters Reference Manual.*

Office parameters used by MAINT trunk groups

Table name	Parameter name	Explanation and action
OFCVAR	TRK_OOS_CHK_ON	This parameter specifies whether to check that the trunks in a trunk group are out of service before changing the values of specific fields in table TRKGRP by data modification order (DMO).

MAINT trunk groups (continued)

Datafill sequence

The following table lists the tables used by MAINT trunk groups. The tables are listed in the order in which they are to be datafilled.

Tables used by MAINT trunk groups

Table	Purpose of table
CLLI	The common language location identifier table uniquely identifies the far end of each announcement, tone, or trunk group.
TRKGRP	The trunk group table contains customer-defined data associated with each trunk group.
TRKSGRP	The trunk subgroup table contains supplementary information for each trunk group. No trunk subgroup data is required from the operating company for trunk group type MAINT. The trunk subgroup data is automatically produced with default values.
TRKMEM	The trunk member table specifies the physical location of each trunk assigned to one of the trunk groups.

The following table shows sample input for datafilling MAINT trunk groups.

Sample input for MAINT trunk groups

Table	Sample input
CLLI	DTU 51 2 DIGITAL_TEST_UNIT
TRKGRP	DTU MAINT 0 IAO NCRT 4X23AA
TRKSGRP	DTU 0 4X23AA STD OG NP WK 2 0 MW IB N N N 17
TRKMEM	DTU 0 1 DTC 4 0 1 $

MAINT trunk groups (continued)

Datafilling table CLLI

The following table shows the datafill specific to MAINT for table CLLI. Only those fields that apply directly to MAINT are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table CLLI

Field	Subfield or refinement	Entry	Explanation and action
CLLI		alphanumeric (1 to 16 characters)	Common language location identifier. Enter a CLLI code to uniquely identify the far end of the MAINT trunk group. Only alphabetic characters, numeric characters, and _ (underscores) can be used to datafill this field. The first character must be alphabetic. For optimum use, a CLLI code must contain not more than 12 characters, as only the first 12 characters are displayed on the MAP (maintenance and administration position) display. When a CLLI code is displayed in a log report, the entire 16-character CLLI code appears.

Datafill example for table CLLI

The following example shows sample datafill for table CLLI.

MAP display example for table CLLI

```
CLLI     ADNUM  TRKGRSIZ           ADMININF
-------------------------------------------------------
DTU      51     2                  DIGITAL_TEST_UNIT
```

Changing datafill for table CLLI

Use the standard table editor commands to change datafill for table CLLI.

Datafilling table TRKGRP

The following table shows the datafill specific to MAINT for table TRKGRP. Only those fields that apply directly to MAINT are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table TRKGRP (Sheet 1 of 4)

Field	Subfield or refinement	Entry	Explanation and action
GRPKEY		see subfield	Group key. This field consists of subfield CLLI.
	CLLI	DCLTONE, DTU, ESADGTR, HSET, JACK, LTU, MONTALK, MTU, TERM108, TTT, TTU, or alphanumeric (1 to 16 characters)	Common language location identifier. Enter one of the following pseudo-CLLIs to specify the maintenance trunk group type required. DCLTONE - dialable cable-locator tone DTU - digital test unit ESADGTR - emergency stand-alone Digitone receiver HSET - position headset JACK - position jack LTU - line test unit MONTALK - monitor-and-talk circuit MTU - multiline test unit (for North American switches) or metallic test unit (for non-North American switches) TERM108 - 108 test line TTT - trunk test transmission TTU - terminating transmission test unit For spare trunk groups, enter the CLLI of the trunk group.
GRPINFO		see subfields	Variable group data. This field consists of subfields GRPTYP, TRAFSNO, PADGRP, NCCLS, and CARD. Note that among these subfields, only those directly affected by MAINT are described below.
	GRPTYP	MAINT	Group type. Enter MAINT to specify the maintenance group type.

MAINT trunk groups (continued)

Datafilling table TRKGRP (Sheet 2 of 4)

Field	Subfield or refinement	Entry	Explanation and action
	NCCLS	NCBN, NCID, NCIM, NCIT, NCLT, NCOF, NCON, NCOT, NCRT, NCTC, or NOSC	Operational measurement 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 pseudo-CLLIs DTU, HSET, JACK, LTU, MTU, TTT, and TTU, there is no generalized no-circuit (GNCT) treatment. Enter NCRT. For more information, refer to *Operational Measurements Reference Manual* and to table TRKGRP in the data schema section of this document.

Datafilling table TRKGRP (Sheet 3 of 4)

Field	Subfield or refinement	Entry	Explanation and action
	CARDCODE	1X54AA, 2X11AA, 2X11BA, 2X47AA, 2X47AC, 2X72AA, 2X88AA, 2X90AB, 2X96AA, 4X23AA, 4X45AA, 4X97AA, 5X30AA, ESADGT, or alphanumeric (1 to 6 characters)	Cardcode. This field contains the PEC of the card required for the specified maintenance trunk group type. Datafill this field as described below: For dialable cable-locator tone, enter 2X90AB (or equivalent). For digital test unit trunk group members, enter 4X23AA. For members of the enhanced digital test unit (EDTU), enter 4X45AA. The NT4X45AA card emulates the trunk test transmission group (TTT), the terminating transmission test unit (TTU), or the digital test unit (DTU). Each EDTU virtual channel is equivalent to a TTT, TTU and or a virtual DTU channel. Install the EDTU in any slot number on a MTM shelf. In the MTM, the slot to the right of the EDTU must be empty or contain an EDRAM or CTM card. In the ISM, the slot to the left of the EDTU must be empty or contain an EDRAM or CTM card. For emergency stand-alone Digitone receivers, enter ESADGT. For position headset trunk group members, enter 2X72AA, 2X88AA, or 5X30AA. For position jack trunk group members, enter 2X72AA, 1X54AA, or 2X88AA. For line test unit trunk group members, enter 2X11AA. For members of the monitor-and-talk trunk group, enter 2X90AB.

MAINT trunk groups (continued)

Datafilling table TRKGRP (Sheet 4 of 4)

Field	Subfield or refinement	Entry	Explanation and action
			For members of the metallic (or multiline) test unit trunk group, enter 2X11BA if the switch is North American, or 4X97AA if the switch is not North American. For members of the 108 test line trunk group, enter 2X88AA. For members of the trunk test transmission trunk group, enter 2X96AA. Each member of the trunk group consists of a test signal generator with PEC NT1X90AA and its associated PCM-level meter with PEC NT2X96AA. As these two cards always reside in adjacent slots in the maintenance trunk module, and function as one unit, only PEC 2X96AA is specified in table TRKGRP. For members of trunk subgroup 0 of the terminating transmission test unit trunk group, enter 2X47AA or 2X47AC. Each member of the trunk group consists of a control and signal generator with PEC NT2X47AA and its associated digital filter with PEC NT2X56AA. As these two cards always reside in adjacent slots in the maintenance trunk module, and function as one unit, only PEC 2X47AA is specified in table TRKGRP. For members of a spare trunk group, enter the PEC that applies to 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.
	AUDRING	Y or N	Audible ring. Enter Y if the switching unit is required to return audible ring to the originator. Otherwise, enter N.

Datafill example for table TRKGRP

The following example shows sample datafill for table TRKGRP.

MAP display example for table TRKGRP

```
GRPKEY                          GRPINFO
-------------------------------------------------------------
DTU                             MAINT 0 IAO NCRT 4X23AA
```

Changing datafill for table TRKGRP

If office parameter TRK_OOS_CHK_ON in table OFCVAR is set to Y, all trunks in the trunk group must be taken out of service before changing the value of certain fields in table TRKGRP.

Datafilling table TRKSGRP

Default datafill is automatically added to table TRKSGRP when table TRKGRP is datafilled with a valid pseudo-CLLI for trunk group type MAINT. Refer to tables 1 and 2 in the “Description" section for more information.

Datafill example for table TRKSGRP

The following example shows sample datafill for table TRKSGRP.

MAP display example for table TRKSGRP

```
          SGRPKEY   CARDCODE
SGRPVAR                         SGRPVAR
-------------------------------------------------------------
          DTU 1     4X23AA
STD                             OG NP WK 2 0 MW IB N N N 17
```

MAINT trunk groups (end)

Datafilling table TRKMEM

The following table shows the datafill specific to MAINT for table TRKMEM. Only those fields that apply directly to MAINT are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table TRKMEM

Field	Subfield or refinement	Entry	Explanation and action
CLLI		alphanumeric (1 to 16 characters)	Common language location identifier. Enter the CLLI code assigned in table CLLI to the trunk group of which the trunk is a member.
EXTRKNM		0 to 9999	External trunk number. Enter the external trunk number that is assigned to the trunk.
SGRP		0 to 1	Subgroup number. Enter the subgroup number to which the trunk is assigned.

Datafill example for table TRKMEM

The following example shows sample datafill for table TRKMEM.

MAP display example for table TRKMEM

```
CLLI   EXTRKNM  SGRP                          MEMVAR
------------------------------------------------------------
DTU    1        0                             DTC 4 0 1 $
```

Changing datafill for table TRKMEM

Use the standard table editor commands to change datafill for table TRKMEM.

MTR trunk groups

MTR trunk group functionality codes

MTR trunk groups have no functionality codes.

Release applicability

TL03 and up

Prerequisites

MTR trunk groups have no functional group prerequisites.

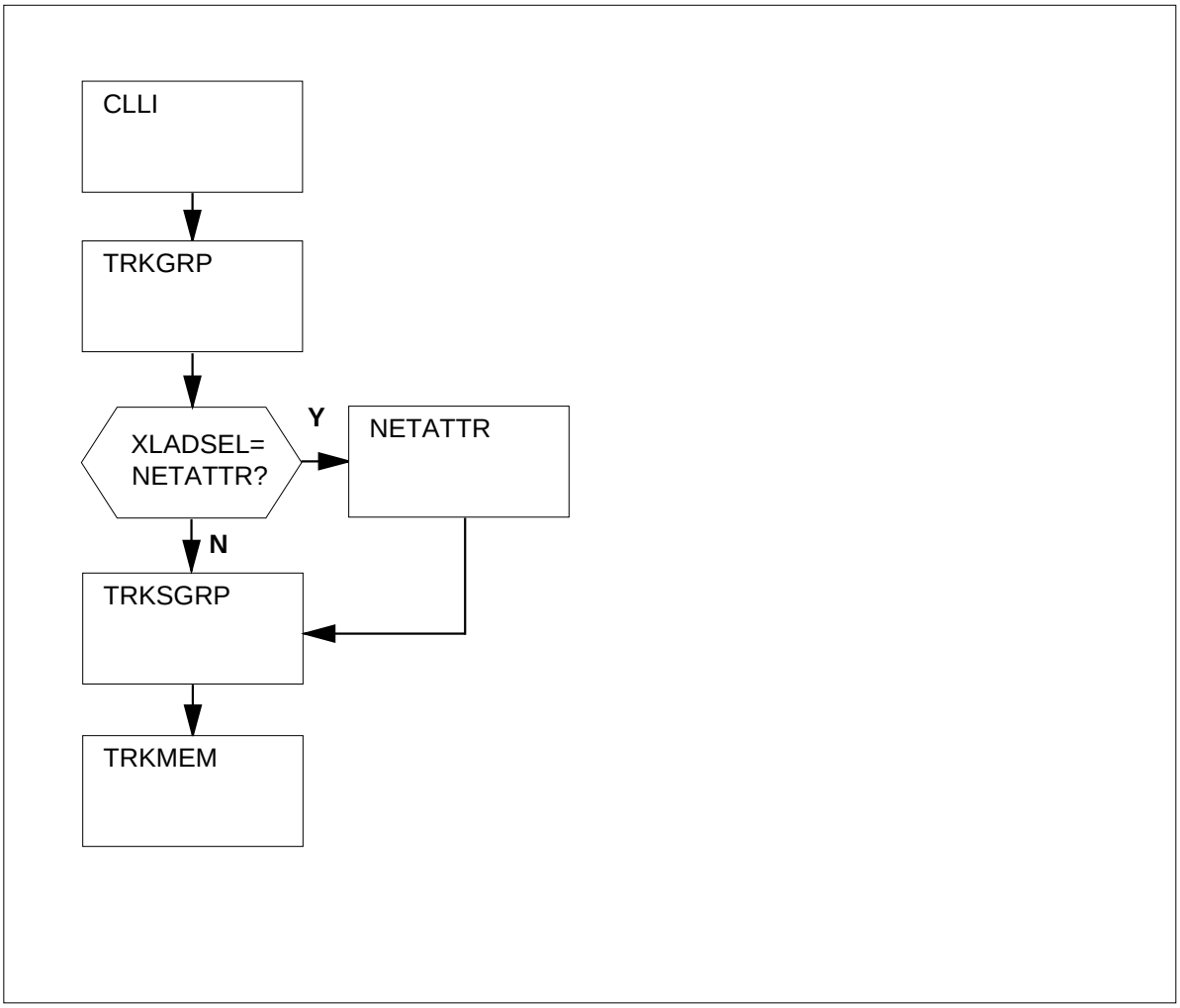
Description

One of the trunk group types used by international XMS-based peripheral module (IXPM) trunks is metering trunk (MTR). The direction of this trunk group is incoming, outgoing, or two way. Metering is supported as an option. This trunk group is intended for local or national network traffic.

The following figure shows the datafill dependencies for MTR trunk groups.

MTR trunk groups (continued)

Datafill dependencies for MTR trunk groups



Limitations and restrictions

The following limitations and restrictions apply to MTR trunk groups:

- If the translation selector (field XLADSEL in table TRKGRP) is set to NETATTR, translation data is datafilled in table NETATTR, instead of in table TRKGRP.
- 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.

Billing

For information on billing, refer to the Bellcore format AMA translations section of this document.

Datafilling office parameters

The following table shows the office parameters used by MTR trunk groups. For more information about office parameters, refer to *Office Parameters Reference Manual.*

Office parameters used by MTR trunk groups

Table name	Parameter name	Explanation and action
OFCVAR	TRK_OOS_CHK_ON	This parameter specifies whether to check that the trunks in a trunk group are out of service before changing the values of specific fields in table TRKGRP by data modification order (DMO).
	IAA_REQUESTED	This parameter is required for a toll switching unit (international) with universal translations and specifies whether or not Inter-Administration Accounting (IAA) is applicable for MTR trunk groups having the IAA field in table TRKGRP set to Y. If the value of the parameter is set to Y then calls over trunks with trunk group type MTR will be recorded. If the parameter is left at the default value of N then no IAA records will be generated.
OFCENG	NUM_ICAMA_RECORDING_UNITS	This parameter specifies the maximum number of ICAMA recording units required before the next extension. Set the value of this parameter equal to the number of simultaneous toll calls originating on trunks with trunk group type ANI that have the required call class or the number of simultaneous toll calls originating on trunks with trunk group type MTR that have field IAA equal to Y in table TRKGRP.

MTR trunk groups (continued)

Datafill sequence

The following table lists the tables used by MTR trunk groups. The tables are listed in the order in which they are to be datafilled.

Tables used by MTR trunk groups

Table	Purpose of table
CLLI	The common language location identifier table uniquely identifies the far end of each announcement, tone, or trunk group.
TRKGRP	The trunk group table contains customer-defined data associated with each trunk group.
NETATTR	The network attributes table contains translation data and optional features associated with a network. This table can be used as an alternative to table TRKGRP for datafilling the trunk translation data.
TRKSGRP	The trunk subgroup table contains supplementary information for each trunk group.
TRKMEM	The trunk member table specifies the physical location of each trunk assigned to one of the trunk groups.

The following table shows sample input for datafilling MTR trunk groups.

Sample input for MTR trunk groups

Table	Sample input
CLLI	ICFRBKA 51 250 $
TRKGRP	ICFRBKA MTR 0 ELOA NCRT N N Y EEND NONE IC N UNIV PX ICTOLLCN N N NIL MEXR2 MEXTRT
NETATTR	1 UNIV PX ICTOLLCN NIL
TRKSGRP	ICFRBKA 0 P30CAS SIGSYS Y N DELDIAL IC LOCLNSIGDX LOCRGSIGDX NIL TERM M $
TRKMEM	ICFRBKA 103 0 IDTC 123 16 25 $

Datafilling table CLLI

The following table shows the datafill specific to MTR for table CLLI. Only those fields that apply directly to MTR are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table CLLI

Field	Subfield or refinement	Entry	Explanation and action
CLLI		alphanumeric (1 to 16 characters)	Common language location identifier. Enter a CLLI code to uniquely identify the far end of the MTR trunk group. Only alphabetic characters, numeric characters, and _ (underscores) can be used to datafill this field. The first character must be alphabetic. For optimum use, a CLLI code must contain not more than 12 characters, as only the first 12 characters are displayed on the MAP (maintenance and administration position) display. When a CLLI code is displayed in a log report, the entire 16-character CLLI code appears.

Datafill example for table CLLI

The following example shows sample datafill for table CLLI.

MAP display example for table CLLI

```
CLLI            ADNUM  TRKGRSIZ                    ADMININF
-------------------------------------------------------------
ICFRBKA          51     250                           $
```

Changing datafill for table CLLI

Use the standard table editor commands to change datafill for table CLLI.

MTR trunk groups (continued)

Datafilling table TRKGRP

The following table shows the datafill specific to MTR for table TRKGRP. Only those fields that apply directly to MTR are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table TRKGRP (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 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, SAT, ESUPR, IAA, TANDEM, TRFC, DIR, and refinements of field DIR. Note that among these subfields, only those directly affected by MTR are described below.
	GRPTYP	MTR	Group type. Enter MTR to specify the international trunk group type.
	SAT	Y or N	Satellite. Enter Y if the trunk group is set up to switch through satellite. Otherwise, enter N.
	ESUPR	Y or N	Echo suppressor. If the trunk sub-group has echo suppressors, enter Y. Otherwise, enter N.
	IAA	Y or N	Inter-administration accounting. Inter-administration accounting (IAA) provides the operating company with the call details to facilitate revenue accounting back to the originating administration. Enter Y if IAA recording is required for this trunk group. Otherwise, enter N to indicate that no IAA recording is required. If the office parameter IAA_REQUESTED in table OFCVAR is set to Y, only calls over trunks with IAA equal to Y are recorded. If the parameter is set to N, no IAA records are generated.

Datafilling table TRKGRP (Sheet 2 of 6)

Field	Subfield or refinement	Entry	Explanation and action
	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 operation), if end-to-end connections are not enabled over the trunk group. End-to-end connections are only applicable to R2 MFC signaling trunk groups. For non-R2 MFC signaling trunk groups, this field is not used by the system.
	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 - 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.

MTR trunk groups (continued)

Datafilling table TRKGRP (Sheet 3 of 6)

Field	Subfield or refinement	Entry	Explanation and action
	DIR	IC, 2W, or OG	Direction. Enter IC to specify the trunk group direction as incoming, and datafill refinements MCTANI, XLAD, MTRIC, DIGREGEN, DGNAME, PROTIDX, and TRTMTIDX. Enter 2W to specify the trunk group direction as two way, and datafill refinements MCTANI, XLAD, MTRIC, SELSEQ, MTROG, DIGREGEN, ANIIDX, DGNAME, PROTIDX, and TRTMTIDX. Enter OG to specify the trunk group direction as outgoing, and datafill refinements SELSEQ, MTROG, DIGREGEN, ANIIDX, DGNAME, PROTIDX, and TRTMTIDX.
	MCTANI	Y or N	Forward ANI enable. Enter Y to indicate that on Malicious Call Trace (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 on 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	Variable translation data. This field consists of subfield XLADSEL and its refinements.
	XLADSEL	UNIV, NETATTR,or NALT	Translation selector. If the universal translation system is used, enter UNIV and datafill refinements XLASYS and XLANAME. For a description of these refinements, refer to the data schema section of this document. If translation data from table NETATTR is used, enter NETATTR and datafill refinement NETINDX as described below. If the North American translation system is used, enter NALT and datafill refinements PRTNM, SCRNCL, SNPA, and ORIGSRC. For a description of these refinements, refer to the data schema section of this document.

MTR trunk groups (continued)

Datafilling table TRKGRP (Sheet 4 of 6)

Field	Subfield or refinement	Entry	Explanation and action
	NETINDX	0 to 1023	Network attribute index. Enter network attribute index into table NETATTR. No other translation datafill is required, since it is available in table NETATTR.
	MTRIC	see subfields	Meter incoming information. This field consists of subfields METERIC and MDI.
	METERIC	Y or N	Meter option. For incoming MTR trunks, if metering is desired, enter Y and datafill subfield MDI. If metering is not required, enter N. The value in field METERIC cannot be changed to N once it has the value Y. For two-way MTR trunks, metering is not allowed. Enter N.
	MDI	0 to 1023	Metering data index. If the entry in field METERIC is Y, enter an appropriate metering data index from table MSRCDATA. If the entry in field METERIC is N, leave field MDI blank.
	MTROG	see subfields	Metering outgoing information. This field consists of subfields METEROG and MDI.
	METEROG	N	Meter option. Enter N. Metering is not allowed on outgoing MTR trunks.
	MDI	leave blank	Metering data index. This field is left blank. Datafill for subfield MDI is only required if the entry in METEROG is Y.
	DIGREGEN	0 to 9(up to 4 digits) or N	Digit regeneration. Enter the digits (maximum four) to prefix to the incoming digits so that the number in the distant office can be regenerated. If no prefix digits are required, enter N (none).

MTR trunk groups (continued)

Datafilling table TRKGRP (Sheet 5 of 6)

Field	Subfield or refinement	Entry	Explanation and action
	ANIIDX	alphanumeric (1 to 8 characters)or NIL	Fixed automatic number identification index. Enter the index into table FIXEDANI for this trunk group. If 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.

Datafilling table TRKGRP (Sheet 6 of 6)

Field	Subfield or refinement	Entry	Explanation and action
	PROTIDX	BELR2, BRAR2, CHILER2, CHIR2, GUYR2, HAITIR2, IRER2L, IRER2T, MEXR2, MEXR2B, MORR2L, MORR2T, PERU1R2, SOCR24, SOCR26, SOCR26A, SOCR27, or NIL	R2 protocol index. This field references table indexes in table R2PROT that are required by this trunk group for R2 signal to activity mappings and control. All valid entries are five to eight alphanumeric characters in length, with the characters prior to 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 the 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 index. This field references table indexes in tables TRTMTACT (treatment to activity) and ACTTRTMT (activity to treatment) required by this trunk group. All valid entries are six to eight alphanumeric characters in length, with the characters prior to 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 not valid.

Datafill example for table TRKGRP

The following example shows sample datafill for table TRKGRP.

MTR trunk groups (continued)

MAP display example for table TRKGRP

```
GRPKEY
                                                                GRPINFO
------------------------------------------------------------------------
ICFRBKA
MTR 0 ELOA NCRT N N Y EEND NONE IC N UNIV PX ICTOLLCN N N NIL MEXR2
MEXTRT $
```

Changing datafill for table TRKGRP

If office parameter TRK_OOS_CHK_ON in table OFCVAR is set to Y, all trunks in the trunk group must be taken out of service before changing the value of certain fields in table TRKGRP.

Datafilling table NETATTR

The following table shows the datafill specific to MTR for table NETATTR. Only those fields that apply directly to MTR are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table NETATTR

Field	Subfield or refinement	Entry	Explanation and action
NETIDX		0 to 1023	Network index. Enter the index referenced by table TRKGRP.
XLAVAR		see subfield	Variable translation data. This field consists of subfield XLADSEL and its refinements. For a description of these fields, refer to the data schema section of this document.

Datafill example for table NETATTR

The following example shows sample datafill for table NETATTR.

MAP display example for table NETATTR

```
NETINDX                    XLAVAR                 NETVAR
-----------------------------------------------------------
1                        UNIV PX ICTOLLCN         NIL
```

Changing datafill for table NETATTR

Use the standard table editor commands to change datafill for table NETATTR.

Datafilling table TRKSGRP

The following table shows the datafill specific to MTR for table TRKSGRP. Only those fields that apply directly to MTR are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table TRKSGRP

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 CLLI code assigned to the trunk group as datafilled in table CLLI.
	SGRP	0 or 1	Subgroup number. Enter the subgroup number assigned to the trunk group.
CARDCODE		P30CAS	Enter P30CAS, the cardcode for an IXPM trunk with pulse code modulation 30 (PCM30).
SGRPVAR		see subfield	This field consists of subfield SIGDATA and its refinements RXTXSEP, REMBSY, DIALSTRT, DIR, LNICSSI, RGICSSI, MTICSSI, ALERTCTL, DIALMODE, LNOGSSI, RGOGSSI, MTOGSSI, LN2WSSI, RG2WSSI, and MT2WSSI.
	SIGDATA	SIGSYS	Enter SIGSYS for international signaling. For a description of SIGDATA refinements, refer to the data schema section of this document.

MTR trunk groups (continued)

Datafill example for table TRKSGRP

The following example shows sample datafill for table TRKSGRP.

MAP display example for table TRKSGRP

```
            SGRPKEY     CARDCODE
SGRPVAR
                                                                  SGRPVAR
------------------------------------------------------------------------
            ICFRBKA 0   P30CAS
SIGSYS
                      Y N DELDIAL IC LOCLNSIGDX LOCRGSIGDX NIL TERM M $
```

Changing datafill for table TRKSGRP

Use the standard table editor commands to change datafill for table TRKSGRP.

Datafilling table TRKMEM

The following table shows the datafill specific to MTR for table TRKMEM. Only those fields that apply directly to MTR are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table TRKMEM

Field	Subfield or refinement	Entry	Explanation and action
CLLI		alphanumeric (1 to 16 characters)	Common language location identifier. Enter the CLLI code assigned in table CLLI to the trunk group of which the trunk is a member.
EXTRKNM		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.
SGRP		0 or 1	Subgroup number. Enter the subgroup number to which the trunk is assigned.

Datafill example for table TRKMEM

The following example shows sample datafill for table TRKMEM.

MAP display example for table TRKMEM

```
CLLI          EXTRKNM  SGRP                          MEMVAR
------------------------------------------------------------
ICFRBKA       103      0                  IDTC 123 16 25 $
```

Changing datafill for table TRKMEM

Use the standard table editor commands to change datafill for table TRKMEM.

NFA trunk groups

NFA trunk group functionality codes

NFA trunk groups have no functionality codes.

Release applicability

TL03 and up

Prerequisites

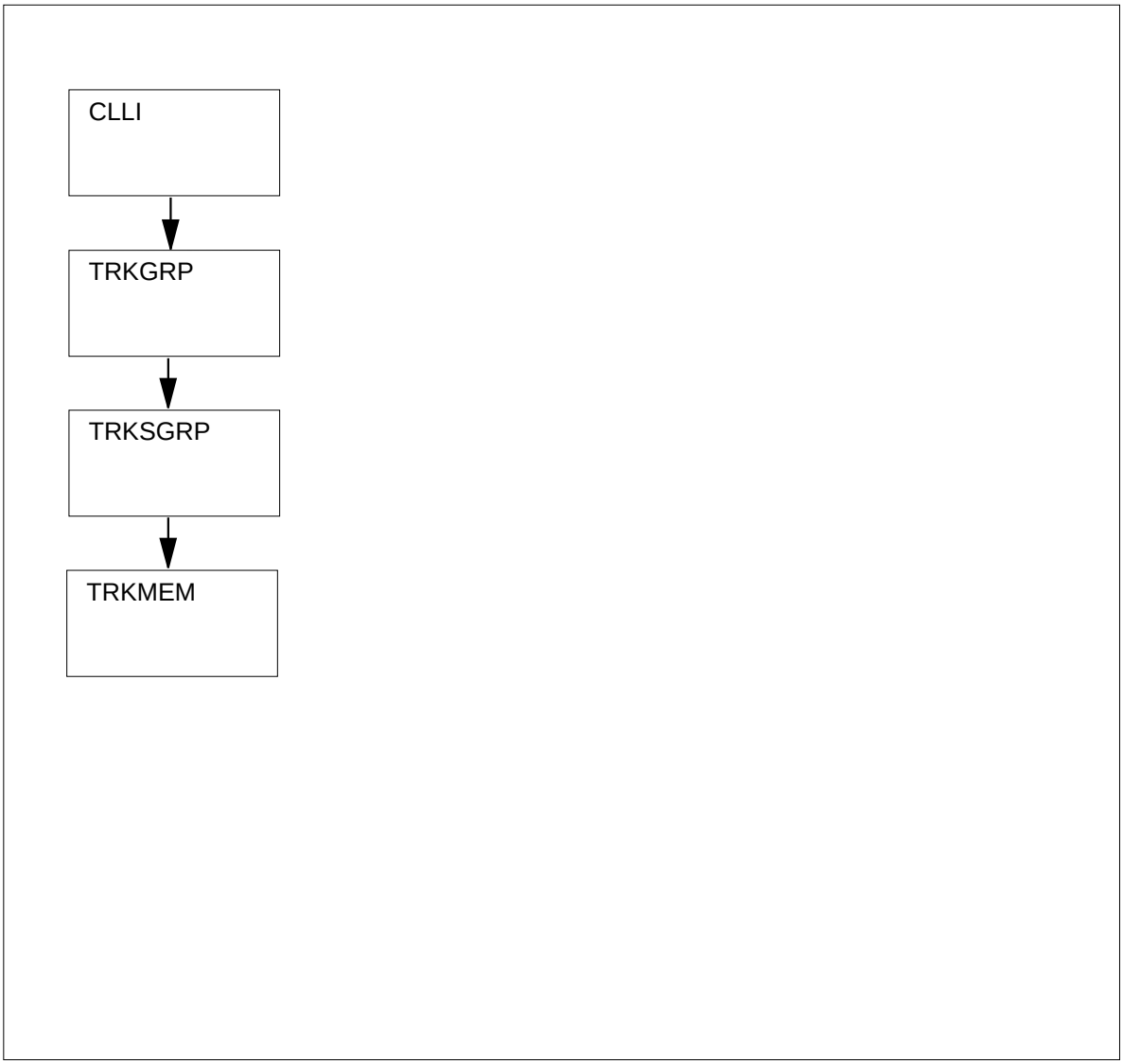
NFA trunk groups have no functional group prerequisites.

Description

Trunk group type NFA is used to assign network facility access (NFA) trunks that connect a subscriber line to an intelligent peripheral (IP) processor. These connections provide subscribers with direct access to services provided by the IP.

The following figure shows the datafill dependencies for NFA trunk groups.

Datafill dependencies for NFA trunk groups



Limitations and restrictions

NFA trunk groups have no limitations or restrictions.

Billing

For information on billing, refer to the Bellcore format AMA translations section of this document.

NFA trunk groups (continued)

Datafilling office parameters

The following table shows the office parameters used by NFA trunk groups. For more information about office parameters, refer to *Office Parameters Reference Manual.*

Office parameters used by NFA trunk groups

Table name	Parameter name	Explanation and action
OFCENG	NFA_ANSWER_DETECT_TIME	This parameter specifies the filter time, in 10-ms intervals, for detecting answer on an NFA trunk. The parameter range is 7 to 9. The recommended value is 9 (90 ms).
	NFA_INVERTED_WINK_DURATION	This parameter specifies the upper limit for the duration of the inverted wink that is propogated by a DMS on an NFA trunk when the speech path is established between the subscriber and the NFA trunk. The parameter range is 6 to 10. The recommended value is 10 (between 90 and 100 ms).
	NFA_PRE_DIAL_DELAY_TIME	This parameter specifies the amount of pre-dial delay, in 10-ms intervals, between seizing an NFA trunk and sending the first digit. The parameter range is 0 to 15. The recommended value is 15 (150 ms).

Datafill sequence

The following table lists the tables used by NFA trunk groups. The tables are listed in the order in which they are to be datafilled.

Tables used by NFA trunk groups

Table	Purpose of table
CLLI	The common language location identifier table uniquely identifies the far end of each announcement, tone, or trunk group.
TRKGRP	The trunk group table contains customer-defined data associated with each trunk group.
TRKSGRP	The trunk subgroup table contains supplementary information for each trunk group.
TRKMEM	The trunk member table specifies the physical location of each trunk assigned to one of the trunk groups.

The following table shows sample input for datafilling NFA trunk groups.

Sample input for NFA trunk groups

Table	Sample input
CLLI	NFATKG1 51 125 $
TRKGRP	NFATKG1 NFA 0 ELO NCRT NIL MIDL 12
TRKSGRP	NFATKG1 0 DS1SIG STD 2W DT WK N 10 10 DT IM 7 0 N NO NO N N N M 50 UNEQ
TRKMEM	NFATKG1 105 0 DTC 3 0 4 $

Datafilling table CLLI

The following table shows the datafill specific to NFA for table CLLI. Only those fields that apply directly to NFA are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table CLLI

Field	Subfield or refinement	Entry	Explanation and action
CLLI		alphanumeric (1 to 16 characters)	Common language location identifier. Enter a CLLI code to uniquely identify the far end of the NFA trunk group. Only alphabetic characters, numeric characters, and _ (underscores) can be used to datafill this field. The first character must be alphabetic. For optimum use, a CLLI code must contain not more than 12 characters, as only the first 12 characters are displayed on the MAP (maintenance and administration position) display. When a CLLI code is displayed in a log report, the entire 16-character CLLI code appears.

Datafill example for table CLLI

The following example shows sample datafill for table CLLI.

NFA trunk groups (continued)

MAP display example for table CLLI

```
CLLI              ADNUM   TRKGRSIZ                    ADMININF
-------------------------------------------------------------
NFATKG1            51     125                                $
```

Changing datafill for table CLLI

Use the standard table editor commands to change datafill for table CLLI.

Datafilling table TRKGRP

The following table shows the datafill specific to NFA for table TRKGRP. Only those fields that apply directly to NFA are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table TRKGRP

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 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, SELSEQ, and ANSTOUT. Note that among these subfields, only those directly affected by NFA are described below.
	GRPTYP	NFA	Group type. Enter NFA to specify the group type for network facility access trunks.
	ANSTOUT	5 to 15	Answer timeout. Enter the time, in seconds, within which the trunk much respond with answer supervision after seizure.

Datafill example for table TRKGRP

The following example shows sample datafill for table TRKGRP.

MAP display example for table TRKGRP

```
GRPKEY                                                GRPINFO
------------------------------------------------------------
NFATKG1                              NFA 0 ELO NCRT NIL MIDL 12
```

Changing datafill for table TRKGRP

Use the standard table editor commands to change datafill for table TRKGRP.

Datafilling table TRKSGRP

The following table shows the datafill specific to NFA for table TRKSGRP. Only those fields that apply directly to NFA are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table TRKSGRP (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 CLLI code assigned to the trunk group as datafilled in table CLLI.
	SGRP	0 or 1	Subgroup number. Enter the subgroup number assigned to the trunk group.
CARDCODE		DS1SIG	Card code. Enter DS1SIG.
SGRPVAR		see subfields	Variable subgroup data. For trunk group type NFA with standard signaling, datafill subfields SIGDATA and DIR as shown below.
	SIGDATA	STD	Signaling data. Enter STD for standard signaling.

NFA trunk groups (continued)

Datafilling table TRKSGRP (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
	DIR	2W	Direction. Enter 2W (two way). Datafill refinements IPULSTYP, ISTARTSG, OVLP, PSPDSEIZ, PARTDIAL, OPULSTYP, OSTARTSG, IDGTIME, NUMSTOPS, GLAREYD, CCONT, RNGBCK, ESUPR, SAT, REMBSY, DIALMODE, TRKGRDTM, and ECSELECT. Note that among these refinements, only those directly affected by NFA are described below.
	IPULSTYP	DT	Incoming type of pulsing. Enter DT (Digitone).
	ISTARTSG	WK	Incoming start dial signal. Enter WK (wink).
	OPULSTYP	DT	Outgoing type of pulsing. Enter DT (Digitone).
	OSTARTSG	IM	Outgoing start dial signal. Enter IM (immediate dial).
	NUMSTOPS	0	Number of stop/goes. Enter 0 (zero) for the maximum allowable number of stop/go signals.
	GLAREYD	Y	Yield to glare. Enter N.
	CCONT	NO	Coin control. Enter NO.
	RNGBCK	NO	Ringback. Enter NO.
	ESUPR	N	Echo suppressor. Enter N.
	SAT	N	Satellite. Enter N.
	REMBSY	N	Remote make busy. Enter N.
	DIALMODE	M	Dial mode. Enter M to specify that incoming digits are machine produced.
	ECSELECT	see subfield	Echo canceler selector. This field consists of subfield ECSTAT.
	ECSTAT	UNEQ	Echo canceler status. Enter UNEQ (unequipped).

Datafill example for table TRKSGRP

The following example shows sample datafill for table TRKSGRP.

MAP display example for table TRKSGRP

```
           SGRPKEY    CARDCODE
SGRPVAR
                                                          SGRPVAR
------------------------------------------------------------
           NFATKG1 0 DS1SIG
STD
       2W DT WK N 10 10 DT IM 7 0 N NO NO N N N M 50 UNEQ
```

Changing datafill for table TRKSGRP

Use the standard table editor commands to change datafill for table TRKSGRP.

Datafilling table TRKMEM

The following table shows the datafill specific to NFA for table TRKMEM. Only those fields that apply directly to NFA are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table TRKMEM

Field	Subfield or refinement	Entry	Explanation and action
CLLI		alphanumeric (1 to 16 characters)	Common language location identifier. Enter the CLLI code assigned in table CLLI to the trunk group of which the trunk is a member.
EXTRKNM		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.
SGRP		0 or 1	Subgroup number. Enter the subgroup number to which the trunk is assigned.

Datafill example for table TRKMEM

The following example shows sample datafill for table TRKMEM.

NFA trunk groups (end)

MAP display example for table TRKMEM

```
CLLI          EXTRKNM  SGRP                          MEMVAR
------------------------------------------------------------
NFATKG1       105      0                       DTC 3 0 4 $
```

Changing datafill for table TRKMEM

Use the standard table editor commands to change datafill for table TRKMEM.

NU trunk groups

NU trunk group functionality codes

NU trunk groups have no functionality codes.

Release applicability

TL03 and up

Prerequisites

NU trunk groups have no functional group prerequisites.

Description

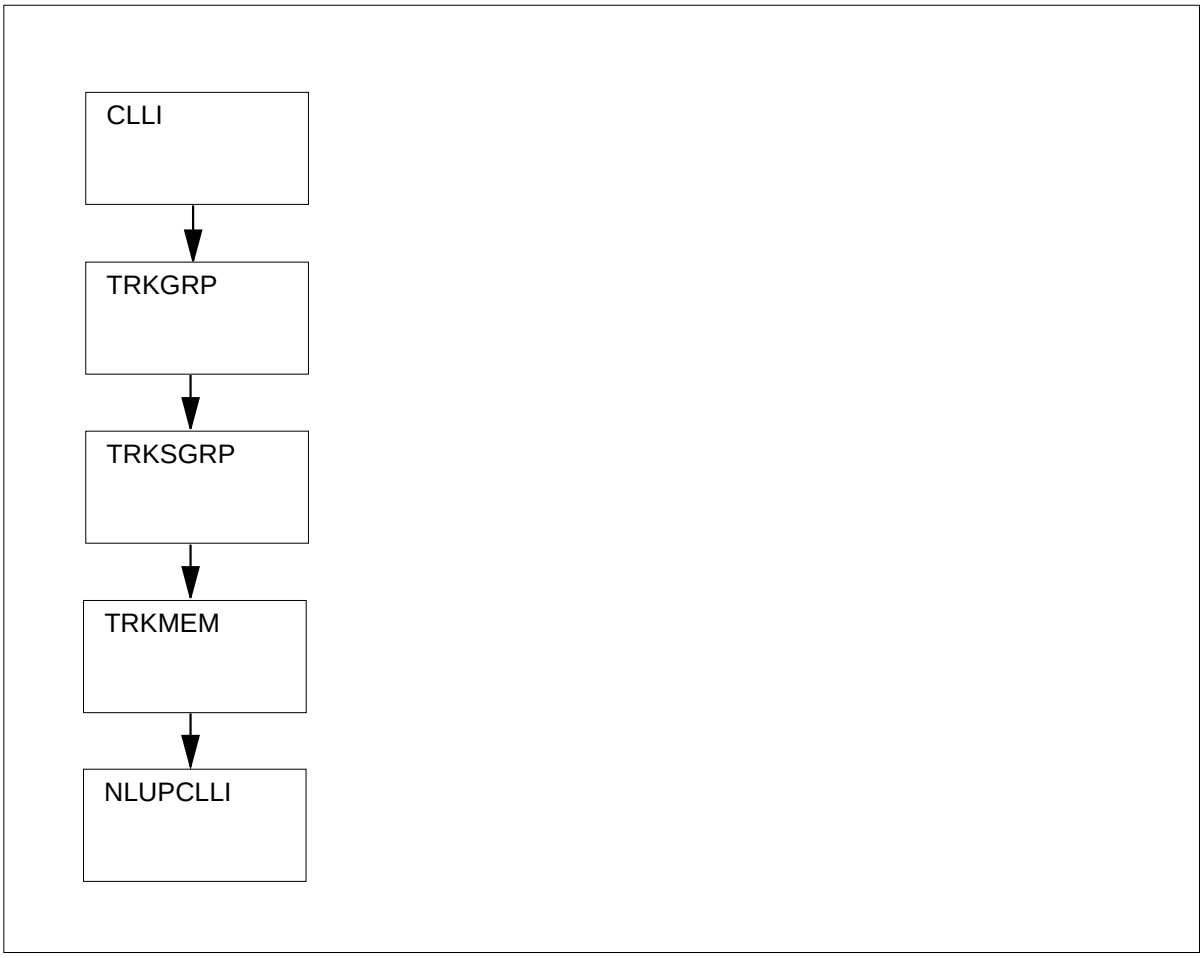
In a toll or end office, an incoming trunk of trunk group type NU (nailed-up) can be permanently connected to an outgoing trunk of type NU.

Table NLUPCLLI lists trunk connections that have been nailed-up. Each nailed-up connection consists of one incoming and one outgoing NU trunk.

The following figure shows the datafill dependencies for NU trunk groups.

NU trunk groups (continued)

Datafill dependencies for NU trunk groups



Limitations and restrictions

The following limitations and restrictions apply to NU trunk groups:

- Pulsing over NU trunk groups is not allowed if the trunk is digital and the pulsing format is dial pulse.

Billing

For information on billing, refer to the Bellcore format AMA translations section of this document.

Datafilling office parameters

NU trunk groups do not affect office parameters.

Datafill sequence

The following table lists the tables used by NU trunk groups. The tables are listed in the order in which they are to be datafilled.

Tables used by NU trunk groups

Table	Purpose of table
CLLI	The common language location identifier table uniquely identifies the far end of each announcement, tone, or trunk group.
TRKGRP	The trunk group table contains customer-defined data associated with each trunk group.
TRKSGRP	The trunk subgroup table contains supplementary information for each trunk group.
TRKMEM	The trunk member table specifies the physical location of each trunk assigned to one of the trunk groups.
NLUPCLLI	The nailed-up connection CLLI table lists nailed-up trunk connections. Each nailed-up connection consists of one incoming and one outgoing trunk of trunk group type NU.

The following table shows sample input for datafilling NU trunk groups.

Sample input for NU trunk groups

Table	Sample input
CLLI	OTWAON52CG02 51 150 $
TRKGRP	OTWAON52CG02 NU 15 ELO NCRT IC 64KDATA
TRKSGRP	OTWAON52CG02 0 DS1SIG STD IC NP IM N 2 2 NO NO N N N C UNEQ
TRKMEM	OTWAON52CG02 4 0 DTC 59 12 22 $
NLUPCLLI	10 OTWAON52CG02 4 HULLPQ1077X0 17 Y

NU trunk groups (continued)

Datafilling table CLLI

The following table shows the datafill specific to NU for table CLLI. Only those fields that apply directly to NU are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table CLLI

Field	Subfield or refinement	Entry	Explanation and action
CLLI		alphanumeric (1 to 16 characters)	Common language location identifier. Enter a CLLI code to uniquely identify the far end of the NU trunk group. Only alphabetic characters, numeric characters, and _ (underscores) can be used to datafill this field. The first character must be alphabetic. For optimum use, a CLLI code must contain not more than 12 characters, as only the first 12 characters are displayed on the MAP (maintenance and administration position) display. When a CLLI code is displayed in a log report, the entire 16-character CLLI code appears.

Datafill example for table CLLI

The following example shows sample datafill for table CLLI.

MAP display example for table CLLI

```
CLLI          ADNUM  TRKGRSIZ                    ADMININF
-------------------------------------------------------
OTWAON52CG02  51     150                           $
```

Changing datafill for table CLLI

Use the standard table editor commands to change datafill for table CLLI.

Datafilling table TRKGRP

The following table shows the datafill specific to NU for table TRKGRP. Only those fields that apply directly to NU are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table TRKGRP

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 CLLI code assigned to the trunk group in table CLLI.
GRPINFO		see subfields	Group information. This field consists of subfields GRPTYP, TRAFSNO, PADGRP, NCCLS, DIR, and BCNAME. Note that only those subfields directly affected by NU are described below. Refer to table TRKGRP in the data schema section of this document for information on an alternate structure for this field that results from the datafill of table CUSTFLDS.
	GRPTYP	NU	Group type. Enter NU to specify the group type for nailed-up connections.
	DIR	IC or OG	Trunk direction. Enter IC for incoming NU trunk groups, or OG for outgoing NU trunk groups.
	BCNAME	alphanumeric (1 to 16 characters)	Bearer capability name. Enter the bearer capability to be used by nailed-up trunks in this trunk group. Refer to table BCDEF in the data schema section of this document for the list of available bearer capabilities. All values defined in table BCDEF are valid except those that require a transfer capability of AU_7KHZ. The default value is 64KDATA.

Datafill example for table TRKGRP

The following example shows sample datafill for table TRKGRP.

NU trunk groups (continued)

MAP display example for table TRKGRP

```
GRPKEY                                                  GRPINFO
-------------------------------------------------------------
OTWAON52CG02                          NU 15 ELO NCRT IC 64KDATA
HULLPQ1077X0                          NU 16 ELO NCRT OG 56KDATA
```

Changing datafill for table TRKGRP

Use the standard table editor commands to change datafill for table TRKGRP.

Datafilling table TRKSGRP

The following table shows the datafill specific to NU for table TRKSGRP. Only those fields that apply directly to NU are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table TRKSGRP (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 CLLI code assigned to the trunk group as datafilled in table CLLI.
	SGRP	(0 or 1)	Subgroup number. Enter the subgroup number assigned to the trunk group.
SGRPVAR		see subfields	Variable subgroup data. For trunk group type NU with standard signaling, datafill subfields SIGDATA and DIR as shown below.
	SIGDATA	STD	Signaling data. Enter STD for standard signaling.

NU trunk groups (continued)

Datafilling table TRKSGRP (Sheet 2 of 3)

Field	Subfield or refinement	Entry	Explanation and action
	DIR	IC or OG	Direction. For an incoming NU trunk group, enter IC and datafill refinements IPULSTYP, ISTARTSG, OVLP, PSPDSEIZ, PARTDIAL, CCONT, RNGBCK, ESUPR, SAT, REMBSY, DIALMODE, and ECSELECT. For an outgoing NU trunk group, enter OG and datafill refinements OPULSTYP, OSTARTSG, IDGTIME, NUMSTOPS, CCONT, RNGBCK, ESUPR, SAT, REMBSY, TRKGRDTM, and ECSELECT. Note that among these refinements, only those directly affected by NU are described below.
	IPULSTYP	NP	Incoming type of pulsing. Enter NP (no pulsing).
	ISTARTSG	IM	Incoming start dial signal. Enter IM (immediate dial).
	OVLP	N	Overlap outpulsing. Enter N.
	PSPDSEIZ	2	Permanent signal or partial dial on seizure timing. Enter 2 for the time, in seconds, that the NU trunk has to wait for reception of each digit, up to and including the specified minimum number of digits expected.
	PARTDIAL	2	Partial dial timing. Enter 2 for the time, in seconds, that the trunk waits for reception of each digit received after the specified expected minimum number of digits is received.
	OPULSTYP	NP	Outgoing type of pulsing. Enter NP (no pulsing).
	OSTARTSG	IM	Outgoing start dial signal. Enter IM (immediate dial).
	IDGTIME	7	Interdigital timing. Enter 7 (70 ms) for the interdigital timing interval.
	NUMSTOPS	0	Number of stop/goes. Enter 0 (zero) for the maximum allowable number of stop/go signals.
	CCONT	NO	Coin control. Enter NO.

NU trunk groups (continued)

Datafilling table TRKSGRP (Sheet 3 of 3)

Field	Subfield or refinement	Entry	Explanation and action
	RNGBCK	NO	Ringback. Enter NO.
	ESUPR	N	Echo suppressor. Enter N.
	SAT	N	Satellite. Enter N.
	REMBSY	N	Remote make busy. Enter N.
	DIALMODE	C	Dial mode. Enter C to specify that incoming digits originate from a subscriber.
	TRKGRDTM	70	Trunk guard timing. Enter 70 (700 ms) for the time that the outgoing NU trunk waits after sending an on-hook signal to the far end, before putting the trunk in the idle queue.

Datafill example for table TRKSGRP

The following example shows sample datafill for table TRKSGRP.

MAP display example for table TRKSGRP

```
           SGRPKEY       CARDCODE
SGRPVAR
                                                        SGRPVAR
------------------------------------------------------------
         OTWAON52CG02 0 DS1SIG
STD
                        IC NP IM N 2 2 NO NO N N N C UNEQ
```

Changing datafill for table TRKSGRP

Use the standard table editor commands to change datafill for table TRKSGRP.

Datafilling table TRKMEM

The following table shows the datafill specific to NU for table TRKMEM. Only those fields that apply directly to NU are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table TRKMEM

Field	Subfield or refinement	Entry	Explanation and action
CLLI		alphanumeric (1 to 16 characters)	Common language location identifier. Enter the CLLI code assigned in table CLLI to the trunk group that the trunk is a member of.
EXTRKNM		0 to 9999	External trunk number. Enter the external trunk number that is assigned to the trunk.
SGRP		0 or 1	Subgroup number. Enter the subgroup number to which the trunk is assigned.

Datafill example for table TRKMEM

The following example shows sample datafill for table TRKMEM.

MAP display example for table TRKMEM

```
CLLI          EXTRKNM  SGRP                          MEMVAR
------------------------------------------------------------
OTWAON52CG02 4         0                      DTC 59 12 22 $
```

Changing datafill for table TRKMEM

Use the standard table editor commands to change datafill for table TRKMEM.

NU trunk groups (continued)

Datafilling table NLUPCLLI

The following table shows the datafill specific to NU for table NLUPCLLI. Only those fields that apply directly to NU are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table NLUPCLLI

Field	Subfield or refinement	Entry	Explanation and action
INDX		0 to 800	Index. Enter the index assigned to the entry. The index must be assigned sequentially, starting from 0 (zero).
NUPI		see subfields	Nailed-up incoming connection. This field consists of subfields CLLI and EXTRKNM.
	CLLI	alphanumeric (1 to 16 characters)	Common language location identifier. Enter the code assigned in table CLLI to the incoming trunk group that the trunk is a member of.
	EXTRKNM	0 to 9999	External trunk number. Enter the external trunk number assigned to the incoming trunk.
NUPO		see subfields	Nailed-up outgoing connection. This field consists of subfields CLLI and EXTRKNM.
	CLLI	alphanumeric (1 to 16 characters)	Common language location identifier. Enter the code assigned in table CLLI to the outgoing trunk group that the trunk is a member of.
	EXTRKNM	0 to 9999	External trunk number. Enter the external trunk number assigned to the outgoing trunk.
CONNECT		Y or N	Connect. Enter Y if the two trunks are to be connected. Otherwise, enter N.

Datafill example for table NLUPCLLI

The following example shows sample datafill for table NLUPCLLI.

MAP display example for table NLUPCLLI

```
INDX        NUPI              NUPO                CONNECT
-------------------------------------------------------------
10         OTWAON52CG0 4      HULLPQ1077X0 17           Y
```

Changing datafill for table NLUPCLLI

Use the standard table editor commands to change datafill for table NLUPCLLI.

OC trunk groups

OC trunk group functionality codes

OC trunk groups have no functionality codes.

Release applicability

TL03 and up

Prerequisites

OC trunk groups have no functional group prerequisites.

Description

Trunk group type OC (outgoing/two way from local to CAMA) is used in one of the following configurations:

- In a DMS-100 end office, outgoing trunk group type OC connects 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-100 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.

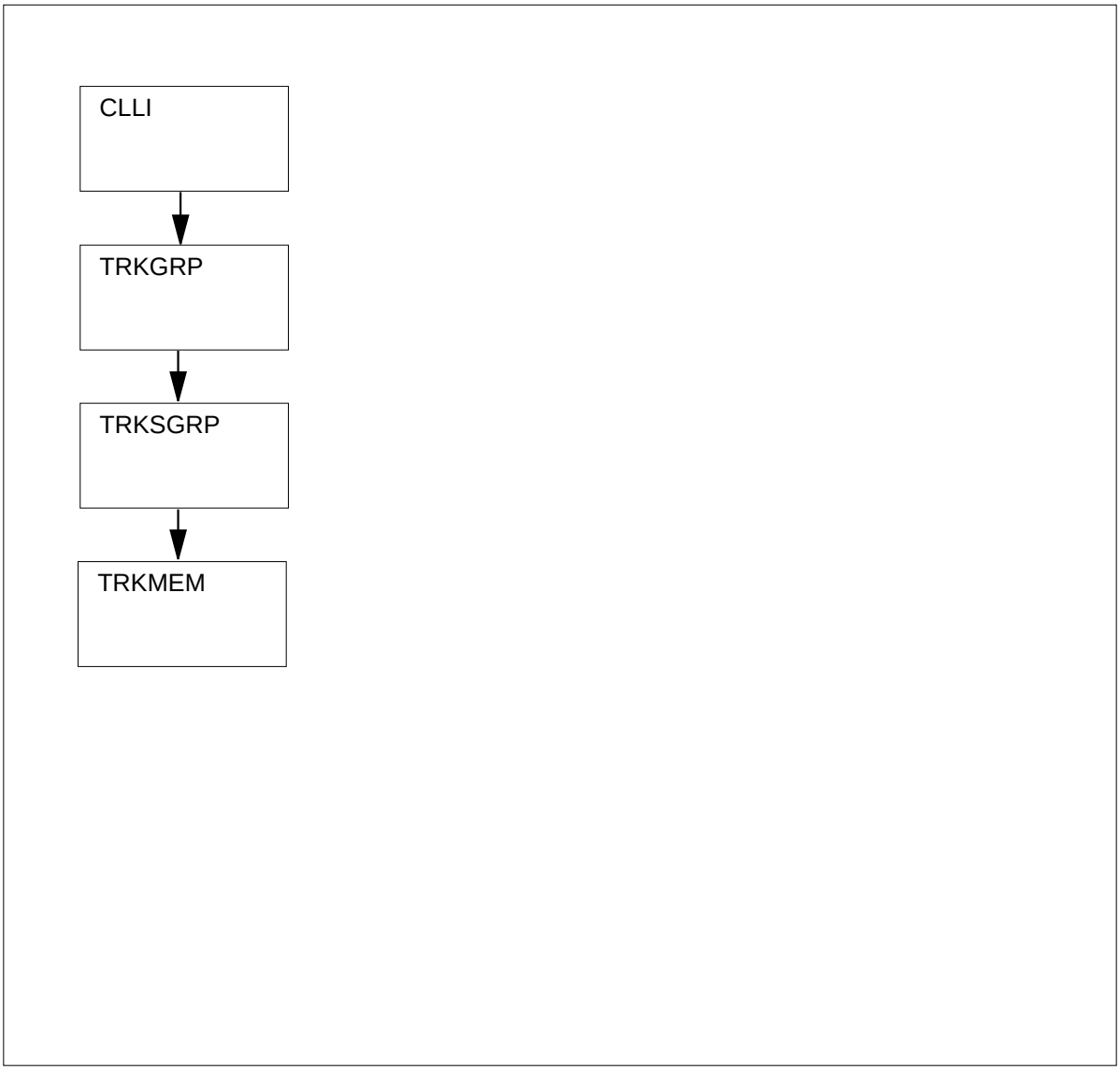
- In a DMS toll or TOPS office, outgoing trunk group type OC tandems a call to another toll office as a CAMA call, and outpulses ANI if required.

  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.

The following figure shows the datafill dependencies for OC trunk groups.

OC trunk groups (continued)

Datafill dependencies for OC trunk groups



Limitations and restrictions

Refer to the “Description" section for the limitations and restrictions that apply to OC trunk groups.

Billing

For information on billing, refer to the Bellcore format AMA translations section of this document.

OC trunk groups (continued)

Datafilling office parameters

The following table shows the office parameters used by OC trunk groups. For more information about office parameters, refer to *Office Parameters Reference Manual.*

Office parameters used by OC trunk groups

Table name	Parameter name	Explanation and action
OFCVAR	TRK_OOS_CHK_ON	This parameter specifies whether to check that the trunks in a trunk group are out of service before changing the values of specific fields in table TRKGRP by data modification order (DMO).
OFCOPT	TWO_WAY_FOR_OC	This parameter specifies whether OC trunk groups are configured for two-way operation.

Datafill sequence

The following table lists the tables used by OC trunk groups. The tables are listed in the order in which they are to be datafilled.

Tables used by OC trunk groups

Table	Purpose of table
CLLI	The common language location identifier table uniquely identifies the far end of each announcement, tone, or trunk group.
TRKGRP	The trunk group table contains customer-defined data associated with each trunk group.
TRKSGRP	The trunk subgroup table contains supplementary information for each trunk group.
TRKMEM	The trunk member table specifies the physical location of each trunk assigned to one of the trunk groups.

The following table shows sample input for datafilling OC trunk groups.

Sample input for OC trunk groups

Table	Sample input
CLLI	OTWAON2303TO 51 225 $
TRKGRP	OTWAON2303TO OC 11 TLD NCRT CAMA MIDL WK N N OG BCNAME 56KDATA $
TRKSGRP	OTWAON2303TO 0 DS1SIG STD OG MF WK 7 0 NO NO N N N 70 UNEQ
TRKMEM	OTWAON2303TO 201 0 DTC 3 0 4 $

Datafilling table CLLI

The following table shows the datafill specific to OC for table CLLI. Only those fields that apply directly to OC are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table CLLI

Field	Subfield or refinement	Entry	Explanation and action
CLLI		alphanumeric (1 to 16 characters)	Common language location identifier. Enter a CLLI code to uniquely identify the far end of the OC trunk group. Only alphabetic characters, numeric characters, and _ (underscores) can be used to datafill this field. The first character must be alphabetic. For optimum use, a CLLI code must contain not more than 12 characters, as only the first 12 characters are displayed on the MAP (maintenance and administration position) display. When a CLLI code is displayed in a log report, the entire 16-character CLLI code appears.

Datafill example for table CLLI

The following example shows sample datafill for table CLLI.

OC trunk groups (continued)

MAP display example for table CLLI

```
CLLI          ADNUM  TRKGRSIZ                    ADMININF
-------------------------------------------------------
OTWAON2303TO  51     225                          $
```

Changing datafill for table CLLI

Use the standard table editor commands to change datafill for table CLLI.

Datafilling table TRKGRP

The following table shows the datafill specific to OC for table TRKGRP. Only those fields that apply directly to OC are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table TRKGRP (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 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, SELSEQ, ANITYPE, BILLSPILL, EA, and V2DATA. Note that among these subfields, only those directly affected by OC are described below. Refer to table TRKGRP in the data schema section of this document 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.

Datafilling table TRKGRP (Sheet 2 of 5)

Field	Subfield or refinement	Entry	Explanation and action
	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. 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 if direct-dialed calls terminating to the trunk group are to be recorded in a Bellcore AMA-format billing record. Otherwise, enter N.
	EA	Y or N	Equal access. Enter Y if double ANI digits are to be sent out. Otherwise, enter N. 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. Enter Y if EAOSS signaling is to be used on the trunk. Otherwise, enter N.

OC trunk groups (continued)

Datafilling table TRKGRP (Sheet 3 of 5)

Field	Subfield or refinement	Entry	Explanation and action
	DIR	OG or 2W	Direction. Enter OG to specify the trunk group direction as outgoing, and datafill subfield OPTIONS. Enter 2W to specify the trunk group direction as two-way, and datafill subfields PRTNM, SCRNL, SNPA, ORIGSRCE, MODE, VDEVAR, VDESEL, DIGREGEN, DIGSIN1, DIGSIN2, FGB_AREA, FGBTRAFC, FGBANI, CARRNM, and OPTIONS. Note that among these subfields, only those directly affected by OC are described below. 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.
	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.

OC trunk groups (continued)

Datafilling table TRKGRP (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.
	DIGSIN1	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 DMO.
	DIGSIN2	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 DMO.
	FGB_AREA	see subfield	Feature group B information. This field consists of subfield FGBTRAFC and refinements.

OC trunk groups (continued)

Datafilling table TRKGRP (Sheet 5 of 5)

Field	Subfield or refinement	Entry	Explanation and action
	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.
	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.
	OPTIONS	see subfield	Options. This field consists of subfield OPTION and refinements.
	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 in the data schema section of this document for the list of available bearer capabilities. If field OPTION and refinement BCNAME are left blank, the default bearer capability of the central office is used.

Datafill example for table TRKGRP

The following example shows sample datafill for table TRKGRP.

MAP display example for table TRKGRP

```
GRPKEY
                                                          GRPINFO
------------------------------------------------------------
OTWAON2303TO
OC 11 TLD NCRT CAMA MIDL WK N N OG BCNAME 56KDATA $
OTWAON2304TO
OC 11 TLD NCRT CAMA MIDL REV N N 2W VRCT 613 LCL CV Y 7 9
Y Y CARR1 BCNAME 56KDATA $
```

Changing datafill for table TRKGRP

If office parameter TRK_OOS_CHK_ON in table OFCVAR is set to Y, all trunks in the trunk group must be taken out of service before changing the value of certain fields in table TRKGRP.

Datafilling table TRKSGRP

The following table shows the datafill specific to OC for table TRKSGRP. Only those fields that apply directly to OC are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table TRKSGRP

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 CLLI code assigned to the trunk group as datafilled in table CLLI.
	SGRP	0 or 1	Subgroup number. Enter the subgroup number assigned to the trunk group.

Datafill example for table TRKSGRP

The following example shows sample datafill for table TRKSGRP.

OC trunk groups (continued)

MAP display example for table TRKSGRP

```
            SGRPKEY         CARDCODE
SGRPVAR
                                                          SGRPVAR
------------------------------------------------------------
            OTWAON2303TO 0 DS1SIG
STD
                            OG MF WK 7 0 NO NO N N N 70 UNEQ
```

Changing datafill for table TRKSGRP

Use the standard table editor commands to change datafill for table TRKSGRP.

Datafilling table TRKMEM

The following table shows the datafill specific to OC for table TRKMEM. Only those fields that apply directly to OC are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table TRKMEM

Field	Subfield or refinement	Entry	Explanation and action
CLLI		alphanumeric (1 to 16 characters)	Common language location identifier. Enter the CLLI code assigned in table CLLI to the trunk group of which the trunk is a member.
EXTRKNM		0 to 9999	External trunk number. Enter the external trunk number that is assigned to the trunk.
SGRP		0 or 1	Subgroup number. Enter the subgroup number to which the trunk is assigned.

Datafill example for table TRKMEM

The following example shows sample datafill for table TRKMEM.

MAP display example for table TRKMEM

```
CLLI           EXTRKNM  SGRP                          MEMVAR
-------------------------------------------------------------
OTWAON2303TO   201      0                        DTC 3 0 4 $
```

Changing datafill for table TRKMEM

Use the standard table editor commands to change datafill for table TRKMEM.

OI trunk groups

OI trunk group functionality codes

OI trunk groups have no functionality codes.

Release applicability

TL03 and up

Prerequisites

OI trunk groups have no functional group prerequisites.

Description

In a DMS-100 end office, trunk group type OI (operator incoming) 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.

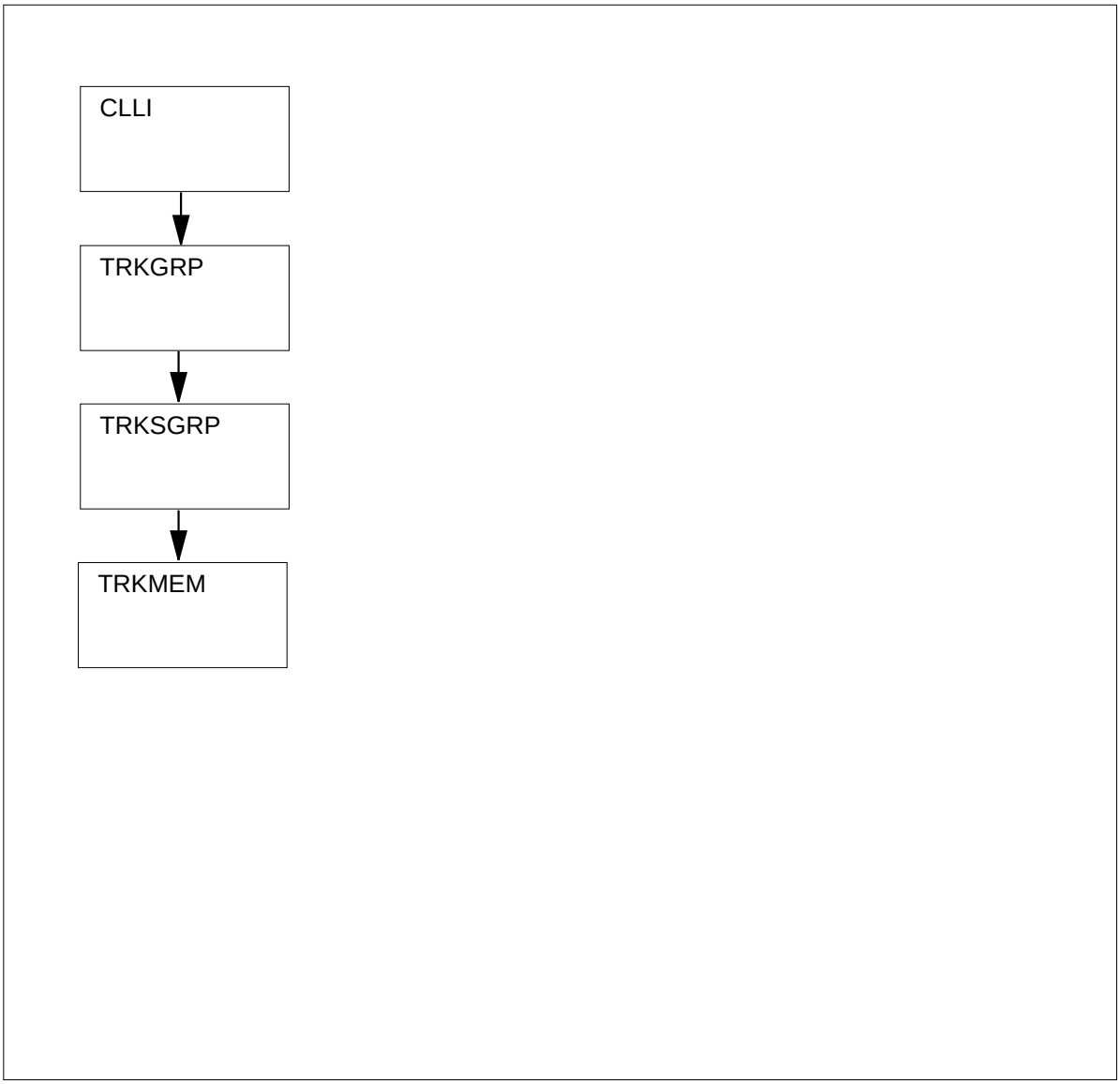
Verification calls can originate on trunk group type OI under certain conditions. Refer to table TRKGRP type VR for more information.

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.

The following figure shows the datafill dependencies for OI trunk groups.

Datafill dependencies for OI trunk groups



Limitations and restrictions

Refer to the “Description" section for the limitations and restrictions that apply to OI trunk groups.

Billing

For information on billing, refer to the Bellcore format AMA translations section of this document.

OI trunk groups (continued)

Datafilling office parameters

The following table shows the office parameters used by OI trunk groups. For more information about office parameters, refer to *Office Parameters Reference Manual.*

Office parameters used by OI trunk groups

Table name	Parameter name	Explanation and action
OFCVAR	TRK_OOS_CHK_ON	This parameter specifies whether to check that the trunks in a trunk group are out of service before changing the values of specific fields in table TRKGRP by data modification order (DMO).

Datafill sequence

The following table lists the tables used by OI trunk groups. The tables are listed in the order in which they are to be datafilled.

Tables used by OI trunk groups

Table	Purpose of table
CLLI	The common language location identifier table uniquely identifies the far end of each announcement, tone, or trunk group.
TRKGRP	The trunk group table contains customer-defined data associated with each trunk group.
TRKSGRP	The trunk subgroup table contains supplementary information for each trunk group.
TRKMEM	The trunk member table specifies the physical location of each trunk assigned to one of the trunk groups.

The following table shows sample input for datafilling OI trunk groups.

Sample input for OI trunk groups (Sheet 1 of 2)

Table	Sample input
CLLI	OTWAON231BB1 51 225 $
TRKGRP	OTWAON231BB1 OI 12 TLA NCRT VR INCO NSCR 613 NLCL VF N 72 Y

Sample input for OI trunk groups (Sheet 2 of 2)

Table	Sample input
TRKSGRP	OTWAON231BB1 0 3X07AA STD IC MF DIALTONE N 30 30 NO NO N N N C UNEQ
TRKMEM	OTWAON231BB1 48 0 TM8 12 5 1 $

Datafilling table CLLI

The following table shows the datafill specific to OI for table CLLI. Only those fields that apply directly to OI are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table CLLI

Field	Subfield or refinement	Entry	Explanation and action
CLLI		alphanumeric (1 to 16 characters)	Common language location identifier. Enter a CLLI code to uniquely identify the far end of the OI trunk group. Only alphabetic characters, numeric characters, and _ (underscores) can be used to datafill this field. The first character must be alphabetic. For optimum use, a CLLI code must contain not more than 12 characters, as only the first 12 characters are displayed on the MAP (maintenance and administration position) display. When a CLLI code is displayed in a log report, the entire 16-character CLLI code appears.

Datafill example for table CLLI

The following example shows sample datafill for table CLLI.

MAP display example for table CLLI

```
CLLI            ADNUM   TRKGRSIZ                    ADMININF
-------------------------------------------------------------
OTWAON231BB1     51      225                          $
```

OI trunk groups (continued)

Changing datafill for table CLLI

Use the standard table editor commands to change datafill for table CLLI.

Datafilling table TRKGRP

The following table shows the datafill specific to OI for table TRKGRP. Only those fields that apply directly to OI are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table TRKGRP (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 CLLI 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, MODE, VDEVAR, and COLOCATED. Note that among these subfields, only those directly affected by OI are described below. Refer to table TRKGRP in the data schema section of this document 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.
	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.

OI trunk groups (continued)

Datafilling table TRKGRP (Sheet 2 of 3)

Field	Subfield or refinement	Entry	Explanation and action
	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. 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	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 DMO.

OI trunk groups (continued)

Datafilling table TRKGRP (Sheet 3 of 3)

Field	Subfield or refinement	Entry	Explanation and action
	DIGSIN2	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 DMO.
	COLOCA-TED	Y or N	Co-located switchboards. 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 co-located, use trunk circuits with PEC NT3X07AA (incoming trunk to 3C, 3CL, or AE no. 31 switchboard, sleeve lead circuit card).

Datafill example for table TRKGRP

The following example shows sample datafill for table TRKGRP.

MAP display example for table TRKGRP

```
GRPKEY                                                          GRPINFO
------------------------------------------------------------------------
OTWAON231BB1            OI 12 TLA NCRT VR INCO NSCR 613 NLCL VF N 72 Y
```

Changing datafill for table TRKGRP

If office parameter TRK_OOS_CHK_ON in table OFCVAR is set to Y, all trunks in the trunk group must be taken out of service before changing the value of certain fields in table TRKGRP.

Datafilling table TRKSGRP

The following table shows the datafill specific to OI for table TRKSGRP. Only those fields that apply directly to OI are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table TRKSGRP

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 CLLI code assigned to the trunk group as datafilled in table CLLI.
	SGRP	0 or 1	Subgroup number. Enter the subgroup number assigned to the trunk group.

Datafill example for table TRKSGRP

The following example shows sample datafill for table TRKSGRP.

MAP display example for table TRKSGRP

```
           SGRPKEY         CARDCODE
SGRPVAR
                                                          SGRPVAR
-------------------------------------------------------------
           OTWAON231BB1 0 3X07AA
STD
                 IC MF DIALTONE N 30 30 NO NO N N N C UNEQ
```

Changing datafill for table TRKSGRP

Use the standard table editor commands to change datafill for table TRKSGRP.

OI trunk groups (end)

Datafilling table TRKMEM

The following table shows the datafill specific to OI for table TRKMEM. Only those fields that apply directly to OI are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table TRKMEM

Field	Subfield or refinement	Entry	Explanation and action
CLLI		alphanumeric (1 to 16 characters)	Common language location identifier. Enter the CLLI code assigned in table CLLI to the trunk group of which the trunk is a member.
EXTRKNM		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.
SGRP		0 or 1	Subgroup number. Enter the subgroup number to which the trunk is assigned.

Datafill example for table TRKMEM

The following example shows sample datafill for table TRKMEM.

MAP display example for table TRKMEM

```
CLLI           EXTRKNM  SGRP                          MEMVAR
-------------------------------------------------------------
OTWAON231BB1   48       0                      TM8 12 5 1 $
```

Changing datafill for table TRKMEM

Use the standard table editor commands to change datafill for table TRKMEM.

OP trunk groups

OP trunk group functionality codes

OP trunk groups have no functionality codes.

Release applicability

TL03 and up

Prerequisites

OP trunk groups have no functional group prerequisites.

Description

Trunk group type OP is used in one of the following two configurations:

In a DMS-100 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-200 TOPS office, the far end of trunk group type OP enters the office as trunk group type TOPS.

In a DMS-100 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 trunk group type VR for additional information on verification calls.

OP trunk groups (continued)

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

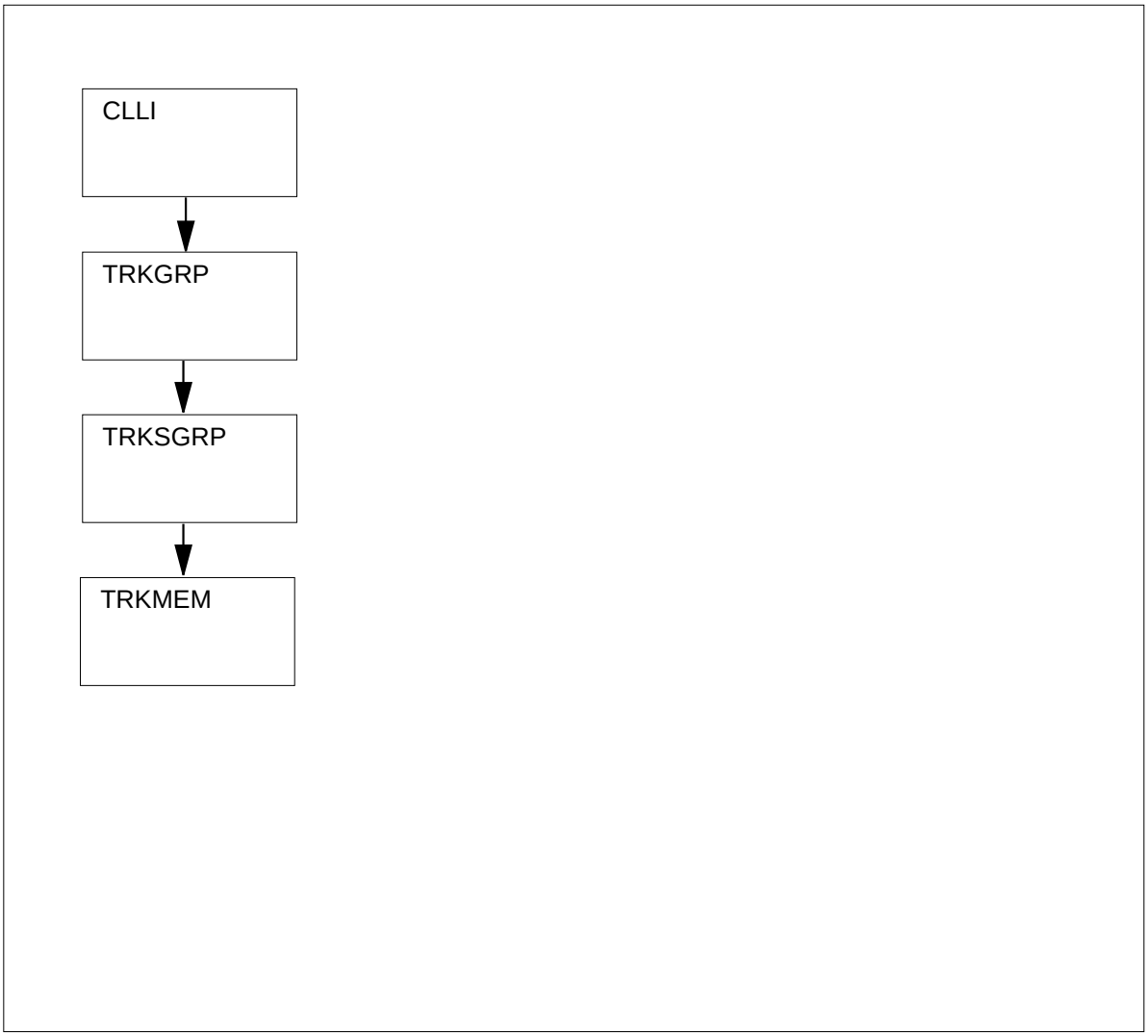
If alarm sending of ANI information digit 8 over a TSPS or TOPS trunk is required, datafill the trunk using the pseudo common language location identifier (CLLI) ASCS in table CLLI.

If identification digit 9 is to be sent on intercept calls, set the parameter SPILL_ANI_9 in table OFCENG to Y.

The following figure shows the datafill dependencies for OP trunk groups.

OP trunk groups (continued)

Datafill dependencies for OP trunk groups



Limitations and restrictions

Refer to the “Description" section for the limitations and restrictions that apply to OP trunk groups.

Billing

For information on billing, refer to the Bellcore format AMA translations section of this document.

OP trunk groups (continued)

Datafilling office parameters

The following table shows the office parameters used by OP trunk groups. For more information about office parameters, refer to *Office Parameters Reference Manual.*

Office parameters used by OP trunk groups

Table name	Parameter name	Explanation and action
OFCVAR	TRK_OOS_CHK_ON	This parameter specifies whether to check that the trunks in a trunk group are out of service before changing the values of specific fields in table TRKGRP by data modification order (DMO).
OFCENG	SC_OP_ANI_REQ_TIME	This parameter specifies the maximum time, in 1-s intervals, that an OP trunk will wait for the ANI request signal from the far end for a call which originates from an SC trunk. The parameter range is 0 to 59. The default value is 15 (15 s).
	SPILL_ANI_9	This parameter specifies whether the ANI identification digit specified by office parameter BELL_ANI_INTERCEPT_ID in table OFCENG is sent on intercept calls on a trunk group with trunk group type OP.
OFCOPT	TWO_WAY_FOR_OP	This parameter specifies whether trunk groups of type OP are configured for two-way operation.

Datafill sequence

The following table lists the tables used by OP trunk groups. The tables are listed in the order in which they are to be datafilled.

Tables used by OP trunk groups (Sheet 1 of 2)

Table	Purpose of table
CLLI	The common language location identifier table uniquely identifies the far end of each announcement, tone, or trunk group.
TRKGRP	The trunk group table contains customer-defined data associated with each trunk group.

OP trunk groups (continued)

Tables used by OP trunk groups (Sheet 2 of 2)

Table	Purpose of table
TRKSGRP	The trunk subgroup table contains supplementary information for each trunk group.
TRKMEM	The trunk member table specifies the physical location of each trunk assigned to one of the trunk groups.

The following table shows sample input for datafilling OP trunk groups.

Sample input for OP trunk groups

Table	Sample input
CLLI	OTWAON2303TO 51 300 $
TRKGRP	OTWAON2303TO OP 11 TLD NCRT SP MIDL NCN MIX REV TERMHOLD N OG Y Y Y
TRKSGRP	OTWAON2303TO 0 DS1SIG STD OG MF WK 7 0 NO NO N N N 50 UNEQ
TRKMEM	OTWAON2303TO 201 0 DCM 0 0 1 $

OP trunk groups (continued)

Datafilling table CLLI

The following table shows the datafill specific to OP for table CLLI. Only those fields that apply directly to OP are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table CLLI

Field	Subfield or refinement	Entry	Explanation and action
CLLI		alphanumeric (1 to 16 characters)	Common language location identifier. Enter a CLLI code to uniquely identify the far end of the OP trunk group. Only alphabetic characters, numeric characters, and _ (underscores) can be used to datafill this field. The first character must be alphabetic. For optimum use, a CLLI code must contain not more than 12 characters, as only the first 12 characters are displayed on the MAP (maintenance and administration position) display. When a CLLI code is displayed in a log report, the entire 16-character CLLI code appears.

Datafill example for table CLLI

The following example shows sample datafill for table CLLI.

MAP display example for table CLLI

```
CLLI            ADNUM  TRKGRSIZ                    ADMININF
-------------------------------------------------------------
OTWAON2303TO     51     300                           $
```

Changing datafill for table CLLI

Use the standard table editor commands to change datafill for table CLLI.

Datafilling table TRKGRP

The following table shows the datafill specific to OP for table TRKGRP. Only those fields that apply directly to OP are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table TRKGRP (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 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, SELSEQ, STNCLS, TRAFTYPE, ANITYPE, HOLDTYPE, BILLSPILL, V2DATA, EADATA, and OPTIONS. Note that among these subfields, only those directly affected by OP are described below.
	GRPTYP	OP	Group type. Enter OP to specify the outgoing or two-way local/toll to TOPS/TSPS trunk group type.
	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

OP trunk groups (continued)

Datafilling table TRKGRP (Sheet 2 of 6)

Field	Subfield or refinement	Entry	Explanation and action
	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.

OP trunk groups (continued)

Datafilling table TRKGRP (Sheet 3 of 6)

Field	Subfield or refinement	Entry	Explanation and action
	ANITYPE	WK, REV, NO, or REVUK	ANI request type. For special requirements (RCF/TCF), enter WK (wink). This is the correct 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. If 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	NOHOLDor TERMHOLD	Hold type. Enter NOHOLD if the call is to be taken 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 be taken down only if the terminator goes on-hook. Entries outside this range are not valid.
	BILLSPILL	Y or N	Spill billing. In offices with feature package NTX159AA (Bellcore LAMA Format) and feature package NTX986AA (ANI with AMA), enter Y if direct-dialed calls terminating to the trunk group are to be recorded in a Bellcore AMA format billing record. Otherwise, enter N.
	V2DATA	see subfields	Data for two-way trunk group. This field consists of subfield DIR and refinements.

OP trunk groups (continued)

Datafilling table TRKGRP (Sheet 4 of 6)

Field	Subfield or refinement	Entry	Explanation and action
	DIR	OG or 2W	Direction. Enter either OG or 2W. Enter OG to specify that the trunk group direction is outgoing. Datafill fields EADATA and OPTIONS. Enter 2W to specify that the trunk group direction is two way. Datafill subfields PRTNM, SCRNCL, SNPA, ORIGSRC, MODE, VDEVAR, EADATA, and OPTIONS. Note that only those subfields directly affected by OP are described below. 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. If the trunk group is two way, set option TWO_WAY_FOR_OP in table OFCOPT to Y.
	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. If the number of incoming digits is variable, a corresponding variable-digit-format entry is required in the table STDPRTCT.STDPRT.

OP trunk groups (continued)

Datafilling table TRKGRP (Sheet 5 of 6)

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.
	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 DMO.
	DIGSIN2	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 DMO.
	EADATA	see subfield	Equal access data. This field consists of subfield EA and refinements.

OP trunk groups (continued)

Datafilling table TRKGRP (Sheet 6 of 6)

Field	Subfield or refinement	Entry	Explanation and action
	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. If 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.
	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. Otherwise, enter N.
	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.
	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 in the data schema section of this document for the list of available bearer capabilities. If field OPTION and refinement BCNAME are left blank, the default bearer capability of the central office is used.

Datafill example for table TRKGRP

The following example shows sample datafill for table TRKGRP.

MAP display example for table TRKGRP

```
GRPKEY
                                                                GRPINFO
------------------------------------------------------------------------
OTWAON2303TO
OP 11 TLD NCRT SP MIDL NCN MIX REV TERMHOLD N OG Y Y Y $
OTWAON2303T2
OP 11 TLD NCRT SP MIDL NCN MIX REV TERMHOLD N 2W VCRT NSCR 613 LCL CV
Y 7 9 N BCNAME 56KDATA $
```

Changing datafill for table TRKGRP

If office parameter TRK_OOS_CHK_ON in table OFCVAR is set to Y (yes), all trunks in the trunk group must be taken out of service before changing the value of certain fields in table TRKGRP.

Datafilling table TRKSGRP

The following table shows the datafill specific to OP for table TRKSGRP. Only those fields that apply directly to OP are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table TRKSGRP

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 CLLI code assigned to the trunk group as datafilled in table CLLI.
	SGRP	0 or 1	Subgroup number. Enter the subgroup number assigned to the trunk group.

Datafill example for table TRKSGRP

The following example shows sample datafill for table TRKSGRP.

OP trunk groups (continued)

MAP display example for table TRKSGRP

```
           SGRPKEY        CARDCODE
SGRPVAR
                                                          SGRPVAR
-------------------------------------------------------------
           OTWAON2303TO 0 DS1SIG
STD
                          OG MF WK 7 0 NO NO N N N 50 UNEQ
```

Datafilling table TRKMEM

The following table shows the datafill specific to OP for table TRKMEM. Only those fields that apply directly to OP are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table TRKMEM

Field	Subfield or refinement	Entry	Explanation and action
CLLI		alphanumeric (1 to 16 characters)	Common language location identifier. Enter the CLLI code assigned in table CLLI to the trunk group of which the trunk is a member.
EXTRKNM		0 to 9999	External trunk number. Enter the external trunk number that is assigned to the trunk.
SGRP		0 or 1	Subgroup number. Enter the subgroup number to which the trunk is assigned.

Datafill example for table TRKMEM

The following example shows sample datafill for table TRKMEM.

MAP display example for table TRKMEM

```
CLLI          EXTRKNM  SGRP                          MEMVAR
-------------------------------------------------------------
OTWAON2303TO  201      0                       DCM 0 0 1 $
```

Changing datafill for table TRKMEM

Use the standard table editor commands to change datafill for table TRKMEM.

OPR trunk groups

Ordering codes

OPR trunk groups have no ordering codes.

Release applicability

TL03 and up

Prerequisites

OPR trunk groups have no functional group prerequisites.

Description

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 figure 1.

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. Whenever possible, the international DMS-100 (DMS-100I) switch attempts to establish end-to-end connections.

OPR trunk groups (continued)

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.

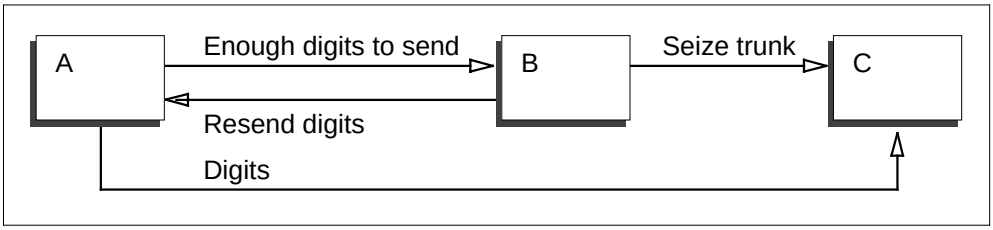
For other incoming trunks that must not establish end-to-end connections, field TANDEM in table TRKGRP must be set to LNK. With this field set to LNK, all incoming trunk circuits belonging to the trunk group (regardless of their traffic class) cannot establish end-to-end connections.

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.

The following figure shows an example of how an end-to-end connection is established. Once office B collects enough digits 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.

OPR trunk groups (continued)

End-to-end connection



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.

OPR trunk groups (continued)

Incoming trunk groups with this traffic class do not attempt to establish end-to-end 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-100I 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.

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).

OPR trunk groups (continued)

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.

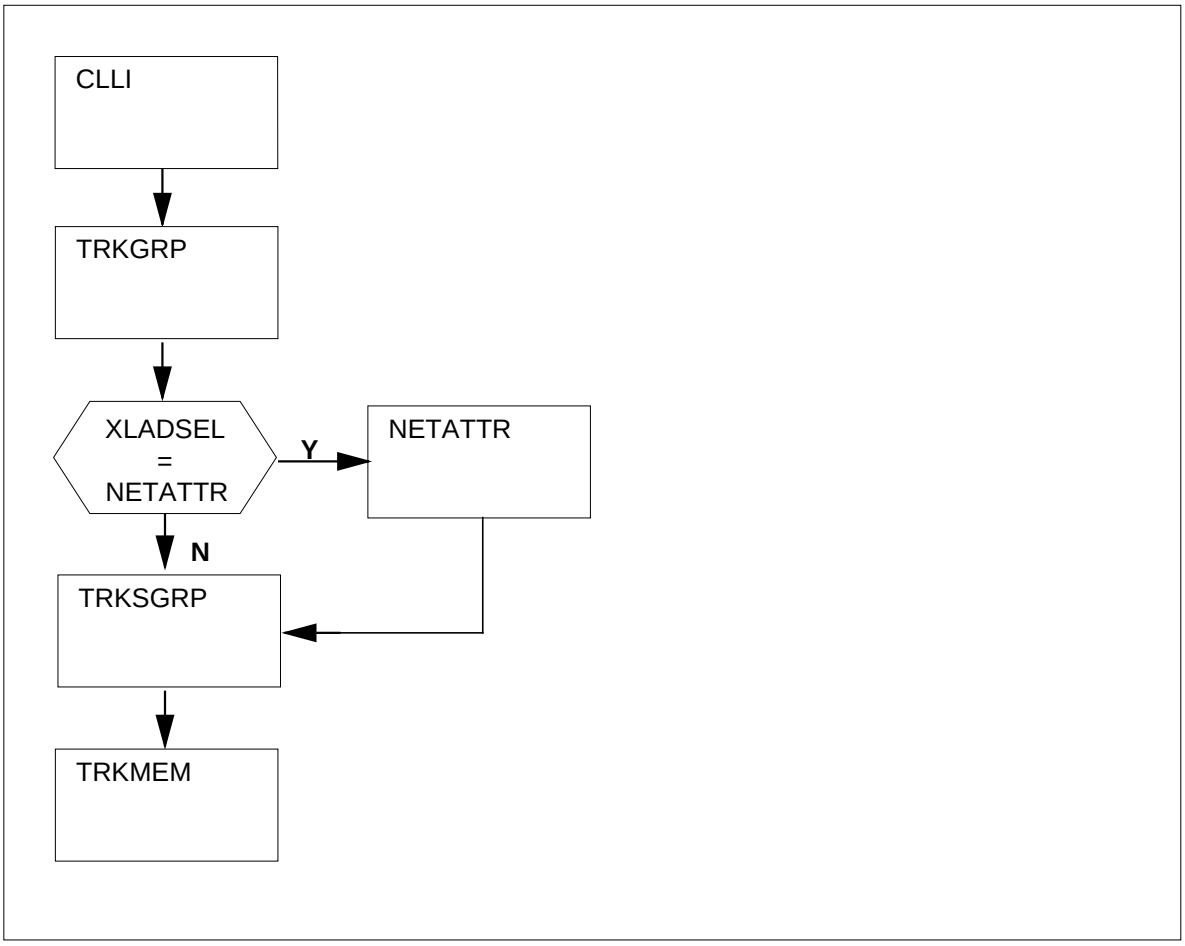
Calls do not survive cold or reload restarts, and are automatically taken down. The software meters are not updated for these calls.

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.

The following figure shows the datafill dependencies for OPR trunk groups.

OPR trunk groups (continued)

Datafill dependencies for OPR trunk groups



Limitations and restrictions

The following limitations and restrictions apply to OPR trunk groups:

- 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.
- 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).

- The translation data selector NETATTR is an index into a new network attributes table. If this selector is used, translation data is datafilled in table NETATTR instead of table TRKGRP.
- 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).

Billing

For information on billing, refer to the Bellcore format AMA translations section of this document.

Datafilling office parameters

The following table shows the office parameters used by OPR trunk groups. For more information about office parameters, refer to *Office Parameters Reference Manual.*

Office parameters used by OPR trunk groups

Table name	Parameter name	Explanation and action
OFCVAR	TRK_OOS_CHK_ON	This parameter specifies whether to check that the trunks in a trunk group are out of service before changing the values of specific fields in table TRKGRP by data modification order (DMO).

Datafill sequence

The following table lists the tables used by OPR trunk groups. The tables are listed in the order in which they are to be datafilled.

Tables used by OPR trunk groups (Sheet 1 of 2)

Table	Purpose of table
CLLI	The common language ocation identifier table uniquely identifies the far end of each announcement, tone, or trunk group.
TRKGRP	The trunk group table contains customer-defined data associated with each trunk group.
NETATTR	The network attributes table contains translation data and optional features associated with a network. This table can be used as an alternative to table TRKGRP for datafilling the trunk translation data.

OPR trunk groups (continued)

Tables used by OPR trunk groups (Sheet 2 of 2)

Table	Purpose of table
TRKSGRP	The trunk subgroup table contains supplementary information for each trunk group.
TRKMEM	The trunk member table specifies the physical location of each trunk assigned to one of the trunk groups.

The following table shows sample input for datafilling OPR trunk groups.

Sample input for OPR trunk groups

Table	Sample input
CLLI	OGTOBKA 51 175 MI
TRKGRP	OGTOBKA OPR 10 ELOA NCRT N N N EEND NONE OG UNIV N MIDL N NIL BELR2 SOCTRTL ICFRBKA
NETATTR	1 UNIV PX ICOPRICN NIL
TRKSGRP	OGTOBKA 0 P30CAS STD OG MF DIALTONE N 30 30 TR NO N N N C UNEQ
TRKMEM	OGTOBKA 109 0 DTC1 1 17

Datafilling table CLLI

The following table shows the datafill specific to OPR for table CLLI. Only those fields that apply directly to OPR are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table CLLI

Field	Subfield or refinement	Entry	Explanation and action
CLLI		alphanumeric (1 to 16 characters)	Common language location identifier. Enter a CLLI code to uniquely identify the far end of the OPR trunk group. Only alphabetic characters, numeric characters, and _ (underscores) can be used to datafill this field. The first character must be alphabetic. For optimum use, a CLLI code must not contain more than 12 characters, as only the first 12 characters are displayed on the maintenance and administration position (MAP). When a CLLI code is displayed in a log report, the entire 16-character CLLI code appears.

Datafill example for table CLLI

The following example shows sample datafill for table CLLI.

MAP display example for table CLLI

```
CLLI              ADNUM  TRKGRSIZ           ADMININF
-------------------------------------------------------
OGTOBKA            51     175               MI
```

Changing datafill for table CLLI

Use the standard table editor commands to change datafill for table CLLI.

OPR trunk groups (continued)

Datafilling table TRKGRP

The following tables show the datafill specific to OPR for table TRKGRP. Only those fields that apply directly to OPR are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table TRKGRP (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 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, SAT, ESUPR, IAA, TANDEM, TRFC, DIR, MCTANI, XLAD, MTRIC, DIGREGEN, DGNAME, PROTIDX, and TRTMTIDX. Note that among these subfields, only those directly affected by OPR are described below. Refer to section “General field information" in table TRKGRP in the data schema section of this document for information concerning 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.
	DR	IC, OG, or 2W	Trunk direction. This field specifies the trunk group direction. Enter IC for incoming, OG for outgoing, or 2W for twoway trunks. 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).
	XLAD	see subfield	Translation fields. This field consists of subfield XLADSEL and refinements.

OPR trunk groups (continued)

Datafilling table TRKGRP (Sheet 2 of 3)

Field	Subfield or refinement	Entry	Explanation and action
	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.
	PRTNM	alphanumeric (1 to 4 characters) or NPRT	Standard pretranslator name. If the entry in subfield XLADSEL is NALT, and 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 the entry in subfield XLADSEL is NALT and 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. If the entry in subfield XLADSEL is NALT, 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.

OPR trunk groups (continued)

Datafilling table TRKGRP (Sheet 3 of 3)

Field	Subfield or refinement	Entry	Explanation and action
	ORIGSRCE	LCL or NLCL	Originating source. If the entry in subfield XLADSEL is NALT, 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 in the data schema section of this document.
	NETINDX	numeric (0 to 1023)	Network attribute index. If the entry in subfield XLADSEL is NETINDX, enter a valid network attribute index from table NETATTR. No other translation data is required, since it is available in table NETATTR.
	XLAAREA	see subfield	Universal translation fields. If the entry in subfield XLADSEL is UNIV, datafill this field. 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 OPR trunks

For the metering and other data for all OPR trunks, datafill additional refinements as described below.

Field descriptions for conditional datafill (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
	MTRIC	see subfields	Meter incoming information. This field consists of subfields 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.
	DIGREGEN	numeric (1 to 4 digits) or N	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.

OPR trunk groups (continued)

Field descriptions for conditional datafill (Sheet 2 of 2)

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.
	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.

Datafill example for table TRKGRP

The following example shows sample datafill for table TRKGRP.

The example consists of datafill for one incoming trunk group and one outgoing trunk group with the following characteristics:

- The code in table CLLI for the outgoing trunk group is OGTOBKA and the code for the incoming trunk group is ICFRBKA.
- The traffic separation number for the outgoing trunk group is 10 and for the incoming trunk group is 0.

OPR trunk groups (continued)

- ELOA is the pad group assigned to both trunk groups.
- NCRT is the no circuit class for both trunk groups.
- Neither trunk group is set up to switch through satellite.
- Neither trunk group has echo suppressors.
- IAA is not applicable for OPR trunks.
- End-to-end connections are enabled.
- International traffic class is not used.
- The direction for the outgoing trunk group is OG and for the incoming trunk group is IC.
- Backward requests for DN and CATEGORY are not made on the incoming trunk group.
- Both trunk groups use the universal translator.
- The translation for the incoming trunk group starts in the prefix translation table.
- The translation name for the incoming trunk group is ICTOLLCN.
- Neither trunk group uses metering.
- No digit prefixing is done for the incoming trunk group.
- The outgoing trunk group selection sequence is most idle (MIDL)
- The fixed ANI index entry is not used for the outgoing trunk group.
- The digit collection name is not required.
- For both trunk groups, the protocol index is BELR2 and the treatment index is SOCTRTL.

Datafill example for table TRKGRP

The following example shows sample datafill for table TRKGRP.

OPR trunk groups (continued)

MAP display example for table TRKGRP

```
GRPKEY        GRPINFO
-------------------------------------------------------------------------
OGTOBKA       OPR 10 ELOA NCRT N N N EEND NONE OG UNIV N MIDL N NIL
              BELR2 SOCTRTL
ICFRBKA
              OPR 0 ELOA NCRT N N N EEND NONE IC N UNIV PX ICTOLLCN
               N MIDL N N NIL BELR2 SOCTRTL
```

Changing datafill for table TRKGRP

If office parameter TRK_OOS_CHK_ON in table OFCVAR is set to Y, all trunks in the trunk group must be taken out of service before changing the value of certain fields in table TRKGRP.

Datafilling table NETATTR

The following table shows the datafill specific to OPR for table NETATTR. Only those fields that apply directly to OPR are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table NETATTR

Field	Subfield or refinement	Entry	Explanation and action
NETIDX		0 to 1023	Network index. Enter the index referenced by table TRKGRP.
XLAVAR		see subfield	Variable translation data. This field consists of subfield XLADSEL and its refinements. For a description of these fields, refer to the data schema section of this document.

Datafill example for table NETATTR

The following example shows sample datafill for table NETATTR.

MAP display example for table NETATTR

```
NETINDX     XLAVAR                                  NETVAR
-------------------------------------------------------------
1           UNIV  PX  ICOPRICN                      NIL
```

Changing datafill for table NETATTR

Use the standard table editor commands to change datafill for table NETATTR.

Datafilling table TRKSGRP

The following table shows the datafill specific to OPR for table TRKSGRP. Only those fields that apply directly to OPR are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table TRKSGRP

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 CLLI code assigned to the trunk group as datafilled in table CLLI.
	SGRP	numeric (0 or 1)	Subgroup number. Enter the subgroup number assigned to the trunk group.
	CARDCODE	P30CAS	Card code. Enter P30CAS for an international extended multiprocessor system (XMS) based peripheral module (IXPM) trunk with pulse code modulation 30 (PCM30).

Datafill example for table TRKSGRP

The following example shows sample datafill for table TRKSGRP.

OPR trunk groups (continued)

MAP display example for table TRKSGRP

```
         SGRPKEY      CARDCODE
SGRPVAR         SGRPVAR
-------------------------------------------------------
         OGTOBKA 0    P30CAS
STD             OG MF DIALTONE N 30 30 TR NO N N N C UNEQ
```

Changing datafill for table TRKSGRP

Use the standard table editor commands to change datafill for table TRKSGRP.

Datafilling table TRKMEM

The following table shows the datafill specific to OPR for table TRKMEM. Only those fields that apply directly to OPR are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table TRKMEM

Field	Subfield or refinement	Entry	Explanation and action
CLLI		alphanumeric (1 to 16 characters)	Common language location identifier. Enter the CLLI code assigned in table CLLI to the trunk group of which the trunk is a member.
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.
SGRP		numeric(0 to 1)	Subgroup number. Enter the subgroup number to which the trunk is assigned.

Datafill example for table TRKMEM

The following example shows sample datafill for table TRKMEM.

MAP display example for table TRKMEM

```
CLLI              EXTRKNM  SGRP           MEMVAR
-------------------------------------------------------
OGTOBKA           109      0              DTC 1 1 17 $
```

Changing datafill for table TRKMEM

Use the standard table editor commands to change datafill for table TRKMEM.

OS trunk groups

Ordering codes

OS trunk groups have no ordering codes.

Release applicability

TL03 and up

Prerequisites

OS trunk groups have no functional group prerequisites.

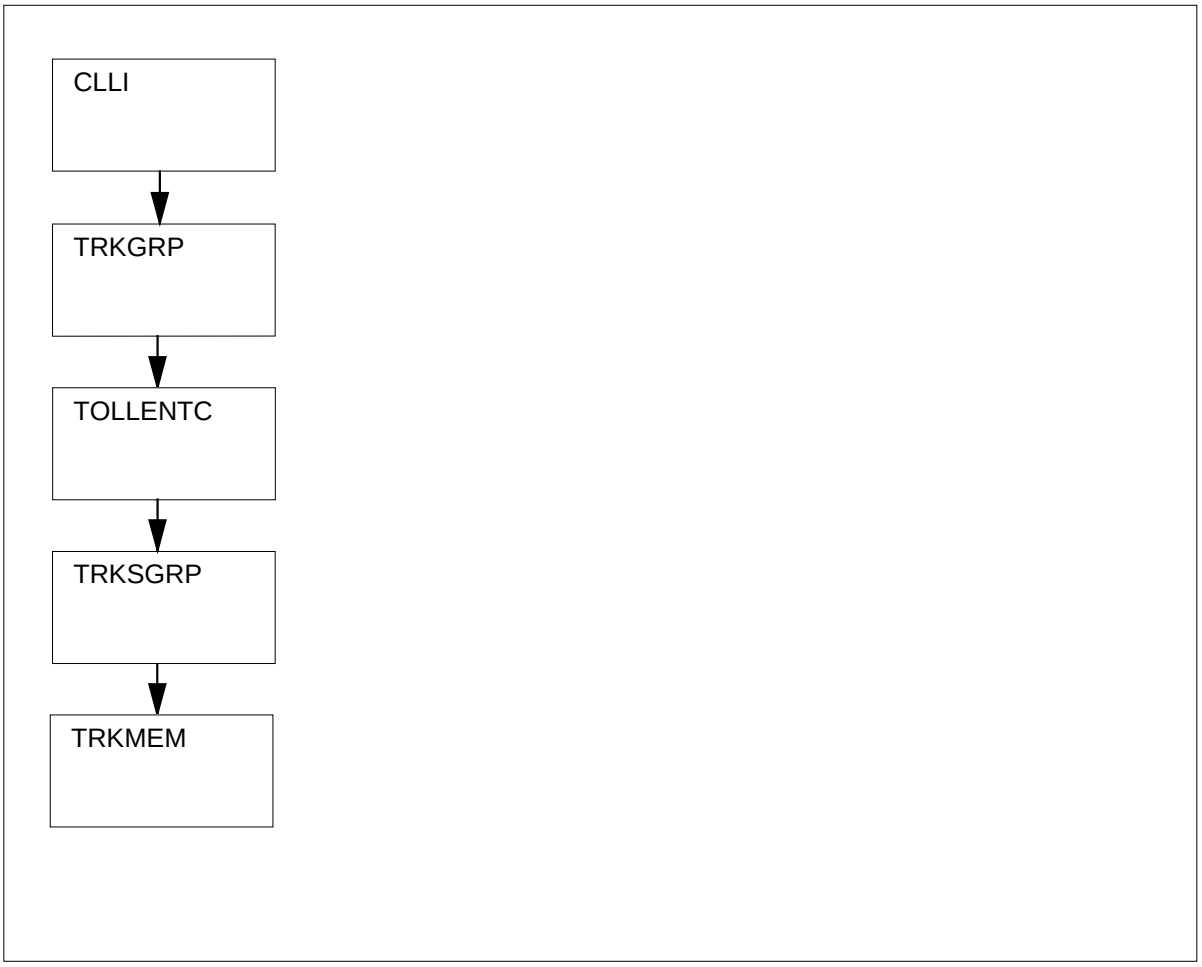
Description

In a DMS toll office equipped with functional group OSB00001 (Operator Services Base), outgoing trunk group type OS is used for toll-completing and toll-tandem calls requiring joint hold on timeout. Functional group OSB00001 allows ANI to be forwarded if feature group C (FGC) signaling is used.

The following figure shows the datafill dependencies for OS trunk groups.

OS trunk groups (continued)

Datafill dependencies for OS trunk groups



Limitations and restrictions

The following limitations and restrictions apply to OS trunk groups:

- If the switching unit is toll or combined local and toll with Super CAMA trunk groups that require an automatic message accounting (AMA) recording, and if there are no called or calling digits for some of the calls, a tuple containing specific charge and entry code information must be added to table TOLLENTC.

Billing

For information on billing, refer to the Bellcore format AMA translations section of this document.

OS trunk groups (continued)

Datafilling office parameters

The following table shows the office parameters used by OS trunk groups. For more information about office parameters, refer to *Office Parameters Reference Manual.*

Office parameters used by OS trunk groups

Table name	Parameter name	Explanation and action
OFCVAR	TRK_OOS_CHK_ON	This parameter specifies whether to check that the trunks in a trunk group are out of service before changing the values of specific fields in table TRKGRP by data modification order (DMO).

Datafill sequence

The following table lists the tables used by OS trunk groups. The tables are listed in the order in which they are to be datafilled.

Tables used by OS trunk groups

Table	Purpose of table
CLLI	The common language location identifier table uniquely identifies the far end of each announcement, tone, or trunk group.
TRKGRP	The trunk group table contains customer-defined data associated with each trunk group.
TOLLENTC	The entry code table provides the entry code and indicates whether a charge is applicable for each charge class listed in table BILLCODE for incoming CAMA trunk groups, or for lines listed in table LINEATTR.
TRKSGRP	The trunk subgroup table contains supplementary information for each trunk group.
TRKMEM	The trunk member table specifies the physical location of each trunk assigned to one of the trunk groups.

The following table shows sample input for datafilling OS trunk groups.

Sample input for OS trunk groups (Sheet 1 of 2)

Table	Sample input
CLLI	OSCAMA 55 175 MI
TRKGRP	OSCAMA OS 0 ELO NCRT NIL MIDL WK Y N Y

Sample input for OS trunk groups (Sheet 2 of 2)

Table	Sample input
TOLLENTC	CAM0 63 Y
TRKSGRP	OSCAMA 0 DS1SIG STD OG MF WK 7 0 NO NO N N N 70 UNEQ
TRKMEM	OSCAMA 100 0 TM8 11 4 2

Datafilling table CLLI

The following table shows the datafill specific to OS for table CLLI. Only those fields that apply directly to OS are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table CLLI

Field	Subfield or refinement	Entry	Explanation and action
CLLI		alphanumeric (1 to 16 characters)	Common language location identifier. Enter a CLLI code to uniquely identify the far end of the OS trunk group. Only alphabetic characters, numeric characters, and _ (underscores) can be used to datafill this field. The first character must be alphabetic. For optimum use, a CLLI code must not contain more than 12 characters, as only the first 12 characters are displayed on the maintenance and administration position (MAP). When a CLLI code is displayed in a log report, the entire 16-character CLLI code appears.

Datafill example for table CLLI

The following example shows sample datafill for table CLLI.

OS trunk groups (continued)

MAP display example for table CLLI

```
CLLI           ADNUM   TRKGRSIZ             ADMININF
-------------------------------------------------------
OSCAMA          55      175                 MI
```

Changing datafill for table CLLI

Use the standard table editor commands to change datafill for table CLLI.

Datafilling table TRKGRP

The following table shows the datafill specific to OS for table TRKGRP. Only those fields that apply directly to OS are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table TRKGRP (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 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, SELSEQ, ANIREQ, OUTPANI, CHARGE, and JNTHOLD. Note that among these subfields, only those directly affected by OS are described below. Refer to the “General field information" section in table TRKGRP in the data schema section of this document for information on an alternate structure for this field that results from the datafill of table CUSTFLDS.
	GRPTYP	OS	Group type. Enter OS to specify the outgoing from toll trunk group type.

Datafilling table TRKGRP (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
	ANIREQ	REV	Automatic number identification request. If functional group OSB00001 (Operator Services Base) is present, enter REV (reversal or answer). 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).
	OUTPANI	Y or N	Outpulse ANII. 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.

Datafill example for table TRKGRP

The following example shows sample datafill for table TRKGRP.

OS trunk groups (continued)

MAP display example for table TRKGRP

```
GRPKEY          GRPINFO
-------------------------------------------------------

OSCAMA          OS 0 ELO NCRT NIL MIDL WK Y N Y
```

Changing datafill for table TRKGRP

If office parameter TRK_OOS_CHK_ON in table OFCVAR is set to Y, all trunks in the trunk group must be taken out of service before changing the value of certain fields in table TRKGRP.

Datafilling table TOLLENTC

The following table shows the datafill specific to OS for table TOLLENTC. Only those fields that apply directly to OS are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table TOLLENTC

Field	Subfield or refinement	Entry	Explanation and action
CHGCLSS		SPCL	Charge class. Enter an alphanumeric character string to specify the charge class.
ECANDCHG		see subfields	Entry code and charge. Datafill this field if there are no called or calling digits for some of the calls. This field consists of subfields ENTCODE and APPLYCHG.
	ENTCODE	63	Entry code. Enter 63 to indicate the entry code assigned to the charge class.
	APPLYCHG	Y	Apply charge. Enter Y to indicate that a charge is applied for the call.

Datafill example for table TOLLENTC

The following example shows sample datafill for table TOLLENTC.

MAP display example for table TOLLENTC

```
            CHGCLSS   ECANDCHG
-------------------------------------------------------
             CAM0      00    Y
             TWX0      08    Y
             WAT0      11    Y
             DAT0      15    Y
             LCDR      18    N
```

Changing datafill for table TOLLENTC

Use the standard table editor commands to change datafill for table TOLLENTC.

Datafilling table TRKSGRP

The following table shows the datafill specific to OS for table TRKSGRP. Only those fields that apply directly to OS are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table TRKSGRP

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 CLLI code assigned to the trunk group as datafilled in table CLLI.
	SGRP	numeric (0 or 1)	Subgroup number. Enter the subgroup number assigned to the trunk group.

Datafill example for table TRKSGRP

The following example shows sample datafill for table TRKSGRP.

OS trunk groups (continued)

MAP display example for table TRKSGRP

```
SGRPKEY    CARDCODE
SGRPVAR         SGRPVAR
------------------------------------------------------------
OSCAMA 0   DS1SIG
STD             OG MF WK 7 0 NO NO N N N 70 UNEQ
```

Changing datafill for table TRKSGRP

Use the standard table editor commands to change datafill for table TRKSGRP.

Datafilling table TRKMEM

The following table shows the datafill specific to OS for table TRKMEM. Only those fields that apply directly to OS are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table TRKMEM

Field	Subfield or refinement	Entry	Explanation and action
CLLI		alphanumeric (1 to 16 characters)	Common language location identifier. Enter the CLLI code assigned in table CLLI to the trunk group of which the trunk is a member.
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.
SGRP		numeric (0 to 1)	Subgroup number. Enter the subgroup number to which the trunk is assigned.

Datafill example for table TRKMEM

The following example shows sample datafill for table TRKMEM.

MAP display example for table TRKMEM

```
CLLI              EXTRKNM  SGRP          MEMVAR
-------------------------------------------------------
OSCAMA             100      0            TM8 11 4 2
```

Changing datafill for table TRKMEM

Use the standard table editor commands to change datafill for table TRKMEM.

P2 trunk groups

P2 trunk group functionality codes

P2 trunk groups have no functionality codes.

Release applicability

TL03 and up

Prerequisites

P2 trunk groups have no functional group prerequisites.

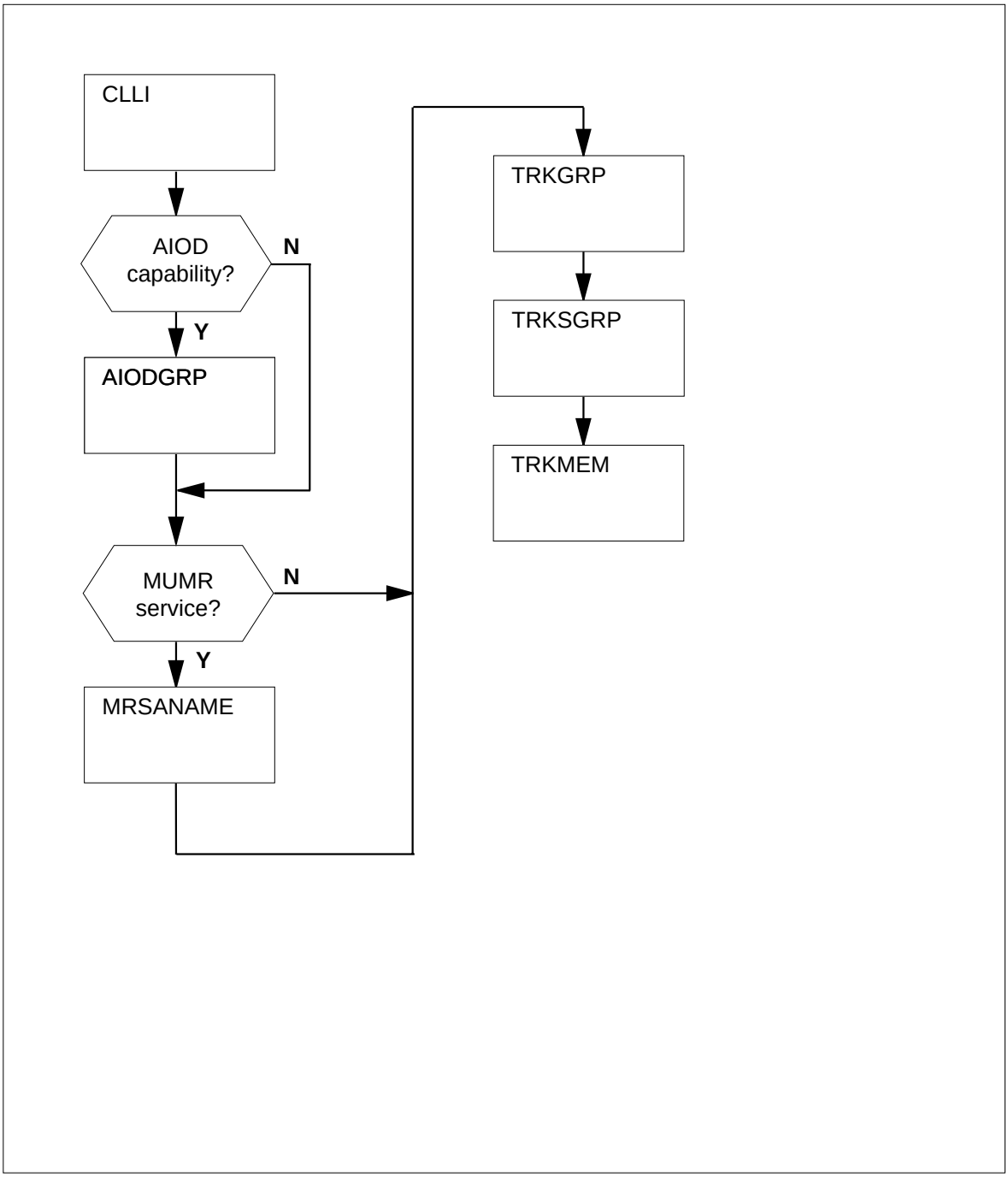
Description

In a DMS-100 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.

The following figure shows the datafill dependencies for P2 trunk groups.

P2 trunk groups (continued)

Datafill dependencies for P2 trunk groups



P2 trunk groups (continued)

Limitations and restrictions

The following limitations and restrictions apply to P2 trunk groups:

- 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.

Billing

For information on billing, refer to the Bellcore format AMA translations section of this document.

Datafilling office parameters

The following table shows the office parameters used by P2 trunk groups. For more information about office parameters, refer to *Office Parameters Reference Manual.*

Office parameters used by P2 trunk groups

Table name	Parameter name	Explanation and action
OFCVAR	TRK_OOS_CHK_ON	This parameter specifies whether to check that the trunks in a trunk group are out of service before changing the values of specific fields in table TRKGRP by data modification order (DMO).
	ANI_IN_SMDR	This parameter is applicable to P2 trunks in switching units with the Station Message Detail Recording (SMDR) system. If the parameter is set to Y, the virtual facility group (VFG) ID in the SMDR record is replaced with the actual calling number from the ANI information provided by the incoming trunk. If left at the default value of N, the VFG ID is shown in the SMDR record.
	TOLL_DIVERSION_SIGNAL	This parameter applies to P2 trunks that have the toll diversion (TDV) option, and specifies the type of TDV signal, WINK, or REVERSAL.

Datafill sequence

The following table lists the tables used by P2 trunk groups. The tables are listed in the order in which they are to be datafilled.

Tables used by P2 trunk groups

Table	Purpose of table
CLLI	The common language location identifier table uniquely identifies the far end of each announcement, tone, or trunk group.
AIODGRP	The automatic identified outward dialing (AIOD) group table contains data used to define AIOD datalinks between a PBX and its host office. These links provide a means for billing outgoing calls from the PBX to individual PBX stations.
MRSANAME	The multiunit message rate area names table lists multiunit message rate (MUMR) service area names.
TRKGRP	The trunk group table contains customer-defined data associated with each trunk group.
TRKSGRP	The trunk subgroup table contains supplementary information for each trunk group.
TRKMEM	The trunk member table specifies the physical location of each trunk assigned to one of the trunk groups.

The following table shows sample input for datafilling P2 trunk groups.

Sample input for P2 trunk groups

Table	Sample input
CLLI	X95PBX 51 250 $
AIODGRP	BNRCAR TREATMENT 2
MRSANAME	NEP
TRKGRP	X95PBX P2 55 ELO NCID MI MIDL 7 Y P621 PBX1 613 LCL NONE TSPS 6211234 NLCA N Y BNRCAR N N N N N NEP N Y 10 CHGNUM
TRKSGRP	X95PBX 0 2X95AA STD 2W DT DIALTONE N 30 30 DT WK 0 Y NO NO N N N C 160 UNEQ
TRKMEM	X95PBX 101 0 TM8 12 5 1 $

P2 trunk groups (continued)

Datafilling table CLLI

The following table shows the datafill specific to P2 for table CLLI. Only those fields that apply directly to P2 are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table CLLI

Field	Subfield or refinement	Entry	Explanation and action
CLLI		alphanumeric (1 to 16 characters)	Common language location identifier. Enter a CLLI code to uniquely identify the far end of the P2 trunk group. Only alphabetic characters, numeric characters, and _ (underscores) can be used to datafill this field. The first character must be alphabetic. For optimum use, a CLLI code must contain not more than 12 characters, as only the first 12 characters are displayed on the MAP (maintenance and administration position) display. When a CLLI code is displayed in a log report, the entire 16-character CLLI code appears.

Datafill example for table CLLI

The following example shows sample datafill for table CLLI.

MAP display example for table CLLI

```
CLLI            ADNUM  TRKGRSIZ                    ADMININF
-------------------------------------------------------------
X95PBX           51     250                                $
```

Changing datafill for table CLLI

Use the standard table editor commands to change datafill for table CLLI.

Datafilling table AIODGRP

The following table shows the datafill specific to P2 for table AIODGRP. Only those fields that apply directly to P2 are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table AIODGRP

Field	Subfield or refinement	Entry	Explanation and action
AIODGRP		alphanumeric (1 to 16 characters)	Automatic identified outward dialing group. Enter the code that is assigned in table CLLI and represents the name of the AIOD group.
FAILDEF		RECORD or TREATMENT	Automatic identified outward dialing failure default. This field defines the action taken if the AIOD message is not received. Enter RECORD if the call is allowed to proceed, but is billed to the default PBX number or the PBX special billing number. Enter TREATMENT if a call is routed to the automatic identified outward dialing failure (AIFL) treatment.
TIMEOUT		0 to 3	Automatic identified outward dialing time out. Enter the length of time, in 1-s increments, that call processing is to wait if the AIOD message is late.

Datafill example for table AIODGRP

The following example shows sample datafill for table AIODGRP.

MAP display example for table AIODGRP

```
AIODGRP      FAILDEF      TIMEOUT
-------------------------------------------------------
BNRCAR       TREATMENT    2
```

Changing datafill for table AIODGRP

Use the standard table editor commands to change datafill for table AIODGRP.

P2 trunk groups (continued)

Datafilling table MRSANAME

The following table shows the datafill specific to P2 for table MRSANAME. Only those fields that apply directly to P2 are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table MRSANAME

Field	Subfield or refinement	Entry	Explanation and action
MRSA		alphanumeric (up to 8 characters)	Multiunit message rate service area name. Enter the name of an MRSA. The total number of MUMR service area names cannot exceed 127.

Datafill example for table MRSANAME

The following example shows sample datafill for table MRSANAME.

MAP display example for table MRSANAME

```
MRSA
------------------------------------------------------
NEP
OTWA
HULL
```

Changing datafill for table MRSANAME

Use the standard table editor commands to change datafill for table MRSANAME.

Datafilling table TRKGRP

The following table shows the datafill specific to P2 for table TRKGRP. Only those fields that apply directly to P2 are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table TRKGRP (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 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, SELSEQ, DIGSOUT, TOLL, PRTNM, SCRNCL, SNPA, ORIGSRCE, CHGCLSS, ZEROMPOS, BILLNO, LCANAME, LCABILL AIOD, TDN, TDV, CPH, RMR, RMT, MRSA, EA, and BCLID. Note that among these subfields, only those directly affected by P2 are described below. Refer to table TRKGRP in the data schema section of this document for information on an alternate structure for this field that results from the datafill of table CUSTFLDS.
	GRPTYP	P2	Group type. Enter P2 to specify the group type for two-way DID/DOD PBX trunks.
	DIGSOUT	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 DMO.

P2 trunk groups (continued)

Datafilling table TRKGRP (Sheet 2 of 5)

Field	Subfield or refinement	Entry	Explanation and action
	Toll	Y or N	Toll. If the PBX is toll, enter Y. Otherwise, enter N. 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.
	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.

P2 trunk groups (continued)

Datafilling table TRKGRP (Sheet 3 of 5)

Field	Subfield or refinement	Entry	Explanation and action
	LCANAME	alphanumeric (1 to 4 characters) or NLCA	Local calling area screening table nameIf screening of local NXX codes is required, enter the name of the local calling area screening table name assigned to the trunk group. If screening of local NXX codes is not required, enter NLCA.
	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	Automatic identified outward dialing information. This field consists of subfield AIOD and refinement AIODGRP.
	AIOD	Y or N	Automatic identified outward dialingIf the trunk group is from a PBX that has an 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 NONE.
	AIODGRP	alphanumeric (1 to 16 characters) or blank	Automatic 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.
	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.

P2 trunk groups (continued)

Datafilling table TRKGRP (Sheet 4 of 5)

Field	Subfield or refinement	Entry	Explanation and action
	CPH	Y or N	Called party hold. Enter Y if called party hold is required. Otherwise, enter N.
	RMR	Y or N	Answer supervision local calls. Enter Y if answer supervision for local calls is required. Otherwise, enter N.
	RMT	Y or N	Answer supervision toll calls. Enter Y if answer supervision for toll calls is required. Otherwise, enter N.
	MRSA	alphanumeric 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 subfields	Equal access information. This field consists of subfield EA and refinements.
	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. Enter an inter-LATA or international carrier name specified in the table OCCNAME.
	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.

Datafilling table TRKGRP (Sheet 5 of 5)

Field	Subfield or refinement	Entry	Explanation and action
	LATANM	alphanumeric (1 to 16 characters)	Local access and transport area name. Datafill this field if the value in field EA is Y. Enter a LATA name specified in table LATANAME.
	BCLID	Y or N	Bulk calling line identification. If the Bulk Calling Line Identification feature (BCLID) is used, enter Y and datafill refinement BCGRPNUM. Otherwise, enter N.
	BCGRPNUM	0 to 2047	Bulk calling line identification group number. Datafill this field if the value in field BCLID is Y. Enter the bulk calling line identification group number for the trunk group.
	OPTION	CHGNUM	Change number delivery. Enter CHGNUM to send a charge number and originating line information (OLI) parameter with the initial address message (IAM).

Datafill example for table TRKGRP

The following example shows sample datafill for table TRKGRP.

MAP display example for table TRKGRP

```
GRPKEY
                                                                GRPINFO
------------------------------------------------------------------------
X95PBX
P2 55 ELO NCID MI MIDL 7 Y P621 PBX1 613 LCL NONE TSPS 6211234 NLCA N
Y BNRCAR N N N N N NEP N Y 10 CHGNUM
```

Changing datafill for table TRKGRP

If office parameter TRK_OOS_CHK_ON in table OFCVAR is set to Y, all trunks in the trunk group must be taken out of service before changing the value of certain fields in table TRKGRP.

P2 trunk groups (continued)

Datafilling table TRKSGRP

The following table shows the datafill specific to P2 for table TRKSGRP. Only those fields that apply directly to P2 are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table TRKSGRP

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 CLLI code assigned to the trunk group as datafilled in table CLLI.
	SGRP	0 or 1	Subgroup number. Enter the subgroup number assigned to the trunk group.
CARDCODE		2X95AA	Card code. Enter 2X95AA.
DIR		2W	Direction. Enter 2W (two way).
	IPULSTYP	DP or DT	Incoming type of pulsing. Enter DP (dial pulse) or DT (Digitone).
	ISTARTSG	DIALTONE	Incoming start dial signal. Enter DIALTONE.
	OPULSTYP	DT	Outgoing type of pulsing. Enter DT (Digitone).
	GLAREYD	Y	Yield to glare. Enter Y to specify that the P2 subgroup must yield to glare.

Datafill example for table TRKSGRP

The following example shows sample datafill for table TRKSGRP.

MAP display example for table TRKSGRP

```
           SGRPKEY    CARDCODE
SGRPVAR
                                                          SGRPVAR
-------------------------------------------------------------
           X95PBX 0   2X95AA
STD
2W DT DIALTONE N 30 30 DT WK  0 Y NO NO N N N C 160 UNEQ
```

Changing datafill for table TRKSGRP

Use the standard table editor commands to change datafill for table TRKSGRP.

Datafilling table TRKMEM

The following table shows the datafill specific to P2 for table TRKMEM. Only those fields that apply directly to P2 are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table TRKMEM

Field	Subfield or refinement	Entry	Explanation and action
CLLI		alphanumeric (1 to 16 characters)	Common language location identifier. Enter the CLLI code assigned in table CLLI to the trunk group of which the trunk is a member.
EXTRKNM		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.
SGRP		0 or 1	Subgroup number. Enter the subgroup number to which the trunk is assigned.

Datafill example for table TRKMEM

The following example shows sample datafill for table TRKMEM.

MAP display example for table TRKMEM

```
CLLI        EXTRKNM   SGRP                          MEMVAR

------------------------------------------------------------
X95PBX      101       0                       TM8 12 5 1 $
```

Changing datafill for table TRKMEM

Use the standard table editor commands to change datafill for table TRKMEM.

PRI trunk groups

PRI trunk group functionality codes

PRI trunk groups have no functionality codes.

Release applicability

TL03 and up

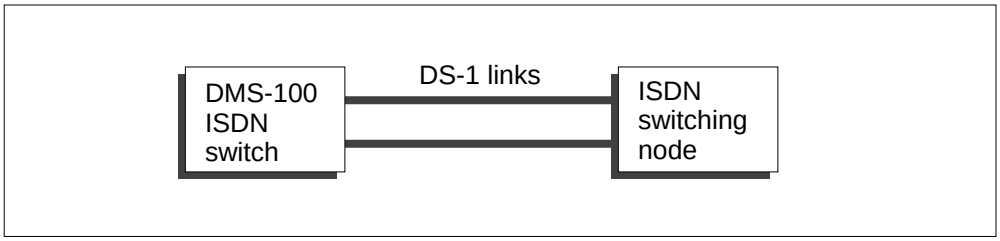
Prerequisites

PRI trunk groups have no functional group prerequisites.

Description

In a DMS ISDN office, trunk group type PRI is used to establish an ISDN primary rate interface (PRI) to another switching node at the far end. As shown in the following figure, the interface is implemented on DS-1 links between the two nodes.

PRI Base Service



PRI can be used to connect the DMS-100 switch to the following Northern Telecom products:

- DMS-100 switch
- DMS-250 switch
- Meridian 1 Options 11-81 (SL-1 system) private branch exchange (PBX)
- Meridian 1 Options 111-211 (SL-100 system) PBX

The DMS-100 switch can also be connected to a number of switches produced by vendors other than Northern Telecom.

ISDN uses time-division multiplexed digital channels to carry information. The ISDN PRI interface consists of B-channels and D-channels. The B-channels carry circuit-switched voice or data between the DMS-100 switch and the switching node at the far end. The D-channels carry the call control messages for the B-channels.

PRI trunk groups (continued)

A PRI interface can be implemented on a number of DS-1 links. Each B-channel and D-channel occupies one time slot on a DS-1.

Each DS-1 link can handle 24 B-channels or 23 B-channels and one D-channel. As one D-channel can support up to 479 B-channels, a PRI interface can consist of 479 B-channels and one D-channel over a maximum of 20 DS-1 links. However, for traffic considerations and protection against equipment failure, a lower D-channel-to-B-channel ratio is recommended. Typical installations have one D-channel for every one or two DS-1 links (a ratio of one D-channel for 23 or 47 B-channels).

PRI trunks

In PRI terms, a trunk is a B- or D-channel, and a trunk group is the collection of B- and D-channels forming the PRI interface. The trunk group can be implemented across a number of DS-1 links. PRI trunk groups are defined in tables CLLI, PADDATA, and TRKGRP.

Unlike other trunk group types, a PRI trunk group has no subgroups as such, but the trunk's D-channel is defined in table TRKSGRP. (There must be one D-channel defined for each trunk group.) The B-channels, also known as trunk group members, are defined in table TRKMEM.

Logical terminals

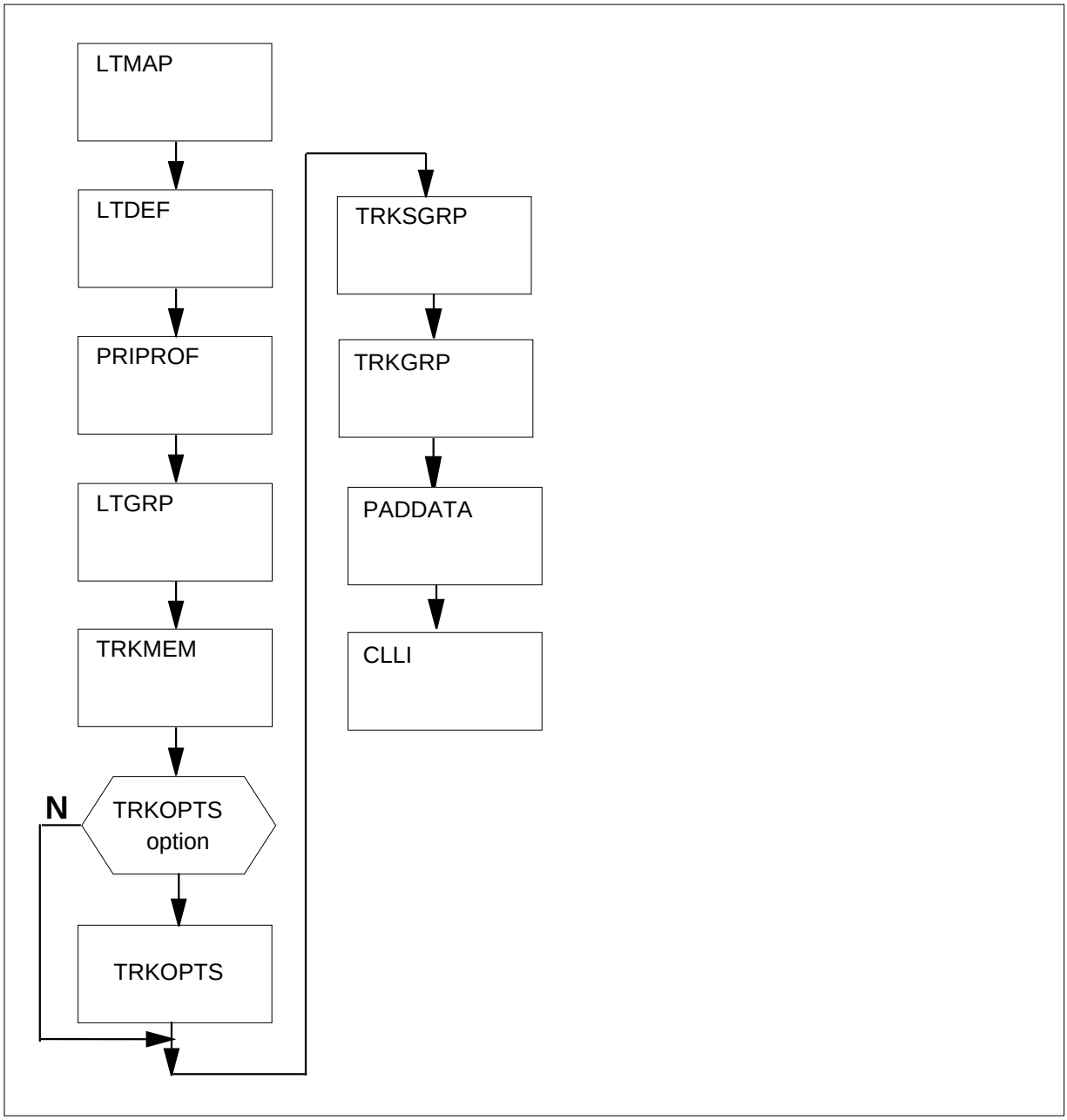
In ISDN applications, the concept of the logical terminal clarifies the situation in which more than one physical terminal can be associated with a single line card.

In PRI applications, the logical terminal is actually the switching node at the far end. By extension, the PRI interface or trunk group is the equivalent of a logical terminal. As each logical terminal has an identifier and belongs to a logical terminal group, the PRI trunk group is datafilled with these attributes in tables LTGRP, LTDEF, and LTMAP.

The following figure shows the datafill dependencies for PRI trunk groups.

PRI trunk groups (continued)

Datafill dependencies for PRI trunk groups



Limitations and restrictions

The following limitations and restrictions apply to PRI trunk groups:

- Table PRIPROF can have a maximum of 255 profiles datafilled in field PROFNAME and subfields VARIANT and ISSUE. The maximum

number of variants is 15, and each variant can have a maximum of 15 issues.

- In table LTDEF, when you make changes to subfields VARIANT, ISSUE, or PROFNAME, the associated D-channel associated with the LTID must be installation busy (INB). The LTID must be mapped to a D-channel which is datafilled as a CLLI in table TRKSGRP. Changes take effect when the changed tuple is accepted.
- A tuple change in table PRIPROF only becomes effective by unmapping and mapping the entry for the associated LTID in table LTMAP. This includes changing the variant, issue, or function switches in the profile. A tuple can only be deleted from table PRIPROF when all references to the profile name have been removed from table LTDEF. The following are the steps for changing a profile:
  - — Add a new profile name to table PRIPROF reflecting the required modifications.
  - — Change the D-channel state to INB.
  - — Delete the associated entry in table LTMAP.
  - — Change all references to the old profile name in table LTDEF to the new profile name.
  - — Replace the associated entry in table LTMAP.
  - — Delete the old profile name from table PRIPROF.
- Unsupported fields in a tuple for a PRI trunk group cannot be changed after ISDN has been set as the signaling type in table TRKSGRP
- A PRI trunk group cannot be deleted while its LTID option is still mapped to table LTMAP. Change the mapping in table LTMAP before attempting to delete the PRI trunk.
- If option DLYFWDXMT is datafilled in table TRKOPTS, all trunk members of that trunk group must terminate to a DTC or an LTC. The exec line up in table LTCINV must be specified as DTCEX, DTCFX, or FXODTC.

Billing

For information on billing, refer to the Bellcore format AMA translations section of this document.

Datafilling office parameters

PRI trunk groups do not affect office parameters.

PRI trunk groups (continued)

Datafill sequence

The following table lists the tables used by PRI trunk groups. The tables are listed in the order in which they are to be datafilled.

Tables used by PRI trunk groups

Table	Purpose of table
CLLI	The common language location identifier table uniquely identifies the far end of each announcement, tone, or trunk group.
PADDATA	The pad data table defines the loss and level plan for PRI.
TRKGRP	The trunk group table contains customer-defined data associated with each trunk group.
TRKSGRP	The trunk subgroup table contains supplementary information for each trunk group.
TRKMEM	The trunk member table specifies the physical location of each trunk assigned to one of the trunk groups.
TRKOPTS	The trunk option table contains data defining the options associated with this trunk group.
LTGRP	The logical terminal group table defines the logical terminal group to which the PRI trunk group belongs.
PRIPROF	The PRI profile table establishes a PRI profile to be used for each interface.
LTDEF	The logical terminal definition table specifies a logical terminal identifier and access privileges for the PRI trunk group.
LTMAP	The logical terminal mapping table associates the PRI trunk's LTID with the trunk group CLLI.

The following table shows sample input for datafilling PRI trunk groups.

Sample input for PRI trunk groups (Sheet 1 of 2)

Table	Sample input
CLLI	SL1NTPRI 171 47 PRA_TRUNK_TO_SL1_PBX
PADDATA	PRAC UNBAL 3L 0
TRKGRP	SL1NTPRI PRA 0 NPDGP NCIT ASEQ N ISDN 1008 $
TRKSGRP	SL1NTPRI 0 DS1SIG ISDN 2 2 87Q931 1 N STAND NETWORK PT_PT USER N UNEQ 30 N STRA DTCI 0 0 24 64K HDLC $

Sample input for PRI trunk groups (Sheet 2 of 2)

Table	Sample input
TRKMEM	SL1NTPRI 1 0 DTCI 2 0 1 $
LTGRP	ISDN 0 $
PRIPROF	NAPBX NTNAPRI V1 NOPIALRT $
LTDEF	ISDN 1008 B PRA 10 10 5 5 NTNAPRI V1 NAPBX NOPMD $
LTMAP	ISDN 1008 CLLI SL1NTPRI TEI 0 $

Datafilling table CLLI

The following table shows the datafill specific to PRI for table CLLI. Only those fields that apply directly to PRI are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table CLLI

Field	Subfield or refinement	Entry	Explanation and action
CLLI		alphanumeric (up to 16 characters)	Trunk group name. Enter the name of the trunk group.
ADNUM		50 to 8191	Administration number. Enter a number from 50 to 8191. ***Note:*** The number must be less than the size of table CLLI defined in table DATASIZE.
TRKGRSIZ		0 to 2047	Trunk group size. Enter the total number of B-channels in the PRI trunk group.
ADMININF		alphanumeric (up to 32 characters)	Administration information. Enter a string of text to describe the CLLI.

Datafill example for table CLLI

The following example shows sample datafill for table CLLI. This example illustrates a 47B+D configuration.

PRI trunk groups (continued)

MAP display example for table CLLI

```
CLLI       ADNUM  TRKGRSIZ                          ADMININF
-------------------------------------------------------------
SL1NTPRI   171    47                 PRA_TRUNK_TO_SL1_PBX
```

Changing datafill for table CLLI

Use the standard table editor commands to change datafill for table CLLI.

Error messages for table CLLI

The following error messages apply to table CLLI.

Error messages for table CLLI

Error message	Explanation and action
`ADNUM greater than 50 must be used if CLLI is not a PSEUDOCLLI`	A value of less than or equal to 50 has been entered in field ADNUM for a CLLI that is not a shortened CLLI. Enter a value of greater than 50 in field ADNUM.

Datafilling table PADDATA

The following table shows the datafill specific to PRI trunk groups for table PADDATA. Only those fields that apply directly to PRI trunk groups are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table PADDATA

Field	Subfield or refinement	Entry	Explanation and action
PADKEY		see subfields	PADDATA key. Datafill subfields PADGRP1 and PADGRP2 as one concatenated entry. Separate the two values with a blank. You are not prompted for the subfields individually.
	PADGRP1	alphanumeric (up to 5 characters)	PAD group 1. Enter a name which defines the originating PAD group.
	PADGRP2	alphanumeric (up to 5 characters)	PAD group 2. Enter a name which defines the destination PAD group.
PAD1TO2		alphanumeric (up to 3 characters)	PAD group 1 to PAD group 2. For the transmit PAS enter one of the following values: • 0 (zero). • 0L to 14L for loss. • 0G to 7G for gain.

Datafill example for table PADDATA

The following example shows sample datafill for table PADDATA.

PRI trunk groups (continued)

MAP display example for table PADDATA

```
PADKEY             PAD1TO2  PAD2TO1
-------------------------------------------------------
PRAC UNBAL         3L       0
PRAC STDLN         3L       0
PRAC  LRLM         3L       0
PRAC PPHON          0       0
PRAC DAVLN         6L       0
PRAC   IAO         3L       0
PRAC   LCO         3L       0
PRAC   ELO          0       0
PRAC  ETLS          0       0
PRAC  ETLL          0       0
PRAC   TLA          0       0
PRAC   TLD         3G       0
PRAC  CONF         2G       0
PRAC  CPOS          0       0
PRAC  TPOS          0       0
PRAC   BRA          0       0
PRAC  PRAC          0       0
PRAC   RSC         3L       0
PRAC   ITT          0       0
PRAC   DID          0       0
PRAC   ATT         3L       0
PRAC   DTT          0       0
PRAC  SHFX          0       0
PRAC  LHFX          0       0
```

Changing datafill for table PADDATA

Use the standard table editor commands to change datafill for table PADDATA.

Datafilling table TRKGRP

The following table shows the datafill specific to PRI for table TRKGRP. Only those fields that apply directly to PRI are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table TRKGRP (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 CLLI code assigned to the PRI trunk group in table CLLI.
GRPINFO		see subfields	Variable group data. This field consists of subfields GRPTYP, TRAFSNO, PADGRP, NCCLS, SELSEQ, BILLDN, LTID, and OPTIONS. Note that among these subfields, only those directly affected by PRI are described below. Refer to table TRKGRP in the data schema section of this document for information on an alternate structure for this field that results from the datafill of table CUSTFLDS.
	GRPTYP	PRA	Group type. Enter PRA (primary rate access) to define a PRI trunk group type.
	PADGRP	alphanumeric	PAD group. Enter the name of the originating PAD group from table PADDATA (subfield PADGRP1).

PRI trunk groups (continued)

Datafilling table TRKGRP (Sheet 2 of 3)

Field	Subfield or refinement	Entry	Explanation and action
	SELSEQ	ASEQ, DSEQ, MIDL, LIDL, CWCTH, or CCWCTH	Selection sequence. This field determines the sequence in which trunks are selected within the trunk group. It is used to reduce B-channel glare by coordinating the selection of channels between the DMS-100 and the switching node at the far end. Three sets of two corresponding values for SELSEQ define the three types of trunk selection: ascending/descending, most idle/least idle, and clockwise/counter-clockwise circular hunting. Each set includes two values, so that opposite ends of the PRI trunk group can be datafilled with opposite SELSEQ field values. Enter ASEQ (ascending sequence) or DSEQ (descending sequence) to specify the ascending/descending selection sequence in which the switch searches for a free B-channel. Enter MIDL (most idle) or LIDL (least idle) to choose the most idle or least idle method of trunk selection. Enter CWCTH (clockwise circular trunk hunting) or CCWCTH (counter-clockwise circular trunk hunting) to specify the circular trunk hunting selection sequence. The ASEQ and DSEQ selection sequences are not recommended for trunk groups which have 175 or more members, or are members of a route list in which the total number of members is 175 or more. A sequential search of 175 or more members may cause the unpreemtable timer to expire before the search is complete. To change the field SELSEQ value after the trunk group has been datafilled, you must delete the trunk group and then add it again.
	BILLDN	numeric (up to 11 digits) or N	Billing directory number. Enter one of the following: • Enter the directory number (up to 11 digits) to which all calls are billed, regardless of the calling party number. • Enter N when the calling number is a billing DN.

Datafilling table TRKGRP (Sheet 3 of 3)

Field	Subfield or refinement	Entry	Explanation and action
	LTID	$	Logical terminal identifier. Enter a $ to satisfy the table editor. This field is automatically updated by the system after you datafill the corresponding entry in table LTMAP. ***Note:*** In the datafill example, the tuple is shown after table TRKGRP has been updated automatically with the LTID from table LTMAP.
	OPTIONS	see subfield	Options. This field consists of subfield OPTION.
	OPTION	MCH	Option. To specify the malicious call hold (MCH) option, enter MCH. If no options apply, leave this field blank.

Datafill example for table TRKGRP

The following example shows sample datafill for table TRKGRP.

MAP display example for table TRKGRP

```
GRPKEY
                                                        GRPINFO
--------------------------------------------------------------
SL1NTPRI
                        PRA 0 NPDGP NCIT ASEQ N (ISDN 1008)$
```

Changing datafill for table TRKGRP

Use the standard table editor commands to change datafill for table TRKGRP.

Datafilling table TRKSGRP

In PRI applications, table TRKSGRP defines the D-channel for the trunk group.

PRI trunk groups (continued)

The following table shows the datafill specific to PRI for table TRKSGRP. Only those fields that apply directly to PRI are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table TRKSGRP (Sheet 1 of 6)

Field	Subfield or refinement	Entry	Explanation and action
SGRPKEY		see subfields	Subgroup key. Datafill subfields CLLI and SGRP as one concatenated entry. Separate the two values with a blank. You are not prompted for the subfields individually.
	CLLI	alphanumeric (1 to 16 characters)	Common language location identifier. From table CLLI, enter the trunk group name to which the subgroup belongs.
	SGRP	0	Subgroup. Enter 0 (zero).
CARDCODE		DS1SIG	Card code. Enter DS1SIG.
SGRPVAR		see subfields	Subgroup variable refinements. This field consists of subfield SIGDATA and refinements PSPDSEIZ, PARTDIAL, VERSION, CRLENGTH, BCHNEG, BCHGLARE, IFCLASS, CONFIG, LOCATION, SAT, ECSTAT, NSMATCH, TRKGRDTM, LIFLAGS, DCHNL, PMTYPE, DTCINO, LTCINO, DTCICKTNO, LTCCKTNO, DTCICKTTS, LTCCKTTS, DCHRATE, and HDLCTYPE.
	SIGDATA	ISDN	Subgroup variable. Enter ISDN.
	PSPDSEIZ	2 to 30	Permanent signal or partial dial on seizure timing. Enter a number from 2 to 30 for the number of seconds that the trunk waits for reception of the first digit.
	PARTDIAL	2 to 30	Partial dial timing. Enter a number from 2 to 30 for the number of seconds that the trunk waits for reception of each digit, except the first digit.
	VERSION	87Q931	Protocol version. Enter 87Q931.
	CRLENGTH	1 or 2	Call reference length. Enter 1 or 2 for the number of octets in the call reference.
	BCHNEG	N	B-channel negotiation. Enter N.

PRI trunk groups (continued)

Datafilling table TRKSGRP (Sheet 2 of 6)

Field	Subfield or refinement	Entry	Explanation and action
	BCHGLARE	STAND or YIELD	B-channel glare. When the B-channel is used in SETUP messages simultaneously in both directions and there is glare. Enter one of the following values: • STAND when this switch waits for the other switch to yield. • YIELD if the call should be taken down by this switch. ***Note:*** When the switching node at the far end is another DMS-100 switch, one side must be STAND and the other YIELD. Generally, enter YIELD at the DMS-100 switch when the switching node at the far end is a PBX which is not manufactured by Northern Telecom. However, correlation of datafill with the PBX must be made.
	IFCLASS	NETWORK	Interface class. Enter NETWORK for the network end of the PRI link.
	CONFIG	PT_PT or PT_MLT_PT	Configuration. When broadcast procedures are to be used on this PRI interface. Enter one of the following values: • PT_PT for point-to-point. • PT_MLT_PT for point-to-multipoint.
	LOCATION	USER, PVTNET, or LOCALEO	Location. The location used when creating CAUSE information elements. These CAUSE IE are contained in release messages that map to a specific treatment. Enter one of the following values: • USER for public network • PVTNET for private network. • LOCALEO for local end office (public network)
	SAT	Y or N	Satellite. Enter Y when the trunk group is connected to the distant office using satellite. Otherwise, enter N.

PRI trunk groups (continued)

Datafilling table TRKSGRP (Sheet 3 of 6)

Field	Subfield or refinement	Entry	Explanation and action
	ECSTAT	INTERNAL, INNOTONE, EXTERNAL, or UNEQ	Echo canceller status. Enter one of the following values: • INTERNAL for internal processing and enabling by call processing. • INNOTONE for internal with inbound no tone • EXTERNAL for external with no call processing involved. • UNEQ for unequipped.
	NSMATCH	Y or N	Noise match control. Enter Y for noise matching. The background noise levels are maintained when the internal echo canceller is actively cancelling echoes. Enter N for no noise matching. This is the default. The background noise levels are not maintained when the internal echo canceller is actively cancelling echoes. ***Note:*** Use when ECSTAT is INTERNAL and INNOTONE.
	AUTOON	Y or N	Auto reenable control. If the entry in subfield ECSTAT is INTERNAL, datafill 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.
	TRKGRDTM	1 to 255	Trunk guard timing. Enter a number from 1 to 255 for the time, in 10 millisecond intervals, that an outgoing or two-way trunk waits after sending an onhook signal to the switching node at the far end and before putting the trunk in the idle queue. This gives the switching node at the far end time to release the connection and prepare for another call. Enter a blank if the trunk is incoming.

PRI trunk groups (continued)

Datafilling table TRKSGRP (Sheet 4 of 6)

Field	Subfield or refinement	Entry	Explanation and action
	ADJNODE (-BCS35)	alphanumeric (1 to 12 characters)	Adjacent node. Datafill 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. For information about table ADJNODE refer to the data schema section of this document.
	L1FLAGS	Y or N	L1FLAGS is only valid on TDM/XPMs. It indicates what may be expected as an idle code when no frames are transmitted on a D-channel, particularly when the NTBX01 (ISP card) is used in the XPM. The default value should be Y(es). Y(es) means that the idle code is 7E. Most non-Nortel equipment and Nortel M1 use this value. N(o) means that the idle code can be 7E + other value, such as 7F. This value can be used when connecting to other TDM/XPMs. See NIS-A211-1 (Standard release 08.01, August 1998), section 4.5 and NIS-A233-1 (Standard release 05.01, April, 1999), section 4.5 for more information about the idle codes.
	PARMNAME	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. For information about table ISDNPARM refer to the data schema section of this document.
	DCHNL		D-channel. Defines the primary D-channel to be used for this PRI interface. **Note:** When datafilling a backup D-channel, the subfields must be datafilled twice, once for the primary D-channel and once for the backup D-channel, and must be in the same tuple.

PRI trunk groups (continued)

Datafilling table TRKSGRP (Sheet 5 of 6)

Field	Subfield or refinement	Entry	Explanation and action
	PMTYPE	DTCI or LTC	Peripheral module type. Enter DTCI or LTC, and datafill the applicable refinements. Should only a primary D-channel be required, enter a $ to end the tuple after the primary D-channel is datafilled.
	DTCINO	0 to 511	DTCI number. Enter the DTCI number. ***Note:*** Use when PMTYPE is DTCI.
	LTCNO	0 to 511	LTC number. Enter the LTCI number. ***Note:*** Use when PMTYPE is LTC.
	DTCICKTNO	0 to 19	DS-1 circuit number. Enter the DS-1 circuit number. ***Note:*** Use when PMTYPE is DTCI. The primary D-channel must be datafilled on a lower DS-1 circuit number than the backup D-channel.
	LTCCKTNO	0 to 19	DS-1 circuit numberEnter the DS-1 circuit number. ***Note:*** Use when PMTYPE is LTC. The primary D-channel must be datafilled on a lower DS-1 circuit number than the backup D-channel.
	DTCICKTTS	1 to 24	D-channel time slot number. Enter the time slot number of the D-channel. Normally 24. ***Note:*** Use when PMTYPE is DTCI.
	LTCCKTTS	1 to 24	D-channel time slot number. Enter the time slot number of the D-channel. Normally 24. ***Note:*** Use when PMTYPE is LTC.

Datafilling table TRKSGRP (Sheet 6 of 6)

Field	Subfield or refinement	Entry	Explanation and action
	DCHRATE	56K or 64K	D-channel rate. Enter 56K or 64K for the data rate of the D-channel. ***Note:*** This field must be compatible with subfield ZLG in table CARRMTC. If subfield ZLG is set to ZCS, DCHRATE must be 56K; if ZLG is B8ZS, DCHRATE must be 64K.
	HDLCTYPE	HDLC	High level data link type. Enter HDLC for high level data link.

Datafill example for table TRKSGRP

The following example shows sample datafill for table TRKSGRP.

MAP display example for table TRKSGRP

```
       SGRPKEY    CARDCODE
SGRPVAR
                                                                  SGRPVAR
-------------------------------------------------------------------------
       SL1NTPRI 0 DS1SIG
ISDN
2 2 87Q931 1 N STAND NETWORK PT_PT USER N UNEQ 30 N STRA   DTCI 0  0
24 64K HDLC $
```

Changing datafill for table TRKSGRP

Use the standard table editor commands to change datafill for table TRKSGRP.

PRI trunk groups (continued)

Error messages for table TRKSGRP

The following error messages apply to table TRKSGRP.

Error messages for table TRKSGRP

Error message	Explanation and action
DCHRATE MISMATCH WITH ZLG FIELD IN CARRMTC	Field DCHRATE must be compatible with field ZLG in table CARRMTC. If ZLG is set to ZCS, DCHRATE must be 56K; if ZLG is B8ZS, DCHRATE must be 64K.
NO OF DCHANNELS EXCEEDS MAXIMUM LIMIT	The maximum number of D-channels that can be configured in the DTCI is 32. When a new tuple is added to table TRKSGRP, the tuple is accepted if the current number of D-channels configured on the PM is less than the maximum allowed. If it is greater, table LTMAP is checked to determine how many of the D-channels are mapped to an LTID. If the number of mapped D-channels is less than the maximum, the tuple is accepted. If not, this message is displayed.
USER IFCLASS IS NOT SUPPORTED ON INS1500	If the operating company personnel attempts to datafill the interface class as USER and the protocol in table ADJNODE is datafilled as INS1500, then this error message is displayed.

Datafilling table TRKOPTS

The following table shows the datafill specific to PRI trunk groups for table TRKOPTS. Only those fields that apply directly to PRI trunk groups are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table TRKOPTS

Field	Subfield or refinement	Entry	Explanation and action
CLLI		alphanumeric (1 to 16 characters)	Common language location identifier. Enter the CLLI code of this trunk group.
	OPTNAME	DLYFWD-XMT	Option code, enter DLYFWDXMT, delay forward transmission.
	TIMEOUT	0, 1, 2, 3, 4, or 5	Specifies the maximum time the system will wait for an answer supervision signal before taking down the speech path. A timeout value of 0 prevents the timeout timer from starting. The forward speech path will be blocked until an answer supervision signal is received or one of the parties goes onhook. Time is specified in minutes.

Datafill example for table TRKOPTS

The following example shows sample datafill for table TRKOPTS.

PRI trunk groups (continued)

MAP display example for table TRKOPTS

```
  CLLI                OPTNAME                OPTINFO

------------------------------------------------------------
PRI_MONTREAL          DLYFWDXMT           DLYFWDXMT  2

WARNING: This option will block the forward speech path
until an answer message is returned from the far–end
trunk. If no answer message is received, the forward
speech path will not be established.

TUPLE TO BE CHANGED:
PRI_MONTREAL  DLYFWDXMT  DLYFWDXMT  2
ENTER Y TO CONFIRM, N TO REJECT OR E TO EDIT
Y
TUPLE CHANGED
JOURNAL FILE INACTIVE
```

Changing datafill for table TRKOPTS

Use the standard table editor commands to change datafill for table TRKOPTS.

Datafilling table TRKMEM

Table TRKMEM contains an entry for each B-channel in the trunk group, defining the PM number, circuit number, and time slot number to which it is assigned.

PRI trunk groups (continued)

The following table shows the datafill specific to PRI for table TRKMEM. Only those fields that apply directly to PRI are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table TRKMEM

Field	Subfield or refinement	Entry	Explanation and action
CLLI		alphanumeric (1 to 16 characters)	Common language location identifier. From table CLLI, enter the trunk group name.
EXTRKNM		1 to 479	External trunk name. Enter a number from 1 to 479 for the external number to identify the trunk member. ***Note:*** To ensure that trunk selection is done in the correct order, this number should be the same as the DTCI circuit time slot number, subfield DTCICKTTS.
SGRP		0 (zero)	Subgroup. Enter 0 (zero), the only valid subgroup for ISDN signaling.
MEMVAR		see subfields	Member variables
	PMTYPE	DTCI or LTC	Peripheral module type. Enter DTCI or LTC.
	DTCINO	0 to 511	DTCI number. Enter the DTCI number. ***Note:*** Use when subfield PMTYPE is DTCI.
	DTCICKTTS	1 to 24	B-channel time slot number. Enter the time slot number of the B-channel. ***Note:*** Use when subfield PMTYPE is DTCI.
	LTCCKTTS	1 to 24	B-channel time slot number. Enter the time slot number of the B-channel. ***Note:*** Use when subfield PMTYPE is LTC.

Note: All members of a trunk subgroup (all B-channels serviced by the same D-channel) must be on the same DTCI. The D-channel for the trunk group is defined in table TRKSGRP.

Datafill example for table TRKMEM

The following example shows sample datafill for table TRKMEM.

PRI trunk groups (continued)

MAP display example for table TRKMEM

```
CLLI      EXTRKNM  SGRP                                MEMVAR
------------------------------------------------------------
SL1NTPRI  1        0                              DTCI  2 0 1
```

Changing datafill for table TRKMEM

Use the standard table editor commands to change datafill for table TRKMEM.

Error messages for table TRKMEM

The following error messages apply to table TRKMEM.

Error messages for table TRKMEM

Error message	Explanation and action
PERIPHERAL DOES NOT EXIST	An attempt is made to enter a peripheral module that does not exist. Create the PM or check the table TRKMEM values for an error.

Datafilling table LTGRP

The following table shows the datafill specific to PRI trunk groups for table LTGRP. Only those fields that apply directly to PRI trunk groups are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table LTGRP

Field	Subfield or refinement	Entry	Explanation and action
GROUP		ISDN	Group name. Enter ISDN for the name of the logical terminal group to which the PRI trunk group belongs.
GROUPNO		0 to 31	Group number. Enter the group number.
OPTIONS		SAPI16 or $	Options. Enter a $ to end the tuple.

Datafill example for table LTGRP

The following example shows sample datafill for table LTGRP.

MAP display example for table LTGRP

```
GROUP  GROUPNO OPTIONS
------------------------------------------------------
ISDN        0       $
```

Changing datafill for table LTGRP

Use the standard table editor commands to change datafill for table LTGRP.

Datafilling table PRIPROF

A new profile is created by adding a tuple to table PRIPROF. Multiple interfaces can share the same profile providing the variant and issue are the same. Interfaces with the same variant and issue do not have to use the same profile.

A profile is linked to an interface using field PROFNAME in table LTDEF as the key to table PRIPROF. The profile is software associated with a specific issue of a protocol variant. A function can be shared among various issues of a variant as well as among multiple variants. A profile is used when interworking a switch or PBX that may not be fully compliant with PRI as implemented on the DMS-100 switch. This table provides additional control of PRI variants on each interface.

The following table shows the datafill specific to PRI trunk groups for table PRIPROF. Only those fields that apply directly to PRI trunk groups are shown.

PRI trunk groups (continued)

For a description of the other fields, refer to the data schema section of this document.

Datafilling table PRIPROF

Field	Subfield or refinement	Entry	Explanation and action
PROFNAME		Name (up to 8 characters)	Profile name. Enter a name up to eight characters, with no underscores.
VARINFO		see subfields	Variant information. This field contains subfields VARIANT and ISSUE.
	VARIANT	NTNAPRI, U449PRI, or U459PRI	Protocol variant. Enter NTNAPRI, U449PRI, or U459PRI. ***Note:*** Use NTNAPRI when connecting switching nodes manufactured by Northern Telecom.
	ISSUE	V1	Variant issue. Enter V1.
SWITCH		NOPIALRT, XPLCTIID, CIDXBIT0, CSE27T47, RMBCSE82, or NOSTATEQ	Function switch. Enter NOPIALRT, XPLCTIID, CIDXBIT0, CSE27T47, RMBCSE82, or NOSTATEQ for the function name. These function switches allow a profile to be setup. Enter a $ to end the tuple. A profile with no function names is considered a nil profile. ***Note:*** A nil profile is not visible and cannot be changed or deleted. It can be used by all issues of variants.

Datafill example for table PRIPROF

The following example shows sample datafill for table PRIPROF.

MAP display example for table PRIPROF

```
PROFNAME       VARINFO                                  SWITCH
-------------------------------------------------------------
NAPBX          NTNAPRI V1                          (NOPIALRT)$
```

Changing datafill for table PRIPROF

Use the standard table editor commands to change datafill for table PRIPROF.

Error messages for table PRIPROF

The following error messages apply to table PRIPROF.

Error messages for table PRIPROF

Error message	Explanation and action
TUPLE REFERRED TO BY ANOTHER TABLE	An attempt was made to delete a tuple when a reference to the profile remains in table LTDEF. Remove the reference to the profile in table LTDEF before deleting the table PRIPROF tuple.

Datafilling table LTDEF

Table LTDEF identifies logical terminals and defines their access privileges. Since each PRI trunk group is considered the equivalent of a logical terminal, it must be assigned a logical terminal identifier (LTID) and access privileges in table LTDEF. Protocol variant information is extracted from table PRIPROF.

The following table shows the datafill specific to PRI trunk groups for table LTDEF. Only those fields that apply directly to PRI trunk groups are shown.

PRI trunk groups (continued)

For a description of the other fields, refer to the data schema section of this document.

Datafilling table LTDEF (Sheet 1 of 3)

Field	Subfield or refinement	Entry	Explanation and action
LTKEY		see subfields	Logical terminal key. This field contains datafill subfields LTGRP and LTNUM as one concatenated entry. Separate the two values with a blank. You are not prompted for the subfields individually.
	LTGRP	ISDN	Logical terminal group. Enter ISDN. ***Note:*** Same as field GROUP in table LTGRP.
	LTNUM	1 to 1022	Logical terminal number. Enter the logical terminal number.
LTAP		B	Logical terminal access privilege. Enter B to specify circuit switching.
CLASSREF		see subfields	Class reference. This field consists of subfield LTCLASS and refinements. ***Note:*** Field NUMBCHNL, NUMCALLS, INCALLS, and OUTCALLS are not used at this time and are reserved for future use. In order to satisfy the editor function, it is recommended to split the total number of B-channels by 2, enter that number in the INCCALLS field, and enter the other half in the OUTCALLS field.
	LTCLASS	PRA	Logical terminal class. Enter PRA.
	NUMBCHNL	1 to 479	Number of B-channels. Enter the number. ***Note:*** The same value as field TRKGRSIZ in table CLLI.

PRI trunk groups (continued)

Datafilling table LTDEF (Sheet 2 of 3)

Field	Subfield or refinement	Entry	Explanation and action
	NUMCALLS	1 to 479	Number of calls. Enter the number of calls allowed on this logical interface at one time. ***Note:*** The subfield NUMCALLS value must be greater than or equal to the sum of the subfields INCCALLS and OUTCALLS values.
	INCCALLS	0 to 479	Incoming calls. Enter the number of reserved incoming-only calls that are allowed on this logical terminal at one time.
	OUTCALLS	0 to 479	Outgoing calls. Enter the number of reserved outgoing-only calls that are allowed on this logical terminal at one time.
	VARISSUE	see subfields	Variant issue. This field is made up of subfields VARIANT and ISSUE.
	VARIANT	NTNAPRI, U449PRI, or U459PRI	Protocol variant. Enter NTNAPRI, U449PRI, or U459PRI. ***Note:*** The subfields VARIANT, ISSUE, and PROFNAME must be in a defined tuple in table PRIPROF. Use NTNAPRI when connecting switching nodes manufactured by Northern Telecom.

PRI trunk groups (continued)

Datafilling table LTDEF (Sheet 3 of 3)

Field	Subfield or refinement	Entry	Explanation and action
	ISSUE	V1	Variant issue. Enter V1. ***Note:*** The subfields VARIANT, ISSUE, and PROFNAME must be in a defined tuple in table PRIPROF.
	OPTION	NOPMD, NOVOICE, NOVBD, NOCMD or $	Option. This field controls the use of bearer capabilities (BC) on the PRI interface. Enter one of the following values: • NOPMD to prevent packet-mode calls. This is the default. • NOVOICE to prevent calls with a speech BC from originating or terminating on the PRI interface. • NOVBD to prevent voice-band data calls. • NOCMD to prevent circuit-mode data calls. • $ to end the tuple.

Datafill example for table LTDEF

The following example shows sample datafill for table LTDEF.

MAP display example for table LTDEF

```
LTKEY      LTAP
                                                        CLASSREF
-------------------------------------------------------------
ISDN 1008  B
                PRA 10 10 5 5 NTNAPRI V1 NAPBX (NOPMD ) $
```

Changing datafill for table LTDEF

Use the standard table editor commands to change datafill for table LTDEF.

Error messages for table LTDEF

The following error messages apply to table LTDEF.

Error messages for table LTDEF

Error message	Explanation and action
THE SUM OF INCOMING CALLS AND OUTGOING CALLS MUST BE LESS THAN OR EQUAL TO THE NUMBER OF CALLS ALLOWED	The sum of values in subfields INCCALLS and OUTCALLS must be less than or equal to the value in subfield NUMCALLS. Adjust the values so the value in subfield NUMCALLS is greater than or equal to the sum of values in subfields INCCALLS and OUTCALLS.

Datafilling table LTMAP

Table LTMAP associates the LTID assigned to the trunk group in table LTDEF with the trunk group CLLI.

The maximum number of D-channels that can be configured in the DTCI is 32. When a new tuple is added to table TRKSGRP, the tuple is accepted if the current number of D-channels configured on the PM is less than the maximum allowed. If it is greater, table LTMAP is checked to determine how many of the D-channels are mapped to an LTID. If the number of mapped D-channels is less than the maximum, the tuple is accepted.

The following table shows the datafill specific to PRI trunk groups for table LTMAP. Only those fields that apply directly to PRI trunk groups are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table LTMAP (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
LTKEY		see subfields	Logical terminal key. Datafill subfields LTGRP and LTNUM as one concatenated entry. Separate the two values with a blank. You are not prompted for the subfields individually. ***Note:*** Field LTID in table TRKGRP is updated automatically with the datafilled values.
	LTGRP	ISDN	Logical terminal group. Enter ISDN.

PRI trunk groups (end)

Datafilling table LTMAP (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
	LTNUM	1 to 1022	Logical terminal number.
MAPPING		see subfields	Mapping
	MAPTYPE	CLLI	Map type. Enter CLLI.
	CLLI	alphanumeric (up to 16 characters)	Common language location identifier. From table CLLI, enter the trunk group name.
OPTION		see subfields	Option
	OPTION	TEI	Option. Enter TEI.
	TEI	0 (zero)	Terminal endpoint identifier. Enter 0 (zero). Enter a $ to end the tuple.

Datafill example for table LTMAP

The following example shows sample datafill for table LTMAP.

MAP display example for table LTMAP

```
LTKEY       MAPPING                                    OPTION
-------------------------------------------------------------
ISDN 1008  CLLI SL1NTPRI                          (  TEI 0)$
```

Changing datafill for table LTMAP

Use the standard table editor commands to change datafill for table LTMAP.

Table history

APC006

Added value MCH to subfield OPTION in accordance with functionality AR1748 (Malicious Call Trace on TS14 and DC5) for the Australian market.

NA004

Removed option AIN; table TRKAIN is used instead.

PRIVLN trunk groups

Ordering codes

PRIVLN trunk groups have no ordering codes.

Release applicability

TL03 and up

Prerequisites

PRIVLN trunk groups have no functional group prerequisites.

Description

Incoming or outgoing trunk group type PRIVLN is used for private lines in a DMS-300 gateway office.

The following figure shows the datafill dependencies for PRIVLN trunk groups.

Datafill dependencies for PRIVLN trunk groups

PRIVLN trunk groups (continued)

Limitations and restrictions

The following limitations and restrictions apply to PRIVLN trunk groups:

- 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.

Billing

For information on billing, refer to the Bellcore format AMA translations section of this document.

Datafilling office parameters

The following table shows the office parameters used by PRIVLN trunk groups. For more information about office parameters, refer to *Office Parameters Reference Manual.*

Office parameters used by PRIVLN trunk groups

Table name	Parameter name	Explanation and action
OFCVAR	TRK_OOS_CHK_ON	This parameter specifies whether to check that the trunks in a trunk group are out of service before changing the values of specific fields in table TRKGRP by data modification order (DMO).

Datafill sequence

The following table lists the tables used by PRIVLN trunk groups. The tables are listed in the order in which they are to be datafilled.

Tables used by PRIVLN trunk groups (Sheet 1 of 2)

Table	Purpose of table
CLLI	The common language location identifier table uniquely identifies the far end of each announcement, tone, or trunk group.
TRKGRP	The trunk group table contains customer-defined data associated with each trunk group.

Tables used by PRIVLN trunk groups (Sheet 2 of 2)

Table	Purpose of table
TRKSGRP	The trunk subgroup table contains supplementary information for each trunk group.
TRKMEM	The trunk member table specifies the physical location of each trunk assigned to one of the trunk groups.

The following table shows sample input for datafilling PRIVLN trunk groups.

Sample input for PRIVLN trunk groups

Table	Sample input
CLLI	NCC01 51 75 MI
TRKGRP	NCC01 PRIVLN 0 NPDGP NCRT CC02 SCPL IP21
TRKSGRP	NCC01 0 P30CAS SIGSYS Y N DELDIAL OG LOCLNSIGDX LOCRGSIGDX NIL
TRKMEM	NCC01 26 0 PDTC 8 5 6 $

Datafilling table CLLI

The following table shows the datafill specific to PRIVLN for table CLLI. Only those fields that apply directly to PRIVLN are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table CLLI

Field	Subfield or refinement	Entry	Explanation and action
CLLI		alphanumeric (1 to 16 characters)	Common language location identifier. Enter a CLLI code to uniquely identify the far end of the PRIVLN trunk group. Only alphabetic characters, numeric characters, and _ (underscores) can be used to datafill this field. The first character must be alphabetic. For optimum use, a CLLI code must contain not more than 12 characters, as only the first 12 characters are displayed on the MAP (maintenance and administration position) display. When a CLLI code is displayed in a log report, the entire 16-character CLLI code appears.

PRIVLN trunk groups (continued)

Datafill example for table CLLI

The following example shows sample datafill for table CLLI.

MAP display example for table CLLI

```
CLLI      ADNUM  TRKGRSIZ                          ADMININF
-------------------------------------------------------------
NCC01     51     75                                MI
```

Changing datafill for table CLLI

Use the standard table editor commands to change datafill for table CLLI.

Datafilling table TRKGRP

The following table shows the datafill specific to PRIVLN for table TRKGRP. Only those fields that apply directly to PRIVLN are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table TRKGRP (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 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, CCTRNSL, SCRNCL, PRTNM, CDRCLASS, SELSEQ, and DIR_DEP. Note that among these subfields, only those directly affected by PRIVLN are described below. Refer to table TRKGRP in the data schema section of this document 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.

Datafilling table TRKGRP (Sheet 2 of 3)

Field	Subfield or refinement	Entry	Explanation and action
	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).
	PRTNM	alphanumeric (1 to 4 characters) or NPRT	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 DMO.
	CDRCLASS	alphanumeric (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 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.

PRIVLN trunk groups (continued)

Datafilling table TRKGRP (Sheet 3 of 3)

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	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.

Datafill example for table TRKGRP

The following criteria are shown in the example of sample datafill for table TRKGRP.

MAP display example for table TRKGRP

```
GRPKEY                  GRPINFO
-------------------------------------------------------
NCC01                  PRIVLN 0 NPDGP NCRT CC02 SCPL IP21
```

Changing datafill for table TRKGRP

If office parameter TRK_OOS_CHK_ON in table OFCVAR is set to Y, all trunks in the trunk group must be taken out of service before changing the value of certain fields in table TRKGRP.

Datafilling table TRKSGRP

The following table shows the datafill specific to PRIVLN for table TRKSGRP. Only those fields that apply directly to PRIVLN are shown. For

a description of the other fields, refer to the data schema section of this document.

Datafilling table TRKSGRP

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 CLLI code assigned to the trunk group as datafilled in table CLLI.
	SGRP	0 or 1	Subgroup number. Enter the subgroup number assigned to the trunk group.

Datafill example for table TRKSGRP

The following example shows sample datafill for table TRKSGRP.

MAP display example for table TRKSGRP

```
          SGRPKEY     CARDCODE
SGRPVAR       SGRPVAR
-------------------------------------------------------
           NCC01 0     P30CAS
SIGSYS        Y N DELDIAL OG LOCLNSIGDX LOCRGSIGDX NIL
```

Changing datafill for table TRKSGRP

Use the standard table editor commands to change datafill for table TRKSGRP.

Datafilling table TRKMEM

The following table shows the datafill specific to PRIVLN for table TRKMEM. Only those fields that apply directly to PRIVLN are shown. For

PRIVLN trunk groups (end)

a description of the other fields, refer to the data schema section of this document.

Datafilling table TRKMEM

Field	Subfield or refinement	Entry	Explanation and action
CLLI		alphanumeric (1 to 16 characters)	Common language location identifier. Enter the CLLI code assigned in table CLLI to the trunk group of which the trunk is a member.
EXTRKNM		0 to 9999	External trunk number. Enter the external trunk number that is assigned to the trunk.
SGRP		0 to 1	Subgroup number. Enter the subgroup number to which the trunk is assigned.

Datafill example for table TRKMEM

The following example shows sample datafill for table TRKMEM.

MAP display example for table TRKMEM

```
CLLI     EXTRKNM  SGRP                    MEMVAR
-------------------------------------------------------
NCC01    26        0                      PDTC 8 5 6 $
```

Changing datafill for table TRKMEM

Use the standard table editor commands to change datafill for table TRKMEM.

PX trunk groups

PX trunk group functionality codes

PX trunk groups have no functionality codes.

Release applicability

TL03 and up

Prerequisites

PX trunk groups have no functional group prerequisites.

Description

In a DMS-100 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.

Note on MS-1 (teleconferencing) System 1+, 011 calls

For the MS-1 system to receive the proper answer supervision from the DMS-100 switch 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.

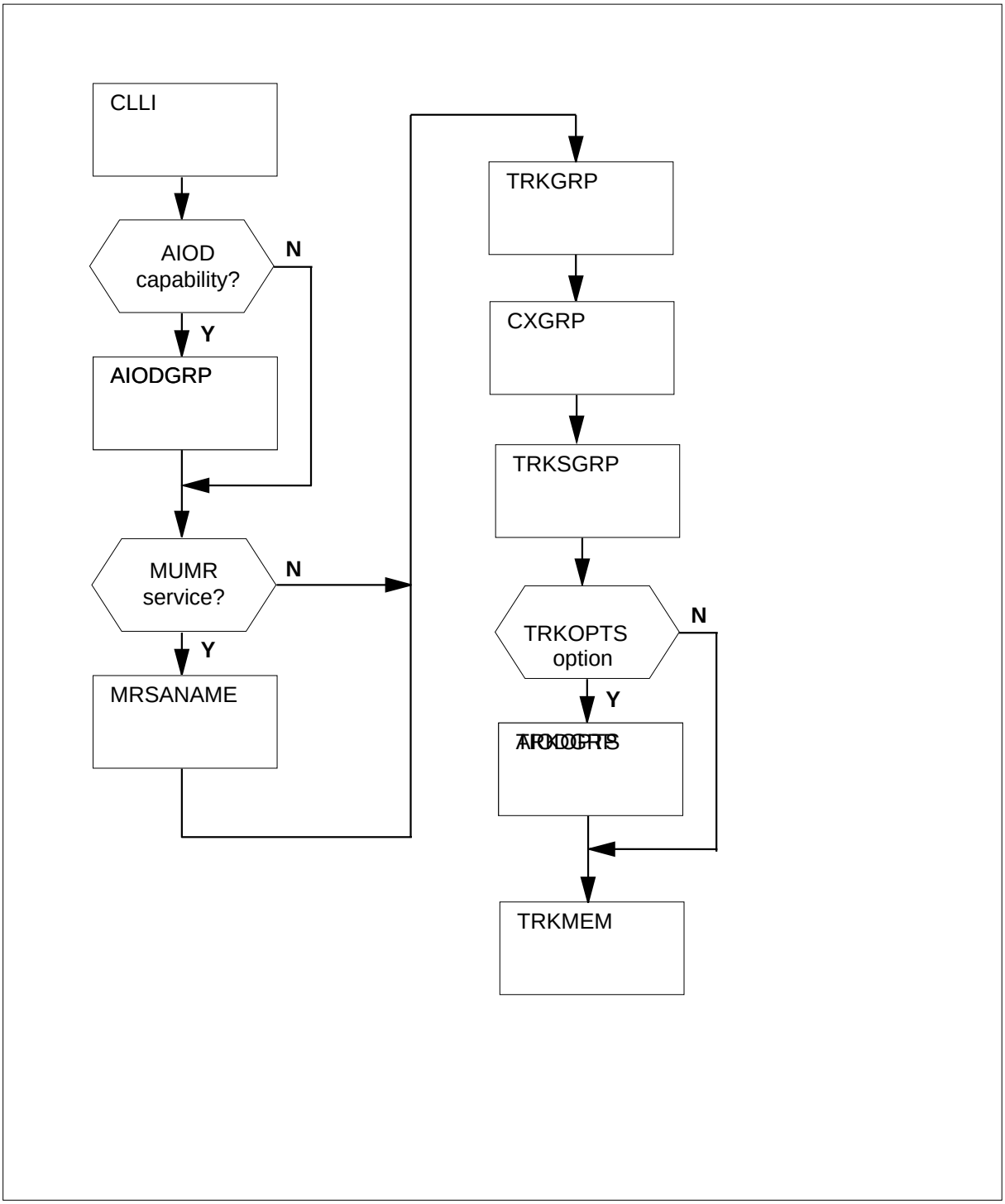
Note on PX trunks and UTRs (Universal Tone Receivers)

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.

The following figure shows the datafill dependencies for PX trunk groups.

PX trunk groups (continued)

Datafill dependencies for PX trunk groups



Limitations and restrictions

If option DLYFWDXMT is datafilled in table TRKOPTS, all trunk members of that trunk group must terminate to a DTC or an LTC. The exec line up in table LTCINV must be specified as DTCEX, DTCFX, or FXODTC.

Also refer to the “Description" section for the limitations and restrictions that apply to PX trunk groups.

Billing

For information on billing, refer to the Bellcore format AMA translations section of this document.

Datafilling office parameters

The following table shows the office parameters used by PX trunk groups. For more information about office parameters, refer to *Office Parameters Reference Manual.*

Office parameters used by PX trunk groups (Sheet 1 of 2)

Table name	Parameter name	Explanation and action
OFCSTD	SHORT_TIMED_RELEASE_DISC _TIME	This disconnect timing is used for calls with low setup costs or scarce resources that must be deallocated quickly after use. This parameter specifies the time, in 10-ms intervals, for which a called party on-hook is timed before releasing the connection to the calling party.
OFCVAR	TRK_OOS_CHK_ON	This parameter specifies whether to check that the trunks in a trunk group are out of service before changing the values of specific fields in table TRKGRP by data modification order (DMO).

PX trunk groups (continued)

Office parameters used by PX trunk groups (Sheet 2 of 2)

Table name	Parameter name	Explanation and action
	ANI_IN_SMDR	This parameter is applicable to PX trunks in switching units with the Station Message Detail Recording (SMDR) system. If the parameter is set to Y, the virtual facility group (VFG) ID in the SMDR record is replaced with the actual calling number from the ANI information provided by the incoming trunk. If left at the default value of N, the VFG ID is shown in the SMDR record.
	TOLL_DIVERSION_SIGNAL	This parameter applies to PX trunks that have the toll diversion (TDV) option, and specifies the type of TDV signal, WINK or REVERSAL.

Datafill sequence

The following table lists the tables used by PX trunk groups. The tables are listed in the order in which they are to be datafilled.

Tables used by PX trunk groups (Sheet 1 of 2)

Table	Purpose of table
CLLI	The common language location identifier table uniquely identifies the far end of each announcement, tone, or trunk group.
AIODGRP	The automatic identified outward dialing (AIOD) group table contains data used to define AIOD datalinks between a PBX and its host office. These links provide a means for billing outgoing calls from the PBX to individual PBX stations.
MRSANAME	The multiunit message rate area names table lists multiunit message rate (MUMR) service area names.
TRKGRP	The trunk group table contains customer-defined data associated with each trunk group.
CXGRP	The customer group options table defines the options associated with a digital trunk group type PX.
TRKSGRP	The trunk subgroup table contains supplementary information for each trunk group.

PX trunk groups (continued)

Tables used by PX trunk groups (Sheet 2 of 2)

Table	Purpose of table
TRKOPTS	The trunk options table contains data that is used to define the options associated with this trunk group.
TRKMEM	The trunk member table specifies the physical location of each trunk assigned to one of the trunk groups.

The following table shows sample input for datafilling PX trunk groups.

Sample input for PX trunk groups

Table	Sample input
CLLI	DIGPBX 51 175 DIGITAL_PBX
AIODGRP	BNRCAR2 RECORD 2
MRSANAME	OTWA
TRKGRP	DIGPBX PX 25 ELO NCID 2W MI MIDL Y P621 PBX1 613 LCL NONE TSPS NLCA N Y BNRCAR2 32 OTWA 6211234 NODIALTN Y N Y 7 BCNAME 56KDATA
CXGRP	32 Y 6137272000 N Y ETWATS UNOW Y Y 9 LOCAL_LATA CARRIER_A INTRASTA CARRIER_B INTERSTA CARRIER_C CANADA CARRIER_D AG1 CARRIER_E XY LCDR RMR RMT LPIC CARRA
TRKSGRP	DIGPBX 0 DS1SIG STD 2W DP DIALTONE N 10 10 MF WK 7 0 Y NO NO N N N M 160 UNEQ
TRKMEM	DIGPBX 101 0 DCM 1 1 17 $

PX trunk groups (continued)

Datafilling table CLLI

The following table shows the datafill specific to PX for table CLLI. Only those fields that apply directly to PX are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table CLLI

Field	Subfield or refinement	Entry	Explanation and action
CLLI		alphanumeric (1 to 16 characters)	Common language location identifier. Enter a CLLI code to uniquely identify the far end of the PX trunk group. Only alphabetic characters, numeric characters, and _ (underscores) can be used to datafill this field. The first character must be alphabetic. For optimum use, a CLLI code must contain not more than 12 characters, as only the first 12 characters are displayed on the MAP (maintenance and administration position) display. When a CLLI code is displayed in a log report, the entire 16-character CLLI code appears.

Datafill example for table CLLI

The following example shows sample datafill for table CLLI.

MAP display example for table CLLI

```
CLLI            ADNUM  TRKGRSIZ                    ADMININF
-------------------------------------------------------------
DIGPBX           51    175                      DIGITAL_PBX
```

Changing datafill for table CLLI

Use the standard table editor commands to change datafill for table CLLI.

Datafilling table AIODGRP

The following table shows the datafill specific to PX for table AIODGRP. Only those fields that apply directly to PX are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table AIODGRP

Field	Subfield or refinement	Entry	Explanation and action
AIODGRP		alphanumeric (1 to 16 characters)	Automatic identified outward dialing group. Enter the code that is assigned in table CLLI and represents the name of the AIOD group.
FAILDEF		RECORD or TREATMENT	Automatic identified outward dialing failure default. This field defines the action taken if the AIOD message is not received. Enter RECORD if the call is allowed to proceed, but is billed to the default PBX number or the PBX special billing number. Enter TREATMENT if a call is routed to the automatic identified outward dialing failure (AIFL) treatment.
TIMEOUT		0 to 3	Automatic identified outward dialing time out. Enter the length of time, in 1-s increments, that call processing is to wait if the AIOD message is late.

Datafill example for table AIODGRP

The following example shows sample datafill for table AIODGRP.

MAP display example for table AIODGRP

```
AIODGRP    FAILDEF      TIMEOUT
-------------------------------------------------------
BNRCAR2    RECORD       2
```

Changing datafill for table AIODGRP

Use the standard table editor commands to change datafill for table AIODGRP.

PX trunk groups (continued)

Datafilling table MRSANAME

The following table shows the datafill specific to PX for table MRSANAME. Only those fields that apply directly to PX are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table MRSANAME

Field	Subfield or refinement	Entry	Explanation and action
MRSA		alphanumeric (up to 8 characters)	Multiunit message rate service area name. Enter the name of an MRSA. The total number of MUMR service area names cannot exceed 127.

Datafill example for table MRSANAME

The following example shows sample datafill for table MRSANAME.

MAP display example for table MRSANAME

```
MRSA
------------------------------------------------------
NEP
OTWA
HULL
```

Changing datafill for table MRSANAME

Use the standard table editor commands to change datafill for table MRSANAME.

Datafilling table TRKGRP

The following table shows the datafill specific to PX for table TRKGRP. Only those fields that apply directly to PX are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table TRKGRP (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 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, DIR, TRAFLCS, SELSEQ, TOLL, PRTNM, SCRNCL, SNPA, ORIGSRCE, CHGCLSS, ZEROMPOS, LCANAME, LCABILL, AIOD, AIODGRP, PXCGRP, MRSA, BILLNO, DTONE, LOCALCMC, EA, PIC, CHOICE, and LATANM. Note that among these subfields, only those directly affected by PX are described below. Refer to table TRKGRP in the data schema section of this document 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.
	DIR	IC, OG, or 2W	Direction. This field specifies the trunk group direction. Enter IC for incoming, OG for outgoing, or 2W or 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 DMO.
	TOLL	Y or N	Toll. If the PBX is toll, enter Y. Otherwise, enter N.

PX trunk groups (continued)

Datafilling table TRKGRP (Sheet 2 of 5)

Field	Subfield or refinement	Entry	Explanation and action
	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.
	LCANAME	alphanumeric (1 to 4 characters) or NLCA	Local calling area screening table name. If screening of local NXX codes is required, enter the name of the local calling area screening table name assigned to the trunk group. If screening of local NXX codes is not required, enter NLCA.
	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	Automatic identified outward dialing information. This field consists of subfield AIOD and refinement AIODGRP.
	AIOD	Y or N	Automatic identified outward dialing. If the trunk group is from a PBX that has an 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 NONE.

PX trunk groups (continued)

Datafilling table TRKGRP (Sheet 3 of 5)

Field	Subfield or refinement	Entry	Explanation and action
	AIODGRP	alphanumeric (1 to 16 characters) or blank	Automatic 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 PX (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.
	MRSA	alphanumeric 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.
	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	DIALTNorNO DIALTN	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.

PX trunk groups (continued)

Datafilling table TRKGRP (Sheet 4 of 5)

Field	Subfield or refinement	Entry	Explanation and action
	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 (local access and transport area) carrier. Datafill this field if the value in field EA is Y. Enter an inter-LATA or international carrier name specified in the table OCCNAME.
	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 name. Datafill this field if the value in field EA is Y. 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.
	BCGRPNUM	(0 to 2047)	Bulk calling line identification. If the entry in refinement BCLID is Y, datafill this refinement.
	OPTIONS	see subfield	Options. This field consists of subfield OPTION and refinements.

Datafilling table TRKGRP (Sheet 5 of 5)

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 in the data schema section of this document for the list of available bearer capabilities. If field OPTION and refinement BCNAME are left blank, the default bearer capability of the central office is used.

Datafill example for table TRKGRP

The following example shows sample datafill for table TRKGRP.

MAP display example for table TRKGRP

```
         GRPKEY
                                                                  GRPINFO
_____________________________________________________________________________

         DIGPBX
PX 25 ELO NCID 2W MI MIDL Y P621 PBX1 613 LCL NONE TSPS NLCA N Y
BNRCAR2 32 OTWA 6211234 NODIALTN Y N          Y 7 BCNAME 56KDATA
```

Changing datafill for table TRKGRP

If office parameter TRK_OOS_CHK_ON in table OFCVAR is set to Y, all trunks in the trunk group must be taken out of service before changing the value of certain fields in table TRKGRP.

PX trunk groups (continued)

Datafilling table CXGRP

The following table shows the datafill specific to PX for table CXGRP. Only those fields that apply directly to PX are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table CXGRP (Sheet 1 of 4)

Field	Subfield or refinement	Entry	Explanation and action
CUSTKEY		32 to 255	Customer group key. Enter the customer group key.
SPB		Y or N	Special billing. If the customer group has special billing, enter Y and datafill refinement BILLNO as described below. Otherwise, enter N and leave refinement BILLNO blank.
	BILLNO	string of 7 or 10 digits	Billing number. Enter the billing number, which must be a string of either seven or ten digits.
CTD		Y or N	Carrier toll denial. To deny toll access for one or more carriers, enter Y and datafill refinement CARRIERS as described below. Otherwise, enter N and leave refinement CARRIERS blank.
	CARRIERS	vector of up to 21 carrier names	Toll denied carriers. Enter up to 21 inter-LATA carrier (IC) names for which toll access is denied. A list of valid carrier names is found in table OCCNAME.
EWATS		Y or N	Enhanced WATS. To enable enhanced wide area telephone service (WATS) for this customer group, enter Y and datafill refinements EWATTYPE, TREAT, INTRALAT, SAC, BAND, LATANM, and WCINFO. Otherwise, enter N.
	EWATTYPE	EOWATS or ETWATS	Enhanced WATS type. Enter EOWATS for enhanced outward WATS. Enter ETWATS for enhanced two-way WATS.
	TREAT	alphanumeric (up to 4 characters)	Treatment. Enter the unauthorized outward WATS (OUTWATS) call treatment (for example, UNOW).
	INTRALAT	Y or N	Intra-lata. Enter Y if the customer group allows intra-LATA calls. Otherwise, enter N.

PX trunk groups (continued)

Datafilling table CXGRP (Sheet 2 of 4)

Field	Subfield or refinement	Entry	Explanation and action
	SAC	Y or N	Service access code. Enter Y if the customer group allows service access code calls. Otherwise, enter N.
	BAND	0 to 126	Band. Enter the band that is assigned to the facility used in the billing record.
	LATANM	alphanumeric (up to 10 characters)	LATA name. Enter the LATA name that is required for the equal access translations.
	WICINFO	vector of up to 5 carrier-bandset pairs; see refinements	WATS interexchange carrier information. This field is a vector that consists of one or more multiples of refinements WIC and BANDSET. Each entry in refinement BANDSET must be paired with a carrier in refinement WIC. Up to five pairs can be entered, the first of which is the primary WATS interexchange carrier (WIC).
	WIC	alphanumeric (up to 16 characters)	WATS interexchange carrier. Enter a WIC to use with this facility.
	BANDSET	alphanumeric (up to 8 characters)	Bandset. Enter the allowable calling area defined in table BANDSETS.

PX trunk groups (continued)

Datafilling table CXGRP (Sheet 3 of 4)

Field	Subfield or refinement	Entry	Explanation and action
PXOPTION		ATC, CLI, CPH, FANI, FNT, HOT, LCDR, LPIC, ONI, RMR, RMT, TDN, TDV, or WATS	Customer group options. Enter up to 14 options for each group as follows: For the automatic time and charge option, enter ATC. For the calling line identification option, enter CLI. For the called party hold option, enter CPH. For the flexible automatic number identification option, enter FANI and datafill refinement FANIDIGS. For the free number terminating option, enter FNT. For the hotel/motel option, enter HOT. For the local call detail recording option, enter LCDR. For the intra-LATA primary inter-LATA carrier option, enter LPIC and datafill refinement CARRIER. For the operator number identification option, enter ONI. For the answer supervision local calls option, enter RMR. For the answer supervision toll calls option, enter RMT. For the answer supervision local calls option, enter RMR. For the answer supervision toll calls option, enter RMT. For the toll denied option, enter TDN. For the toll diverted option, enter TDV. For the WATS service option, enter WATS and datafill refinement TYPEWATS.

Datafilling table CXGRP (Sheet 4 of 4)

Field	Subfield or refinement	Entry	Explanation and action
	FANIDIGS	00 to 99	Flexible automatic number identification digits. If field FANI is set to Y in table OCCINFO, datafill this refinement. Enter the flexible automatic number identification (FANI) digit pair to outpulse to the carrier. The carrier accepts FANI digits only if the value of field FANI in table OCCINFO is Y.
	CARRIER	alphanumeric (up to 16 characters)	Carrier name. If the entry in refinement PXOPTION is LPIC, datafill this refinement. Enter the intra-LATA carrier name. A list of valid carrier names is found in table OCCNAME.
	TYPEWATS	INWATS OUTWATS or TWWATS	Type of WATS. If the entry in refinement PXOPTION is WATS, datafill this refinement. For outgoing WATS or two-way WATS, enter OUTWATS or TWWATS, respectively, and datafill refinements TREAT and OWATZONE. For incoming WATS, enter INWATS. No further refinements need to be datafilled.
	TREAT	alphanumeric (up to 4 characters)	Treatment. Enter the unauthorized OUTWATS call treatment (for example, UNOW).
	OWATZONE	0 to 12	OUTWATS zone. Enter the zone assigned to this WATS trunk group.

Datafill example for table CXGRP

The following example shows sample datafill for table CXGRP.

MAP display example for table CXGRP

```
CUSTKEY           SPB
                                                                    CTD
                                                                  EWATS
                                                                PXOPTION
------------------------------------------------------------------------
32                Y 6137272000
                                                                      N
Y ETWATS UNOW Y Y 9 LOCAL_LATA CARRIER_A INTRASTA CARRIER_B INTERSTA
CARRIER_C CANADA CARRIER_D AG1 CARRIER_E XYZ
                                                  LCDR RMR RMT LPIC CARRA
```

PX trunk groups (continued)

Changing datafill for table CXGRP

Use the standard table editor commands to change datafill for table CXGRP.

Datafilling table TRKSGRP

The following table shows the datafill specific to PX for table TRKSGRP. Only those fields that apply directly to PX are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table TRKSGRP

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 CLLI code assigned to the trunk group as datafilled in table CLLI.
	SGRP	0 or 1	Subgroup number. Enter the subgroup number assigned to the trunk group.
DIR		2W	Direction. Enter 2W (two way).
	OPULSTYP	MF	Outgoing type of pulsing. Enter MF (multifrequency).
	TRKGRDTM	numeric (1 to 255) or blank	Trunk guard timing. Enter 50 (500 ms) or greater as the time, in 10-ms intervals, that the PX trunk waits after sending on-hook signal to the far end, before putting the trunk in the idle queue.

Datafill example for table TRKSGRP

The following example shows sample datafill for table TRKSGRP.

MAP display example for table TRKSGRP

```
           SGRPKEY    CARDCODE
SGRPVAR
                                                        SGRPVAR
-------------------------------------------------------------
           DIGPBX 0   DS1SIG
STD
2W DP DIALTONE N 10 10 MF WK 7 0 Y NO NO N N N M 160 UNEQ
```

Changing datafill for table TRKSGRP

Use the standard table editor commands to change datafill for table TRKSGRP.

Datafilling table TRKOPTS

The following table shows the datafill specific to PX trunk groups for table TRKOPTS. Only those fields that apply directly to PX trunk groups are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table TRKOPTS

Field	Subfield or refinement	Entry	Explanation and action
CLLI		alphanumeric (1 to 16 characters)	Common language location identifier. Enter the CLLI code of this trunk group.
	OPTNAME	DLYFWD-XMT	Option code, enter DLYFWDXMT, delay forward transmission.
	TIMEOUT	0, 1, 2, 3, 4, or 5	Specifies the maximum time the system will wait for an answer supervision signal before taking down the speech path. A timeout value of 0 will prevent the timeout timer from starting. The forward speech path will be blocked until an answer supervision signal is received or one of the parties goes onhook. Time is specified in minutes.

Datafill example for table TRKOPTS

The following example shows sample datafill for table TRKOPTS.

PX trunk groups (continued)

MAP display example for table TRKOPTS

```
  CLLI              OPTNAME          OPTINFO

------------------------------------------------------------
PX_MONTREAL       DLYFWDXMT        DLYFWDXMT  2

WARNING: This option will block the forward speech path
until an answer message is returned from the far-end
trunk. If no answer message is received, the forward
speech path will not be established.

TUPLE TO BE CHANGED:
PX_MONTREAL   DLYFWDXMT   DLYFWDXMT   2
ENTER Y TO CONFIRM, N TO REJECT OR E TO EDIT
Y
TUPLE CHANGED
JOURNAL FILE INACTIVE
```

Changing datafill for table TRKOPTS

Use the standard table editor commands to change datafill for table TRKOPTS.

Datafilling table TRKMEM

The following table shows the datafill specific to PX for table TRKMEM. Only those fields that apply directly to PX are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table TRKMEM (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
CLLI		alphanumeric (1 to 16 characters)	Common language location identifier. Enter the CLLI code assigned in table CLLI to the trunk group of which the trunk is a member.

Datafilling table TRKMEM (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
EXTRKNM		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.
SGRP		0 or 1	Subgroup number. Enter the subgroup number to which the trunk is assigned.

Datafill example for table TRKMEM

The following example shows sample datafill for table TRKMEM.

MAP display example for table TRKMEM

```
CLLI          EXTRKNM    SGRP                        MEMVAR

------------------------------------------------------------
DIGPBX        101        0                    DCM 1 1 17 $
```

Changing datafill for table TRKMEM

Use the standard table editor commands to change datafill for table TRKMEM.

RC trunk groups

Ordering codes

RC trunk groups have no ordering codes.

Release applicability

TL03 and up

Prerequisites

RC trunk groups have no functional group prerequisites.

Description

In a DMS office, trunk group type Recording Completing (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

The following table 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 (Sheet 1 of 2)

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

Note: In the type of originator column, the reference to other lines refers to non-party lines (for example, coin).

RC trunk groups (continued)

Tone resulting from a combination of factors (Sheet 2 of 2)

Table OFRT field CSTHTONE	Table OFRT field CSTLTONE	Type of originator	Table LINEATTR field COST	Resulting tone
Y	Y	party lines	any entry value	none
Y	Y	other lines	NT	none
Y	Y	other lines	LO	low
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).

The following figure shows the datafill dependencies for RC trunk groups.

Datafill dependencies for RC trunk groups

RC trunk groups (continued)

Limitations and restrictions

RC trunk groups have no limitations or restrictions.

Billing

For information on billing, refer to the Bellcore format AMA translations section of this document.

Datafilling office parameters

RC trunk groups do not affect office parameters.

Datafill sequence

The following table lists the tables used by RC trunk groups. The tables are listed in the order in which they are to be datafilled.

Tables used by RC trunk groups

Table	Purpose of table
CLLI	The common language location identifier table uniquely identifies the far end of each announcement, tone, or trunk group.
TRKGRP	The trunk group table contains customer-defined data associated with each trunk group.
TRKSGRP	The trunk subgroup table contains supplementary information for each trunk group.
TRKMEM	The trunk member table specifies the physical location of each trunk assigned to one of the trunk groups.

The following table shows sample input for datafilling RC trunk groups.

Sample input for RC trunk groups

Table	Sample input
CLLI	OTWAON231BB0 55 175 MI
TRKGRP	OTWAON231BB0 RC 15 TLA NCRT RC ASEQ Y N NOHOLD
TRKSGRP	OTWAON231BB0 0 DS1SIG STD IC MF DIALONE 30 30 TR NO N N N C UNEQ
TRKMEM	OTWAON231BB0 109 0 DTC 1 1 17 $

Datafilling table CLLI

The following table shows the datafill specific to RC for table CLLI. Only those fields that apply directly to RC are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table CLLI

Field	Subfield or refinement	Entry	Explanation and action
CLLI		alphanumeric (1 to 16 characters)	Common language location identifier. Enter a CLLI code to uniquely identify the far end of the RC trunk group. Only alphabetic characters, numeric characters, and _ (underscores) can be used to datafill this field. The first character must be alphabetic. For optimum use, a CLLI code must not contain more than 12 characters, as only the first 12 characters are displayed on the maintenance and administration position (MAP). When a CLLI code is displayed in a log report, the entire 16-character CLLI code appears.

Datafill example for table CLLI

The following example shows sample datafill for table CLLI.

MAP display example for table CLLI

```
CLLI               ADNUM  TRKGRSIZ   ADMININF
-------------------------------------------------------
OTWAON231BB0        55     175       MI
```

Changing datafill for table CLLI

Use the standard table editor commands to change datafill for table CLLI.

RC trunk groups (continued)

Datafilling table TRKGRP

The following table shows the datafill specific to RC for table TRKGRP. Only those fields that apply directly to RC are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table TRKGRP (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 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, SELSEQ, AUDRING, COLOCATED, and HOLDTYPE. Note that among these subfields, only those directly affected by RC are described below. Refer to “General field information" in table TRKGRP in the data schema section of this document for information concerning 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.
	TRAFCLS	RC	Traffic usage class. Enter RC to specify the recording completing traffic class. For more information, refer to table TRKGRP in the data schema section of this document.

Datafilling table TRKGRP (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
	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.

Datafill example for table TRKGRP

The following example shows sample datafill for table TRKGRP.

MAP display example for table TRKGRP

```
GRPKEY              GRPINFO
-------------------------------------------------------

OTWAON231BB0        RC 15 TLA NCRT RC ASEQ Y N NOHOLD
```

Changing datafill for table TRKGRP

Use the standard table editor commands to change datafill for table TRKGRP.

Perform the following procedure to change datafill for table TRKGRP.

RC trunk groups (continued)

Datafilling table TRKSGRP

The following table shows the datafill specific to RC for table TRKSGRP. Only those fields that apply directly to RC are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table TRKSGRP

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 CLLI code assigned to the trunk group as datafilled in table CLLI.
	SGRP	numeric (0 or 1)	Subgroup number. Enter the subgroup number assigned to the trunk group.

Datafill example for table TRKSGRP

The following example shows sample datafill for table TRKSGRP.

MAP display example for table TRKSGRP

```
SGRPKEY          CARDCODE
SGRPVAR     SGRPVAR
-------------------------------------------------------
OTWAON231BB0 0   DS1SIG
STD         IC MF DIALONE 30 30 TR NO N N N C UNEQ
```

Changing datafill for table TRKSGRP

Use the standard table editor commands to change datafill for table TRKSGRP.

Datafilling table TRKMEM

The following table shows the datafill specific to RC for table TRKMEM. Only those fields that apply directly to RC are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table TRKMEM

Field	Subfield or refinement	Entry	Explanation and action
CLLI		alphanumeric (1 to 16 characters)	Common language location identifier. Enter the CLLI code assigned in table CLLI to the trunk group of which the trunk is a member.
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.
SGRP		numeric (0 to 1)	Subgroup number. Enter the subgroup number to which the trunk is assigned.

Datafill example for table TRKMEM

The following example shows sample datafill for table TRKMEM.

MAP display example for table TRKMEM

```
CLLI           EXTRKNM  SGRP              MEMVAR
-------------------------------------------------------
OTWAON231BB0   109       0                DTC 1 1 17 $
```

Changing datafill for table TRKMEM

Use the standard table editor commands to change datafill for table TRKMEM.

RONI trunk groups

Ordering codes

RONI trunk groups have no ordering codes.

Release applicability

TL03 and up

Prerequisites

RONI trunk groups have no functional group prerequisites.

Description

In a TOPS office, trunk group type remote operator number identification (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.

RONI trunk groups (continued)

The following figure shows the datafill dependencies for RONI trunk groups.

Datafill dependencies for RONI trunk groups

Limitations and restrictions

The following limitations and restrictions apply to RONI trunk groups:

- 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).
- For additional information, refer to table TRKMEM in the data schema section of this document.

RONI trunk groups (continued)

Billing

For information on billing, refer to the Bellcore format AMA translations section of this document.

Datafilling office parameters

RONI trunk groups do not affect office parameters.

Datafill sequence

The following table lists the tables used by RONI trunk groups. The tables are listed in the order in which they are to be datafilled.

Tables used by RONI trunk groups

Table	Purpose of table
CLLI	The common language location identifier table uniquely identifies the far end of each announcement, tone, or trunk group.
TRKGRP	The trunk group table contains customer-defined data associated with each trunk group.
TRKSGRP	The trunk subgroup table contains supplementary information for each trunk group.
TRKMEM	The trunk member table specifies the physical location of each trunk assigned to one of the trunk groups.

The following table shows sample input for datafilling RONI trunk groups.

Sample input for RONI trunk groups

Table	Sample input
CLLI	RONI1 51 175 MI
TRKGRP	RONI1 RONI 0 AA NCRT IC NT LOOP 2541 613
TRKSGRP	RONI1 0 STD IC NP WK N 10 10 IB IB H N N M
TRKMEM	RONI1 0 0 TM8 6 12

Datafilling table CLLI

The following table shows the datafill specific to RONI for table CLLI. Only those fields that apply directly to RONI are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table CLLI

Field	Subfield or refinement	Entry	Explanation and action
CLLI		alphanumeric (1 to 16 characters)	Common language location identifier. Enter a CLLI code to uniquely identify the far end of the RONI trunk group. Only alphabetic characters, numeric characters, and _ (underscores) can be used to datafill this field. The first character must be alphabetic. For optimum use, a CLLI code must not contain more than 12 characters, as only the first 12 characters are displayed on the maintenance and administration position (MAP). When a CLLI code is displayed in a log report, the entire 16-character CLLI code appears.

Datafill example for table CLLI

The following example shows sample datafill for table CLLI.

MAP display example for table CLLI

```
CLLI              ADNUM  TRKGRSIZ           ADMININF
-------------------------------------------------------
RONIL              51     175               MI
```

Changing datafill for table CLLI

Use the standard table editor commands to change datafill for table CLLI.

RONI trunk groups (continued)

Datafilling table TRKGRP

The following table shows the datafill specific to RONI for table TRKGRP. Only those fields that apply directly to RONI are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table TRKGRP (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, NCCLS, DIR, PROTOCOL, SIGINFO, NBECID, and SNPA. Note that among these subfields, only those directly affected by RONI are described below. 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	RONI	Group type. Enter RONI to specify the group type for remote ONI TOPS trunks.
	DIR	IC	Direction. Enter IC to specify that the trunk group direction is incoming.
	PROTOCOL	NTorTSPS	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.

Datafilling table TRKGRP (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
	SIGTYPE	EANDMor 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.
	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.

Datafill example for table TRKGRP

The following example shows sample datafill for table TRKGRP.

RONI trunk groups (continued)

MAP display example for table TRKGRP

```
GRPKEY          GRPINFO
_____________________________________________________________________

RONI1           RONI 0 AA NCRT IC NT LOOP 2541 613
RONICEN1        RONI 0 AB NCRT IC TSPS EANDM N OFF 5983 919
RONIT           RONI 0 AC NCRT IC TSPS EANDM Y ON  0000 613
```

Changing datafill for table TRKGRP

Use the standard table editor commands to change datafill for table TRKGRP.

Datafilling table TRKSGRP

The following table shows the datafill specific to RONI for table TRKSGRP. Only those fields that apply directly to RONI are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table TRKSGRP

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 CLLI code assigned to the trunk group as datafilled in table CLLI.
	SGRP	numeric (0 or 1)	Subgroup number. Enter the subgroup number assigned to the trunk group.

Datafill example for table TRKSGRP

The following example shows sample datafill for table TRKSGRP.

MAP display example for table TRKSGRP

```
SGRPKEY      CARDCODE     SGRPVAR
_____________________________________________________________________

RONI1 0      2X81AA       STD IC NP WK N 10 10 IB IB H N N M $
RONI2 0      2X81AA       STD IC NP WK N 10 10 IB IB H N N M $
RONI3 0      2X81AA       STD IC NP WK N 10 10 IB IB H N N M $
RONI4 0      2X81AA       STD IC NP WK N 10 10 IB IB H N N M $
```

Changing datafill for table TRKSGRP

Use the standard table editor commands to change datafill for table TRKSGRP.

Datafilling table TRKMEM

The following table shows the datafill specific to RONI for table TRKMEM. Only those fields that apply directly to RONI are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table TRKMEM

Field	Subfield or refinement	Entry	Explanation and action
CLLI		alphanumeric (1 to 16 characters)	Common language location identifier. Enter the CLLI code assigned in table CLLI to the trunk group of which the trunk is a member.
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.
SGRP		numeric (0 to 1)	Subgroup number. Enter the subgroup number to which the trunk is assigned.

Datafill example for table TRKMEM

The following example shows sample datafill for table TRKMEM.

RONI trunk groups (end)

MAP display example for table TRKMEM

```
CLLI            EXTRKNM     SGRP    MEMVAR
_____________________________________________________________________

RONI1           0           0       TM8 6 12
RONI1           1           0       TM8 6 13
RONI2           0           0       TM8 6 14
RONI2           1           0       TM8 6 15
RONI3           0           0       DCM 0 0 1
RONI3           1           0       DCM 0 0 5
```

Changing datafill for table TRKMEM

Use the standard table editor commands to change datafill for table TRKMEM.

ROTL trunk groups

Ordering codes

ROTL trunk groups have no ordering codes.

Release applicability

TL03 and up

Prerequisites

ROTL trunk groups have no functional group prerequisites.

Description

Trunk group type Remote Office Test Line (ROTL) is used for remote line testing in a DMS office.

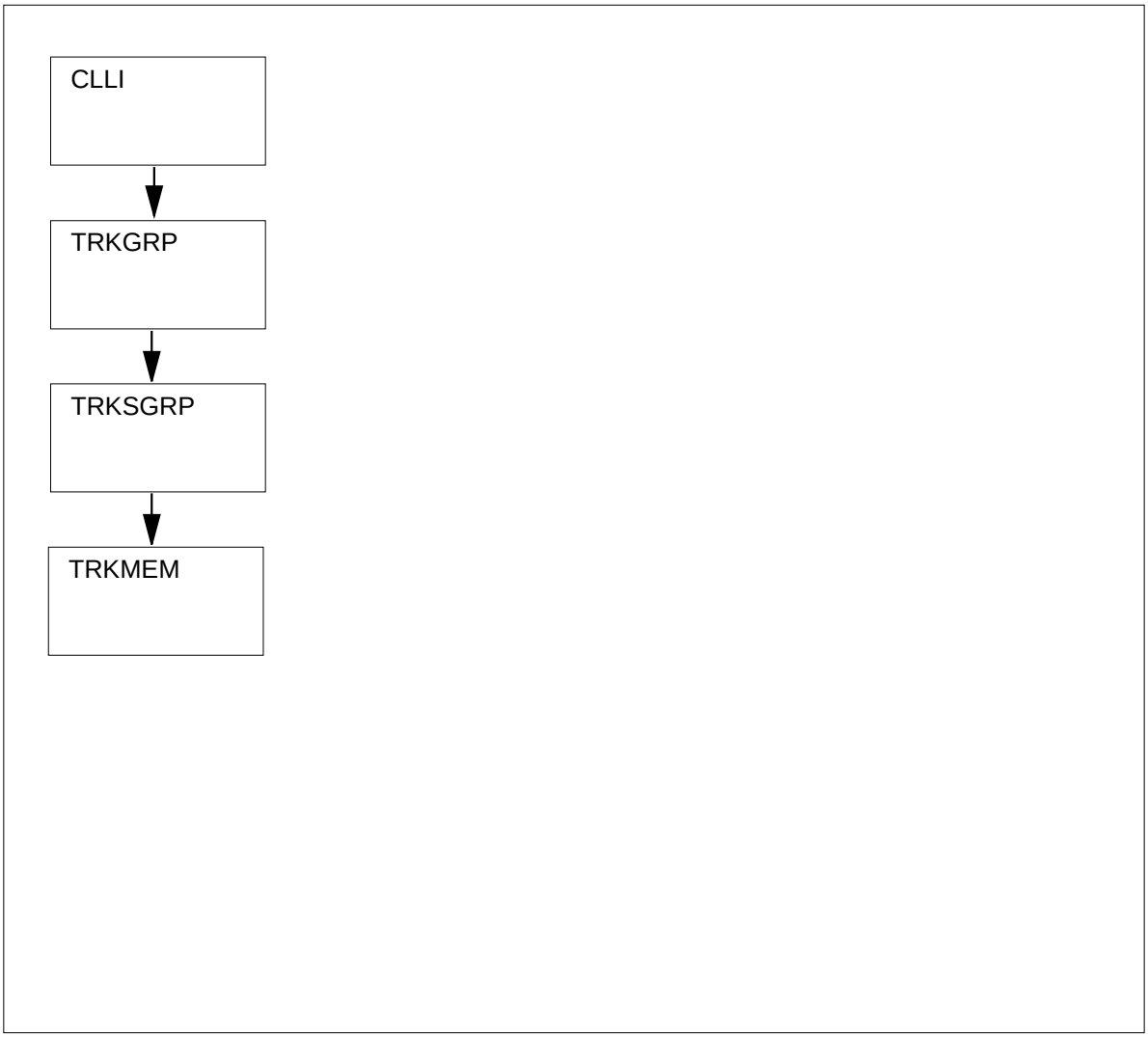
This trunk group is represented in table CLLI by pseudo-common language location identifier (CLLI) ROTLTP.

Trunk cards for table TRKGRP and group type ROTL have product engineering code (PEC) NT3X91AA (remote office test line circuit).

The following figure shows the datafill dependencies for ROTL trunk groups.

ROTL trunk groups (continued)

Datafill dependencies for ROTL trunk groups



Limitations and restrictions

ROTL trunk groups have no limitations and restrictions.

Billing

For information on billing, refer to the Bellcore format AMA translations section of this document.

ROTL trunk groups (continued)

Datafilling office parameters

The following table shows the office parameters used by ROTL trunk groups. For more information about office parameters, refer to *Office Parameters Reference Manual.*

Office parameters used by ROTL trunk groups

Table name	Parameter name	Explanation and action
OFCVAR	TRK_OOS_CHK_ON	This parameter specifies whether or not to check that the trunks in a trunk group are out of service before changing the values of specific fields in table TRKGRP by data modification order (DMO).

Datafill sequence

The following table lists the tables used by ROTL trunk groups. The tables are listed in the order in which they are to be datafilled.

Tables used by ROTL trunk groups

Table	Purpose of table
CLLI	The common language location identifier table uniquely identifies the far end of each announcement, tone, or trunk group.
TRKGRP	The trunk group table contains customer-defined data associated with each trunk group.
TRKSGRP	The trunk subgroup table contains supplementary information for each trunk group.
TRKMEM	The trunk member table specifies the physical location of each trunk assigned to one of the trunk groups.

The following table shows sample input for datafilling ROTL trunk groups.

Sample input for ROTL trunk groups

Table	Sample input
CLLI	ROTLTP 31 151 MI
TRKGRP	ROTLTP ROTL 0 ELO NCOT RS NPRT 613 NSCR
TRKSGRP	ROTLTP 0 3X91AA STD IC MF WK N 30 30 NO NO N N N M UNEQ
TRKMEM	ROTLTP 0 0 MTM 10 10

ROTL trunk groups (continued)

Datafilling table CLLI

The following table shows the datafill specific to ROTL for table CLLI. Only those fields that apply directly to ROTL are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table CLLI

Field	Subfield or refinement	Entry	Explanation and action
CLLI		alphanumeric (1 to 16 characters)	Common language location identifier. Enter a CLLI code to uniquely identify the far end of each trunk group. Only alphabetic characters, numeric characters, and _ (underscores) can be used to datafill this field. The first character must be alphabetic. For optimum use, a CLLI code must not contain more than 12 characters, as only the first 12 characters are displayed on the maintenance and administration position (MAP). When a CLLI code is displayed in a log report, the entire 16-character CLLI code appears.

Datafill example for table CLLI

The following example shows sample datafill for table CLLI.

MAP display example for table CLLI

```
CLLI              ADNUM       TRKGRSIZ      ADMININF
-------------------------------------------------------
ROTLTP             31          151           MI
```

Changing datafill for table CLLI

Use the standard table editor commands to change datafill for table CLLI.

Datafilling table TRKGRP

The following table shows the datafill specific to ROTL for table TRKGRP. Only those fields that apply directly to ROTL are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table TRKGRP (Sheet 1 of 2)

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-CLLI ROTLTP.
GRPINFO		see subfields	Variable group data. This field consists of subfields GRPTYP, TRAFSNO, PADGRP, NCCLS, TRAFCLS, PRTNM, SNPA, and SCRNCL. Note that among these subfields, only those directly affected by ROTL are described below. Refer to section “General field information" in table TRKGRP in the data schema section of this document for information concerning 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.

ROTL trunk groups (continued)

Datafilling table TRKGRP (Sheet 2 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, 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.

Datafill example for table TRKGRP

The following example shows sample datafill for table TRKGRP.

MAP display example for table TRKGRP

```
GRPKEY            GRPINFO
------------------------------------------------------------
ROTLTP            ROTL 0 ELO NCOT RS NPRT 613 NSCR
```

Changing datafill for table TRKGRP

If office parameter TRK_OOS_CHK_ON in table OFCVAR is set to Y, all trunks in the trunk group must be taken out of service before changing the value of certain fields in table TRKGRP.

Datafilling table TRKSGRP

The following table shows the datafill specific to ROTL for table TRKSGRP. Only those fields that apply directly to ROTL are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table TRKSGRP

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 CLLI code assigned to the trunk group as datafilled in table CLLI.
	SGRP	numeric (0 or 1)	Subgroup number. Enter the subgroup number assigned to the trunk group.

Datafill example for table TRKSGRP

The following example shows sample datafill for table TRKSGRP.

MAP display example for table TRKSGRP

```
SGRPKEY      CARDCODE
SGRPVAR    SGRPVAR
-------------------------------------------------------
ROTLTP 0     3X91AA
STD        IC MF WK N 30 30 NO NO N N N M UNEQ
```

Changing datafill for table TRKSGRP

Use the standard table editor commands to change datafill for table TRKSGRP.

ROTL trunk groups (end)

Datafilling table TRKMEM

The following table shows the datafill specific to ROTL for table TRKMEM. Only those fields that apply directly to ROTL are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table TRKMEM

Field	Subfield or refinement	Entry	Explanation and action
CLLI		alphanumeric (1 to 16 characters)	Common language location identifier. Enter the CLLI code assigned in table CLLI to the trunk group of which the trunk is a member.
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.
SGRP		numeric (0 to 1)	Subgroup number. Enter the subgroup number to which the trunk is assigned.

Datafill example for table TRKMEM

The following example shows sample datafill for table TRKMEM.

MAP display example for table TRKMEM

```
CLLI              EXTRKNM      SGRP      MEMVAR

-------------------------------------------------------------
ROTLTP             0           0         MTM 10 10
```

Changing datafill for table TRKMEM

Use the standard table editor commands to change datafill for table TRKMEM.

SC trunk groups

SC trunk group functionality codes

SC trunk groups have no functionality codes.

Release applicability

TL03 and up

Prerequisites

SC trunk groups have no functional group prerequisites.

Description

Trunk group type SC (incoming or two-way CAMA or AMR5) is used in one of the following two configurations:

- In a DMS toll office, and under certain conditions, in a DMS Traffic Operator Position System (TOPS) office, incoming trunk group SC 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.
- In a DMS toll office, two-way trunk group SC, 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

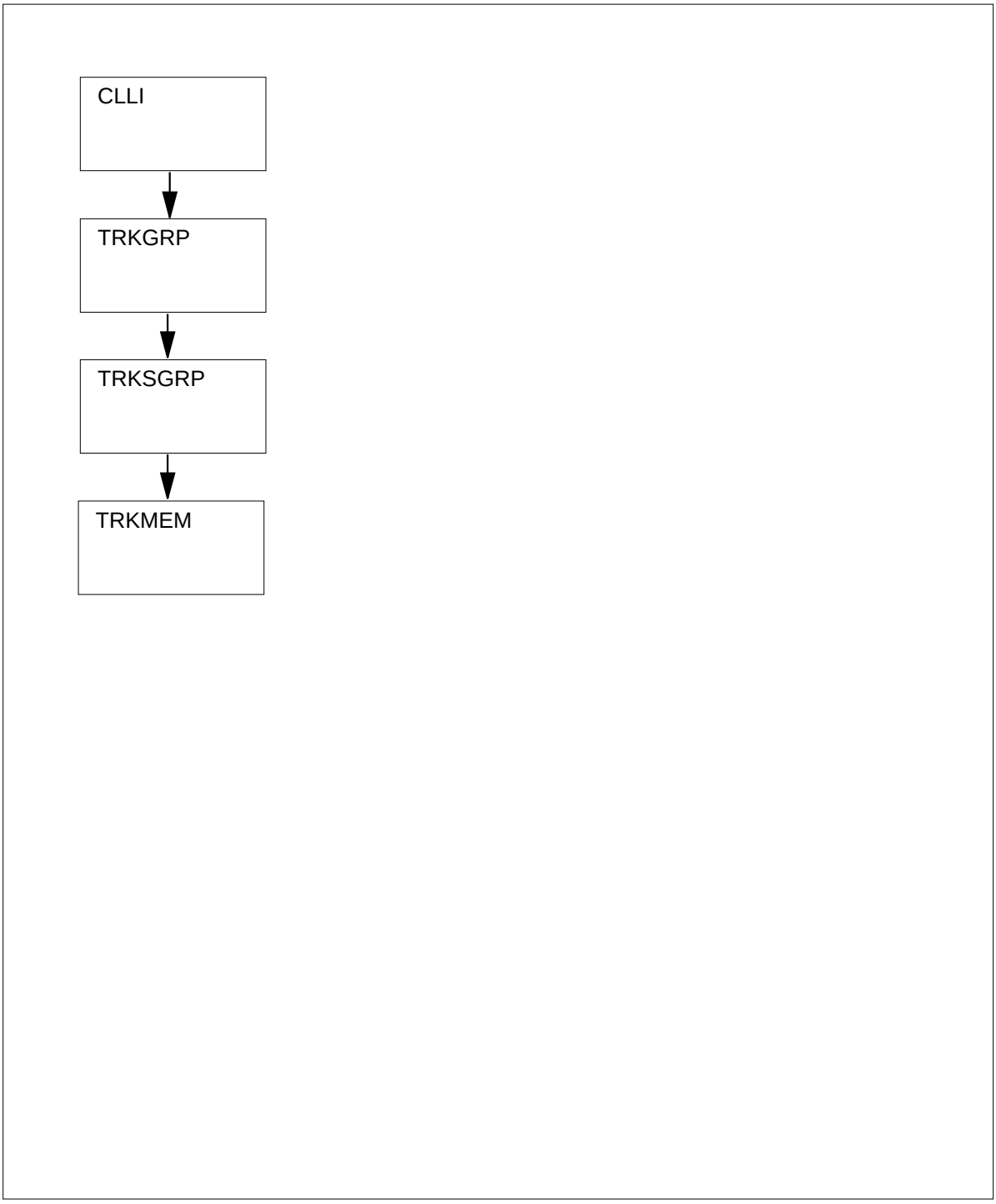
  Refer to trunk group type VR for additional information on verification calls.

Refer to table TRKGRP in the data schema section of this document for information on changing trunk selection.

The following figure shows the datafill dependencies for SC trunk groups.

SC trunk groups (continued)

Datafill dependencies for SC trunk groups



SC trunk groups (continued)

Limitations and restrictions

The following limitations and restrictions apply to SC trunk groups:

- This trunk group cannot be configured as an OG (outgoing) trunk.
- The selection method for an existing trunk group cannot be changed.

Billing

For information on billing, refer to the Bellcore format AMA translations section of this document.

Datafilling office parameters

The following table shows the office parameters used by SC trunk groups. For more information about office parameters, refer to the *Office Parameters Reference Manual.*

Office parameters used by SC trunk groups

Table name	Parameter name	Explanation and action
OFCVAR	TRK_OOS_CHK_ON	This parameter specifies whether to check that the trunks in a trunk group are out of service before changing the values of specific fields in table TRKGRP by data modification order (DMO).

Datafill sequence

The following table lists the tables used by SC trunk groups. The tables are listed in the order in which they are to be datafilled.

Tables used by SC trunk groups

Table	Purpose of table
CLLI	The common language location identifier table uniquely identifies the far end of each announcement, tone, or trunk group.
TRKGRP	The trunk group table contains customer-defined data that are associated with each trunk group.
TRKSGRP	The trunk subgroup table contains supplementary information for each trunk group.
TRKMEM	The trunk member table specifies the physical location of each trunk assigned to one of the trunk groups.

SC trunk groups (continued)

The following table shows sample input for datafilling SC trunk groups.

Sample input for SC trunk groups

Table	Sample input
CLLI	HULLPQ1077X1 51 350 $
TRKGRP	HULLPQ1077X1 SC 41 NPDGP NCRT CA Y 514 NPRT NONE DD ONHOOK ONHOOK 20 5 5 IC MIDL 0 BELL REGULAR CAMA RTE1 REV Y Y BCNAME (56KDATA) (NOUTR) (PIA) $
TRKSGRP	HULLPQ1077X1 0 DS1SIG STD IC MF DIALTONE N 30 30 TR NO N N N C UNEQ
TRKMEM	HULLPQ1077X1 102 0 DCM 1 1 17 $

Datafilling table CLLI

The following table shows the datafill specific to SC for table CLLI. Only those fields that apply directly to SC are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table CLLI

Field	Subfield or refinement	Entry	Explanation and action
CLLI		alphanumeric (1 to 16 characters)	Common language location identifier. Enter a CLLI code to uniquely identify the far end of the SC trunk group. Only alphabetic characters, numeric characters, and _ (underscores) can be used to datafill this field. The first character must be alphabetic. For optimum use, a CLLI code must contain not more than 12 characters, as only the first 12 characters are displayed on the MAP display. When a CLLI code is displayed in a log report, the entire 16-character CLLI code appears.

Datafill example for table CLLI

The following example shows sample datafill for table CLLI.

MAP display example for table CLLI

```
       CLLI            ADNUM   TRKGRSIZ      ADMININF
-------------------------------------------------------
HULLPQ1077X1               51       350             $
```

Changing datafill for table CLLI

Use the standard table editor commands to change datafill for table CLLI.

Datafilling table TRKGRP

The following table shows the datafill specific to SC for table TRKGRP. Only those fields that apply directly to SC are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table TRKGRP (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 CLLI code assigned to the SC trunk group in table CLLI.
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 OPTIONS. Note that among these subfields, only those directly affected by SC are described in this table. Refer to the section “General field information" in table TRKGRP in the data schema section of this document 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.

SC trunk groups (continued)

Datafilling table TRKGRP (Sheet 2 of 8)

Field	Subfield or refinement	Entry	Explanation and action
	ONI	Y or N	Operator number identification. Enter Y if traffic on the trunk group is all Operator Number Identification (ONI) traffic. Otherwise, enter N.
	NODIGRTE	AMAFAIL 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 the trunk group is from AMR5, enter NONE to indicate that all operator-assisted calls are routed to position CAMA in table POSITION. If the trunk group is from CAMA and all operator-assisted calls are routed to position CAMA in table POSITION, enter NONE. If the trunk group is from CAMA and all operator-assisted calls are routed to a position other than CAMA in table POSITION, enter the position that routes the call to a TSPS or TOPS trunk group that has trunk group type OP. If the value entered 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, all trunks in the group must be busy before the value of this field can be changed by DMO.
	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 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.

Datafilling table TRKGRP (Sheet 3 of 8)

Field	Subfield or refinement	Entry	Explanation and action
	TRTMTSUP	OFFHOOK ONHOOK 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).
	NPRETSUP	OFFHOOK ONHOOK or OFFHKWK	No-prefix return supervision. Enter the return supervision required on no-prefix type of calls: OFFHOOK, ONHOOK, or OFFHKWK). 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, an off-hook signal is not sent back to the end office to start the automatic number identification (ANI) spill.
	NOBILLCD	1 to 63	Number of bill code. Enter the number of bill codes plus spares that are reserved in table BILLCODE. For more information on table BILLCODE refer to the data schema section of this document. Entries outside the range indicated for this field are not valid.
	ANISEIZ	2 to 30	Automatic number identification seizure timing. Enter the time, in seconds, that the trunk waits for reception of first ANI digit or signal. 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.

SC trunk groups (continued)

Datafilling table TRKGRP (Sheet 4 of 8)

Field	Subfield or refinement	Entry	Explanation and action
	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, all trunks in the group must be busy before the value of this field can be changed by 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, all trunks in the group must be busy before the value of this field can be changed by DMO.
	DIGSOUT	(0 to 18)	Digits outpulsed. If the number of digits to be sent is variable, enter 0 (zero) and specify the number of digits to be sent in the appropriate route list. If the number of digits to be sent is fixed, enter a value from 0 to 18.
	SDATA	see subfield	Signaling data. This field consists of subfield SIGFMT.
	SIGFMT	AMR5A or BELL	Signaling format. If the trunk group is from AMR5, enter AMR5A and datafill refinements CC_XLA_NAME and TRAFTYPE. If the trunk group is from CAMA, enter BELL and datafill refinements GRPTYPE and DEFANIFL. If the signaling format is BELL and no called number is received, the call is routed to permanent signal time-out (PSIG) treatment. 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.

Datafilling table TRKGRP (Sheet 5 of 8)

Field	Subfield or refinement	Entry	Explanation and action
	CC_XLA_ NAME	STD or alphabetic	Category code translator. If the 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 the signaling format is AMR5A, enter the traffic type: AMRCOMB (1+, 0, 0-), AMRONE (1+), or AMRZERO (0+, 0-).
	GRPTYPE	OSS REGULAR orSUPER	Group type. If the signaling format is BELL, datafill this refinement. Enter OSS if the start signal for direct dial (DD) calls is ST and two information digits are expected, and datafill refinement IC_ROUTE. Option OSS is related to equal access (EA) calls. Enter REGULAR if the start signal for 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.
	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) EA call.
	DEFANIFL	CAMA TREAT or TSPS	Default automatic number identification fail. If the signaling format is BELL, datafill this refinement. Specify 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 routes 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.

SC trunk groups (continued)

Datafilling table TRKGRP (Sheet 6 of 8)

Field	Subfield or refinement	Entry	Explanation and action
	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 functional group code OSB00001 (Operator Services Basic) is present, enter REV. If functional group code OSB00001 (Operator Services Basic) 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, all trunks in the group must be busy before the value of this field can be changed by DMO.
	RECORDNP	Y or N	Record calls of type NP. If the office includes the functional group EQA00002 (EQA Toll), enter Y to indicate that calls of type NP are to be recorded. Otherwise, enter N.
	SPLOOKUP	Y or N	Special lookup. Enter Y if the non-equal access end office is not capable of sending 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 fewer than three options are required, end the list with a $ (dollar sign). Refinements consist of BCNAME, LNP, NOUTR, and PIA.

SC trunk groups (continued)

Datafilling table TRKGRP (Sheet 7 of 8)

Field	Subfield or refinement	Entry	Explanation and action
	OPTION	BCNAME LNP 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 s 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. To specify the Local Number Portability option, enter option LNP. This provisions the Location Routing Number (LRN) against the trunk group. This option only applies to trunk group types: IT, SC, TI and T2. Option LNP consists of subfield LRN. A Location Routing Number (LRN) is used to indicate the direction in which to route an LNP call. It consists of the Home NPA-NXX dialing pattern that is associated with the switch to which it routes. Enter a $ dollar sign If no options apply.

SC trunk groups (continued)

Datafilling table TRKGRP (Sheet 8 of 8)

Field	Subfield or refinement	Entry	Explanation and action
	LRN	ten-digit DN	This is a ten-digit directory number (DN) that denotes a default LRN for the trunk group. This DN is used to generate a Jurisdiction Information Parameter (JIP) if one is not present on the incoming Initial Address Message (IAM) of the trunk group. ***Note:*** Enter a dollar sign ($) to indicate that no default LRN is present for the trunk group.
	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 in the data schema section of this document for the list of available bearer capabilities. If field OPTION and refinement BCNAME are left blank, use the default bearer capability of the central office.

Datafill example for table TRKGRP

The following example shows sample datafill for table TRKGRP.

MAP display example for table TRKGRP

```
GRPKEY
                                                                  GRPINFO
------------------------------------------------------------------------
HULLPQ1077X1
SC     41  NPDGP  NCRT       CA Y    514 NPRT   NO  DD ONHOOK  ONHOOK
20  5  5 IC   MIDL  0  BELL REGULAR  CAMA   RTE1 REV
Y Y                        (BCNAME       56KDATA) ( NOUTR ) (  PIA )$
```

The following example shows sample datafill for table TRKGRP option LNP.

MAP display example for table TRKGRP option LNP

```
GRPKEY
                                                                GRPINFO
-------------------------------------------------------------------------

AL7ITICS7
 IT 0 ELO NCRT IC NIL MIDL 909 ATI NSCR 501 000 N N (LNP 9198513361) $
```

Changing datafill for table TRKGRP

If office parameter TRK_OOS_CHK_ON in table OFCVAR is set to Y, all trunks in the trunk group must be taken out of service before changing the value of certain fields in table TRKGRP.

Datafilling table TRKSGRP

The following table shows the datafill specific to SC for table TRKSGRP. Only those fields that apply directly to SC are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table TRKSGRP

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 CLLI code assigned to the SC trunk group as datafilled in table CLLI.
	SGRP	0 or 1	Subgroup number. Enter the subgroup number assigned to the trunk group.

Datafill example for table TRKSGRP

The following example shows sample datafill for table TRKSGRP.

SC trunk groups (continued)

MAP display example for table TRKSGRP

```
                    SGRPKEY         CARDCODE
SGRPVAR
                                                        SGRPVAR
------------------------------------------------------------
           HULLPQ1077X1 0           DS1SIG
    STD
                IC MF DIALTONE  N 30 30 TR NO N N N C UNEQ
```

Changing datafill for table TRKSGRP

Use the standard table editor commands to change datafill for table TRKSGRP.

Datafilling table TRKMEM

The following table shows the datafill specific to SC for table TRKMEM. Only those fields that apply directly to SC are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table TRKMEM

Field	Subfield or refinement	Entry	Explanation and action
CLLI		alphanumeric (1 to 16 characters)	Common language location identifier. Enter the CLLI code assigned in table CLLI to the trunk group of which the trunk is a member.
EXTRKNM		0 to 9999	External trunk number. Enter the external trunk number that is assigned to the trunk.
SGRP		0 or 1	Subgroup number. Enter the subgroup number to which the trunk is assigned.

Datafill example for table TRKMEM

The following example shows sample datafill for table TRKMEM.

MAP display example for table TRKMEM

```
        CLLI          EXTRKNM     SGRP            MEMVAR
-------------------------------------------------------------
HULLPQ1077X1              102       0      DCM 1 1 17 $
```

Changing datafill for table TRKMEM

Use the standard table editor commands to change datafill for table TRKMEM.

SOCKI trunk groups

Ordering codes

SOCKT trunk groups have no ordering codes.

Release applicability

TL03 and up

Prerequisites

SOCKT trunk groups have no functional group prerequisites.

Description

The transmission terminating trunk group type (SOCKT) is used in switches that are configured for short- and open-circuit testing.

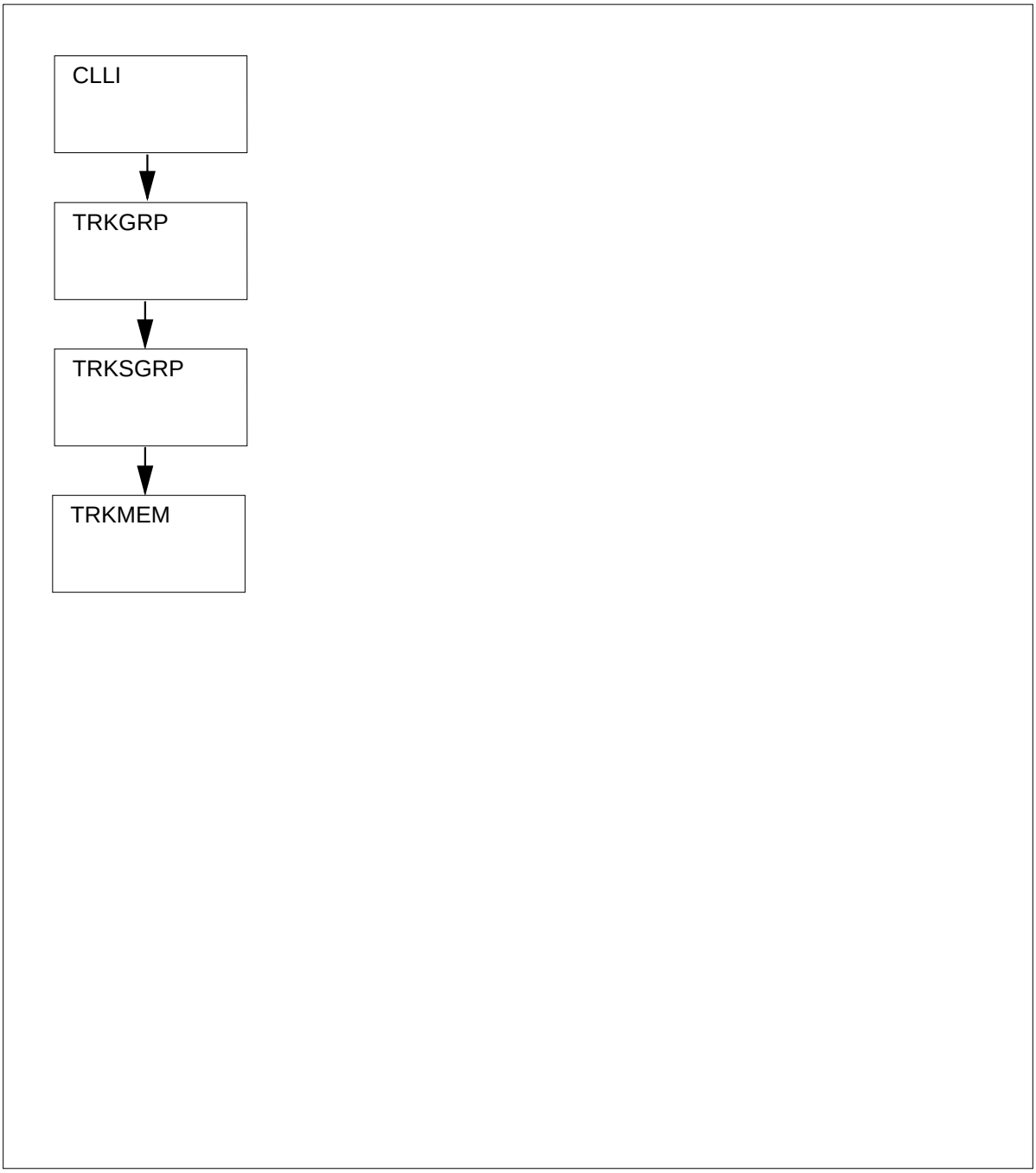
Each transmission termination trunk consists of a trunk circuit with product engineering code (PEC) NT2X71AA (transmission termination trunk).

For related information, refer to table TRKGRP (MAINT) in the data schema section of this document.

The following figure shows the datafill dependencies for SOCKT trunk groups.

SOCKI trunk groups (continued)

Datafill dependencies for SOCKT trunk groups



SOCKI trunk groups (continued)

Limitations and restrictions

The following limitations or restrictions apply to SOCKT trunk groups.

- Each transmission termination trunk 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.

Billing

For information on billing, refer to the Bellcore format AMA translations section of this document.

Datafilling office parameters

The following table shows the office parameters used by SOCKT trunk groups. For more information about office parameters, refer to *Office Parameters Reference Manual.*

Office parameters used by SOCKT trunk groups

Table name	Parameter name	Explanation and action
OFCVAR	TRK_OOS_CHK_ON	This parameter specifies whether or not to check that the trunks in a trunk group are out of service before changing the values of specific fields in table TRKGRP by data modification order (DMO).

SOCKI trunk groups (continued)

Datafill sequence

The following table lists the tables used by SOCKT trunk groups. The tables are listed in the order in which they are to be datafilled.

Tables used by SOCKT trunk groups

Table	Purpose of table
CLLI	The common language location identifier table uniquely identifies the far end of each announcement, tone, or trunk group.
TRKGRP	The trunk group table contains customer-defined data associated with each trunk group.
TRKSGRP	The trunk subgroup table contains supplementary information for each trunk group.
TRKMEM	The trunk member table specifies the physical location of each trunk assigned to one of the trunk groups.

The following table shows sample input for datafilling SOCKT trunk groups.

Sample input for SOCKT trunk groups

Table	Sample input
CLLI	SCKT 60 0 MI
TRKGRP	SCKT SOCKT 0 TLD NCRT 2X71AA
TRKSGRP	SCKT 0 2X71AA STD 09 NP IM 0 0 NO NO N N N 17 UNEQ
TRKMEM	SCKT 0 0 DCM 1 5

SOCKI trunk groups (continued)

Datafilling table CLLI

The following table shows the datafill specific to SOCKT for table CLLI. Only those fields that apply directly to SOCKT are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table CLLI

Field	Subfield or refinement	Entry	Explanation and action
CLLI		alphanumeric (1 to 16 characters)	Common language location identifier. Enter a CLLI code to uniquely identify the far end of the SOCKT trunk group. Only alphabetic characters, numeric characters, and _ (underscores) can be used to datafill this field. The first character must be alphabetic. For optimum use, a CLLI code must not contSOCKTn more than 12 characters, as only the first 12 characters are displayed on the mSOCKTntenance and administration position (MAP). When a CLLI code is displayed in a log report, the entire 16-character CLLI code appears.

Datafill example for table CLLI

The following example shows sample datafill for table CLLI.

MAP display example for table CLLI

```
CLLI              ADNUM     TRKGRSIZ      ADMININF
-------------------------------------------------------
SCKT               60        0            MI
```

Changing datafill for table CLLI

Use the standard table editor commands to change datafill for table CLLI.

Datafilling table TRKGRP

The following table shows the datafill specific to SOCKT for table TRKGRP. Only those fields that apply directly to SOCKT are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table TRKGRP

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 psuedo-CLLI for the transmission terminatrion trunk group.
GRPINFO		see subfields	Variable group data. This field consists of subfields GRPTYP, TRAFSNO, PADGRP, NCCLS, and CARDCODE. Note that among these subfields, only those directly affected by SOCKT are described below. Refer to section “General field information" in table TRKGRP in the data schema section of this document 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 or outgoing traffic separation number assigned to the trunk group. If a traffic separation number is not required, enter 0 (zero).
	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).

Datafill example for table TRKGRP

The following example shows sample datafill for table TRKGRP.

SOCKI trunk groups (continued)

MAP display example for table TRKGRP

```
GRPKEY                  GRPINFO
_____________________________________________________________
SCKT                    SOCKT 0 TLD NCRT 2X71AA
```

Changing datafill for table TRKGRP

If office parameter TRK_OOS_CHK_ON in table OFCVAR is set to Y, all trunks in the trunk group must be taken out of service before changing the value of certain fields in table TRKGRP.

Datafilling table TRKSGRP

The following table shows the datafill specific to SOCKT for table TRKSGRP. Only those fields that apply directly to SOCKT are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table TRKSGRP

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 CLLI code assigned to the trunk group as datafilled in table CLLI.
	SGRP	numeric (0 or 1)	Subgroup number. Enter the subgroup number assigned to the trunk group.

Datafill example for table TRKSGRP

The following example shows sample datafill for table TRKSGRP.

MAP display example for table TRKSGRP

```
SGRPKEY    CARDCODE
SGRPVAR    SGRPVAR
-------------------------------------------------------
SCKT 0     2X71AA
STD        09 NP IM 0 0 NO NO N N N 17 UNEQ
```

Changing datafill for table TRKSGRP

Use the standard table editor commands to change datafill for table TRKSGRP.

Datafilling table TRKMEM

The following table shows the datafill specific to SOCKT for table TRKMEM. Only those fields that apply directly to SOCKT are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table TRKMEM

Field	Subfield or refinement	Entry	Explanation and action
CLLI		alphanumeric (1 to 16 characters)	Common language location identifier. Enter the CLLI code assigned in table CLLI to the trunk group of which the trunk is a member.
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.
SGRP		numeric(0 to 1)	Subgroup number. Enter the subgroup number to which the trunk is assigned.

Datafill example for table TRKMEM

The following example shows sample datafill for table TRKMEM.

SOCKI trunk groups (end)

MAP display example for table TRKMEM

```
CLLI              EXTRKNM  SGRP          MEMVAR
-------------------------------------------------------
SCKT               0       0             DCM 1 5
```

Changing datafill for table TRKMEM

Use the standard table editor commands to change datafill for table TRKMEM.

SPC trunk groups

Ordering codes

SPC trunk groups have no ordering codes.

Release applicability

TL03 and up

Prerequisites

SPC trunk groups have no functional group prerequisites.

Description

Trunk group type semipermanent connections (SPC) is used to define one of the agents used in a semipermanent connection. The other agent is another trunk or a line.

A semipermanent 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.

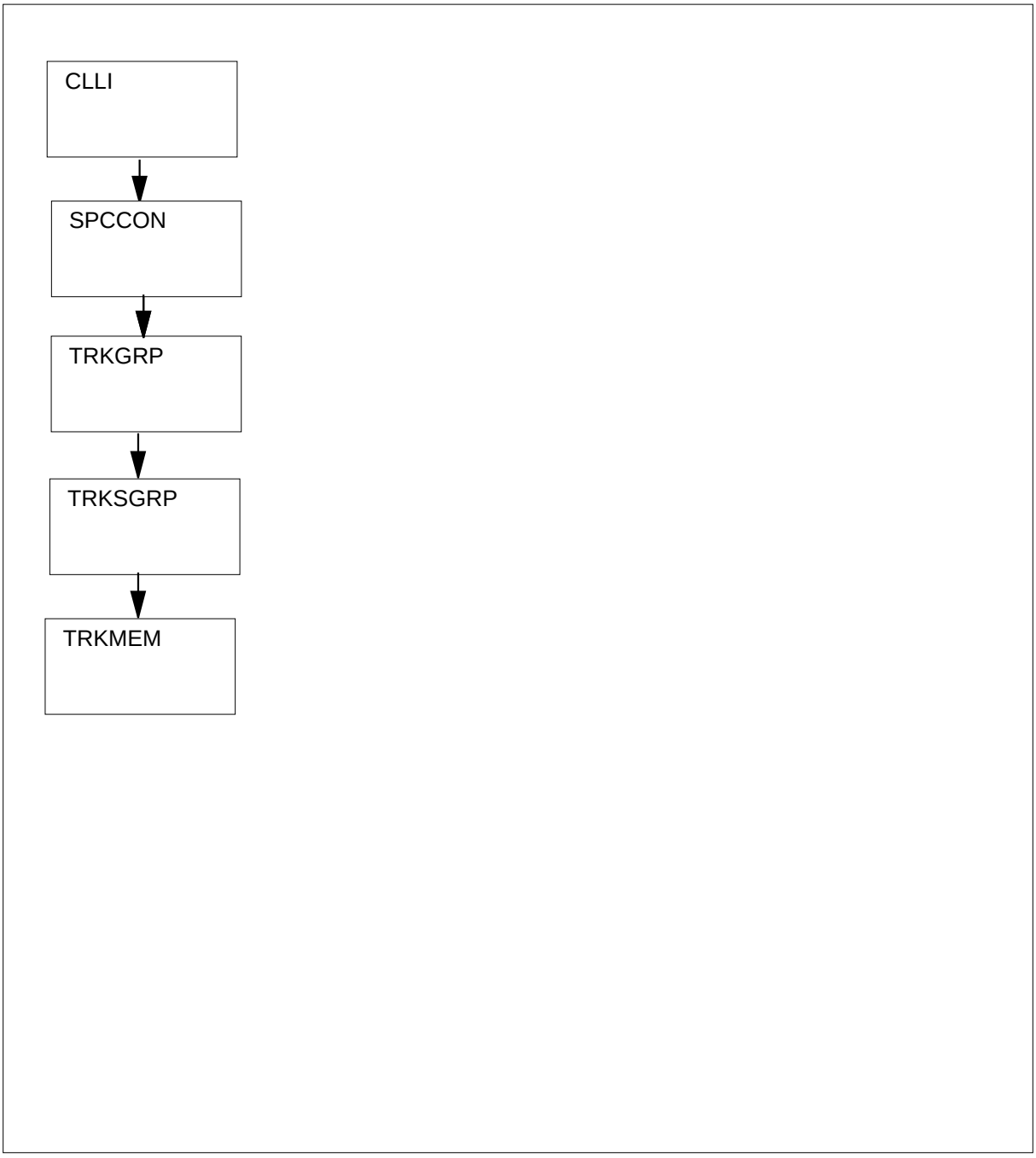
Trunk group type SPC exists in the Global 100 software.

For more information on semipermanent connections, refer to table SPCCON in the data schema section of this document.

The following figure shows the datafill dependencies for SPC trunk groups.

SPC trunk groups (continued)

Datafill dependencies for SPC trunk groups



SPC trunk groups (continued)

Limitations and restrictions

The following limitations and restrictions apply to SPC trunk groups:

- An SPC trunk involved in an SPC connection is in a seized state.
- Call processing busy (CPB) is not a valid state for trunks.
- It is not possible to force the release (FRLS) of an SPC trunk when it is seized.
- SPC lines and trunks do not support testline tests such as milliwatt and loop around tests.
- Services are not supported ona semipermanent nailed up connection
- agents are not available for any other calls except semipermanent nailed up connections.
- 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.

Billing

For information on billing, refer to the Bellcore format AMA translations section of this document.

Datafilling office parameters

SPC trunk groups do not affect office parameters.

Datafill sequence

The following table lists the tables used by SPC trunk groups. The tables are listed in the order in which they are to be datafilled.

Tables used by SPC trunk groups (Sheet 1 of 2)

Table	Purpose of table
CLLI	The common language location identifier table uniquely identifies the far end of each announcement, tone, or trunk group.
SPCCON	The semipermanent connections connection table allows customers to define semipermanent connections through datafill.
TRKGRP	The trunk group table contains customer-defined data associated with each trunk group.

SPC trunk groups (continued)

Tables used by SPC trunk groups (Sheet 2 of 2)

Table	Purpose of table
TRKSGRP	The trunk subgroup table contains supplementary information for each trunk group.
TRKMEM	The trunk member table specifies the physical location of each trunk assigned to one of the trunk groups.

The following table shows sample input for datafilling SPC trunk groups.

Sample input for SPC trunk groups

Table	Sample input
CLLI	OGTOBKA 51 11 MI
SPCCON	SEMIPERM1 TRK OGTOBKA 23 LINE HOST 00 1 03 06 Y
TRKGRP	OGTOBKA SPC 0 ELO NOSC OG
TRKSGRP	OGTOBKA PC30CAS NOSIG
TRKMEM	OGTOBKA 61 0 TM 1 51

Datafilling table CLLI

The following table shows the datafill specific to SPC for table CLLI. Only those fields that apply directly to SPC are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table CLLI

Field	Subfield or refinement	Entry	Explanation and action
CLLI		alphanumeric (1 to 16 characters)	Common language location identifier. Enter a CLLI code to uniquely identify the far end of the SPC trunk group. Only alphabetic characters, numeric characters, and _ (underscores) can be used to datafill this field. The first character must be alphabetic. For optimum use, a CLLI code must not contain more than 12 characters, because only the first 12 characters are displayed on the MAP terminal. When a CLLI code is displayed in a log report, the entire 16-character CLLI code appears.

Datafill example for table CLLI

The following example shows sample datafill for table CLLI.

MAP display example for table CLLI

```
CLLI              ADNUM   TRKGRSIZ              ADMININF
-------------------------------------------------------
OGTOBKA            51      11                    MI
```

Changing datafill for table CLLI

Use the standard table editor commands to change datafill for table CLLI.

Datafilling table SPCCON

The following table shows the datafill specific to SPC for table SPCCON. Only those fields that apply directly to SPC are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table SPCCON

Field	Subfield or refinement	Entry	Explanation and action
AGENT1		see subfield	Agent one. This field consists of subfield AGNTYPE.
	AGNTYPE	TRK	Agent type. Enter TRK if agent one in an SPC is a trunk and datafill refinements CLLI and EXTRKNM.
	CLLI	alphanumeric (1 to 16 characters)	Common language location identifier. Enter a CLLI code to uniquely identify the far end of the SPC trunk group.
	EXTRKNM	0 to 9999	External trunk number. Enter the external trunk number assigned to the trunk that is agent one in the SPC.

Datafill example for table SPCCON

The following example shows sample datafill for table SPCCON.

SPC trunk groups (continued)

MAP display example for table SPCCON

```
SPCKEY     AGENT1          AGENT2                 CONNECT
-------------------------------------------------------
SEMIPERM1  TRK OGTOBKA 23  LINE HOST 00 1 03 06   Y
```

Changing datafill for table SPCCON

Use the standard table editor commands to change datafill for table SPCCON.

Datafilling table TRKGRP

The following table shows the datafill specific to SPC for table TRKGRP. Only those fields that apply directly to SPC are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table TRKGRP

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 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, and DIR. Note that among these subfields, only those directly affected by SPC are described below. Refer to section “General field information" in table TRKGRP in the data schema section of this document for information concerning 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 semipermanent connection trunks.
	DIR	OG	Direction. Enter OG to specify that the trunk group is outgoing.

Datafill example for table TRKGRP

The following example shows sample datafill for table TRKGRP.

MAP display example for table TRKGRP

```
GRPKEY                                  GRPINFO
------------------------------------------------------
OGTOBKA                                 SPC 0 ELO NOSC OG
```

Changing datafill for table TRKGRP

Use the standard table editor commands to change datafill for table TRKGRP.

Datafilling table TRKSGRP

The following table shows the datafill specific to SPC for table TRKSGRP. Only those fields that apply directly to SPC are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table TRKSGRP

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 CLLI code assigned to the trunk group as datafilled in table CLLI.
	SGRP	numeric (0 or 1)	Subgroup number. Enter the subgroup number assigned to the trunk group.
CARDCODE		alphanumeric 1 to 16 characters	Card code number. Enter the card code assigned to the trunk group.
SCRPVAR		NOSIG	Enter the NOSIG signaling type to associate all trunks datafilled in table SPCCPN

Datafill example for table TRKSGRP

The following example shows sample datafill for table TRKSGRP.

SPC trunk groups (continued)

MAP display example for table TRKSGRP

```
SGRPKEY   CARDCODE SGRPVAR   SGRPVAR
-------------------------------------------------------
SNUCTRK 0 DS1SIG     NOSIG
```

Changing datafill for table TRKSGRP

Use the standard table editor commands to change datafill for table TRKSGRP.

Datafilling table TRKMEM

The following table shows the datafill specific to SPC for table TRKMEM. Only those fields that apply directly to SPC are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table TRKMEM (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
CLLI		alphanumeric (1 to 16 characters)	Common language location identifier. Enter the CLLI code assigned in table CLLI to the trunk group of which the trunk is a member.
EXTRKNM		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.
SGRP		0 or 1	Subgroup number. Enter the subgroup number to which the trunk is assigned.
MEMVAR		see subfields	Member variables. This field consists of subfield PMTYPE and refinements DEQNO, DEQCKTNO, DEQCKTTS.
	PMTYPE	PDTC	Peripheral module type. Enter PDTC.
	DEQNO	0 to 511	Digital equipment number. Enter the digital equipment number to which the trunk gorup is assigned.

Datafilling table TRKMEM (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
	DEQCKTNO	0 to 19	Digital equipment circuit number. Enter the digital equipment circuit card to which the circuit number is assigned.
	DEQCKTTS	0 to 31	Digital equipment circuit time-slot. Enter the digital equipment circuit card time-slot to which the trunk group is assigned.

Datafill example for table TRKMEM

The following example shows sample datafill for table TRKMEM.

MAP display example for table TRKMEM

```
CLLI      EXTRKNM     SGRP            MEMVAR
-------------------------------------------------------
SNUCTRK      7          0     PDTC     4 3 1
SNUCTRK      8          0     PDTC     4 3 1
```

Changing datafill for table TRKMEM

Use the standard table editor commands to change datafill for table TRKMEM.

T2 trunk groups

T2 trunk group functionality codes

T2 trunk groups have no functionality codes.

Release applicability

TL03 and up

Prerequisites

T2 trunk groups have no functional group prerequisites.

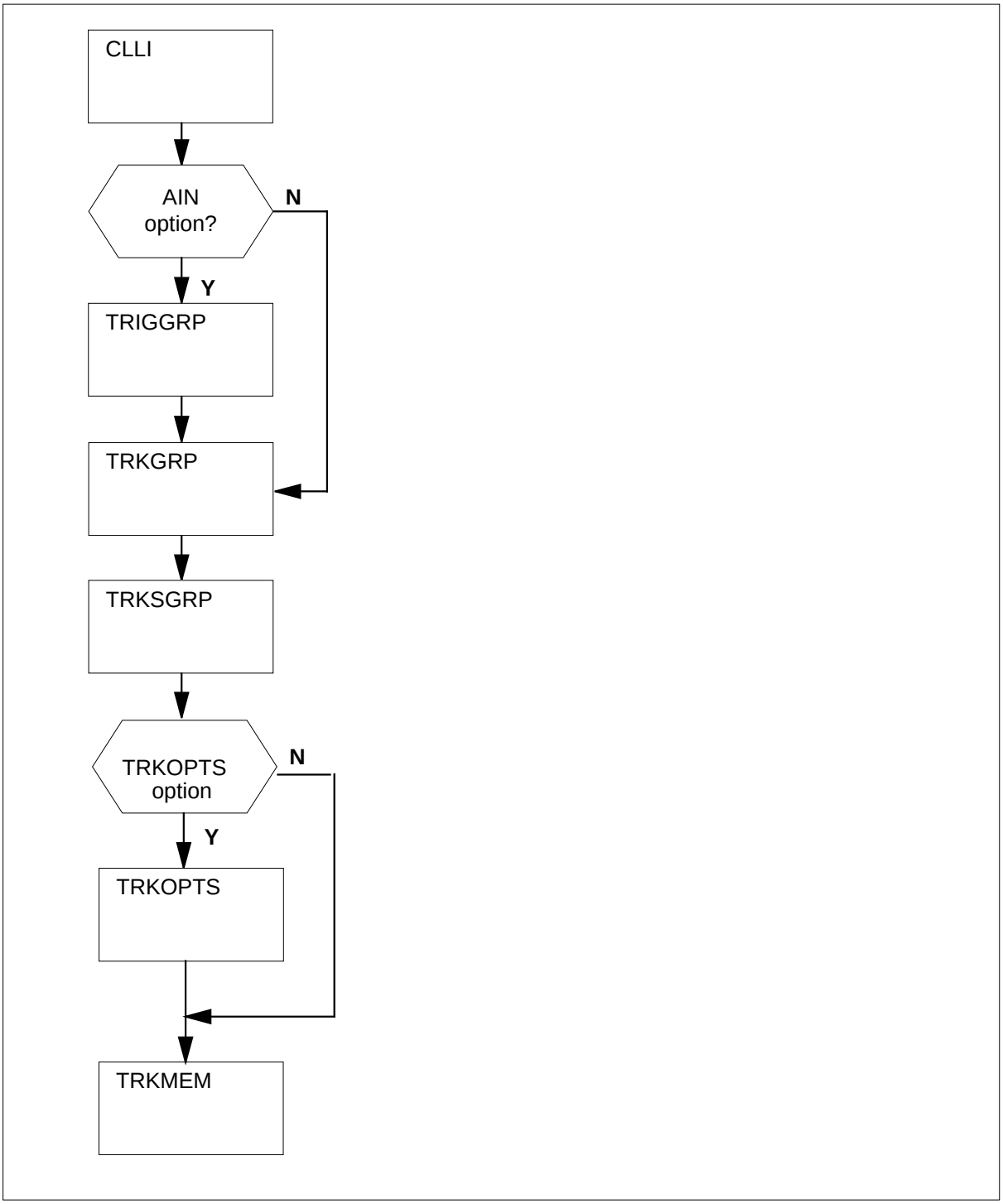
Description

In a DMS-100 office, two-way trunk group type T2 connects with an end or toll office for local, direct, or tandem switching.

The following figure shows the datafill dependencies for T2 trunk groups.

T2 trunk groups (continued)

Datafill dependencies for T2 trunk groups



T2 trunk groups (continued)

Limitations and restrictions

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.

If option DLYFWDXMT is datafilled in table TRKOPTS, all trunk members of that trunk group must terminate to a DTC or an LTC. The exec line up in table LTCINV must be specified as DTCEX, DTCFX, or FXODTC.

Billing

For information on billing, refer to the Bellcore format AMA translations section of this document.

Datafilling office parameters

The following table shows the office parameters used by T2 trunk groups. For more information about office parameters, refer to *Office Parameters Reference Manual.*

Office parameters used by T2 trunk groups

Table name	Parameter name	Explanation and action
OFCVAR	TRK_OOS_CHK_ON	This parameter specifies whether to check that the trunks in a trunk group are out of service before changing the values of specific fields in table TRKGRP by data modification order (DMO).

Datafill sequence

The following table lists the tables used by T2 trunk groups. The tables are listed in the order in which they are to be datafilled.

Tables used by T2 trunk groups (Sheet 1 of 2)

Table	Purpose of table
CLLI	The common language location identifier table uniquely identifies the far end of each announcement, tone, or trunk group.
TRIGGRP	The trigger group table defines advanced intelligent network (AIN) processes that may be applied to T2 trunk groups.
TRKGRP	The trunk group table contains customer-defined data that is associated with each trunk group.

T2 trunk groups (continued)

Tables used by T2 trunk groups (Sheet 2 of 2)

Table	Purpose of table
TRKSGRP	The trunk subgroup table contains supplementary information for each trunk group.
TRKOPTS	The trunk option table contains data defining the options associated with this trunk group.
TRKMEM	The trunk member table specifies the physical location of each trunk that is assigned to one of the trunk groups.

The following table shows sample input for datafilling T2 trunk groups.

Sample input for T2 trunk groups

Table	Sample input
CLLI	OTWAO11MG02 51 350 $
TRIGGRP	AINGRP1 ORIGATT OFFHKIMM DG AINEADIG $ XLA1 $
TRKGRP	OTWAO11MG02 T2 22 ELO NCRT IE MIDL 0 N INC1 NSCR 613 LCL N 7 BCNAME 56KDATA $
TRKSGRP	OTWAO11MG02 0 DS1SIG STD 2W DP WK N 30 30 MF WK 7 0 Y NO NO N N N M 70 UNEQ
TRKMEM	OTWAO11MG02 101 0 DCM 1 2 11 $

T2 trunk groups (continued)

Datafilling table CLLI

The following table shows the datafill specific to T2 for table CLLI. Only those fields that apply directly to T2 are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table CLLI

Field	Subfield or refinement	Entry	Explanation and action
CLLI		alphanumeric (1 to 16 characters)	Common language location identifier. Enter a CLLI code to uniquely identify the far end of the T2 trunk group. Only alphabetic characters, numeric characters, and _ (underscores) can be used to datafill this field. The first character must be alphabetic. For optimum use, a CLLI code must contain not more than 12 characters, as only the first 12 characters are displayed on the MAP display. When a CLLI code is displayed in a log report, the entire 16-character CLLI code appears.

Datafill example for table CLLI

The following example shows sample datafill for table CLLI.

MAP display example for table CLLI

```
CLLI            ADNUM  TRKGRSIZ  ADMININF
-------------------------------------------------------
OTWAO11MG02      51    350       $
```

Changing datafill for table CLLI

Use the standard table editor commands to change datafill for table CLLI.

Datafilling table TRIGGRP

The following table shows the datafill specific to T2 for table TRIGGRP. Only those fields that apply directly to T2 are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table TRIGGRP

Field	Subfield or refinement	Entry	Explanation and action
TRIGNAME		alphanumeric (up to 16 characters)	Advanced intelligent network trigger name. Enter the trigger name used to define a group of trigger processes. Table TRIGGRP associates a symbolic name to a grouping of subscribed trigger detection points (TDP) and their triggers. The symbolic name is bound against a type, an AIN group identifier, to be used in subscription tables.

Datafill example for table TRIGGRP

The following example shows sample datafill for table TRIGGRP.

MAP display example for table TRIGGRP

```
KEY         TRIGGER
                                                                  TRIGDATA
-------------------------------------------------------------------------
AINGRP1     ORIGATT                (OFFHKIM ( DG AINEADIG ) $ XLA1) $
```

Changing datafill for table TRIGGRP

Use the standard table editor commands to change datafill for table TRIGGRP.

T2 trunk groups (continued)

Datafilling table TRKGRP

The following table shows the datafill specific to T2 for table TRKGRP. Only those fields that apply directly to T2 are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table TRKGRP (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 CLLI code that is 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, TOLL, PRTNM, SCRNCL, SNPA, ORIGSRCE, VDEVAR, and OPTIONS. Note that among these subfields, only those directly affected by T2 are described in this table. Refer to table TRKGRP in the data schema section of this document 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.
	DIGSOUT	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.
	TOLL	Y or N	Toll. If the trunk group is outgoing tandem and the connecting office is toll, enter Y. Otherwise, enter N.

T2 trunk groups (continued)

Datafilling table TRKGRP (Sheet 2 of 5)

Field	Subfield or refinement	Entry	Explanation and action
	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 management 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.
	ORIGSRCE	LCL or NLCL	Originating source. Enter the originating source of the call, LCL (local) or NLCL (nonlocal). For more information, refer to “Notes on originating source" in table HNPACONT.HNPACODE in the data schema section of this document.
	VDEVAR	see subfield	Variable digit data. This field consists of subfield VDESEL.

T2 trunk groups (continued)

Datafilling table TRKGRP (Sheet 3 of 5)

Field	Subfield or refinement	Entry	Explanation and action
	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	1 to 15	Minimum number of incoming digit. 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.
	DIGSIN2	1 to 15	Maximum number of incoming digit. 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.

T2 trunk groups (continued)

Datafilling table TRKGRP (Sheet 4 of 5)

Field	Subfield or refinement	Entry	Explanation and action
	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.
	OPTIONS	see subfield	Options. Datafill up to four multiples of subfield OPTION and its refinements. Subfield OPTION consists of AIN, BCNAME, CHGNUM or LNP.
	OPTION	AIN, BCNAME, CHGNUM, or LNP	Option. To specify the AIN option, enter AIN and datafill refinement AINGRP. 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. Enter LNP for Local Number Portability. This provisions the Location Routing Number (LRN) against the trunk group. This option only applies to trunk group types: IT, SC, TI and T2. Option LNP consists of subfield LRN.

T2 trunk groups (continued)

Datafilling table TRKGRP (Sheet 5 of 5)

Field	Subfield or refinement	Entry	Explanation and action
			A Location Routing Number (LRN) is used to indicate the direction in which to route an LNP call. It consists of the Home NPA-NXX dialing pattern that is associated with the switch to which it routes. Enter a $ dollar sign if no options apply.
	LRN	10-digit DN	This is a 10-digit directory number (DN) that denotes a default LRN for the trunk group. This DN is used to generate a Jurisdiction Information Parameter (JIP) if one is not present on the incoming Initial Address Message (IAM) of the trunk group. ***Note:*** Enter a $ dollar sign to indicate that no default LRN is present for the trunk group.
	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 in the data schema section of this document for the list of available bearer capabilities. If field OPTION and refinement BCNAME are left blank, the default bearer capability of the central office is used.
	AINGRP	alphanumeric (1 to 16 characters)	Advanced intelligent network group. If the entry in field OPTION is AIN, enter the AIN group to be used by this trunk group. The AIN group name must be datafilled in table TRIGGRP. Since AIN is subscribed to on a customer group basis, the AIN behavior specified by AINGRP applies to every member of the customer group.

Datafill example for table TRKGRP

The following example shows sample datafill for table TRKGRP.

T2 trunk groups (continued)

MAP display example for table TRKGRP

```
GRPKEY
                                                                GRPINFO
------------------------------------------------------------------------
OTWAO11MG02
T2 22 ELO NCRT IE MIDL 0 N INC1 NSCR 613 LCL N 7 BCNAME 56KDATA $
```

The example tuple shows the following information:

- The code in table CLLI for the trunk group is OTWAO11MG02.
- The trunk group type is T2.
- The incoming and outgoing traffic separation number 22 is assigned to the trunk group.
- The name of the pad group assigned to the trunk group is ELO.
- NCRT is the no-circuit class.
- The traffic class is interoffice IE.
- The select sequence for outgoing calls is most idle trunks (MIDL).
- Field DIGSOUT is 0 (zero), indicating that the digits to be deleted are defined in a route list.
- The trunk group is not toll-protected.
- The standard pretranslation table name is INC1.
- No class-of-service screening is required.
- The trunk group is assigned to serving NPA 613.
- The originating source is local (LCL).
- The number of incoming calls is 5, and the digits 72 are prefixed to the incoming digits to reconstruct the dialed number.
- The bearer capability assigned to the trunk group is 56 kbit/s data.

The following example shows sample datafill for table TRKGRP option LNP.

T2 trunk groups (continued)

MAP display example for table TRKGRP option LNP

```
GRPKEY
                                                                GRPINFO
-------------------------------------------------------------------------

AL7ITICS7
 IT 0 ELO NCRT IC NIL MIDL 909 ATI NSCR 501 000 N N (LNP 9198513361) $
```

Changing datafill for table TRKGRP

If office parameter TRK_OOS_CHK_ON in table OFCVAR is set to Y, all trunks in the trunk group must be taken out of service before changing the value of certain fields in table TRKGRP.

Datafilling table TRKSGRP

The following table shows the datafill specific to T2 for table TRKSGRP. Only those fields that apply directly to T2 are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table TRKSGRP

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 CLLI code assigned to the trunk group as datafilled in table CLLI.
	SGRP	0 or 1	Subgroup number. Enter the subgroup number assigned to the trunk group.

Datafill example for table TRKSGRP

The following example shows sample datafill for table TRKSGRP.

MAP display example for table TRKSGRP

```
           SGRPKEY       CARDCODE
SGRPVAR
                                                        SGRPVAR
------------------------------------------------------------
           OTWAO11MG02 0 DS1SIG
STD
      2W DP WK N 30 30 MF WK 7 0 Y NO NO N N N M 70 UNEQ
```

Changing datafill for table TRKSGRP

Use the standard table editor commands to change datafill for table TRKSGRP.

Datafilling table TRKOPTS

The following table shows the datafill specific to T2 trunk groups for table TRKOPTS. Only those fields that apply directly to T2 trunk groups are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table TRKOPTS

Field	Subfield or refinement	Entry	Explanation and action
CLLI		alphanumeric (1 to 16 characters)	Common language location identifier. Enter the CLLI code of this trunk group.
	OPTNAME	DLYFWD-XMT	Option code, enter DLYFWDXMT, delay forward transmission.
	TIMEOUT	0, 1, 2, 3, 4, or 5	Specifies the maximum time the system will wait for an answer supervision signal before taking down the speech path. A timeout value of 0 will prevent the timeout timer from starting. The forward speech path will be blocked until an answer supervision signal is received or one of the parties goes onhook. Time is specified in minutes.

Datafill example for table TRKOPTS

The following example shows sample datafill for table TRKOPTS.

T2 trunk groups (continued)

MAP display example for table TRKOPTS

```
  CLLI                OPTNAME                OPTINFO

------------------------------------------------------------
T2_MONTREAL         DLYFWDXMT           DLYFWDXMT  2

WARNING: This option will block the forward speech path
until an answer message is returned from the far-end
trunk. If no answer message is received, the forward
speech path will not be established.

TUPLE TO BE CHANGED:
T2_MONTREAL  DLYFWDXMT   DLYFWDXMT    2
ENTER Y TO CONFIRM, N TO REJECT OR E TO EDIT
Y
TUPLE CHANGED
JOURNAL FILE INACTIVE
```

Changing datafill for table TRKOPTS

Use the standard table editor commands to change datafill for table TRKOPTS.

Datafilling table TRKMEM

The following table shows the datafill specific to T2 for table TRKMEM. Only those fields that apply directly to T2 are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table TRKMEM

Field	Subfield or refinement	Entry	Explanation and action
CLLI		alphanumeric (1 to 16 characters)	Common language location identifier. Enter the CLLI code assigned in table CLLI to the trunk group of which the trunk is a member.
EXTRKNM		0 to 9999	External trunk number. Enter the external trunk number that is assigned to the trunk.
SGRP		0 or 1	Subgroup number. Enter the subgroup number to which the trunk is assigned.

Datafill example for table TRKMEM

The following example shows sample datafill for table TRKMEM.

MAP display example for table TRKMEM

```
CLLI          EXTRKNM   SGRP                          MEMVAR

------------------------------------------------------------
OTWAO11MG02   101       0                        DCM 1 2 11 $
```

Changing datafill for table TRKMEM

Use the standard table editor commands to change datafill for table TRKMEM.

T101 trunk groups

Ordering codes

T101 trunk groups have no ordering codes.

Release applicability

TL03 and up

Prerequisites

T101 trunk groups have no functional group prerequisites.

Description

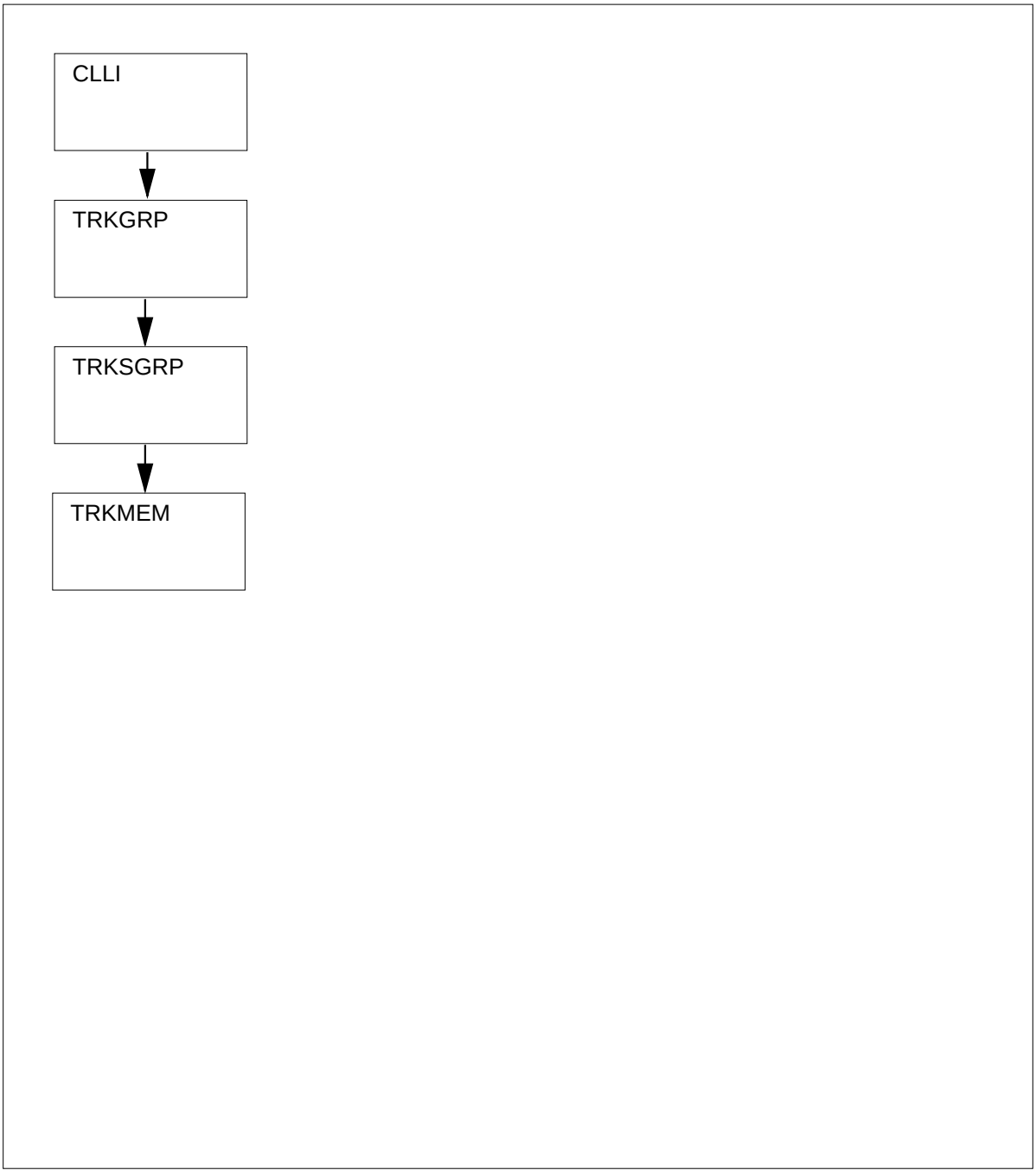
Trunk group type 101 test line (T101), which can be incoming or outgoing, is used for 101 tests in DMS offices.

Incoming 101 test lines use dial pulse (DP), Digitone (DT), and multifrequency (MF) dialing.

The following figure shows the datafill dependencies for T101 trunk groups.

T101 trunk groups (continued)

Datafill dependencies for T101 trunk groups



Limitations and restrictions

T101 trunk groups have no limitations or restrictions.

T101 trunk groups (continued)

Billing

T101 trunk groups do not affect billing.

Datafilling office parameters

The following table shows the office parameters used by T101 trunk groups. For more information about office parameters, refer to *Office Parameters Reference Manual.*

Office parameters used by T101 trunk groups

Table name	Parameter name	Explanation and action
OFCVAR	TRK_OOS_CHK_ON	This parameter specifies whether or not to check that the trunks in a trunk group are out of service before changing the values of specific fields in table TRKGRP by data modification order (DMO).

Datafill sequence

The following table lists the tables used by T101 trunk groups. The tables are listed in the order in which they are to be datafilled.

Tables used by T101 trunk groups

Table	Purpose of table
CLLI	The common language location identifier table uniquely identifies the far end of each announcement, tone, or trunk group.
TRKGRP	The trunk group table contains customer-defined data associated with each trunk group.
TRKSGRP	The trunk subgroup table contains supplementary information for each trunk group.
TRKMEM	The trunk member table specifies the physical location of each trunk assigned to one of the trunk groups.

The following table shows sample input for datafilling T101 trunk groups.

Sample input for T101 trunk groups (Sheet 1 of 2)

Table	Sample input
CLLI	T101GRP1IC 196 32 INC_COMMUNICATION_LINE_MAP
TRKGRP	T101GRP1IC T101 0 NPDGP NCRT IC MI MIDL NPRT NSCR 613

Sample input for T101 trunk groups (Sheet 2 of 2)

Table	Sample input
TRKSGRP	T101GRP1IC 0 5X30AA STD OG NP IM 0 0 NO NO N N N 70 UNEQ
TRKMEM	T101GRP1IC 0 0 TM8 1 16

Datafilling table CLLI

The following table shows the datafill specific to T101 for table CLLI. Only those fields that apply directly to T101 are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table CLLI

Field	Subfield or refinement	Entry	Explanation and action
CLLI		alphanumeric (1 to 16 characters)	Common language location identifier. Enter a CLLI code to uniquely identify the far end of each trunk group. Only alphabetic characters, numeric characters, and _ (underscores) can be used to datafill this field. The first character must be alphabetic. For optimum use, a CLLI code must not contain more than 12 characters, as only the first 12 characters are displayed on the maintenance and administration position (MAP). When a CLLI code is displayed in a log report, the entire 16-character CLLI code appears.

Datafill example for table CLLI

The following example shows sample datafill for table CLLI.

MAP display example for table CLLI

```
CLLI         ADNUM  TRKGRSIZ    ADMININF
-------------------------------------------------------
T101GRP1IC   196    32          INC_COMMUNICATION_LINE_MAP
```

T101 trunk groups (continued)

Changing datafill for table CLLI

Use the standard table editor commands to change datafill for table CLLI.

Datafilling table TRKGRP

The following table shows the datafill specific to T101 for table TRKGRP. Only those fields that apply directly to T101 are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table TRKGRP (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 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, DIR, TRAFCLS, SELSEQ, PRTNM, SCRNCL, and SNPA. Note that among these subfields, only those directly affected by T101 are described below. Refer to section “General field information" in table TRKGRP in the data schema section of this document for information on an alternate structure for this field that results from the datafill of table CUSTFLDS.
	GRPTYP	T101	Group type. Enter T101 to specify the group type for 101 test lines.
	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).

Datafilling table TRKGRP (Sheet 2 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 DMO.
	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.

Datafill example for table TRKGRP

The following example shows sample datafill for table TRKGRP.

MAP display example for table TRKGRP

```
GRPKEY     GRPINFO
-------------------------------------------------------

T101GRP1IC  T101 0 NPDGP NCRT OG MI MIDL NPRT NSCR 619
```

Changing datafill for table TRKGRP

If office parameter TRK_OOS_CHK_ON in table OFCVAR is set to Y, all trunks in the trunk group must be taken out of service before changing the value of certain fields in table TRKGRP.

T101 trunk groups (continued)

Datafilling table TRKSGRP

The following table shows the datafill specific to T101 for table TRKSGRP. Only those fields that apply directly to T101 are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table TRKSGRP

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 CLLI code assigned to the trunk group as datafilled in table CLLI.
	SGRP	numeric (0 or 1)	Subgroup number. Enter the subgroup number assigned to the trunk group.

Datafill example for table TRKSGRP

The following example shows sample datafill for table TRKSGRP.

MAP display example for table TRKSGRP

```
SGRPKEY         CARDCODE
SGRPVAR      SGRPVAR
-------------------------------------------------------
T101GRP1IC 0    5X30AA
STD          OG NP IM 0 0 NO NO N N N 70 UNEQ
```

Changing datafill for table TRKSGRP

Use the standard table editor commands to change datafill for table TRKSGRP.

Datafilling table TRKMEM

The following table shows the datafill specific to T101 for table TRKMEM. Only those fields that apply directly to T101 are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table TRKMEM

Field	Subfield or refinement	Entry	Explanation and action
CLLI		alphanumeric (1 to 16 characters)	Common language location identifier. Enter the CLLI code assigned in table CLLI to the trunk group of which the trunk is a member.
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.
SGRP		numeric (0 to 1)	Subgroup number. Enter the subgroup number to which the trunk is assigned.

Datafill example for table TRKMEM

The following example shows sample datafill for table TRKMEM.

MAP display example for table TRKMEM

```
CLLI          EXTRKNM   SGRP                MEMVAR
-------------------------------------------------------
T101GRP1IC     0         0                  TM8 1 16
```

Changing datafill for table TRKMEM

Use the standard table editor commands to change datafill for table TRKMEM.

T105 trunk groups

Ordering codes

T105 trunk groups have no ordering codes.

Release applicability

TL03 and up

Prerequisites

T105 trunk groups have no functional group prerequisites.

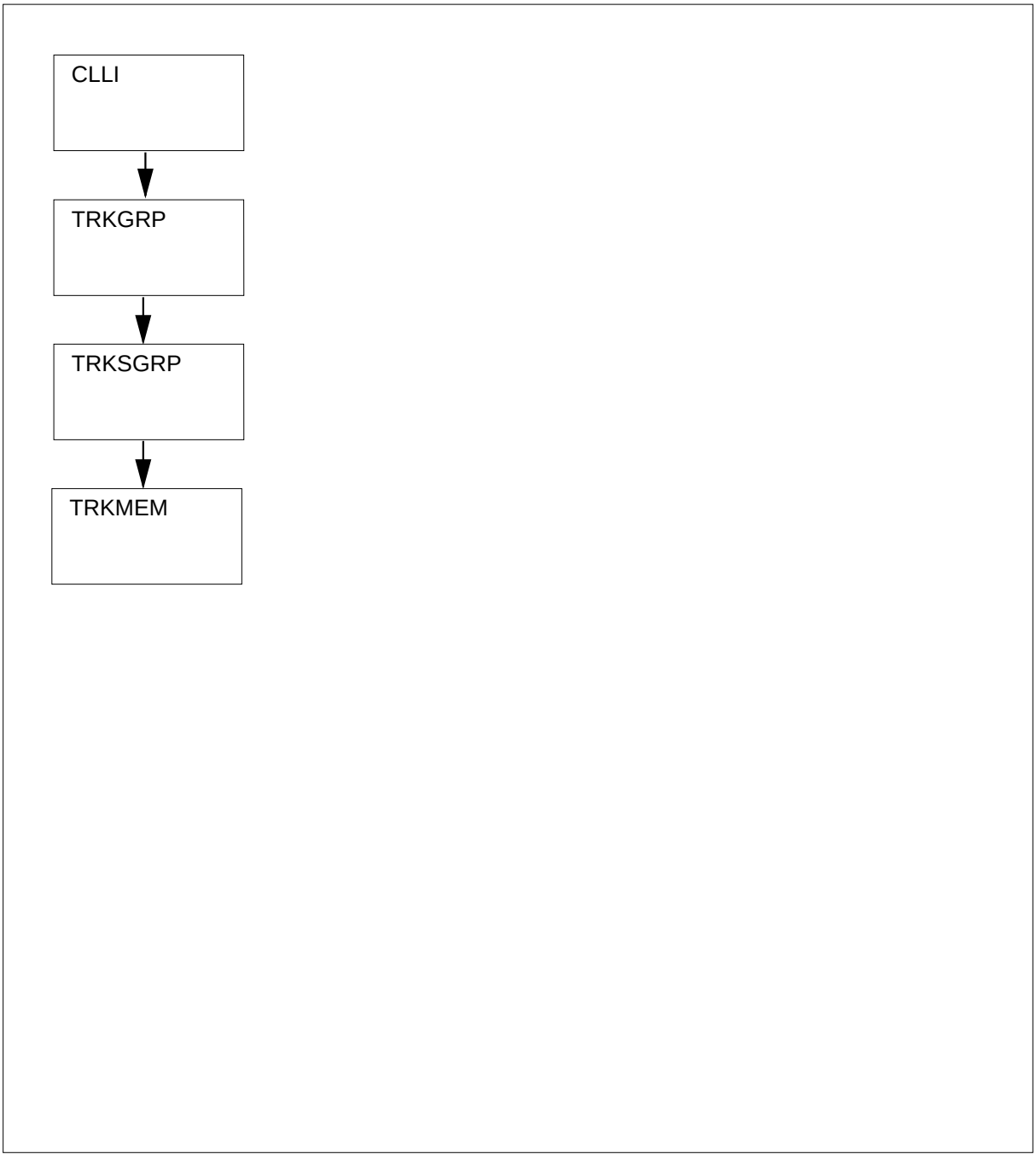
Description

In a DMS office equipped with package ROTL, trunk group type 105 test line (T105) is used for terminating 105 test lines.

The following figure shows the datafill dependencies for T105 trunk groups.

T105 trunk groups (continued)

Datafill dependencies for T105 trunk groups



T105 trunk groups (continued)

Limitations and restrictions

The following limitations or restrictions apply to T105 trunk groups.

- In offices without the ROTL package, terminating 105 test line must be datafilled as trunk group type IT (incoming trunk).

Billing

T105 trunk groups do not affect billing.

Datafilling office parameters

T105 trunk groups do not affect office parameters.

Datafill sequence

The following table lists the tables used by T105 trunk groups. The tables are listed in the order in which they are to be datafilled.

Tables used by T105 trunk groups

Table	Purpose of table
CLLI	The common language location identifier table uniquely identifies the far end of each announcement, tone, or trunk group.
TRKGRP	The trunk group table contains customer-defined data associated with each trunk group.
TRKSGRP	The trunk subgroup table contains supplementary information for each trunk group.
TRKMEM	The trunk member table specifies the physical location of each trunk assigned to one of the trunk groups.

The following table shows sample input for datafilling T105 trunk groups.

Sample input for T105 trunk groups

Table	Sample input
CLLI	TERM105 52 0 MI
TRKGRP	TERM105 T105 27 TLD NCOT OG MI MIDL 613 NPRT NSCCR 613 000 Y N
TRKSGRP	TERM105 0 3X91AA STD OG NP IM 0 0 NO NO N N 70 UNEQ
TRKMEM	TERM105 11 0 TM 1 1 1

Datafilling table CLLI

The following table shows the datafill specific to T105 for table CLLI. Only those fields that apply directly to T105 are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table CLLI

Field	Subfield or refinement	Entry	Explanation and action
CLLI		alphanumeric (1 to 16 characters)	Common language location identifier. Enter a CLLI code to uniquely identify the far end of each T105 trunk group. If ROTL equipment is present, enter the fixed psuedo CLLI TERM105. Only alphabetic characters, numeric characters, and _ (underscores) can be used to datafill this field. The first character must be alphabetic. For optimum use, a CLLI code must not contain more than 12 characters, as only the first 12 characters are displayed on the maintenance and administration position (MAP). When a CLLI code is displayed in a log report, the entire 16-character CLLI code appears.

Datafill example for table CLLI

The following example shows sample datafill for table CLLI.

MAP display example for table CLLI

```
CLLI              ADNUM  TRKGRSIZ  ADMININF
-------------------------------------------------------
TERM105            52     0        MI
```

Changing datafill for table CLLI

Use the standard table editor commands to change datafill for table CLLI.

T105 trunk groups (continued)

Datafilling table TRKGRP

The following table shows the datafill specific to T105 for table TRKGRP. Only those fields that apply directly to T105 are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table TRKGRP (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, NCCLS, DIR, TRAFCLS, SELSEQ, CONNGNPA, PRTNM, SCRNCL, SNPA, TERMTC, TOLLCOMP, and CCWKVLD. Note that among these subfields, only those directly affected by T105 are described below. Refer to section “General field information" in table TRKGRP in the data schema section of this document 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.
	DIR	OG	Direction. Enter OG to specify that the trunk group is outgoing.
	CONNGNPA	numeric (three digits)	Connecting NPA. If the outpulsed digits are translated, enter the NPA code of the switch.
	SNPA	numeric (three digits)	Serving numbering plan area. Enter the serving NPA code to which the trunk group belongs.
	TERMTC	numeric (three 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.

Datafilling table TRKGRP (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
	TOLLCOMP	N or Y	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.

Datafill example for table TRKGRP

The following example shows sample datafill for table TRKGRP.

MAP display example for table TRKGRP

```
GRPKEY
GRPINFO
------------------------------------------------------
TERM105
T105 27 TLD NCOT OG MI MIDL 613 NPRT NSCCR 613 000 Y N
```

Changing datafill for table TRKGRP

Use the standard table editor commands to change datafill for table TRKGRP.

Datafilling table TRKSGRP

The following table shows the datafill specific to T105 for table TRKSGRP. Only those fields that apply directly to T105 are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table TRKSGRP (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.

T105 trunk groups (continued)

Datafilling table TRKSGRP (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
	CLLI	alphanumeric (1 to 16 characters)	Common language location identifier. Enter the CLLI code assigned to the trunk group as datafilled in table CLLI.
	SGRP	numeric (0 or 1)	Subgroup number. Enter the subgroup number assigned to the trunk group.

Datafill example for table TRKSGRP

The following example shows sample datafill for table TRKSGRP.

MAP display example for table TRKSGRP

```
SGRPKEY    CARDCODE
SGRPVAR  SGRPVAR
-------------------------------------------------------
TERM105 0  3X91AA
STD      OG NP IM 0 0 NO NO N N  70 UNEQ
```

Changing datafill for table TRKSGRP

Use the standard table editor commands to change datafill for table TRKSGRP.

Datafilling table TRKMEM

The following table shows the datafill specific to T105 for table TRKMEM. Only those fields that apply directly to T105 are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table TRKMEM

Field	Subfield or refinement	Entry	Explanation and action
CLLI		alphanumeric (1 to 16 characters)	Common language location identifier. Enter the CLLI code assigned in table CLLI to the trunk group of which the trunk is a member.
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 T105OD option, the external trunk number must be unique over all trunks and lines using the same T105OD group.
SGRP		numeric (0 to 1)	Subgroup number. Enter the subgroup number to which the trunk is assigned.

Datafill example for table TRKMEM

The following example shows sample datafill for table TRKMEM.

MAP display example for table TRKMEM

```
CLLI            EXTRKNM   SGRP           MEMVAR
-------------------------------------------------------
TERM105         11        0              TM 1 1 1
```

Changing datafill for table TRKMEM

Use the standard table editor commands to change datafill for table TRKMEM.

TD trunk groups

Ordering codes

TD trunk groups have no ordering codes.

Release applicability

TL03 and up

Prerequisites

TD trunk groups have no functional group prerequisites.

Description

In a DMS end office, incoming and outgoing trunk group type Test Desk (TD) connects with a test desk (for example, #14 LTD, #3 LTC). Members of these trunk groups have PEC 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 in table TRKGRP 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:

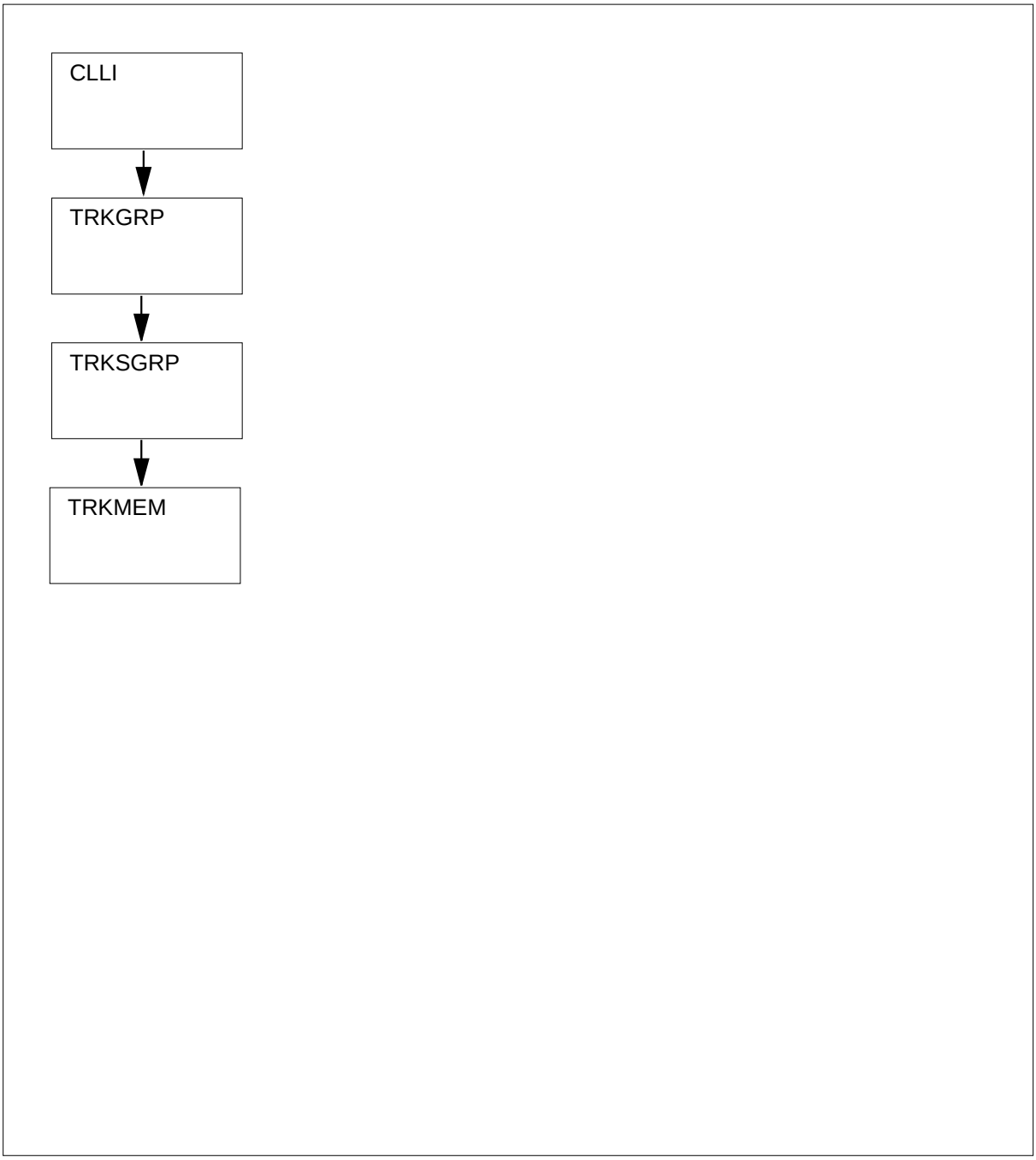
- the test desk closes its tip-and-ring loop
- the line goes off-hook

Trunk group type TD can, under certain circumstances, be used for verification. Refer to table TRKGRP (VR) in the data schema section of this document for more information.

The following figure shows the datafill dependencies for TD trunk groups.

TD trunk groups (continued)

Datafill dependencies for TD trunk groups



Limitations and restrictions

TD trunk groups have no limitations or restrictions.

TD trunk groups (continued)

Billing

For information on billing, refer to the Bellcore format AMA translations section of this document.

Datafilling office parameters

The following table shows the office parameters used by TD trunk groups. For more information about office parameters, refer to *Office Parameters Reference Manual.*

Office parameters used by TD trunk groups

Table name	Parameter name	Explanation and action
OFCVAR	TRK_OOS_CHK_ON	This parameter specifies whether or not to check that the trunks in a trunk group are out of service before changing the values of specific fields in table TRKGRP by data modification order (DMO).

Datafill sequence

The following table lists the tables used by TD trunk groups. The tables are listed in the order in which they are to be datafilled.

Tables used by TD trunk groups

Table	Purpose of table
CLLI	The common language location identifier table uniquely identifies the far end of each announcement, tone, or trunk group.
TRKGRP	The trunk group table contains customer-defined data associated with each trunk group.
TRKSGRP	The trunk subgroup table contains supplementary information for each trunk group.
TRKMEM	The trunk member table specifies the physical location of each trunk assigned to one of the trunk groups.

The following table shows sample input for datafilling TD trunk groups.

Sample input for TD trunk groups

Table	Sample input
CLLI	MLTTRK 56 2 SATOVER_CLLI
TRKGRP	MLTTRK TD 0 NPDGP NCOT NIL MIDL IC NPRT NSCR 619 LCL N N MLT INTRCVR N
TRKSGRP	MLTTRK 0 2X90AD STD IC MF XD N 30 4 NO SX N N N M UNEQ
TRKMEM	MLTTRK 0 0 TM 3 4

Datafilling table CLLI

The following table shows the datafill specific to TD for table CLLI. Only those fields that apply directly to TD are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table CLLI

Field	Subfield or refinement	Entry	Explanation and action
CLLI		alphanumeric (1 to 16 characters)	Common language location identifier. Enter a CLLI code to uniquely identify the far end of the trunk group. Only alphabetic characters, numeric characters, and _ (underscores) can be used to datafill this field. The first character must be alphabetic. For optimum use, a CLLI code must not contain more than 12 characters, as only the first 12 characters are displayed on the maintenance and administration position (MAP). When a CLLI code is displayed in a log report, the entire 16-character CLLI code appears.

Datafill example for table CLLI

The following example shows sample datafill for table CLLI.

TD trunk groups (continued)

MAP display example for table CLLI

```
CLLI        ADNUM   TRKGRSIZ                ADMININF
-------------------------------------------------------
MLTTRK       56      2                      SATOVER_CLLI
```

Changing datafill for table CLLI

Use the standard table editor commands to change datafill for table CLLI.

Datafilling table TRKGRP

The following table shows the datafill specific to TD for table TRKGRP. Only those fields that apply directly to TD are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table TRKGRP (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 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, SELSEQ, TRKDIR, PRTNM, SCRNCL, SNPA, ORIGSCRE, VDEVAR, TDTYPE, and BARGE. Note that among these subfields, only those directly affected by TD are described below. Refer to section “General field information" in table TRKGRP in the data schema section of this document 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.

TD trunk groups (continued)

Datafilling table TRKGRP (Sheet 2 of 4)

Field	Subfield or refinement	Entry	Explanation and action
	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).
	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.
	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 in the data schema section of this document.
	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 standard pretranslation, enter Y and datafill refinements DIGSIN1 and DIGSIN2. Otherwise, enter N and datafill refinement DIGREGEN.
	DIGSIN1	numeric (1 to 18)	Minimum number of incoming digits. Datafill this field if the entry in subfield VDESEL is Y. Enter the minimum number of incoming digits received on 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.

TD trunk groups (continued)

Datafilling table TRKGRP (Sheet 3 of 4)

Field	Subfield or refinement	Entry	Explanation and action
	DIGSIN2	numeric (1 to 18)	Maximum number of incoming digits. Datafill this field if the entry in subfield VDESEL is Y. Enter the maximum number of incoming digits received on 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.
	DIGREGEN	numeric (1 to 4 digits) or N	Digits to be regenerated. Datafill this field 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.
	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 MLT and datafill refinements DGTTST and TKTYP. The default value for TD trunks is TSTDSK.

Datafilling table TRKGRP (Sheet 4 of 4)

Field	Subfield or refinement	Entry	Explanation and action
	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.
	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.

Datafill example for table TRKGRP

The following example shows sample datafill for table TRKGRP.

MAP display example for table TRKGRP

```
GRPKEY
GRPINFO
------------------------------------------------------------
MLTTRK
TD 0 NPDGP NCOT NIL MIDL IC NPRT NSCR 619 LCL N N MLT
INTRCVR N
```

Changing datafill for table TRKGRP

If office parameter TRK_OOS_CHK_ON in table OFCVAR is set to Y, all trunks in the trunk group must be taken out of service before changing the value of certain fields in table TRKGRP.

TD trunk groups (continued)

Datafilling table TRKSGRP

The following table shows the datafill specific to TD for table TRKSGRP. Only those fields that apply directly to TD are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table TRKSGRP

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 CLLI code assigned to the trunk group as datafilled in table CLLI.
	SGRP	numeric (0 or 1)	Subgroup number. Enter the subgroup number assigned to the trunk group.

Datafill example for table TRKSGRP

The following example shows sample datafill for table TRKSGRP.

MAP display example for table TRKSGRP

```
SGRPKEY    CARDCODE
SGRPVAR    SGRPVAR
-------------------------------------------------------
MLTTRK 0   2X90AD
STD        IC MF XD N 30 4 NO SX N N N M UNEQ
```

Changing datafill for table TRKSGRP

Use the standard table editor commands to change datafill for table TRKSGRP.

Datafilling table TRKMEM

The following table shows the datafill specific to TD for table TRKMEM. Only those fields that apply directly to TD are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table TRKMEM

Field	Subfield or refinement	Entry	Explanation and action
CLLI		alphanumeric (1 to 16 characters)	Common language location identifier. Enter the CLLI code assigned in table CLLI to the trunk group of which the trunk is a member.
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.
SGRP		numeric (0 to 1)	Subgroup number. Enter the subgroup number to which the trunk is assigned.

Datafill example for table TRKMEM

The following example shows sample datafill for table TRKMEM.

MAP display example for table TRKMEM

```
CLLI          EXTRKNM   SGRP     MEMVAR
-------------------------------------------------------
MLTTRK         0        0        TM 3 4
```

Changing datafill for table TRKMEM

Use the standard table editor commands to change datafill for table TRKMEM.

TDDO trunk groups

Ordering codes

TDDO trunk groups have no ordering codes.

Release applicability

TL03 and up

Prerequisites

TDDO trunk groups have no functional group prerequisites.

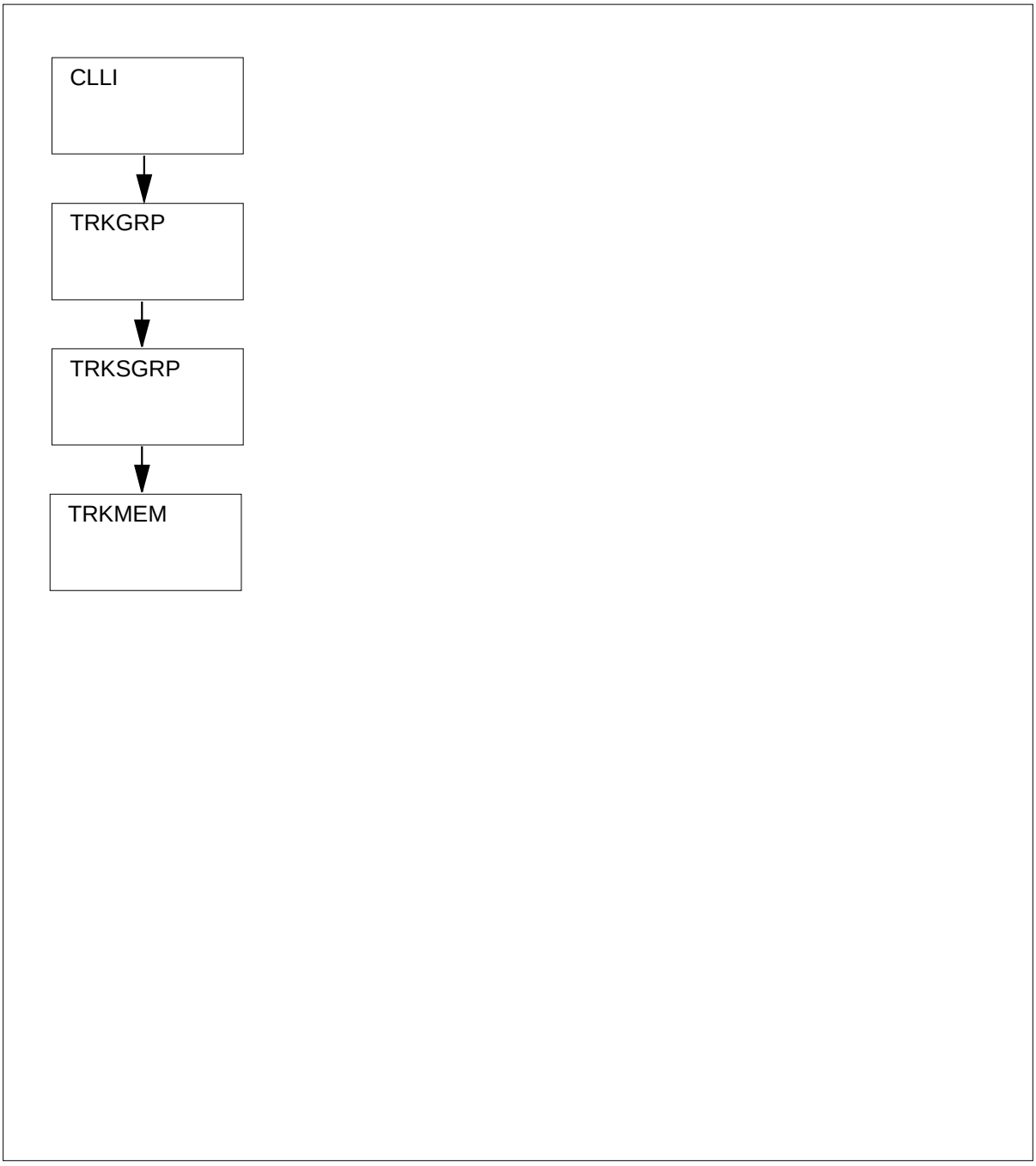
Description

Trunk group type TDDO (tandem two-stage direct-dial overseas) 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 following figure shows the datafill dependencies for TDDO trunk groups.

TDDO trunk groups (continued)

Datafill dependencies for TDDO trunk groups



TDDO trunk groups (continued)

Limitations and restrictions

The following limitations and restrictions apply to TDDO trunk groups:

- The outgoing pulsing and start signal types in table TRKSGRP must be no pulsing (NP) and immediate dial (IM), respectively.

Billing

For information on billing, refer to the Bellcore format AMA translations section of this document.

Datafilling office parameters

The following table shows the office parameters used by TDDO trunk groups. For more information about office parameters, refer to *Office Parameters Reference Manual.*

Office parameters used by TDDO trunk groups

Table name	Parameter name	Explanation and action
OFCVAR	TRK_OOS_CHK_ON	This parameter specifies whether to check that the trunks in a trunk group are out of service before changing the values of specific fields in table TRKGRP by data modification order (DMO).

Datafill sequence

The following table lists the tables used by TDDO trunk groups. The tables are listed in the order in which they are to be datafilled.

Tables used by TDDO trunk groups

Table	Purpose of table
CLLI	The common language location identifier table uniquely identifies the far end of each announcement, tone, or trunk group.
TRKGRP	The trunk group table contains customer-defined data associated with each trunk group.
TRKSGRP	The trunk subgroup table contains supplementary information for each trunk group.
TRKMEM	The trunk member table specifies the physical location of each trunk assigned to one of the trunk groups.

TDDO trunk groups (continued)

The following table shows sample input for datafilling TDDO trunk groups.

Sample input for TDDO trunk groups

Table	Sample input
CLLI	OTWAON0202T0 51 75 MI
TRKGRP	OTWAON0202T0 TDDO 20 TLD NCRT IC MIDL IT N 613 NSCR NPRT 000 000
TRKSGRP	OTWAON0202T0 0 DS1SIG STD OG NP IM 0 0 NO NO N Y N 70 UNEQ
TRKMEM	OTWAON0202T0 58 0 DTC 41 5 12

Datafilling table CLLI

The following table shows the datafill specific to TDDO for table CLLI. Only those fields that apply directly to TDDO are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table CLLI

Field	Subfield or refinement	Entry	Explanation and action
CLLI		alphanumeric (1 to 16 characters)	Common language location identifier. Enter a CLLI code to uniquely identify the far end of the TDDO trunk group. Only alphabetic characters, numeric characters, and _ (underscores) can be used to datafill this field. The first character must be alphabetic. For optimum use, a CLLI code must contain not more than 12 characters, as only the first 12 characters are displayed on the MAP (maintenance and administration position) display. When a CLLI code is displayed in a log report, the entire 16-character CLLI code appears.

Datafill example for table CLLI

The following example shows sample datafill for table CLLI.

TDDO trunk groups (continued)

MAP display example for table CLLI

```
CLLI            ADNUM     TRKGRSIZ         ADMININF
-------------------------------------------------------
OTWAON0202T0     51        75               MI
```

Changing datafill for table CLLI

Use the standard table editor commands to change datafill for table CLLI.

Datafilling table TRKGRP

The following table shows the datafill specific to TDDO for table TRKGRP. Only those fields that apply directly to TDDO are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table TRKGRP (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 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, and TDDO_VDATA. Note that among these subfields, only those directly affected by TDDO are described below. Refer to table TRKGRP in the data schema section of this document 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.
	TDDO_ VDATA	see subfields	Tandem two-stage direct-dial overseas data. This field consists of subfields DIR and SELSEQ, and refinements.

Datafilling table TRKGRP (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
	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.
	TOLLCOMP	Y or N	Toll completion. Datafill this field only if the value in field DIR is 2W. If the trunk group is toll completing, enter Y. Otherwise, enter N.
	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.
	PRTNM	alphanumeric (1 to 4 characters) or NPRT	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 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.

Datafill example for table TRKGRP

The following example shows sample datafill for table TRKGRP.

TDDO trunk groups (continued)

MAP display example for table TRKGRP

```
GRPKEY        GRPINFO
------------------------------------------------------------------------
OTWAON0202T0   TDDO 20 TLD NCRT IC MIDL IT N 613 NSCR NPRT 000 000
```

Changing datafill for table TRKGRP

If office parameter TRK_OOS_CHK_ON in table OFCVAR is set to Y, all trunks in the trunk group must be taken out of service before changing the value of certain fields in table TRKGRP.

Datafilling table TRKSGRP

The following table shows the datafill specific to TDDO for table TRKSGRP. Only those fields that apply directly to TDDO are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table TRKSGRP

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 CLLI code assigned to the trunk group as datafilled in table CLLI.
	SGRP	0 or 1	Subgroup number. Enter the subgroup number assigned to the trunk group.
SGRPVAR	DIR	OG or 2W	Direction. Enter the TDDO trunk group direction: OG (outgoing), or 2W (two way).
	OPULSTYP	NP	Outgoing type of pulsing. Enter NP (no pulsing).
	OSTARTSG	IM	Outgoing start dial signal. Enter IM (immediate dial).

Datafill example for table TRKSGRP

The following example shows sample datafill for table TRKSGRP.

MAP display example for table TRKSGRP

```
SGRPKEY            CARDCODE
SGRPVAR        SGRPVAR
-------------------------------------------------------
OTWAON0202T0 0     DS1SIG
STD            OG NP IM 0 0 NO NO N Y N 70 UNEQ
```

Changing datafill for table TRKSGRP

Use the standard table editor commands to change datafill for table TRKSGRP.

Datafilling table TRKMEM

The following table shows the datafill specific to TDDO for table TRKMEM. Only those fields that apply directly to TDDO are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table TRKMEM

Field	Subfield or refinement	Entry	Explanation and action
CLLI		alphanumeric (1 to 16 characters)	Common language location identifier. Enter the CLLI code assigned in table CLLI to the trunk group of which the trunk is a member.
EXTRKNM		0 to 9999	External trunk number. Enter the external trunk number that is assigned to the trunk.
SGRP		0 to 1	Subgroup number. Enter the subgroup number to which the trunk is assigned.

Datafill example for table TRKMEM

The following example shows sample datafill for table TRKMEM.

MAP display example for table TRKMEM

```
CLLI              EXTRKNM  SGRP        MEMVAR
-------------------------------------------------------
OTWAON0202T0       58      0           DTC 41 5 12
```

TDDO trunk groups (end)

Changing datafill for table TRKMEM

Use the standard table editor commands to change datafill for table TRKMEM.

TI trunk groups

TI trunk group functionality codes

TI trunk groups have no functionality codes.

Release applicability

TL03 and up

Prerequisites

TI trunk groups have no functional group prerequisites.

Description

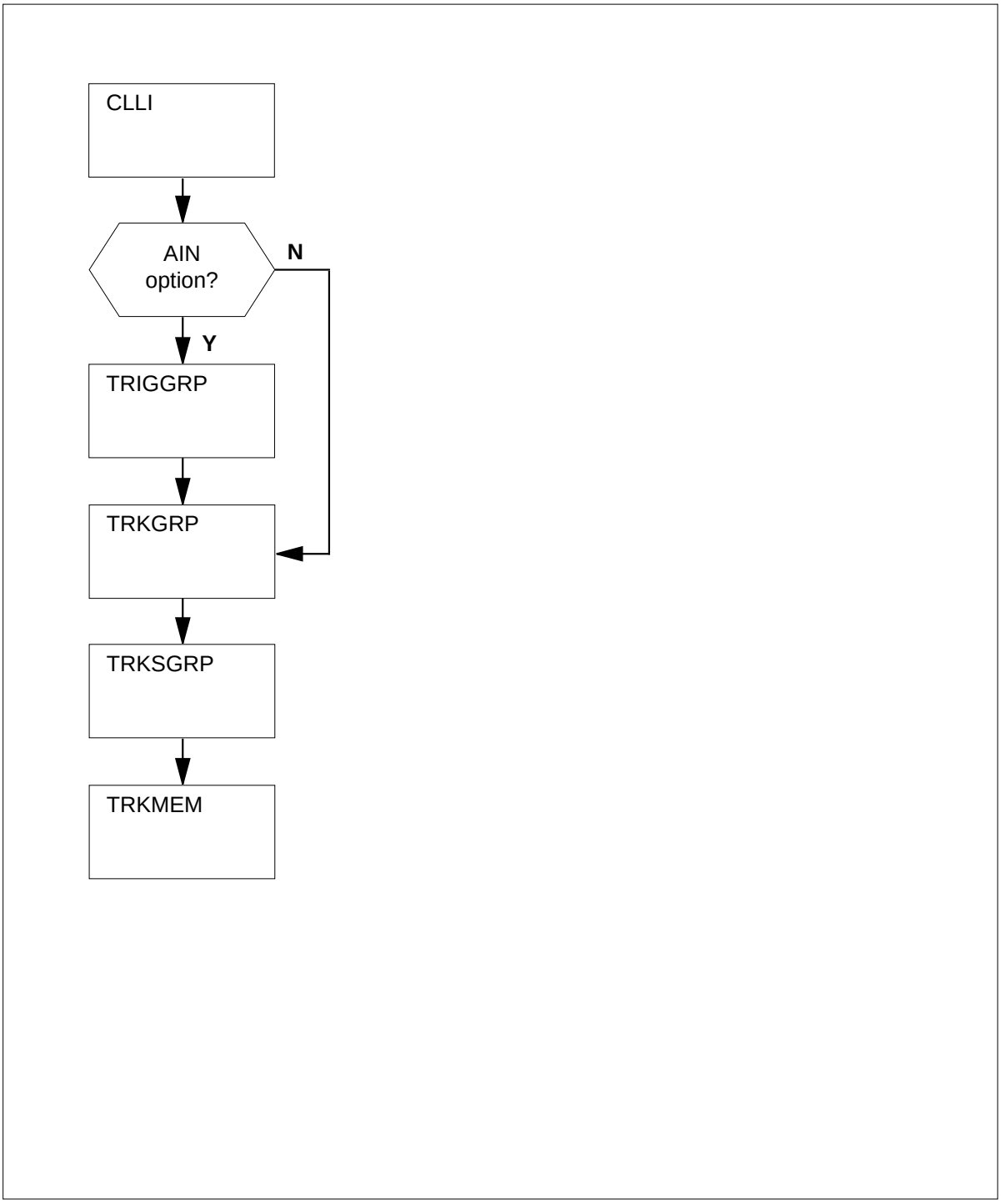
In a DMS-100 end office, incoming trunk group type TI connects with an end or toll office for local, direct, or tandem switching.

The following figure shows the datafill dependencies for TI trunk groups.

If the advanced intelligent network (AIN) option is specified for the trunk group in table TRKGRP, an AIN group name is referenced from table TRIGGRP.

TI trunk groups (continued)

Datafill dependencies for TI trunk groups



Limitations and restrictions

If the trunk group uses dial pulse signaling and trunk-to-trunk overlap outpulsing, the variable number of digits format is required. In table TRKGRP, the minimum number of digits specified is the number of digits received before overlap outpulsing starts.

Billing

For information on billing, refer to the Bellcore format AMA translations section of this document.

Datafilling office parameters

The following table shows the office parameters used by TI trunk groups. For more information about office parameters, refer to *Office Parameters Reference Manual.*

Office parameters used by TI trunk groups (Sheet 1 of 2)

Table name	Parameter name	Explanation and action
OFCVAR	TRK_OOS_CHK_ON	This parameter specifies whether to check that the trunks in a trunk group are out of service before changing the values of specific fields in table TRKGRP by data modification order (DMO).
OFCSTD	RP_INTER_SELECTION_TIMER	This parameter is required in switching units with digital trunk groups of trunk group type TI or TO which have revertive pulsing. It specifies the maximum time between two selections, in 160-ms intervals. The range of the parameter is 0 to 255. The default value is 50 (8 s).

TI trunk groups (continued)

Office parameters used by TI trunk groups (Sheet 2 of 2)

Table name	Parameter name	Explanation and action
	RP_INTRA_SELECTION_TIMER	This parameter is required in switching units with digital trunk groups of trunk group type TI or TO which have revertive pulsing. It specifies the maximum time setup to transmit a selection, in 10-ms intervals. The range of the parameter is 0 to 255. The default value is 10 (100 ms).
	RP_OVERALL_TIMER	This parameter is required in switching units with digital trunk groups of trunk group type TI or TO which have revertive pulsing. It specifies the maximum time setup for the revertive pulsing sequence to complete, in 160-ms intervals. The range of the parameter is 0 to 255. The default value is 125 (20 s).

Datafill sequence

The following table lists the tables used by TI trunk groups. The tables are listed in the order in which they are to be datafilled.

Tables used by TI trunk groups

Table	Purpose of table
CLLI	The common language location identifier table uniquely identifies the far end of each announcement, tone, or trunk group.
TRIGGRP	The trigger group table defines advanced intelligent network (AIN) behaviour that may be applied to TI trunk groups.
TRKGRP	The trunk group table contains customer-defined data associated with each trunk group.
TRKSGRP	The trunk subgroup table contains supplementary information for each trunk group.
TRKMEM	The trunk member table specifies the physical location of each trunk assigned to one of the trunk groups.

The following table shows sample input for datafilling TI trunk groups.

Sample input for TI trunk groups

Table	Sample input
CLLI	OTWAON2303T1 51 350 $
TRIGGRP	AINGRP1 ORIGATT OFFHKIMM DG AINEADIG $ XLA1 $
TRKGRP	OTWAON2303T1 TI 20 ELO NCRT IE INC3 NSCR 613 NLCL N 72 BCNAME 56KDATA
TRKSGRP	OTWAON2303T1 0 DS1SIG STD IC MF WK N 10 10 TR NO N N N C UNEQ
TRKMEM	OTWAON2303T1 102 0 DCM 1 1 17 $

Datafilling table CLLI

The following table shows the datafill specific to TI for table CLLI. Only those fields that apply directly to TI are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table CLLI

Field	Subfield or refinement	Entry	Explanation and action
CLLI		alphanumeric (1 to 16 characters)	Common language location identifier. Enter a CLLI code to uniquely identify the far end of the TI trunk group. Only alphabetic characters, numeric characters, and _ (underscores) can be used to datafill this field. The first character must be alphabetic. For optimum use, a CLLI code must contain not more than 12 characters, as only the first 12 characters are displayed on the MAP (maintenance and administration position) display. When a CLLI code is displayed in a log report, the entire 16-character CLLI code appears.

Datafill example for table CLLI

The following example shows sample datafill for table CLLI.

TI trunk groups (continued)

MAP display example for table CLLI

```
CLLI           ADNUM   TRKGRSIZ   ADMININF
-------------------------------------------------------
OTWAON2303T1    51      350       $
```

Changing datafill for table CLLI

Use the standard table editor commands to change datafill for table CLLI.

Datafilling table TRIGGRP

The following table shows the datafill specific to TI for table TRIGGRP. Only those fields that apply directly to TI are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table TRIGGRP

Field	Subfield or refinement	Entry	Explanation and action
TRIGNAME		alphanumeric (up to 16 characters)	Advanced intelligent network trigger name. Enter the trigger name used to define a group of trigger behaviors. Table TRIGGRP associates a symbolic name to a grouping of subscribed trigger detection points (TDP) and their triggers. The symbolic name is bound against a type, an AIN group identifier, to be used in subscription tables.

Datafill example for table TRIGGRP

The following example shows sample datafill for table TRIGGRP.

MAP display example for table TRIGGRP

```
KEY          TRIGGER
                                                          TRIGDATA
-----------------------------------------------------------------
AINGRP1      ORIGATT
                                  (OFFHKIM ( DG AINEADIG ) $ XLA1) $
```

Changing datafill for table TRIGGRP

Use the standard table editor commands to change datafill for table TRIGGRP.

Datafilling table TRKGRP

The following table shows the datafill specific to TI for table TRKGRP. Only those fields that apply directly to TI are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table TRKGRP (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 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, VDEVAR, and OPTIONS. Note that among these subfields, only those directly affected by TI are described below. Refer to table TRKGRP in the data schema section of this document 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.
	PRTNM	alphanumeric (1 to 4 characters) or NPRT	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 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.

TI trunk groups (continued)

Datafilling table TRKGRP (Sheet 2 of 5)

Field	Subfield or refinement	Entry	Explanation and action
	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 “Notes on originating source" in table HNPACONT.HNPACODE in the data schema section of this document.
	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.

Datafilling table TRKGRP (Sheet 3 of 5)

Field	Subfield or refinement	Entry	Explanation and action
	DIGSIN1	1 to 18	Minimum number of incoming digits. If the entry in field VDESEL is Y, enter the minimum number of incoming digits that can be 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.
	DIGSIN2	1 to 18	Maximum number of incoming digits. If the entry in field VDESEL is Y, enter the maximum number of incoming digits that can be 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 field VDESEL is N, enter the digit string (one to four digits) 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.

TI trunk groups (continued)

Datafilling table TRKGRP (Sheet 4 of 5)

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. Refinements consist of AIN, BCNAME and LNP.
	OPTION	AIN or BCNAME or LNP	Option. To specify the bearer-capability-name option, enter BCNAME and datafill refinement BCNAME. To subscribe to the AIN option, enter AIN and datafill subfield AINGRP. The AIN option is only allowed for incoming and two-way trunks. Enter a $ dollar sign if options AIN and BCNAME do not apply. To provision the Location Routing Number (LRN) against the trunk group, enter LNP (for Local Number Portability). . This option only applies to trunk group types: IT, SC, TI and T2. Option LNP consists of subfield LRN. A Location Routing Number (LRN) is used to indicate the direction in which to route an LNP call. It consists of the Home NPA-NXX dialing pattern that is associated with the switch to which it routes.
	LRN	10-digit DN	This is a ten-digit directory number (DN) that denotes a default LRN for the trunk group. This DN is used to generate a Jurisdiction Information Parameter (JIP) if one is not present on the incoming Initial Address Message (IAM) of the trunk group. ***Note:*** Enter a $ dollar sign to indicate that no default LRN is present for the Trunk group.

Datafilling table TRKGRP (Sheet 5 of 5)

Field	Subfield or refinement	Entry	Explanation and action
	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 in the data schema section of this document for the list of available bearer capabilities. If field OPTION and refinement BCNAME are left blank, the default bearer capability of the central office is used.
	AINGRP	alphanumeric (1 to 16 characters)	Advanced intelligent network group. If the entry in field OPTION is AIN, enter the AIN group to be used by this trunk group. The AIN group name must be datafilled in table TRIGGRP. Since AIN is subscribed to on a customer-group basis, the AIN behaviour specified by AINGRP applies to every member of the customer group.

Datafill example for table TRKGRP

The following example shows sample datafill for table TRKGRP.

MAP display example for table TRKGRP

```
GRPKEY
                                                                  GRPINFO
------------------------------------------------------------------------
OTWAON2303T1
           TI 20 ELO NCRT IE INC3 NSCR 613 NLCL N 72 BCNAME 56KDATA $

OTWAON11MG01
           TI 21 ELO NCRT IE INC2 NSCR 613 LCL Y 3 7 BCNAME 56KDATA $
```

The first tuple shows the following information:

- An incoming end office trunk group that has a fixed number of incoming digits.
- The code in table CLLI for the trunk group is OTWAON2303T1.
- The trunk group type is TI.
- The incoming traffic separation number 20 is assigned to the trunk group. ELO is the name of the pad group assigned to the trunk group.

TI trunk groups (continued)

- NCRT is the no-circuit class.
- The traffic class is interoffice (IE).
- The standard pretranslator subtable name is INC3.
- No class-of-service screening is required.
- The trunk group is assigned to serving NPA 613.
- The originating source is nonlocal (NLCL).
- The number of incoming digits is 5 and the digits 72 are prefixed to the incoming digits to reconstruct the number dialed. The bearer capability is 56 kbit/s data.

The second tuple shows the following information:

- An incoming end office trunk group that has a variable number of incoming digits.
- The code in table CLLI for the trunk group is OTWAONllMG01.
- The trunk group type is TI.
- The incoming traffic separation number 21 is assigned to the trunk group.
- ELO is the name of the pad group assigned to the trunk group.
- NCRT is the no-circuit class.
- The traffic class is interoffice (IE).
- The standard pretranslator subtable name is INC2.
- No class-of-service screening is required.
- The trunk group is assigned to serving numbering plan area 613.
- The originating source is local (LCL).
- The number of incoming digits is variable, the minimum number of digits is 3 and the maximum number of digits is 7.
- The bearer capability is 56 kbit/s data.

The following example shows sample datafill for table TRKGRP option LNP.

MAP display example for table TRKGRP option LNP

```
GRPKEY
                                                                GRPINFO
-------------------------------------------------------------------------

AL7ITICS7
 IT 0 ELO NCRT IC NIL MIDL 909 ATI NSCR 501 000 N N (LNP 9198513361) $
```

Changing datafill for table TRKGRP

If office parameter TRK_OOS_CHK_ON in table OFCVAR is set to Y, all trunks in the trunk group must be taken out of service before changing the value of certain fields in table TRKGRP.

Datafilling table TRKSGRP

The following table shows the datafill specific to TI for table TRKSGRP. Only those fields that apply directly to TI are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table TRKSGRP

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 CLLI code assigned to the trunk group as datafilled in table CLLI.
	SGRP	0 or 1	Subgroup number. Enter the subgroup number assigned to the trunk group.

Datafill example for table TRKSGRP

The following example shows sample datafill for table TRKSGRP.

TI trunk groups (continued)

MAP display example for table TRKSGRP

```
           SGRPKEY        CARDCODE
SGRPVAR
                                                  SGRPVAR
-------------------------------------------------------------
           OTWAON2303T1 0 DS1SIG
STD
           IC MF DIALTONE N 30 30 TR NO N N N C UNEQ
```

Changing datafill for table TRKSGRP

Use the standard table editor commands to change datafill for table TRKSGRP.

Datafilling table TRKMEM

The following table shows the datafill specific to TI for table TRKMEM. Only those fields that apply directly to TI are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table TRKMEM

Field	Subfield or refinement	Entry	Explanation and action
CLLI		alphanumeric (1 to 16 characters)	Common language location identifier. Enter the CLLI code assigned in table CLLI to the trunk group of which the trunk is a member.
EXTRKNM		0 to 9999	External trunk number. Enter the external trunk number that is assigned to the trunk.
SGRP		0 or 1	Subgroup number. Enter the subgroup number to which the trunk is assigned.

Datafill example for table TRKMEM

The following example shows sample datafill for table TRKMEM.

MAP display example for table TRKMEM

```
CLLI           EXTRKNM   SGRP                          MEMVAR
-------------------------------------------------------------
OTWAON2303TI   102       0                        DCM 1 1 17 $
```

Changing datafill for table TRKMEM

Use the standard table editor commands to change datafill for table TRKMEM.

TL trunk groups

TL trunk group functionality codes

TL trunk groups have no functionality codes.

Release applicability

TL03 and up

Prerequisites

TL trunk groups have no functional group prerequisites.

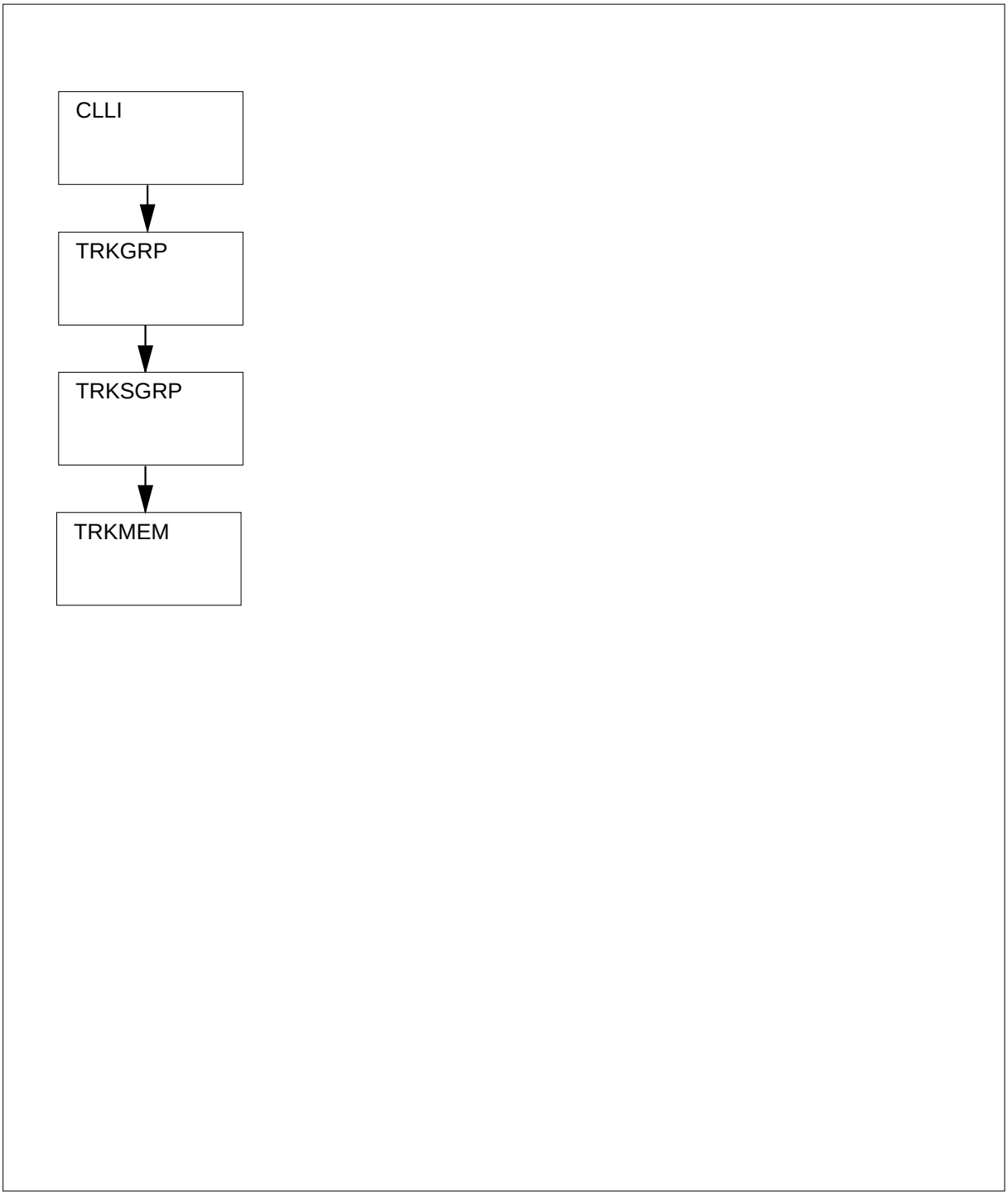
Description

Two-way trunk group type TL (CCIS transmission link) connects a Digital Multiplex System (DMS) office that uses common channel interoffice signaling (CCIS) with another office using CCIS, to transmit and receive signals between the two offices. Call processing functions are not supported.

The following figure shows the datafill dependencies for TL trunk groups.

TL trunk groups (continued)

Datafill dependencies for TL trunk groups



TL trunk groups (continued)

Limitations and restrictions

TL trunk groups have no limitations or restrictions.

Billing

TL trunk groups do not affect billing.

Datafilling office parameters

TL trunk groups do not affect office parameters.

Datafill sequence

The following table lists the tables used by TL trunk groups. The tables are listed in the order in which they are to be datafilled.

Tables used by TL trunk groups

Table	Purpose of table
CLLI	The common language location identifier table uniquely identifies the far end of each announcement, tone, or trunk group.
TRKGRP	The trunk group table contains customer-defined data associated with each trunk group.
TRKSGRP	The trunk subgroup table contains supplementary information for each trunk group.
TRKMEM	The trunk member table specifies the physical location of each trunk assigned to one of the trunk groups.

The following table shows sample input for datafilling TL trunk groups.

Sample input for TL trunk groups

Table	Sample input
CLLI	ORLDFLMA03T6 51 75 CCIS_LINK
TRKGRP	ORLDFLMA03T6 TL 0 NPDGRP NCRT
TRKSGRP	ORLDFLMA03T6 0 DS1SIG STDTL EXTERNAL N DCME
TRKMEM	ORLDFLMA03T6 22 0 DCM 0 0 1 $

Datafilling table CLLI

The following table shows the datafill specific to TL for table CLLI. Only those fields that apply directly to TL are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table CLLI

Field	Subfield or refinement	Entry	Explanation and action
CLLI		alphanumeric (1 to 16 characters)	Common language location identifier. Enter a CLLI code to uniquely identify the far end of the TL trunk group. Only alphabetic characters, numeric characters, and _ (underscores) can be used to datafill this field. The first character must be alphabetic. For optimum use, a CLLI code must contain not more than 12 characters, as only the first 12 characters are displayed on the MAP (maintenance and administration position) display. When a CLLI code is displayed in a log report, the entire 16-character CLLI code appears.

Datafill example for table CLLI

The following example shows sample datafill for table CLLI.

MAP display example for table CLLI

```
CLLI          ADNUM  TRKGRSIZ                      ADMININF
------------------------------------------------------------
ORLDFLMA03T6   51    75                           CCIS_LINK
```

Changing datafill for table CLLI

Use the standard table editor commands to change datafill for table CLLI.

TL trunk groups (continued)

Datafilling table TRKGRP

The following table shows the datafill specific to TL for table TRKGRP. Only those fields that apply directly to TL are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table TRKGRP

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 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 table TRKGRP in the data schema section of this document for information on an alternate structure for this field that results from the datafill of table CUSTFLDS.
	GRPTYP	TL	Group type. Enter TL to specify the group type for CCIS transmission link trunks.
	TRAFSNO	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.
	NCCLS	NCRT	Operational measurements no-circuit class. Enter NCRT (no circuit).

Datafill example for table TRKGRP

The following example shows sample datafill for table TRKGRP. This example shows a signaling link (ORLDFLMA03T6) and its two dedicated voice frequency links, VFL000ORLD and VFL001ORLD.

MAP display example for table TRKGRP

```
GRPKEY                                                  GRPINFO
-------------------------------------------------------------
ORLDFLMA03T6                                  TL 0 NPDGRP NCRT
VFL000ORLD                                    TL 0 NPDGRP NCRT
VFL001ORLD                                    TL 0 NPDGRP NCRT
```

Changing datafill for table TRKGRP

Use the standard table editor commands to change datafill for table TRKGRP.

Datafilling table TRKSGRP

The following table shows the datafill specific to TL for table TRKSGRP. Only those fields that apply directly to TL are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table TRKSGRP (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 CLLI code assigned to the trunk group as datafilled in table CLLI.
	SGRP	0 or 1	Subgroup number. Enter the subgroup number assigned to the trunk group.
CARDCODE		DS1SIG	Card code. Enter DS1SIG.
SGRPVAR		see subfield	Variable subgroup data. This field consists of subfield SIGDATA and refinements.
SGRPVAR (cont)	SIGDATA	STDTL	Signaling data. Enter STDTL (standard transmission link) and datafill refinements ECSTAT and OPTION as described below.

TL trunk groups (continued)

Datafilling table TRKSGRP (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
	ECSTAT	EXTERNAL, INNOTONE, INTERNAL, or UNEQ	Echo canceler status. Enter the type of echo canceler status used for the trunk subgroup. The default is UNEQ (unequipped).
	ECREQD	Y or N	Echo cancelers datafilled. If the entry in subfield ECSTAT is EXTERNAL, datafill this field. Enter Y if the echo canceler status datafilled in subfield ECSTAT must be turned on if a nailed-up connection is made. Otherwise, enter N. Leave this field blank if the entry in subfield ECSTAT is INNOTONE, INTERNAL, or UNEQ.
	OPTION	DCME	Option. Enter the options applicable to the STDTL subgroup. The only valid entry is DCME. The default is an empty list.

Datafill example for table TRKSGRP

The following example shows sample datafill for table TRKSGRP.

MAP display example for table TRKSGRP

```
           SGRPKEY        CARDCODE
SGRPVAR
                                                        SGRPVAR
------------------------------------------------------------
           ORLDFLMA03T6 0 DS1SIG
STDTL
                                                EXTERNAL N DCME
```

Changing datafill for table TRKSGRP

Use the standard table editor commands to change datafill for table TRKSGRP.

Datafilling table TRKMEM

The following table shows the datafill specific to TL for table TRKMEM. Only those fields that apply directly to TL are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table TRKMEM

Field	Subfield or refinement	Entry	Explanation and action
CLLI		alphanumeric (1 to 16 characters)	Common language location identifier. Enter the CLLI code assigned in table CLLI to the trunk group of which the trunk is a member.
EXTRKNM		0 to 9999	External trunk number. Enter the external trunk number that is assigned to the trunk.
SGRP		0 or 1	Subgroup number. Enter the subgroup number to which the trunk is assigned.

Datafill example for table TRKMEM

The following example shows sample datafill for table TRKMEM.

MAP display example for table TRKMEM

```
CLLI           EXTRKNM   SGRP                          MEMVAR
-------------------------------------------------------------
ORLDFLMA03T6   22        0                       DCM 0 0 1 $
```

Changing datafill for table TRKMEM

Use the standard table editor commands to change datafill for table TRKMEM.

TO trunk groups

TO trunk group functionality codes

TO trunk groups have no functionality codes.

Release applicability

TL03 and up

Prerequisites

TO trunk groups have no functional group prerequisites.

Description

In a DMS-100 end office, outgoing trunk group type TO connects with an end or toll office for local, direct, or tandem switching.

The following figure shows the datafill dependencies for TO trunk groups.

Limitations and restrictions

If option DLYFWDXMT is datafilled in table TRKOPTS, all trunk members of that trunk group must terminate to a DTC or an LTC. The exec line up in table LTCINV must be specified as DTCEX, DTCFX, or FXODTC

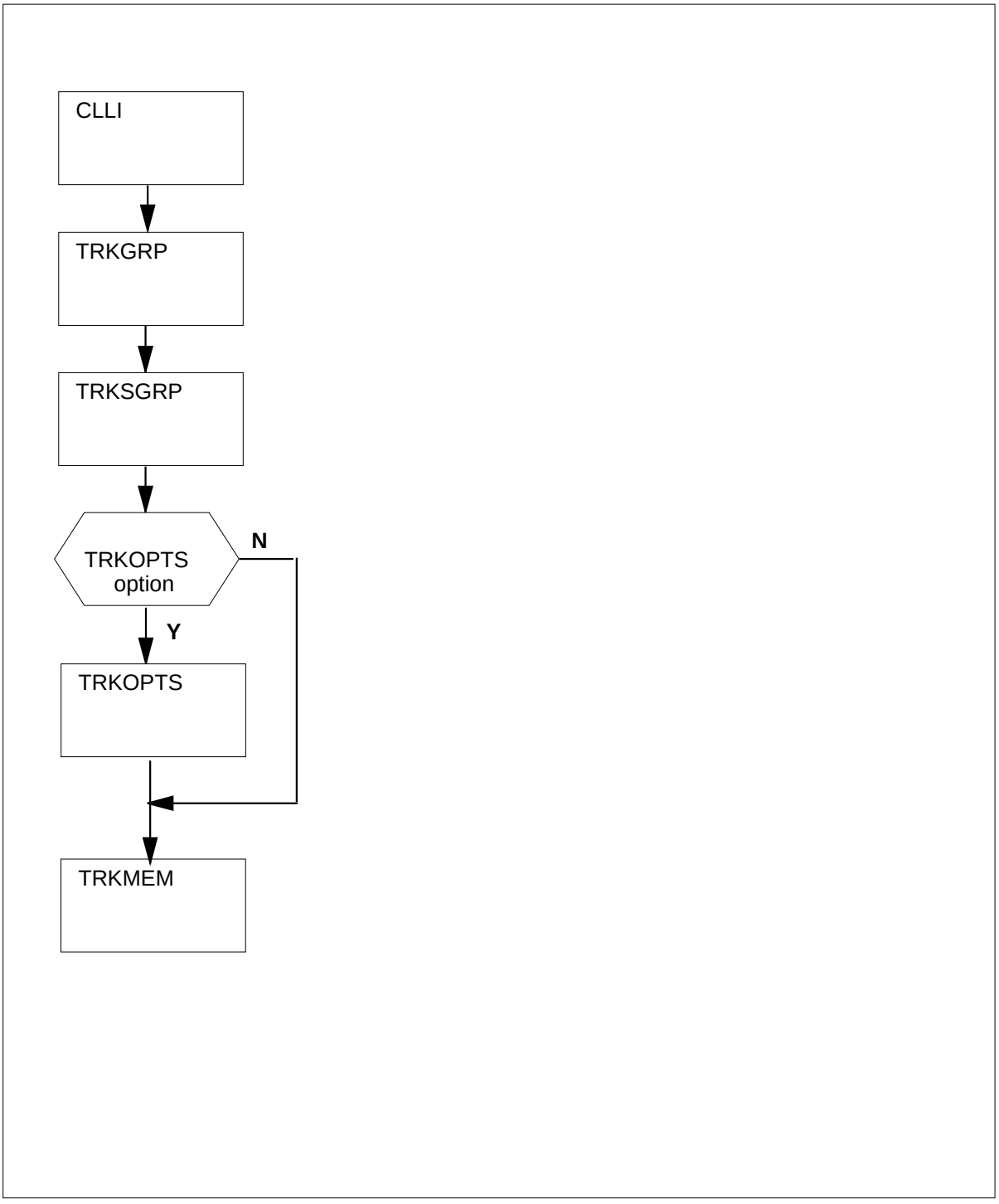
Billing

For information on billing, refer to the Bellcore format AMA translations section of this document.

The following figure shows the datafill dependencies for TO trunk groups.

TO trunk groups (continued)

Datafill dependencies for TO trunk groups



TO trunk groups (continued)

Datafilling office parameters

The following table shows the office parameters used by TO trunk groups. For more information about office parameters, refer to *Office Parameters Reference Manual.*

Office parameters used by TO trunk groups

Table name	Parameter name	Explanation and action
OFCVAR	TRK_OOS_CHK_ON	This parameter specifies whether to check that the trunks in a trunk group are out of service before changing the values of specific fields in table TRKGRP by data modification order (DMO).
OFCSTD	RP_INTER_SELECTION_TIMER	This parameter is required in switching units with digital trunk groups of trunk group type TI or TO which have revertive pulsing. It specifies the maximum time between two selections, in 160-ms intervals. The range of the parameter is 0 to 255. The default value is 50 (8 s).
	RP_INTRA_SELECTION_TIMER	This parameter is required in switching units with digital trunk groups of trunk group type TI or TO which have revertive pulsing. It specifies the maximum time setup to transmit a selection, in 10-ms intervals. The range of the parameter is 0 to 255. The default value is 10 (100 ms).
	RP_OVERALL_TIMER	This parameter is required in switching units with digital trunk groups of trunk group type TI or TO which have revertive pulsing. It specifies the maximum time setup for the revertive pulsing sequence to complete, in 160-ms intervals. The range of the parameter is 0 to 255. The default value is 125 (20 s).
	SHORT_TIMED_RELEASE_DISC_TIME	This disconnect timing is used for calls with low setup costs or scarce resources that must be deallocated quickly after use. This parameter specifies the time, in 10-ms intervals, for which a called party on-hook is timed before releasing the connection to the calling party.

Datafilling office parameters

The following table shows the office parameters used by TO trunk groups. For more information about office parameters, refer to *Office Parameters Reference Manual.*

Office parameters used by TO trunk group

Table name	Parameter name	Explanation and action
OFCVAR	TRK_OOS_CHK_ON	This parameter specifies whether to check that the trunks in a trunk group are out of service before changing the values of specific fields in table TRKGRP by data modification order (DMO).
OFCSTD	RP_INTER_SELECTION_TIMER	This parameter is required in switching units with digital trunk groups of trunk group type TI or TO which have revertive pulsing. It specifies the maximum time between two selections, in 160-ms intervals. The range of the parameter is 0 to 255. The default value is 50 (8 s).
	RP_INTRA_SELECTION_TIMER	This parameter is required in switching units with digital trunk groups of trunk group type TI or TO which have revertive pulsing. It specifies the maximum time setup to transmit a selection, in 10-ms intervals. The range of the parameter is 0 to 255. The default value is 10 (100 ms).
	RP_OVERALL_TIMER	This parameter is required in switching units with digital trunk groups of trunk group type TI or TO which have revertive pulsing. It specifies the maximum time setup for the revertive pulsing sequence to complete, in 160-ms intervals. The range of the parameter is 0 to 255. The default value is 125 (20 s).

TO trunk groups (continued)

Datafill sequence

The following table lists the tables used by TO trunk groups. The tables are listed in the order in which they are to be datafilled.

Tables used by TO trunk groups

Table	Purpose of table
CLLI	The common language location identifier table uniquely identifies the far end of each announcement, tone, or trunk group.
TRKGRP	The trunk group table contains customer-defined data associated with each trunk group.
TRKSGRP	The trunk subgroup table contains supplementary information for each trunk group.
TRKOPTS	The trunk options table contains data that is used to define the options associated with this trunk group.
TRKMEM	The trunk member table specifies the physical location of each trunk assigned to one of the trunk groups.

The following table shows sample input for datafilling TO trunk groups.

Sample input for TO trunk groups

Table	Sample input
CLLI	OTWAON11MG00 51 275 $
TRKGRP	OTWAON11MG00 TO 25 ELO NCRT IE MIDL 0 N $
TRKSGRP	OTWAON11MG00 0 DS1SIG STD IC MF DIALTONE N 30 30 TR NO N N N C UNEQ
TRKMEM	OTWAON11MG00 105 0 DTC 1 1 9 $

Datafilling table CLLI

The following table shows the datafill specific to TO for table CLLI. Only those fields that apply directly to TO are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table

Field	Subfield or refinement	Entry	Explanation and action
CLLI		alphanumeric (1 to 16 characters)	Common language location identifier. Enter a CLLI code to uniquely identify the far end of the TO trunk group. Only alphabetic characters, numeric characters, and _ (underscores) can be used to datafill this field. The first character must be alphabetic. For optimum use, a CLLI code must contain not more than 12 characters, as only the first 12 characters are displayed on the MAP (maintenance and administration position) display. When a CLLI code is displayed in a log report, the entire 16-character CLLI code appears.

Datafill example for table CLLI

The following example shows sample datafill for table CLLI.

MAP display example for table CLLI

```
CLLI            ADNUM  TRKGRSIZ                    ADMININF
-------------------------------------------------------------
OTWAON11MG00     51     275                             $
```

Changing datafill for table CLLI

Use the standard table editor commands to change datafill for table CLLI.

TO trunk groups (continued)

Datafilling table TRKGRP

The following table shows the datafill specific to TO for table TRKGRP. Only those fields that apply directly to TO are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table TRKGRP (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 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. Note that among these subfields, only those that apply directly to TO are described below.
	GRPTYP	TO	Group type. Enter the outgoing end office trunk group type TO.
	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, all trunks in the group must be busy before the value of this field can be changed by DMO.
	TOLL	Y or N	Toll. If the trunk group is outgoing tandem and the connecting office is toll, enter Y. Otherwise, enter N. Trunk groups are classified as toll route calls if the toll essential line feature is activated.

Datafilling table TRKGRP (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
	OPTIONS	see subfield	Options. This field consists of subfield OPTION.
	OPTION	CHGNUM	Option. To specify the charge-number-delivery option enter CHGNUM. The charge-number delivery option sends a charge number and originating line information (OLI) parameter with the initial address message (IAM). No refinements are required for this entry value.

Datafill example for table TRKGRP

The following example shows sample datafill for table TRKGRP.

MAP display example for table TRKGRP

```
GRPKEY                                                    GRPINFO
-------------------------------------------------------------------
OTWAON11MG00    TO  25   ELO NCRT    IE    MIDL  0 N    $
```

The example tuple shows the following information:

- The code in table CLLI for the trunk group is OTWAON11MG00.
- The trunk group type is TO.
- The outgoing traffic separation number 25 is assigned to the trunk group.
- ELO is the name of the pad group assigned to the trunk group.
- NCRT is the no-circuit class.
- The traffic class is interoffice IE.
- MIDL is the selection sequence.
- Field DIGSOUT is 0 (zero), digits deleted are defined in the route list.
- The trunk group is not toll protected.

TO trunk groups (continued)

Changing datafill for table TRKGRP

If office parameter TRK_OOS_CHK_ON in table OFCVAR is set to Y, all trunks in the trunk group must be taken out of service before changing the value of certain fields in table TRKGRP.

Datafilling table TRKSGRP

The following table shows the datafill specific to TO for table TRKSGRP. Only those fields that apply directly to TO are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table TRKSGRP

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 CLLI code assigned to the TO trunk group as datafilled in table CLLI.
	SGRP	0 or 1	Subgroup number. Enter the subgroup number assigned to the trunk group.

Datafill example for table TRKSGRP

The following example shows sample datafill for table TRKSGRP.

MAP display example for table TRKSGRP

```
           SGRPKEY        CARDCODE
SGRPVAR
                                                        SGRPVAR
------------------------------------------------------------
           OTWAON11MG00 0 DS1SIG
STD
                  IC MF DIALTONE N 30 30 TR NO N N N C UNEQ
```

Changing datafill for table TRKSGRP

Use the standard table editor commands to change datafill for table TRKSGRP.

Datafilling table TRKOPTS

The following table shows the datafill specific to TO trunk groups for table TRKOPTS. Only those fields that apply directly to TO trunk groups are

shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table TRKOPTS

Field	Subfield or refinement	Entry	Explanation and action
CLLI		alphanumeric (1 to 16 characters)	Common language location identifier. Enter the CLLI code of this trunk group.
	OPTNAME	DLYFWD-XMT	Option code, enter DLYFWDXMT, delay forward transmission.
	TIMEOUT	0, 1, 2, 3, 4, or 5	Specifies the maximum time the system will wait for an answer supervision signal before taking down the speech path. A timeout value of 0 will prevent the timeout timer from starting. The forward speech path will be blocked until an answer supervision signal is received or one of the parties goes onhook. Time is specified in minutes.

Datafill example for table TRKOPTS

The following example shows sample datafill for table TRKOPTS.

TO trunk groups (continued)

MAP display example for table TRKOPTS

```
  CLLI                    OPTNAME         OPTINFO

------------------------------------------------------------
TO_MONTREAL             DLYFWDXMT         DLYFWDXMT   2

WARNING: This option will block the forward speech path
until an answer message is returned from the far-end
trunk. If no answer message is received, the forward
speech path will not be established.

TUPLE TO BE CHANGED:
TO_MONTREAL  DLYFWDXMT   DLYFWDXMT   2
ENTER Y TO CONFIRM, N TO REJECT OR E TO EDIT
Y
TUPLE CHANGED
JOURNAL FILE INACTIVE
```

Changing datafill for table TRKOPTS

Use the standard table editor commands to change datafill for table TRKOPTS.

Datafilling table TRKMEM

The following table shows the datafill specific to TO for table TRKMEM. Only those fields that apply directly to TO are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table TRKMEM

Field	Subfield or refinement	Entry	Explanation and action
CLLI		alphanumeric (1 to 16 characters)	Common language location identifier. Enter the CLLI code assigned in table CLLI to the trunk group of which the trunk is a member.
EXTRKNM		0 to 9999	External trunk number. Enter the external trunk number that is assigned to the trunk.
SGRP		0 or 1	Subgroup number. Enter the subgroup number to which the trunk is assigned.

Datafill example for table TRKMEM

The following example shows sample datafill for table TRKMEM.

MAP display example for table TRKMEM

```
CLLI          EXTRKNM   SGRP                          MEMVAR
------------------------------------------------------------
OTWAON11MG00 105        0                         DTC 1 1 9 $
```

Changing datafill for table TRKMEM

Use the standard table editor commands to change datafill for table TRKMEM.

TOPS trunk groups

TOPS trunk group functionality codes

TOPS trunk groups have no functionality codes.

Release applicability

TL03 and up

Prerequisites

TOPS trunk groups have no functional group prerequisites.

Description

In a DMS Traffic Operator Position System (TOPS) office, incoming trunk group type TOPS interfaces with an end 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)

  Note: This function is similar to the function of trunk group type SC. TOPS operator assistance is not required.

- coin and noncoin TOPS operator-assisted calls that can be recorded by CAMA in the TOPS office using ANI or ONI

Signaling formats include the pulsing format for Traffic Service Position System (TSPS) from local office. If the far end is a DMS switch, the far end of trunk group type TOPS leaves the far-end DMS office as trunk group type OP.

In a DMS toll office, two-way trunk group type TOPS can be set up for the following outgoing trunk functions (in addition to the incoming trunk functions):

- dedicated to toll completing
- dedicated to verification
- combined toll completing and verification

Refer to trunk group type VR for additional information on verification calls.

Directory assistance (DA) calls originate on TOPS trunks and route to Auxiliary Operator Services System (AOSS) positions. Operating companies can route calls through a pretranslator (table STDPRTCT), provided for the

TOPS trunk groups (continued)

trunk group, or map the called numbering plan area (NPA) against a route for the serving NPA (SNPA) of the trunk group in table HNPACONT. The pretranslator name (which appears in table TRKGRP under field PRTNM) and the subtable name must be the same.

Only TOPS trunks that carry digits outpulsed from the originating office to the TOPS office are capable of originating an AOSS call such as, COMBINED, HOTEL, COIN, NOCOIN, CAMATRIB, and DNLOOKUP.

Intercept calls, routed over TOPS trunks which provide ANI spill, can be recognized by the multifrequency (MF) ANI ID digit. The value of the ID digit corresponding to an intercept call is defined through table BELLCAT, which also provides the route to AOSS for trunks handling intercept calls.

Table OPRTRANS can be used for the translation of intra-LATA (local access and transport area) 800 calls originated on TOPS trunks.

In the case of Enhanced 800 (E800) service, if the routing number is returned from the service control point (SCP), the carrier identifier in the routing number is checked against the office parameter SSP_NSC_CARRIER_ID in table OFCENG. If the carrier identifier and the office parameter match, the call is translated as an intra-LATA call. For intra-LATA (local access and transport area) calls, retranslation starts at table OPRTRANS and then translates to table STDPRTCT.

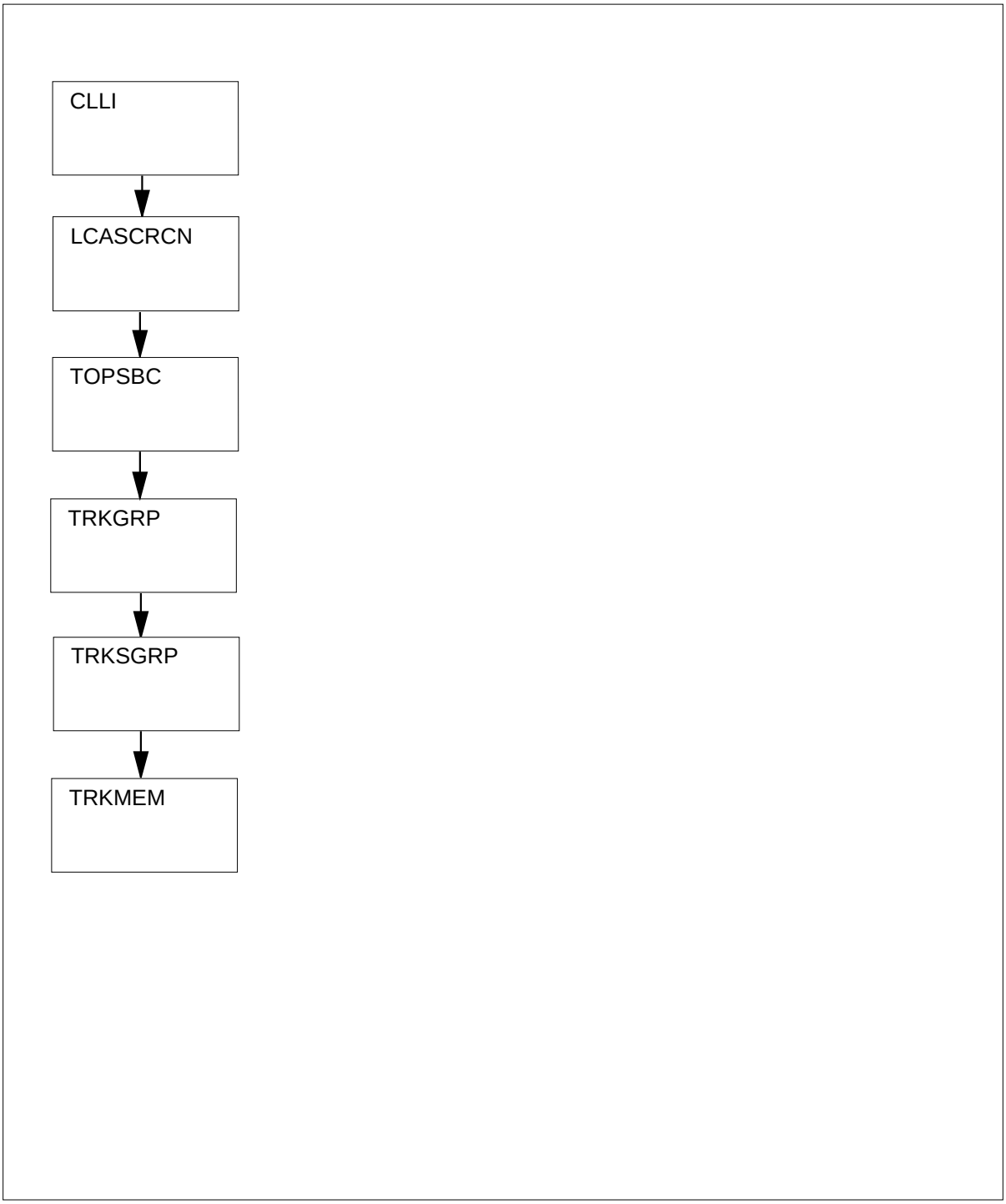
In the case of 800 plus and 800 plus southbound calls originated on TOPS trunks, retranslation starts at table OPRTRANS.

For additional information relating to group type TOPS, refer to table TOPEATRK in the data schema section of this document.

The following figure shows the datafill dependencies for TOPS trunk groups.

TOPS trunk groups (continued)

Datafill dependencies for TOPS trunk groups



TOPS trunk groups (continued)

Limitations and restrictions

Refer to the “Description" section for the limitations and restrictions that apply to TOPS trunk groups.

Billing

For information on billing, refer to the Bellcore format AMA translations section of this document.

Datafilling office parameters

The following table shows the office parameters used by TOPS trunk groups. For more information about office parameters, refer to *Office Parameters Reference Manual.*

Office parameters used by TOPS trunk groups (Sheet 1 of 2)

Table name	Parameter name	Explanation and action
OFCVAR	ASCS_MONITOR_DELAY	This parameter is required for the Alarm sending over TSPS/TOPS trunk feature. It specifies the time in seconds between alarm scans in the monitor process.
	ASCS_NOALARM_THRESHOLD	This parameter is required for the Alarm sending over TSPS/TOPS trunk feature. It specifies the time, in monitor delay units, that a “no alarm" condition must pass before a send call is brought down.
	ASCS_NOSEND_THRESHOLD	This parameter is required for the Alarm sending over TSPS/TOPS trunk feature. It specifies the time, in units of monitor delay time, that sends are inhibited after a checking call while the alarm condition remains the same or less. For example, when monitor delay time is 30 s and the no send threshold is 60, NOSEND is equal to 30 s $\times$ 60 = 30 min.
	ASCS_ROUTE_INDEX	This parameter is required for the Alarm sending over TSPS/TOPS trunk feature. It specifies the route reference index in the office route table (OFRT) that is assigned for the ASCS feature.

TOPS trunk groups (continued)

Office parameters used by TOPS trunk groups (Sheet 2 of 2)

Table name	Parameter name	Explanation and action
	ASCS_TRUNK_TIMEOUT	This parameter is required for the Alarm sending over TSPS/TOPS trunk feature. It specifies the time, in seconds, that a send call hangs onto a trunk without an answer. After this specified time has passed with no answer, the send call releases the trunk and selects another trunk in the group.
	TOPS_FGB_CC134	This parameter determines whether non-operator handled TOPS feature group B (FGB) calls that would have produced AMA records with call code 251, structure code 734 are to produce AMA records with call code 134, structure code 625 (structure code 627 for long duration calls). LATA equal access system FGB 950 calls arriving on a TOPS trunk are affected by this parameter.
	TRK_OOS_CHK_ON	This parameter specifies whether to check that the trunks in a trunk group are out of service before changing the values of specific fields in table TRKGRP by data modification order (DMO).
OFCENG	TOPS_EQUAL_ACCESS_ OFFICE	This parameter, in conjunction with field LATA in table TOPEATRK, activates TOPS equal access tor each TOPS trunk group. If the parameter is set to Y, TOPS equal access features will be activated based on the datafill of the LATA field. If set to N, the switching unit will not execute any TOPS equal access software.

TOPS trunk groups (continued)

Datafill sequence

The following table lists the tables used by TOPS trunk groups. The tables are listed in the order in which they are to be datafilled.

Tables used by TOPS trunk groups

Table	Purpose of table
CLLI	The common language location identifier table uniquely identifies the far end of each announcement, tone, or trunk group.
LCASCRCN	The local calling area screening subtables are required in a toll or local/toll switching unit for incoming or two-way TOPS trunk groups.
TOPSBC	The TOPS billing code table lists information on TOPS calls originated over a specified CLLI of trunk group type TOPS.
TRKGRP	The trunk group table contains customer-defined data associated with each trunk group.
TRKSGRP	The trunk subgroup table contains supplementary information for each trunk group.
TRKMEM	The trunk member table specifies the physical location of each trunk assigned to one of the trunk groups.

The following table shows sample input for datafilling TOPS trunk groups.

Sample input for TOPS trunk groups

Table	Sample input
CLLI	OTWAON0342C1 101 325 $
LCASCRCN	613 OTWA 11 MAND N
TOPSBC	OTWAON0342C1 621 NLCA NSCR 613621 TOPS
TRKGRP	OTWAON0342C1 TOPS 0 AA NCRT IC MIDL 613 SPRT NLCA OTWA Y RCCOMBINED Y Y 0 BELL 20 10 10 N Y WINK N BCNAME VOICE
TRKSGRP	OTWAON0342C1 0 DS1SIG STD 2W DP WK N 30 30 MF WK 7 0 Y NO NO N N N M 70 UNEQ
TRKMEM	OTWAON0342C1 303 0 DCM 1 1 5 $

TOPS trunk groups (continued)

Datafilling table CLLI

The following table shows the datafill specific to TOPS for table CLLI. Only those fields that apply directly to TOPS are shown. For a description of the other fields, refer to table CLLI in the data schema section of this document.

Datafilling table CLLI

Field	Subfield or refinement	Entry	Explanation and action
CLLI		alphanumeric (1 to 16 characters)	Common language location identifier. Enter a CLLI code to uniquely identify the far end of the TOPS trunk group. For a description of the valid CLLI options for TOPS trunks, refer to table CLLI in the data schema section of this document. Only alphabetic characters, numeric characters, and _ (underscores) can be used to datafill this field. The first character must be alphabetic. For optimum use, a CLLI code must contain not more than 12 characters, as only the first 12 characters are displayed on the MAP (maintenance and administration position) display. When a CLLI code is displayed in a log report, the entire 16-character CLLI code appears.

Datafill example for table CLLI

The following example shows sample datafill for table CLLI.

MAP display example for table CLLI

```
CLLI             ADNUM  TRKGRSIZ                  ADMININF
-------------------------------------------------------
OTWAON0342C1      101    325                       $
```

Changing datafill for table CLLI

Use the standard table editor commands to change datafill for table CLLI.

Datafilling table LCASCRCN

The following table shows the datafill specific to TOPS for table LCASCRCN. Only those fields that apply directly to TOPS are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table LCASCRN

Field	Subfield or refinement	Entry	Explanation and action
NPALOCNM		see subfields	NPA local calling area subtable name. This field consists of subfields STS and LCANAME
	STS	numeric	Serving translation scheme. Enter a serving NPA code for the trunk group.
	LCANAME	alphanumeric (up to 4 characters)	Local calling area name. Enter the name of subtable LCASCRCN.LCASCR. Entry NLCA is not allowed in table LCASCRCN because it is reserved by DMS software to mean no local calling area screening. Accidental addition of NLCA in table LCASCRCN followed by deletion removes NLCA from tables such as LINEATTR field LCANAME, making the specification of no local calling area screening impossible.

Datafill example for table LCASCRCN

The following example shows sample datafill for table LCASCRCN.

The example lists a LCASCRCN.LCASCR subtable in NPA 613 with the name OTWA and mandatory dialing of prefix digit 1, and a LCASCRCN.LCASCR subtable in NPA 819 with the name HULL and optional dialing of prefix digit 1.

MAP display example for table LCASCRCN

```
NPALOCNM  LCASCR PFXSELEC PFXFOR10
------------------------------------------------------
613 OTWA  (   11) MAND    N

819 HULL  (    3) OPTL    N
```

TOPS trunk groups (continued)

Changing datafill for table LCASCRCN

Use the standard table editor commands to change datafill for table LCASCRCN.

Datafilling table TOPSBC

The following table shows the datafill specific to TOPS for table TOPSBC. Only those fields that apply directly to TOPS are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table TOPSBC (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
CLLI		alphanumeric (1 to 16 characters)	Common language location identifier. Enter the CLLI code assigned in table CLLI to the TOPS trunk group.
BILLCODE		numeric (3 digits)	Billing code. Enter the billing code to include the following: • all central office NXX codes • special billing codes • wide area telecommunications service (WATS) originating codes that are allowed to originate direct distance dialing (DDD) calls over the TOPS trunk group. ***Note:*** The number of NXX codes allowed in field BILLCODE is limited to 999.
LCANAME		alphanumeric (4 characters)	Local calling area screening table name. If the traffic carried by the trunk group requires local calling area screening particular to a code specified in field BILLCODE, enter a local calling area screening subtable name. The entry must be datafilled in table LCASCRCN. Enter NLCA if: • The LCANAME specified in table TRKGRP provides the proper screening. • No local calling area screening is required. ***Note:*** If an LCANAME other than NLCA is entered in tables TRKGRP and TOPSBC, the local calling screening test is performed twice, thus wasting switch CPU capacity.

Datafilling table TOPSBC (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
SCRNCL		alphanumeric (up to 4 characters)	Class of service screening table name. If the traffic carried by the trunk group requires class of service screening particular to the code specified in field BILLCODE, enter a class of screening subtable name. The entry must be datafilled in table SCRNCLAS. Enter NSCR if: • The SCRNCL specified in table TRKGRP provides the proper screening. • No local calling area screening is required. ***Note:*** If a SCRNCL other than NSCR is entered in tables TRKGRP and TOPSBC, the class of service screening test is performed twice, thus wasting switch CPU capacity.
ACTUALBC		numeric (6 digits)	Actual billing code. Enter the actual billing code (NPA + NXX) that is recorded on the AMA tape.
CHGCLSS		alphanumeric (4 characters)	Charge class. For Northern Telecom automatic message accounting (AMA) format, enter a charge class that is datafilled in table TOPSENTC, field CHGCLSS. For information on table TOPSENTC, refer to the data schema section of this document. For Bellcore AMA format, enter TOPS.

Datafill example for table TOPSBC

The following example shows sample datafill for table TOPSBC.

MAP display example for table TOPSBC

```
CLLI
        BILLCODE   LCANAME   SCRNCL   ACTUALBC   CHGCLSS
-------------------------------------------------------
TWAON0342C1
         621       NLCA      NSCR     613621     TOPS
```

TOPS trunk groups (continued)

Changing datafill for table TOPSBC

Use the standard table editor commands to change datafill for table TOPSBC.

Datafilling table TRKGRP

The following table shows the datafill specific to TOPS for table TRKGRP. Only those fields that apply directly to TOPS are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table TRKGRP (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 CLLI code assigned to the TOPS trunk group in table CLLI.
GRPINFO		see subfields	Variable group data. This field consists of subfields GRPTYP, TRAFSNO, PADGRP, NCCLS, DIR, SELSEQ, SNPA, PRTNM, LCANAME, SCRNCL, OHNXXSCR, TRAFCLS, STATCLAS, TIMEOUT, NPANXXRQ, DISPLAY, NBECCODE, CLGINFO, BYPASUTR, and ISDNAREA. Note that among these subfields, only those directly affected by TOPS are described below. Refer to table TRKGRP in the data schema section of this document for information on an alternate structure for this field that results from the datafill of table CUSTFLDS.
	GRPTYP	TOPS	Group type. Enter TOPS to specify the trunk group type for traffic operator position systems.
	NCCLS	NCRT	Operational measurements no-circuit class. This field is not required for TOPS trunk groups. Enter NCRT.
	DIR	IC or 2W	Direction. Enter IC to specify that the traffic flow is incoming, or 2W to specify that the traffic flow is two way.

TOPS trunk groups (continued)

Datafilling table TRKGRP (Sheet 2 of 10)

Field	Subfield or refinement	Entry	Explanation and action
	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.
	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 DMO.
	LCANAME	alphanumeric (1 to 4 characters) or NLCA	Local calling area screening table name. If all incoming calls on this trunk group require the same local calling area screening, enter the name of the local calling area screening subtable. The entry must be datafilled in table LCASCRCN. Enter NLCA in this field if one of the following conditions is true: • Traffic on this trunk group is from different sources that require different local calling area screening. Field LCANAME is specified in table TOPSBC for each BILLCODE associated with this trunk group CLLI. • No local calling area screening is required. ***Note:*** If an LCANAME other than NLCA is entered in both table TRKGRP and table TOPSBC, switch CPU capacity will be wasted due to the local calling screening test being performed twice.

TOPS trunk groups (continued)

Datafilling table TRKGRP (Sheet 3 of 10)

Field	Subfield or refinement	Entry	Explanation and action
	SCRNCL	alphanumeric (1 to 32 characters) or NSCR	Class-of-service screening table name. Enter a class of service screening subtable name if all calls incoming on this trunk group require the same class of service screening. The entry must be datafilled in table SCRNCLAS. Refer to table SCRNCLAS in the data schema section of this document for more information. Enter NSCR (no screening) in this field if one of the following conditions is true: • Traffic on this trunk group is from different sources that require different classes of service screening. The applicable field SCRNCL value is then specified in table TOPSBC for each field BILLCODE entry associated with the trunk group CLLI. • No class of service screening is required. ***Note:*** If a SCRNCL other than NSCR is entered in both table TRKGRP and table TOPSBC, switch CPU capability is wasted due to the local calling screening test being performed twice.
	OHNXXSCR	Y or N	NXX screening for operator-handled calls. Enter Y (yes) if NXX code screening is required on operator handled calls. Otherwise enter N (no). ***Note:*** For trunk groups of type TOPS, field OHNXXSCR must be set to N if the value in field CLGID is DANI.
	TRAFCLS	CA or SP	Traffic usage class. Enter the traffic usage class assigned to the trunk group. Refer to section “General field information" in table TRKGRP in the data schema section of this document for more information.
	STATCLAS		Station class. Enter the station class of the trunk group. This field identifies the station type from which the traffic is coming.

TOPS trunk groups (continued)

Datafilling table TRKGRP (Sheet 4 of 10)

Field	Subfield or refinement	Entry	Explanation and action
		COMBINED	Combined: a station class for traffic from noncoin, coin (see note concerning coin stations), and hotel station types. DMS uses the TOPS or TSPS pulsing format signals (ST2P, ST3P ST, STP) and the ID digit to determine whether a TOPS position is required (for example, 1+ noncoin with ANI goes on AMA tape without operator intervention). The display on the selected TOPS position screen informs the operator about the kind of call.
		HOTEL	Dedicated hotel: a station class for traffic from hotel stations only. The TOPS position screen display includes HOTEL.
		COIN	Dedicated coin: a station class for traffic from coin stations only. The TOPS position screen display includes COIN (see note). ***Note:*** Coin stations are post-pay (display includes COIN PO) if the value in table TRKSGRP coin control field CCONT is NO. Otherwise coin stations are pre-pay (display includes COIN PRE). For more information on field CCONT, refer to table TRKSGRP in the data schema section of this document.
		NONCOIN	Dedicated noncoin: a station class for traffic from noncoin stations only. The TOPS position screen display includes one of the codes that apply to a noncoin station.
		TOLLSTA	Dedicated toll station: a station class for traffic from toll stations only. The TOPS position screen display includes TS.
		ALARM	Dedicated alarm: a station class for traffic from end offices indicating alarm conditions only. The TOPS position screen display includes ALM.
		INTCPT	Dedicated intercept: a station class for traffic from end office detected intercepts only. The TOPS position screen display includes INTC.

TOPS trunk groups (continued)

Datafilling table TRKGRP (Sheet 5 of 10)

Field	Subfield or refinement	Entry	Explanation and action
		CAMATRIB	Combined ONI only: a station class for traffic from noncoin, coin, and hotel station types from end offices with Operator Number Identification (ONI) only (no automatic number identification [ANI]). Station class is assumed to be noncoin until a verbal or auditory response (zip tone for coin) indicates otherwise. The TOPS position screen display includes one of the codes that apply to a noncoin station.
		MOBILE	Dedicated mobile: a station class for traffic from mobile stations only. The TOPS position screen display can be specified in table TOPS.
		DNLOOKUP	Class-of-service lookup: a station class for traffic from an end office that is unable to provide zip tones and which does not have full ANI service capability. Table SPLDNID is searched, after the operator enters the calling number, to determine the calling station type. For more information, refer to table SPLDNID in the data schema section of this document.
		RESTBIL	Restricted billing class: a station class for traffic from noncoin, coin, and hotel station types requiring selective billing for originating classes entered in table RESTBIL after being screened by table SPLDNID. For more information, refer to table RESTBIL and table SPLDNID in the data schema section of this document.
		CAMA	Centralized automatic message accounting: a station class dedicated to 1+, direct-dialed, non-operator traffic from coin, non-coin, and hotel stations.
		DA	Directory assistance: a station class dedicated to local 411 calls for the served NPA.

TOPS trunk groups (continued)

Datafilling table TRKGRP (Sheet 6 of 10)

Field	Subfield or refinement	Entry	Explanation and action
		OIC	Office identification code: a station class that carries a combination of DA call types, for example, 411, 555-1212, and intercept. If more than one type of traffic is carried on a single TOPS trunk, a special signaling protocol is used to transmit details about the call from the originating office using the MF ANI ID digit. The ID digit is definable by the operating company in table BELLCAT. Note that machine-type intercept cannot be sent over OIC trunks.

TOPS trunk groups (continued)

Datafilling table TRKGRP (Sheet 7 of 10)

Field	Subfield or refinement	Entry	Explanation and action
	TIMEOUT	Y or N	Timeout. The entry in this field specifies whether a timeout is required to detect zero minus (0-) calls when 0- is indicated by absence of digits following trunk seizure. Enter N to indicate that a timeout is not required. This applies in the following cases: • Trunk group is multifrequency (MF); the absence of digits following seizure is recognized as soon as the ST signal is received. • Trunk group is no pulsing (NP) and dedicated to 0- calls. • Trunk group does not carry 0- calls that are indicated by the absence of digits following seizure. Enter Y to indicate that a timeout is required, indicated by the absence of digits following seizure, on a DP trunk group. The length of the timeout interval is specified in field PSPDSEIZ of table TRKSGRP. The trunk group carries a mix of call types (1±, 0±, 0-). For more information on field PSPDSEIZ, refer to table TRKSGRP in the data schema section of this document. ***Note:*** Trunk group type TOPS can only have one type of pulsing (MF, DP, or NP) for all its trunk members. The incoming type of pulsing is specified in field IPULSTYP of table TRKSGRP. For more information on field IPULSTYP, refer to table TRKSGRP in the data schema section of this document.

TOPS trunk groups (continued)

Datafilling table TRKGRP (Sheet 8 of 10)

Field	Subfield or refinement	Entry	Explanation and action
	NPANXXRQ	Y or N	Display originating NPA NXX to operator. Enter Y if the NPA NXX of the originating trunk group is displayed to the operator at call arrival. The format of the display is as follows: • ANI SUCCESS - NPA NXX XXXX of the calling number • ANI FAIL - NPA NXX obtained from first entry for the trunk group in table TOPSBC • ONI - NPA NXX obtained as for ANI FAIL above ***Note:*** Trunk group type TOPS can only have one type of pulsing (MF, DP, or NP) for all its trunk members. The incoming type of pulsing is specified in field IPULSTYP of table TRKSGRP. For more information on field IPULSTYP, refer to table TRKSGRP in the data schema section of this document.
	DISPLAY	0 to 31	Instructional display to operator. Enter the index into table TOPSDISP that specifies the special instructions to display to the operator on a trunk group basis. For more information, refer to table TOPSDISP in the data schema section of this document.
	NBECCODE	0000 to 9999	Non-Bell exchange company code. Enter the non-Bell exchange company (NBEC) code. Each NBEC (where operator services are provided) is normally assigned a unique code by the operating company in the range of 1000 to 9999, although the range of the field allows for all four-digit codes. The default NBEC code is 0000, which indicates the operating company. This default is used if the datafill in table NBECCODE is not present or if the call is ANI fail of ONI.
	CLGINFO	see subfields	Calling number information. This field consists of subfield CLGID and refinements.

TOPS trunk groups (continued)

Datafilling table TRKGRP (Sheet 9 of 10)

Field	Subfield or refinement	Entry	Explanation and action
	CLGID	AIS, AMR5, BELL, COMFGD, DANI, EAFGD, EAOSS, EAOSSIC, MODBELL, MOPS, ONI, OPENNUM, or OSS	Calling identification. If field STATCLAS is set to INTCPT, enter AIS and datafill refinements NOBILLCD, ANISEIZ, ANIPDIAL, and TRTMTSUP. If the trunk group carries ANI and ONI traffic using AMR5A, B or C signaling format, enter AMR5 and datafill refinements NOBILLCD, ANISEIZ, ANIPDIAL, TRTMTSUP, AMR5SUP, and ANIREQ. If the trunk group carries ANI and possible ONI traffic using standard Bell signaling format, enter BELL and datafill refinements NOBILLCD, ANISEIZ, ANIPDIAL, TRTMTSUP, STNOWAIT, and ANIREQ. If the trunk group uses combined equal access feature group D (FGD) signaling only, enter COMFGD and datafill refinements NOBILLCD, ANISEIZ, ANIPDIAL, TRTMTSUP, ONLNRATE, COINPD, and NXXVER. If the trunk group carries traffic from one directory number, enter DANI and datafill refinement LDN. ***Note:*** For trunk groups with a trunk type of TOPS, field OHNXXSCR must be set to N if the value in field CLGID is DANI. If an attempt is made to datafill a TOPS trunk with CLGID of DANI and OHNXXSCR set to Y, the following error message is generated:OHNXXSCR MUST BE N WHEN CLGID = DANI

TOPS trunk groups (continued)

Datafilling table TRKGRP (Sheet 10 of 10)

Field	Subfield or refinement	Entry	Explanation and action
			If the trunk group uses equal access FGD signaled traffic only, enter EAFGD and datafill refinements NOBILLCD, ANISEIZ, ANIPDIAL, and TRTMTSUP. If the trunk group is COMBINED and calls are any combination of 0±, 0-, or 1± calls, enter EAOSS (for equal access operator services signaling) and datafill refinements NOBILLCD, ANISEIZ, ANIPDIAL, TRTMTSUP, ANIREQ, DCNVFROM, DCNVTO, INCVFROM, ICNVTO, and FOURWINK. To verify the CAC or PIC for two- and three-stage outpulsing calls between an EAEO and an AT, enter EAOSSIC and datafill refinements NOBILLCD, ANISEIZ, ANIPDIAL, and TRTMTSUP. If a trunk group uses modified Bell signaling with dial pulsing (DP) and the TOPS software can interpret the start signal in the ANI spill for the ANI failure calls carried on that trunk, enter MODBELL and datafill refinements NOBILLCD, ANISEIZ, ANIPDIAL, TRTMTSUP, and ANIREQ. For the registration of roamers by the MOPS operator in a DMS-MTX/MOPS switch (when the trunk group comes from a looparound T250 trunk group), enter MOPS and datafill refinements NOBILLCD, ANISEIZ, ANIPDIAL, and TRTMTSUP. If the trunk group carries ONI traffic only, enter ONI and datafill refinements NOBILLCD, TONEREPT, and TRWKTIME. If the trunk group uses variable length calling and called digit stream collection for the open numbering plan, enter OPENNUM and datafill refinements ANISEIZ, ANIPDIAL, TRTMTSUP, and ANIREQ. If the trunk group uses the operator services signaling format, enter OSS and datafill refinements NOBILLCD, ANISEIZ, ANIPDIAL, TRTMTSUP, and ANIREQ.

TOPS trunk groups (continued)

CLGID = AIS

If the value in field CLGID is AIS, datafill refinements NOBILLCD, ANISEIZ, ANIPDIAL, and TRTMTSUP as described below.

Field descriptions for conditional datafill

Field	Subfield or refinement	Entry	Explanation and action
	NOBILLCD	0 to 1023	Number of billing codes. Enter the number of billing codes (NXX allocated to originate traffic on this trunk group) plus spares that are reserved in table TOPSBC. Entries outside the indicated range are invalid.
	ANISEIZ	2 to 30	ANI seizure timing. Enter the number of seconds that the trunk has to wait for reception of first digits of the ANI spill.
	ANIPDIAL	2 to 30	ANI partial dial timing. Enter the number of seconds that the trunk has to wait for reception of each ANI signal or digit but the first.
	TRTMTSUP	Y or N	Treatment supervision. Enter Y to indicate that off-hook wink is returned for treatment cases or N to indicate on-hook is maintained.

CLGID = AMR5

If the value in field CLGID is AMR5, datafill refinements NOBILLCD, ANISEIZ, ANIPDIAL, TRTMTSUP, AMR5SUP, and ANIREQ as described below.

Field descriptions for conditional datafill (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
	NOBILLCD	0 to 1023	Number of billing codes. Enter the number of billing codes (NXX allocated to originate traffic on this trunk group) plus spares that are reserved in table TOPSBC. Entries outside the indicated range are invalid.
	ANISEIZ	2 to 30	ANI seizure timing. Enter the number of seconds that the trunk has to wait for reception of first digits of the ANI spill.

Field descriptions for conditional datafill (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
	ANIPDIAL	2 to 30	ANI partial dial timing. Enter the number of seconds that the trunk has to wait for reception of each ANI signal or digit but the first.
	TRTMTSUP	Y or N	Treatment supervision. Enter Y to indicate that off-hook wink is returned for treatment cases or N to indicate on-hook is maintained.
	AMR5SUP	CLG or ANS	AMR5 off-hook supervision control. Enter CLG if off-hook supervision is returned after the calling number is received. Enter ANS if off-hook supervision is returned after the called party or operator answers.
	ANIREQ	OFFHK or WINK	Automatic number identification request signal format. Enter the required protocol for an ANI request. The default value is WINK.

CLGID = COMFGD

If the value in field CLGID is COMFGD, datafill refinements NOBILLCD, ANISEIZ, ANIPDIAL, TRTMTSUP, ONLNRATE, COINPD, and NXXVER as described below.

Field descriptions for conditional datafill (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
	NOBILLCD	0 to 1023	Number of billing codes. Enter the number of billing codes (NXX allocated to originate traffic on this trunk group) plus spares that are reserved in table TOPSBC. Entries outside the indicated range are invalid.
	ANISEIZ	2 to 30	ANI seizure timing. Enter the number of seconds that the trunk has to wait for reception of first digits of the ANI spill.
	ANIPDIAL	2 to 30	ANI partial dial timing. Enter the number of seconds that the trunk has to wait for reception of each ANI signal or digit but the first.

TOPS trunk groups (continued)

Field descriptions for conditional datafill (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
	TRTMTSUP	Y or N	Treatment supervision. Enter Y to indicate that off-hook wink is returned for treatment cases or N to indicate on-hook is maintained.
	ONLNRATE	Y or N	Online rating. Enter Y to provide online rating for calls on this trunk group. Otherwise enter N.
	COINPD	Y or N	Coin paid. Enter Y to provide coin signaling for calls on this trunk group. Otherwise enter N.
	NXXVER	Y or N	NXX verification. Enter Y to verify the calling NXX in table TOPSBC. Otherwise enter N.

CLGID = DANI

If the value in field CLGID is DANI, datafill refinement LDN as described below.

Field descriptions for conditional datafill

Field	Subfield or refinement	Entry	Explanation and action
	LDN	numeric (7 digits)	Listed directory number. Enter the seven-digit directory number (DN) for the calling number associated with the trunk group. All calls on this trunk group will originate from the same DN. For alarms and intercept trunks, enter NXX-0000. For TOLLSTA, TOLLSUB and other dedicated trunks enter the LDN.

CLGID = EAFGD

If the value in field CLGID is EAFGD, datafill refinements NOBILLCD, ANISEIZ, ANIPDIAL, and TRTMTSUP as described below.

Field descriptions for conditional datafill

Field	Subfield or refinement	Entry	Explanation and action
	NOBILLCD	0 to 1023	Number of billing codes. Enter the number of billing codes (NXX allocated to originate traffic on this trunk group) plus spares that are reserved in table TOPSBC. Entries outside the indicated range are invalid.
	ANISEIZ	2 to 30	ANI seizure timing. Enter the number of seconds that the trunk has to wait for reception of first digits of the ANI spill.
	ANIPDIAL	2 to 30	ANI partial dial timing. Enter the number of seconds that the trunk has to wait for reception of each ANI signal or digit but the first.
	TRTMTSUP	Y or N	Treatment supervision. Enter Y to indicate that off-hook wink is returned for treatment cases or N to indicate on-hook is maintained.

CLGID = EAOSS

If the value in field CLGID is EAOSS, datafill refinements NOBILLCD, ANISEIZ, ANIPDIAL, TRTMTSUP, ANIREQ, DCNVFROM, DCNVTO, INCVFROM, ICNVTO, and FOURWINK as described below.

Field descriptions for conditional datafill (Sheet 1 of 4)

Field	Subfield or refinement	Entry	Explanation and action
	NOBILLCD	0 to 1023	Number of billing code. Enter the number of billing codes (NXX allocated to originate traffic on this trunk group) plus spares that are reserved in table TOPSBC. Entries outside the indicated range are invalid.
	ANISEIZ	2 to 30	ANI seizure timing. Enter the number of seconds that the trunk has to wait for reception of first digits of the ANI spill.

TOPS trunk groups (continued)

Field descriptions for conditional datafill (Sheet 2 of 4)

Field	Subfield or refinement	Entry	Explanation and action
	ANIPDIAL	2 to 30	ANI partial dial timing. Enter the number of seconds that the trunk has to wait for reception of each ANI signal or digit but the first.
	TRTMTSUP	Y or N	Treatment supervision. Enter Y to indicate that off-hook wink is returned or N to indicate on-hook is maintained.
	ANIREQ	OFFHK or WINK	ANI request signal format. Enter the required protocol for an ANI request. The default value is OFFHK. ***Note:*** If a single digit is entered as a value in one of the following conversion signaling fields (DCNVFROM, DCNVTO, ICNVFROM, ICNVTO), it is implied that the entry contains a leading zero for direct comparison to the routing digits for example, 9 implies 09.
	DCNVFROM	0 to 99	Domestic convert from. Enter the beginning value of the domestic conversion range. This range is datafilled to indicate to TOPS that the incoming EAOSS signaling is converted before sending the signaling on to the carrier. If the call is a domestic incoming EAOSS signaled call and the routing digits fall between the values datafilled in fields DCNVFROM and DCNVTO, an indication is sent to TOPS to specify that the signaling is converted. The default value is 90.

TOPS trunk groups (continued)

Field descriptions for conditional datafill (Sheet 3 of 4)

Field	Subfield or refinement	Entry	Explanation and action
	DCNVTO	0 to 99	Domestic convert to. Enter the ending value of the domestic conversion range. If the call is a domestic incoming EAOSS signaled call and the routing digits fall between the values datafilled in fields DCNVFROM and DCNVTO, an indication is sent to TOPS to specify that the signaling is converted. The default value is 90. ***Note:*** The value datafilled in field DCNVTO must be greater than or equal to the value datafilled in field DCNVFROM. If not, the following message is displayed:DCNVTO MUST BE GREATER THAN OR EQUAL TO DNCVFROM
	ICNVFROM	0 to 99	International convert from. Enter the beginning value of the international conversion range. This range is datafilled to indicate to TOPS that the incoming EAOSS signaling is converted before sending the signaling on to the carrier. If the call is an international incoming EAOSS signaled call and the routing digits fall between the values datafilled in fields ICNVFROM and ICNVTO, an indication is sent to TOPS to specify that the signaling is converted. The default value is 90.

TOPS trunk groups (continued)

Field descriptions for conditional datafill (Sheet 4 of 4)

Field	Subfield or refinement	Entry	Explanation and action
	ICNVTO	0 to 99	International convert to. Enter the ending value of the international conversion range. If the call is an international incoming EAOSS signaled call and the routing digits fall between the values datafilled in fields ICNVFROM and ICNVTO, an indication is sent to TOPS to specify that the signaling is converted. The default value is 94. ***Note:*** The value datafilled in field ICNVTO must be greater than or equal to the value datafilled in field ICNVFROM. If not, the following message is displayed:ICNVTO MUST BE GREATER THAN OR EQUAL TO INCVFROM
	FOURWINK	Y or N	Four wink. Enter Y to signify that four winks are generated or regenerated by TOPS to the end office for international EAOSS calls. The first wink sent to TOPS from the carrier is regenerated back to the end office for international EAOSS calls. This allows a more accurate recording of the carrier connect time by the end office.

CLGID = EAOSSIC

If the value in field CLGID is EAOSS, datafill refinements NOBILLCD, ANISEIZ, ANIPDIAL, and TRTMTSUP as described below.

Field descriptions for conditional datafill

Field	Subfield or refinement	Entry	Explanation and action
	NOBILLCD	0 to 1023	Number of billing codes. Enter the number of billing codes (NXX allocated to originate traffic on this trunk group) plus spares that are reserved in table TOPSBC. Entries outside the indicated range are invalid.
	ANISEIZ	2 to 30	ANI seizure timing. Enter the number of seconds that the trunk has to wait for reception of first digits of the ANI spill.
	ANIPDIAL	2 to 30	ANI partial dial timing. Enter the number of seconds that the trunk has to wait for reception of each ANI signal or digit after the first.
	TRTMTSUP	Y or N	Treatment supervision. Enter Y to indicate that off-hook wink is returned or N to indicate on-hook is maintained.

CLGID = MODBELL

If the value in field CLGID is MODBELL, datafill refinements NOBILLCD, ANISEIZ, ANIPDIAL, TRTMTSUP, and ANIREQ as described below.

Field descriptions for conditional datafill (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
	NOBILLCD	0 to 1023	Number of billing codes. Enter the number of billing codes (NXX allocated to originate traffic on this trunk group) plus spares that are reserved in table TOPSBC. Entries outside the indicated range are invalid.
	ANISEIZ	2 to 30	ANI seizure timing. Enter the number of seconds that the trunk has to wait for reception of first digits of the ANI spill.

TOPS trunk groups (continued)

Field descriptions for conditional datafill (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
	ANIPDIAL	2 to 30	ANI partial dial timing. Enter the number of seconds that the trunk has to wait for reception of each ANI signal or digit after the first.
	TRTMTSUP	Y or N	Treatment supervision. Enter Y to indicate that off-hook wink is returned or N to indicate on-hook is maintained.
	ANIREQ	OFFHK or WINK	ANI request. Enter WINK to indicate a wink is used to request the ANI spill from the end office. Enter OFFHK to indicate that an off-hook is returned to the end office to request the ANI spill. The default value is OFFHK.

CLGID = MOPS (DMS-MTX/MOPS switch only)

If the value in field CLGID is MOPS, datafill refinements NOBILLCD, ANISEIZ, ANIPDIAL, and TRTMTSUP as described below.

Field descriptions for conditional datafill

Field	Subfield or refinement	Entry	Explanation and action
	NOBILLCD	0 to 1023	Number of billing codes. Enter 1 to specify that only one billing code is permitted. Entries other than this value are invalid.
	ANISEIZ	2 to 30	ANI seizure timing. Enter 10 to specify the number of seconds the trunk has to wait for seizure for the ANI spill.
	ANIPDIAL	2 to 30	ANI partial dial timing. Enter 10 to specify the number of seconds that the trunk has to wait between ANI digits.
	TRTMTSUP	Y or N	Treatment supervision. Enter Y to specify that an off-hook wink is returned.

CLGID = ONI

If the value in field CLGID is ONI, datafill refinements NOBILLCD, TONEREPT, and TRWKTIME as described below.

Field descriptions for conditional datafill (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
	NOBILLCD	0 to 1023	Number of billing codes. Enter the number of billing codes (NXX allocated to originate traffic on this trunk group) plus spares that are reserved in table TOPSBC. Entries outside the indicated range are invalid.

TOPS trunk groups (continued)

Field descriptions for conditional datafill (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
	TONEREPT	NT, TR, AT, or NA	Tone repeat. Tone repeat is used to return a zip tone to the operator. Zip tones are associated with coin traffic only. Tone repeat enables the DMS to return answer supervision to the originating office even though the TOPS position has not yet been attached. This allows the sender to release in the originating office, which eliminates sender timeout during busy periods. If the TOPS position is eventually attached, zip tone can be provided as follows: • NT - No tone is required. Answer supervision is returned. • TR - Manual tone is repeat from the operator. • AT - Answer supervision is returned when waiting in queue and tone repeat signal is returned when presenting the call. • NA - (Nil_Action) Indicates that when a call is presented to a TOPS operator after being in the call waiting queue, the zip tone is not repeated. Answer supervision is not returned. The last three entries apply to COMBINED DP ONI trunk groups only, except for the NA entry. The NA tone repeat can also be used with directory assistance (DA) trunk groups, as specified by the value DA in field STATCLASS. Otherwise enter NT.
	TRWKTIME	10 to 500	Trunk wink time. Enter a numeric value to specify the trunk wink duration in milliseconds. The value of this field specifies the duration of the tone repeat request wink that is sent from the TOPS switch to the end office to request a repeat of the zip tones.

CLGID = OPENNUM

Some fields in the TOPS environment do not apply in an open numbering plan environment. The following list contains the required datafill for the open numbering plan environment.

Field name	Required value
DIR	IC or 2W
LCANAME	NLCA
NPANXXRQ	N
OHNXXSCR	N
SCRNCL	NSCR
STATCLAS	APS, COIN, COMBINED, DNLOOKUP, HOTEL INTCPT, MOBILE, or RESTBIL
TIMEOUT	N

If the value in field CLGID is OPENNUM, datafill refinements ANISEIZ, ANIPDIAL, TRTMTSUP, and ANIREQ as described below.

Field descriptions for conditional datafill (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
	ANISEIZ	2 to 30	ANI seizure timing. Enter the number of seconds that the trunk has to wait for reception of first digits of the ANI spill.
	ANIPDIAL	2 to 30	ANI partial dial timing. Enter the number of seconds that the trunk has to wait for reception of each ANI signal or digit but the first.

TOPS trunk groups (continued)

Field descriptions for conditional datafill (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
	TRTMTSUP	Y or N	Treatment supervision. Enter Y to indicate off-hook supervision is returned or enter N to indicate on-hook is maintained.
	ANIREQ	OFFHK or WINK	ANI request. Enter WINK to indicate a wink is used to request the ANI spill from the end office. Enter OFFHK to indicate that an off-hook is returned to the end office to request the ANI spill.

CLGID = OSS

If the value in field CLGID is OSS, datafill refinements NOBILLCD, ANISEIZ, ANIPDIAL, TRTMTSUP, and ANIREQ as described below.

Field descriptions for conditional datafill (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
	NOBILLCD	0 to 1023	Number of billing codes. Enter the number of billing codes (NXX allocated to originate traffic on this trunk group) plus spares that are reserved in table TOPSBC. Entries outside the indicated range are invalid.
	ANISEIZ	2 to 30	ANI seizure timing. Enter the number of seconds that the trunk has to wait for reception of first digits of the ANI spill.
	ANIPDIA	2 to 30	ANI partial dial timing. Enter the number of seconds that the trunk has to wait for reception of each ANI signal or digit but the first.

Field descriptions for conditional datafill (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
	TRTMTSUP	Y or N	Treatment supervision. Enter Y to indicate that off-hook wink is returned or N to indicate on-hook is maintained.
	ANIREQ	OFFHK or WINK	ANI request. Enter WINK to indicate that a wink is used to request the ANI spill from the end office. Enter OFFHK to indicate that an off-hook signal is returned to the end office to request the ANI spill. The default value is OFFHK.

For all CLGID values

For all tuples, datafill subfields BYPASUTR and ISDNAREA as described below.

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
	BYPASUTR	Y or N	Bypass universal tone receiver. Enter Y to bypass the universal tone receiver (UTR) for automatic number identification (ANI) purposes. The default value is N.
	ISDNAREA	see subfield	ISDN options. This field consists of subfield ISDNOPTS and refinements.
	ISDNOPTS	Y or N	Option. To specify the bearer-capability-name option, enter Y and datafill refinement BCNAME. If no options apply, enter N.
	BCNAME	alphanumeric (1 to 16 characters)	Bearer capability name. If the entry in field ISDNOPTS is Y, enter the bearer capability to be used by this trunk group. Refer to table BCDEF for the list of available bearer capabilities.

Datafill example

The following example shows sample datafill for table TRKGRP.

TOPS trunk groups (continued)

MAP display example for table TRKGRP

```
GRPKEY                                                          GRPINFO
-------------------------------------------------------------------------
OTWAON0342C1             TOPS 0 AA NCRT IC MIDL 613 SPRT NLCA OTWA Y RC
COMBINED Y Y 0 BELL 20 10 10 N Y WINK N BCNAME VOICE
OTWAON7281C2             TOPS 0 AB NCRT IC MIDL 613 PRT1 NLCA OTWA Y RC
HOTEL Y Y 0 ONI 20 AT N BCNAME 56KDATA
OTWAON8394C0             TOPS 0 AC NCRT IC MIDL 613 PRT2 NLCA OTWA Y RC
HOTEL Y Y 0 AMR5 20 10 10 N ANS N BCNAME 56KDATA
TOPAOSMF                 TOPS 31 NPRT NCRT IC MIDL 919 MFNL SUPR NSCR N
RC COMBINED N N 0 BELL 10 5 5 N Y OFFHK Y BCNAME 56KDATA
ICTOPS                  TOPS 31 NPDGP NCRT IC MIDL 214 TXLA NCLA NSCR N
RC COMBINED N N 0 OPENNUM 20 2 2 N OFFHK N
TEAOSSICI               TOPS 0 TLD NCRT IC MIDL 619 EAOS NLCA NSCR Y SP
COMBINED N Y 0 EAOSS 50 10 10 Y OFFHK 9 9 9 0 N N
```

TOPS trunk groups (continued)

Following are characteristics of relevant TOPS trunk groups:

1. TOPS trunk group OTWAON0342C1 has the following characteristics:
   - The trunk group direction is incoming.
   - The most idle select sequence is used.
   - The serving NPA is 613.
   - There is no local area screening.
   - The trunk group has a standard pretranslator, SPRT.
   - The screening class is OTWA.
   - NXX screening is required on operator-handled calls.
   - The traffic class is RC.
   - The trunk group carries traffic from a mix of noncoin, coin, and hotel station types.
   - The 0- traffic is indicated by seizure of trunk and timing out with no digits received.
   - A display of the NPA NXX of the originator to the operator is required.
   - An instructional display to the operator is required.
   - Memory is allocated for 20 billing codes.
   - The trunk group is ANI with Bell signaling format.
   - The ANI seizure timing is 10 seconds and the ANI partial dial timing is 10 seconds.
   - The treatment supervision is on-hook.
2. TOPS trunk group OTWAON7281C2 has characteristics similar to Item 1. except
   - The trunk group has a standard pretranslator PRT1.
   - The trunk group carries traffic from hotel station types only.
   - The trunk group is ONI: ANI seizure, ANI partial dial, and treatment supervision fields do not apply.
   - For coin zip tone, the DMS returns answer supervision when the call is to wait in the queue, and sends tone repeat signal to the end office when the operator answers.

TOPS trunk groups (continued)

3. TOPS trunk group OTWAON8394C0 has characteristics similar to Item 1 except
   - The trunk group has a standard pretranslator PRT2.
   - The trunk group carries ANI and ONI traffic using AMR5A signaling format.
   - AMR5 off-hook supervision control applies when the called party or operator answers.
4. TOPS trunk group TOPAOSMF has characteristics similar to Item 1 except
   - The trunk group serving NPA is 919.
   - The trunk group has a standard pretranslator MFNL.
   - The local area screening subtable entry is SUPR.
   - The SCRNCL entry is NSCR.
   - NXX screening is not required on operator-handled calls.
   - The trunk group can handle COMBINED station types and can route calls to AOSS positions.
   - A time out is not required to detect zero minus calls if 0- is indicated by the absence of digits following a trunk seizure.
   - No display of the originating NPA NXX to the operator is required.
5. TOPS trunk group ICTOPS has characteristics similar to Item 1 except
   - The trunk group serving NPA is 214.
   - The trunk group has a standard pretranslator TXLA.
   - The SCRNCL entry is NSCR.
   - NXX screening is not required on operator-handled calls.

- A time out is not required to detect zero minus calls if 0- is indicated by the absence of digits following a trunk seizure.
- No display of the originating NPA NXX to the operator is required.

6. TOPS trunk group TEAOSSICI has characteristics similar to Item 1 except
   - The trunk group serving NPA is 619.
   - The trunk group has a standard pretranslator EAOS.
   - Field SCRNCL is NSCR.
   - Field DCNVFROM is 9.
   - Field DCNVTO is 9.
   - Field ICNVFROM is 9.
   - Field ICNVTO is 9.
   - Field FOURWINK is N.

Changing datafill for table TRKGRP

If office parameter TRK_OOS_CHK_ON in table OFCVAR is set to Y, all trunks in the trunk group must be taken out of service before changing the value of certain fields in table TRKGRP.

Error messages for table TRKGRP

The following error messages apply to table TRKGRP.

Error messages for table TRKGRP

Error message	Explanation and action
`OHNXXSCR MUST BE N WHEN CLGID = DANI`	For trunk groups with a trunk type of TOPS, set field OHNXXSCR to N if the value in field CLGID is DANI.
`DCNVTO MUST BE GREATER THAN OR EQUAL TO DNCVFROM`	Enter a value in field DCNVTO that is greater than or equal to the value datafilled in field DCNVFROM.
ICNVTO MUST BE GREATER THAN OR EQUAL TO INCVFROM	Enter a value in field ICNVTO that is greater than or equal to the value datafilled in field ICNVFROM.

TOPS trunk groups (continued)

Datafilling table TRKSGRP

The following table shows the datafill specific to TOPS for table TRKSGRP. Only those fields that apply directly to TOPS are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table TRKSGRP

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 CLLI code assigned to the trunk group as datafilled in table CLLI.
	SGRP	0 or 1	Subgroup number. Enter the subgroup number assigned to the trunk group.

Datafill example for table TRKSGRP

The following example shows sample datafill for table TRKSGRP.

MAP display example for table TRKSGRP

```
           SGRPKEY        CARDCODE
SGRPVAR
                                                        SGRPVAR
-------------------------------------------------------------
           TWAON0342C1 0 DS1SIG
STD
        2W DP WK N 30 30 MF WK 7 0 Y NO NO N N N M 70 UNEQ
```

Changing datafill for table TRKSGRP

Use the standard table editor commands to change datafill for table TRKSGRP.

Datafilling table TRKMEM

The following table shows the datafill specific to TOPS for table TRKMEM. Only those fields that apply directly to TOPS are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table TRKMEM

Field	Subfield or refinement	Entry	Explanation and action
CLLI		alphanumeric (1 to 16 characters)	Common language location identifier. Enter the CLLI code assigned in table CLLI to the trunk group of which the trunk is a member.
EXTRKNM		0 to 9999	External trunk number. Enter the external trunk number that is assigned to the trunk.
SGRP		0 or 1	Subgroup number. Enter the subgroup number to which the trunk is assigned.

Datafill example for table TRKMEM

The following example shows sample datafill for table TRKMEM.

The example applies to a local/toll switch and shows datafill for two digital trunks and one analog trunk.

MAP display example for table TRKMEM

```
CLLI            EXTRKNM  SGRP                          MEMVAR
-------------------------------------------------------------
OTWAON0342C1    303      0                        DCM 1 1 5 $
CCIS4A          0        0                        DTC 3 0 4 $
OTWAON0872A     47       0                      TM8 12 5 1 $
SRCCTRK         0        0                      SRCC 0 0 1 $
```

Changing datafill for table TRKMEM

Use the standard table editor commands to change datafill for table 0TRKMEM.

TOPSARU trunk groups

Ordering codes

TOPSARU trunk groups have no ordering codes.

Release applicability

TL03 and up

Prerequisites

TOPSARU trunk groups have no functional group prerequisites.

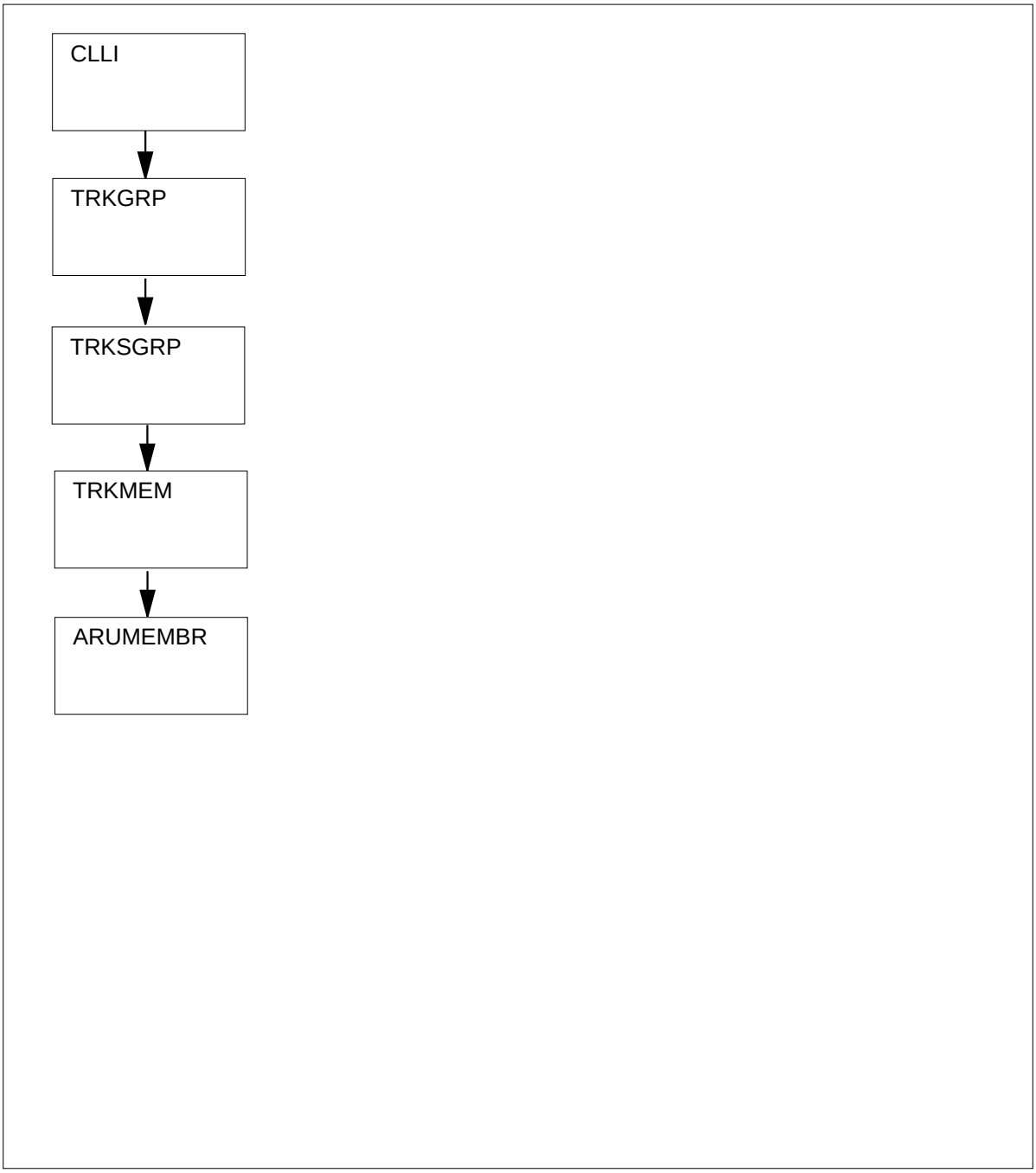
Description

In a DMS TOPS office, trunk group type TOPS external audio response unit (TOPSARU) accommodates external audio response units (ARU). Outgoing TOPSARU trunks interface with the ARU in a directory assistance system (DAS) to provide an announcement in response to an operator request. No outpulsing is done.

The following figure shows the datafill dependencies for TOPSARU trunk groups.

TOPSARU trunk groups (continued)

Datafill dependencies for TOPSARU trunk groups



TOPSARU trunk groups (continued)

Limitations and restrictions

The following limitations and restrictions apply to TOPSARU trunk groups:

- For TOPSARU trunks, table CLLI must be datafilled before table TRKGRP. Table TRKGRP must be datafilled before table ARUMEMBR.
- A group cannot be removed from table TRKGRP until all its members are deleted from table ARUMEMBR.
- Changes are not allowed in table TRKGRP if there is data in table ARUMEMBR for that CLLI.

Billing

For information on billing, refer to the Bellcore format AMA translations section of this document.

Datafilling office parameters

TOPSARU trunk groups do not affect office parameters.

Datafill sequence

The following table lists the tables used by TOPSARU trunk groups. The tables are listed in the order in which they are to be datafilled.

used by TOPSARU trunk groups

Table	Purpose of table
CLLI	The common language location identifier table uniquely identifies the far end of each announcement, tone, or trunk group.
TRKGRP	The trunk group table contains customer-defined data associated with each trunk group.
TRKSGRP	The trunk subgroup table contains supplementary information for each trunk group.
TRKMEM	The trunk member table specifies the physical location of each trunk assigned to one of the trunk groups.
ARUMEMBR	The external audio response member table is used to associate a TOPSARU trunk member with adirectory assistance system (DAS) trunk identification.

The following table shows sample input for datafilling TOPSARU trunk groups.

Sample input for TOPSARU trunk groups

Table	Sample input
CLLI	DAARU1 352 32 MI
TRKGRP	DAARU1 TOPSARU 31 NPDGP NCRT
TRKSGRP	DAARU1 0 2X88AA STD OG NP WK 7 0 NO NO N N N 70 UNEQ
TRKMEM	DAARU1 0 0 TM 3 4
ARUMEMBR	DAARU1 0 30

Datafilling table CLLI

The following table shows the datafill specific to TOPSARU for table CLLI. Only those fields that apply directly to TOPSARU are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table CLLI

Field	Subfield or refinement	Entry	Explanation and action
CLLI		alphanumeric (1 to 16 characters)	Common language location identifier. Enter a CLLI code to uniquely identify the far end of the TOPSARU trunk group. Only alphabetic characters, numeric characters, and _ (underscores) can be used to datafill this field. The first character must be alphabetic. For optimum use, a CLLI code must not contain more than 12 characters, as only the first 12 characters are displayed on the maintenance and administration position (MAP). When a CLLI code is displayed in a log report, the entire 16-character CLLI code appears.

Datafill example for table CLLI

The following example shows sample datafill for table CLLI.

TOPSARU trunk groups (continued)

MAP display example for table CLLI

```
CLLI              ADNUM   TRKGRSIZ            ADMININF
-------------------------------------------------------
DAARU1             352     32                  $
```

Changing datafill for table CLLI

Use the standard table editor commands to change datafill for table CLLI.

Datafilling table TRKGRP

The following table shows the datafill specific to TOPSARU for table TRKGRP. Only those fields that apply directly to TOPSARU are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table TRKGRP

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 identifierEnter the 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. Note that among these subfields, only those directly affected by TOPSARU are described below. Refer to section “General field information" in table TRKGRP in the data schema section of this document 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.

TOPSARU trunk groups (continued)

Datafill example for table TRKGRP

The following example shows sample datafill for table TRKGRP.

MAP display example for table TRKGRP

```
GRPKEY                              GRPINFO
_____________________________________________________________

DAARU1                              TOPSARU  31 NPDGP NCRT
```

Changing datafill for table TRKGRP

Use the standard table editor commands to change datafill for table TRKGRP.

Error messages for table TRKGRP

The following error messages apply to table TRKGRP.

Error messages for table TRKGRP

Error message	Explanation and action
DELETE MEMBERS OF THIS GROUP FROM ARUMEMBR FIRST.	An attempt has been made to change data for a member that is still datafilled in table ARUMEMBR Datafill table TRKGRP before attempting to datafill table ARUMEMBR.
MEMBERS EXIST IN ARUMEMBR.	An attempt has been made to delete a group from table TRKGRP before removing all its members from table ARUMEMBR. Delete all members from table ARUMEMBR before proceeding.

TOPSARU trunk groups (continued)

Datafilling table TRKSGRP

The following table shows the datafill specific to TOPSARU for table TRKSGRP. Only those fields that apply directly to TOPSARU are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table TRKSGRP

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 CLLI code assigned to the trunk group as datafilled in table CLLI.
	SGRP	numeric (0 or 1)	Subgroup number. Enter the subgroup number assigned to the trunk group.
SGRPVAR	DIR	OG	Direction. Enter OG to specify outgoing trunks.
	OPULSTYP	NP	Outgoing type of pulsing. Enter NP (no pulsing).

Datafill example for table TRKSGRP

The following example shows sample datafill for table TRKSGRP.

MAP display example for table TRKSGRP

```
SGRPKEY   CARDCODE
SGRPVAR           SGRPVAR
-------------------------------------------------------
DAARU1 0  2X88AA
STD               OG NP WK 7 0 NO NO N N N 70 UNEQ
```

Changing datafill for table TRKSGRP

Use the standard table editor commands to change datafill for table TRKSGRP.

Error messages for table TRKSGRP

The following error messages apply to table TRKSGRP.

Error messages for table TRKSGRP

Error message	Explanation and action
SUBGROUP AND GROUP DIRECTIONS DO NOT MATCH or TOPSARU TRUNKS MUST BE NO PULSE	An attempt has been made to enter a direction and outpulsing type other than OG and NP respectively. Datafill fields DIR and OPULSTYP as OG and NP respectively.

Datafilling table TRKMEM

The following table shows the datafill specific to TOPSARU for table TRKMEM. Only those fields that apply directly to TOPSARU are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table TRKMEM

Field	Subfield or refinement	Entry	Explanation and action
CLLI		alphanumeric (1 to 16 characters)	Common language location identifier. Enter the CLLI code assigned in table CLLI to the trunk group of which the trunk is a member.
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.
SGRP		numeric (0 to 1)	Subgroup number. Enter the subgroup number to which the trunk is assigned.

Datafill example for table TRKMEM

The following example shows sample datafill for table TRKMEM.

TOPSARU trunk groups (continued)

MAP display example for table TRKMEM

```
CLLI              EXTRKNM  SGRP  MEMVAR
-------------------------------------------------------
DAARU1             1       0     TM 3 4
```

Changing datafill for table TRKMEM

Use the standard table editor commands to change datafill for table TRKMEM.

Error messages for table TRKMEM

The following error messages apply to table TRKMEM.

Error messages for table TRKMEM

Error message	Explanation and action
DELETE TRUNK MEMBER FROM TABLE ARUMEMBR BEFORE DELETING FROM TABLE TRKMEM.	An attempt has been made to delete a trunk memer from table TRKMEM that is still datafilled in table ARUMEMBR. Delete the member from table ARUMEMBR first.

Datafilling table ARUMEMBR

The following table shows the datafill specific to TOPSARU for table ARUMEMBR. Only those fields that apply directly to TOPSARU are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table ARUMEMBR (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
ARUMEM		see subfields	Audio response unit member. This field consists of subfields CLLI and MEM.
	CLLI	alphanumeric (1 to 16 characters)	Common language location identifier. Enter the CLLI code assigned to the trunk group as datafilled in table CLLI. From 1 to 101 trunk groups can be assigned.

TOPSARU trunk groups (continued)

Datafilling table ARUMEMBR (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
	MEM	numeric (0 to 9999)	Member name. Enter the identification number of the member.
DASTRKID		numeric (0 to 9999)	Directory assistance system trunk identification digit. Enter the number that the directory assistance system (DAS) uses to identify this trunk group member.

Datafill example for table ARUMEMBR

The following example shows sample datafill for table ARUMEMBR.

MAP display example for table ARUMEMBR

```
ARUMEM                    DASTRKID
------------------------------------------------------
DAARU1    0               30
DAARU1    1               100
DARUU1    2               101
DARUU1    3               102
```

Error messages for table ARUMEMBR

The following error messages apply to table ARUMEMBR.

Error messages for table ARUMEMBR (Sheet 1 of 2)

Error message	Explanation and action
`CLLI MUST BE A TOPSARU TRUNK.`	CLLIs other than a TOPSARU CLLI are not allowed on table ARUMEMBR.
`DASTRKID IS ALREADY DATAFILLED.`	The same DASTRKID cannot be datafilled against two different CLLIs.
`MAX NUMBER OF GROUPS IN TABLE EXCEEDED.`	Table ARUMEMBR can hold up to 16 different CLLIs.

TOPSARU trunk groups (end)

Error messages for table ARUMEMBR (Sheet 2 of 2)

Error message	Explanation and action
MEMBERS EXIST IN ARUMEMBR.	An attempt has been made to delete a group from table TRKGRP before removing all its members from table ARUMEMBR. Delete all members from table ARUMEMBR before proceeding.
NOT A VALID CLLI	An attempt has been made to datafill table ARUMEMBR first. Datafill table TRKGRP before attempting to datafill table ARUMEMBR.
NOT A VALID TOPSARU MEMBER	An attempt has been made to datafill table ARUMEMBR first. Datafill table TRKGRP before attempting to datafill table ARUMEMBR.
WARNING: DELETION OF THE LAST MEMBER IN A CLLI GROUP COULD AFFECT TOPS DA EXTERNAL ARUS.	An attempt has been made to delete all members from a CLLI group in table ARUMEMBR.

TOPSVL trunk groups

Ordering codes

TOPSVL trunk groups have no ordering codes.

Release applicability

TL03 and up

Prerequisites

TOPSVL trunk groups have no functional group prerequisites.

Description

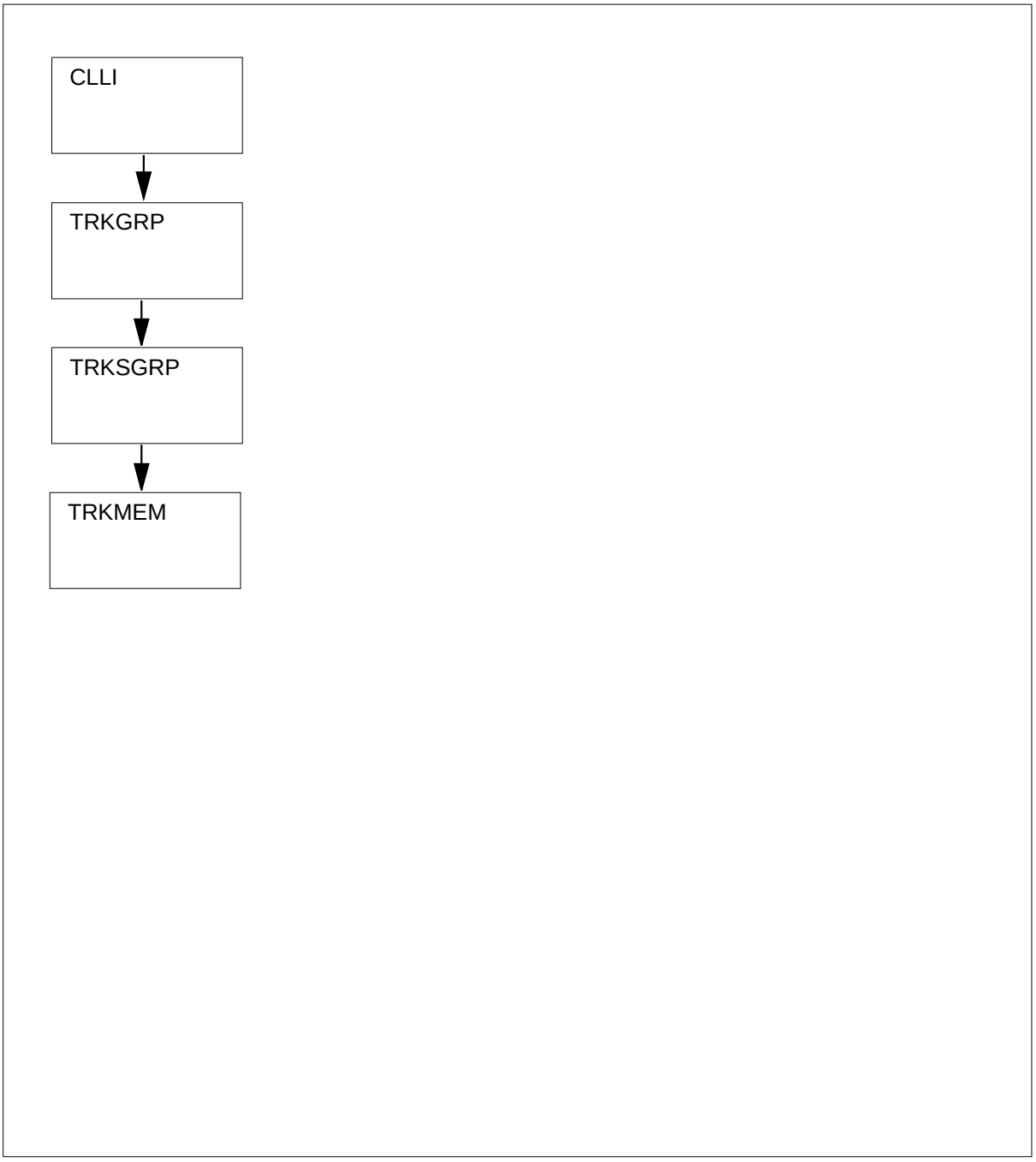
Trunks of type TOPSVL (Traffic Operator Position System voice link) are the voice links to external applications such as Automated Alternate Billing Service (AABS).

In a DMS TOPS office, outgoing trunk group type TOPSVL interfaces with a voice service node (VSN) to provide access to the AABS. No outpulsing is done.

The following figure shows the datafill dependencies for TOPSVL trunk groups.

TOPSVL trunk groups (continued)

Datafill dependencies for TOPSVL trunk groups



Limitations and restrictions

TOPSVL trunk groups have no limitations or restrictions.

TOPSVL trunk groups (continued)

Billing

For information on billing, refer to the Bellcore format AMA translations section of this document.

Datafilling office parameters

TOPSVL trunk groups do not affect office parameters.

Datafill sequence

The following table lists the tables used by TOPSVL trunk groups. The tables are listed in the order in which they are to be datafilled.

Tables used by TOPSVL trunk groups

Table	Purpose of table
CLLI	The common language location identifier table uniquely identifies the far end of each announcement, tone, or trunk group.
TRKGRP	The trunk group table contains customer-defined data associated with each trunk group.
TRKSGRP	The trunk subgroup table contains supplementary information for each trunk group.
TRKMEM	The trunk member table specifies the physical location of each trunk assigned to one of the trunk groups.

The following table shows sample input for datafilling TOPSVL trunk groups.

Sample input for TOPSVL trunk groups

Table	Sample input
CLLI	VSNL 2 1 LA_45_LA
TRKGRP	VSNL TOPSVL 0 NPDGP NCRT MIDL
TRKSGRP	VSNL 0 DS1SIG STD OG NP IM 0 2 NO NO N N Y 70 UNEQ
TRKMEM	VSNL 3 0 DCM 4 1

TOPSVL trunk groups (continued)

Datafilling table CLLI

The following table shows the datafill specific to TOPSVL for table CLLI. Only those fields that apply directly to TOPSVL are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table CLLI

Field	Subfield or refinement	Entry	Explanation and action
CLLI		alphanumeric (1 to 16 characters)	Common language location identifier. Enter a CLLI code to uniquely identify the far end of the trunk group. Only alphabetic characters, numeric characters, and _ (underscores) can be used to datafill this field. The first character must be alphabetic. For optimum use, a CLLI code must not contain more than 12 characters, as only the first 12 characters are displayed on the maintenance and administration position (MAP). When a CLLI code is displayed in a log report, the entire 16-character CLLI code appears.

Datafill example for table CLLI

The following example shows sample datafill for table CLLI.

MAP display example for table CLLI

```
CLLI              ADNUM  TRKGRSIZ  ADMININF
-------------------------------------------------------
VSNL               2     1         LA_45_LA
```

Changing datafill for table CLLI

Use the standard table editor commands to change datafill for table CLLI.

Datafilling table TRKGRP

The following table shows the datafill specific to TOPSVL for table TRKGRP. Only those fields that apply directly to TOPSVL are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table TRKGRP

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 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, and SELSEQ. Note that among these subfields, only those directly affected by TOPSVL are described below. Refer to section “General field information" in table TRKGRP in the data schema section of this document 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.
	SELSEQ	MIDL	Selection sequence. Enter MIDL, for most idle selection sequence.

Datafill example for table TRKGRP

The following example shows sample datafill for table TRKGRP.

MAP display example for table TRKGRP

```
GRPKEY          GRPINFO
------------------------------------------------------
VSNL            TOPSVL 0 NPDGP NCRT MIDL
```

TOPSVL trunk groups (continued)

Changing datafill for table TRKGRP

Use the standard table editor commands to change datafill for table TRKGRP.

Datafilling table TRKSGRP

The following table shows the datafill specific to TOPSVL for table TRKSGRP. Only those fields that apply directly to TOPSVL are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table TRKSGRP

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 CLLI code assigned to the trunk group as datafilled in table CLLI.
	SGRP	numeric (0 or 1)	Subgroup number. Enter the subgroup number assigned to the trunk group.

Datafill example for table TRKSGRP

The following example shows sample datafill for table TRKSGRP.

MAP display example for table TRKSGRP

```
SGRPKEY   CARDCODE
SGRPVAR       SGRPVAR
------------------------------------------------------
VSNL 0    DS1SIG
STD           OG NP IM 0 2 NO NO N N Y 70 UNEQ
```

Changing datafill for table TRKSGRP

Use the standard table editor commands to change datafill for table TRKSGRP.

Datafilling table TRKMEM

The following table shows the datafill specific to TOPSVL for table TRKMEM. Only those fields that apply directly to TOPSVL are shown. For

a description of the other fields, refer to the data schema section of this document.

Datafilling table TRKMEM

Field	Subfield or refinement	Entry	Explanation and action
CLLI		alphanumeric (1 to 16 characters)	Common language location identifier. Enter the CLLI code assigned in table CLLI to the trunk group of which the trunk is a member.
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.
SGRP		numeric (0 to 1)	Subgroup number. Enter the subgroup number to which the trunk is assigned.

Datafill example for table TRKMEM

The following example shows sample datafill for table TRKMEM.

MAP display example for table TRKMEM

```
CLLI              EXTRKNM   SGRP   MEMVAR
-------------------------------------------------------
VSNL               3        0      DCM 4 1
```

Changing datafill for table TRKMEM

Use the standard table editor commands to change datafill for table TRKMEM.

TPS101 trunk groups

Ordering codes

TPS101 trunk groups have no ordering codes.

Release applicability

TL03 and up

Prerequisites

TPS101 trunk groups have no functional group prerequisites.

Description

The international 101 test line (TPS101) 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 capability allows users 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 permits 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.

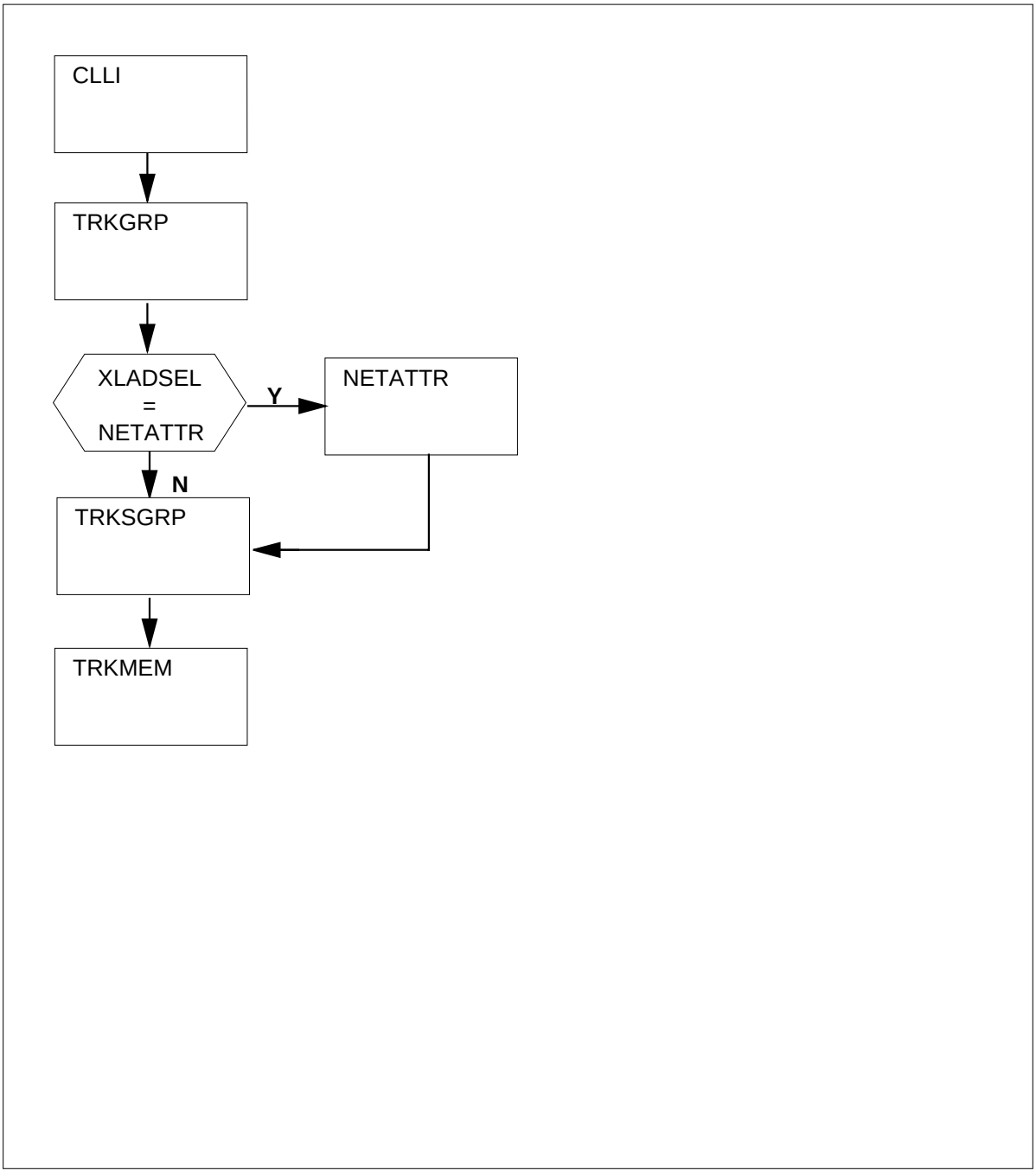
Selectable translator types

The translator type (for example, North American or universal translations) can be selected from the trunk group data.

The following figure shows the datafill dependencies for TPS101 trunk groups.

TPS101 trunk groups (continued)

Datafill dependencies for TPS101 trunk groups



TPS101 trunk groups (continued)

Limitations and restrictions

The following limitations and restrictions apply to TPS101 trunk groups:

- 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.
- Package trunk module (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.
- When datafilling table TRKSGRP for the international 101 test line trunk, use the signaling system STD.
- The translation data selector NETATTR is an index into a new network attributes table. If this selector is used, translation data is datafilled in table NETATTR instead of table TRKGRP.

Billing

For information on billing, refer to the Bellcore format AMA translations section of this document.

Datafilling office parameters

The following table shows the office parameters used by TPS101 trunk groups. For more information about office parameters, refer to *Office Parameters Reference Manual.*

Office parameters used by TPS101 trunk groups

Table name	Parameter name	Explanation and action
OFCVAR	TRK_OOS_CHK_ON	This parameter specifies whether to check that the trunks in a trunk group are out of service before changing the values of specific fields in table TRKGRP by data modification order (DMO).

TPS101 trunk groups (continued)

Datafill sequence

The following table lists the tables used by TPS101 trunk groups. The tables are listed in the order in which they are to be datafilled.

Tables used by TPS101 trunk groups

Table	Purpose of table
CLLI	The common language location identifier table uniquely identifies the far end of each announcement, tone, or trunk group.
TRKGRP	The trunk group table contains customer-defined data associated with each trunk group.
NETATTR	The network attributes table contains translation data and optional features associated with a network. This table can be used as an alternative to table TRKGRP for datafilling the trunk translation data.
TRKSGRP	The trunk subgroup table contains supplementary information for each trunk group.
TRKMEM	The trunk member table specifies the physical location of each trunk assigned to one of the trunk groups.

The following table shows sample input for datafilling TPS101 trunk groups.

Sample input for TPS101 trunk groups

Table	Sample input
CLLI	T101GRP1IC 51 12 MI
TRKGRP	T101GRP1IC TPS101 0 STDLN NCRT IC MI MIDL UNIV PX ICTOLLCN
NETATTR	1 UNIV PX ICANICN NIL
TRKSGRP	T101GRP1IC 0 2X82AA STD IC DT DIALTONE N 2 2 NO NO N N N M UNEQ
TRKMEM	T101GRP1IC 3 0 MTM 2 4

TPS101 trunk groups (continued)

Datafilling table CLLI

The following table shows the datafill specific to TPS101 for table CLLI. Only those fields that apply directly to TPS101 are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table CLLI

Field	Subfield or refinement	Entry	Explanation and action
CLLI		alphanumeric (1 to 16 characters)	Common language location identifier. Enter a CLLI code to uniquely identify the far end of the TPS101 trunk group. Only alphabetic characters, numeric characters, and _ (underscores) can be used to datafill this field. The first character must be alphabetic. For optimum use, a CLLI code must contain not more than 12 characters, as only the first 12 characters are displayed on the MAP (maintenance and administration position) display. When a CLLI code is displayed in a log report, the entire 16-character CLLI code appears.

Datafill example for table CLLI

The following example shows sample datafill for table CLLI.

MAP display example for table CLLI

```
CLLI           ADNUM    TRKGRSIZ            ADMININF
-------------------------------------------------------
T101GRP1IC      51       12                  MI
```

Changing datafill for table CLLI

Use the standard table editor commands to change datafill for table CLLI.

TPS101 trunk groups (continued)

Datafilling table TRKGRP

The following table shows the datafill specific to TPS101 for table TRKGRP. Only those fields that apply directly to TPS101 are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table TRKGRP (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 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, DIR, TRAFCLS, SELSEQ, and XLADATA. Note that among these subfields, only those directly affected by TPS101 are described below. Refer to table TRKGRP in the data schema section of this document for information on 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.
	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, all trunks in the group must be busy before the value of this field can be changed by DMO.
	XLAD	see subfields	Translation data. This field consists of subfield XLADSEL.

TPS101 trunk groups (continued)

Datafilling table TRKGRP (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
	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.
	NETINDX	0 to 1023	Network attribute index. Enter the network attribute index into table NETATTR. No other translation datafill is required since it is available in table NETATTR.

Datafill example

An example of datafill for table TRKGRP with group type TPS101, incoming, is shown below.

MAP display example for table TRKGRP

```
GRPKEY
GRPINFO
------------------------------------------------------------
T101GRP1IC
TPS101 0 STDLN NCRT IC MI MIDL UNIV PX ICTOLLCN
```

Changing datafill for table TRKGRP

If office parameter TRK_OOS_CHK_ON in table OFCVAR is set to Y, all trunks in the trunk group must be taken out of service before changing the value of certain fields in table TRKGRP.

Datafilling table NETATTR

The following table shows the datafill specific to TPS101 for table NETATTR. Only those fields that apply directly to TPS101 are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table NETATTR

Field	Subfield or refinement	Entry	Explanation and action
NETINDX		0 to 1023	Network index. Enter the index referenced by table TRKGRP.
XLAVAR		see subfield	Variable translation data. This field consists of subfield XLADSEL and its refinements. For a description of these fields, refer to the data schema section of this document.

Datafill example for table NETATTR

The following example shows sample datafill for table NETATTR.

MAP display example for table NETATTR

```
NETINDX        XLAVAR                       NETVAR
-------------------------------------------------------
1              UNIV PX ICANICN              NIL
```

Changing datafill for table NETATTR

Use the standard table editor commands to change datafill for table NETATTR.

TPS101 trunk groups (continued)

Datafilling table TRKSGRP

The following table shows the datafill specific to TPS101 for table TRKSGRP. Only those fields that apply directly to TPS101 are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table TRKSGRP

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 CLLI code assigned to the trunk group as datafilled in table CLLI.
	SGRP	0 or 1	Subgroup number. Enter the subgroup number assigned to the trunk group.
SGRPVAR	SIGDATA	STD	Signaling data. Enter STD (standard signaling).

Datafill example for table TRKSGRP

The following example shows sample datafill for table TRKSGRP.

MAP display example for table TRKSGRP

```
SGRPKEY         CARDCODE
SGRPVAR       SGRPVAR
------------------------------------------------------------
T101GRP1IC 0    2X82AA
STD           IC DT DIALTONE N 2 2 NO NO N N N M UNEQ
```

Changing datafill for table TRKSGRP

Use the standard table editor commands to change datafill for table TRKSGRP.

Datafilling table TRKMEM

The following table shows the datafill specific to TPS101 for table TRKMEM. Only those fields that apply directly to TPS101 are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table TRKMEM

Field	Subfield or refinement	Entry	Explanation and action
CLLI		alphanumeric (1 to 16 characters)	Common language location identifier. Enter the CLLI code assigned in table CLLI to the trunk group of which the trunk is a member.
EXTRKNM		0 to 9999	External trunk number. Enter the external trunk number that is assigned to the trunk.
SGRP		0 to 1	Subgroup number. Enter the subgroup number to which the trunk is assigned.

Datafill example for table TRKMEM

The following example shows sample datafill for table TRKMEM.

MAP display example for table TRKMEM

```
CLLI         EXTRKNM  SGRP          MEMVAR
-------------------------------------------------------
T101GRP1IC   3         0            MTM 2 4 $
```

Changing datafill for table TRKMEM

Use the standard table editor commands to change datafill for table TRKMEM.

TTL2 trunk groups

Ordering codes

TTL2 trunk groups have no ordering codes.

Release applicability

TL03 and up

Prerequisites

TTL2 trunk groups have no functional group prerequisites.

Description

The carrier milliwatt test termination trunk groups (type TTL2) are used in switches configured for milliwatt supply and balance termination testing. Decibel level, product equipment code, and supervision combinations are shown below.

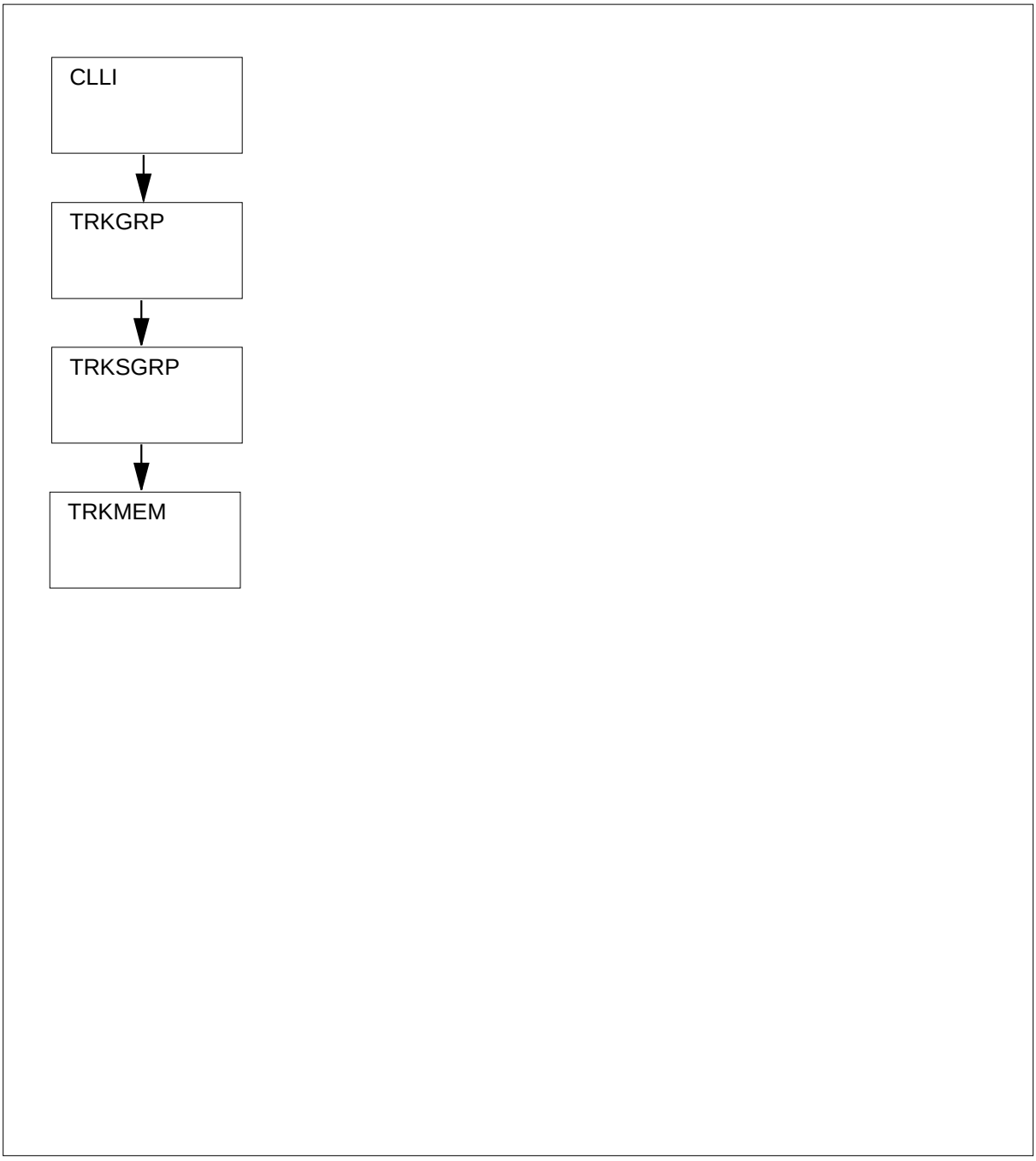
Level	Product equipment code	Supervision
0 dB	NT1X00AANT1X00AB	100 balance102 toll102 local102 steady (DMS-250 only)
- 10 dB	NT1X00AF	100 balance102 toll102 local102 steady (DMS-250 only)
- 15 dB	NT1X00AH	100 balance102 toll102 local102 steady (DMS-250 only)
- 20 dB	NT1X00AENT1X00AG	100 balance102 toll102 local102 steady (DMS-250 only)
Note: The NT1X00AB card is an enhanced version of NT1X00AA with identical functions. Both cards emit a milliwatt source of 1004 Hz at a 0-dB level.		

For related information, refer to TRKGRP type MAINT in the data schema section of this document.

The following figure shows the datafill dependencies for TTL2 trunk groups.

TTL2 trunk groups (continued)

Datafill dependencies for TTL2 trunk groups



Limitations and restrictions

TTL2 trunk groups have no limitations or restrictions.

TTL2 trunk groups (continued)

Billing

TTL2 trunk groups do not affect billing.

Datafilling office parameters

TTL2 trunk groups do not affect office parameters.

Datafill sequence

The following table lists the tables used by TTL2 trunk groups. The tables are listed in the order in which they are to be datafilled.

Tables used by TTL2 trunk groups

Table	Purpose of table
CLLI	The common language location identifier table uniquely identifies the far end of each announcement, tone, or trunk group.
TRKGRP	The trunk group table contains customer-defined data associated with each trunk group.
TRKSGRP	The trunk subgroup table contains supplementary information for each trunk group.
TRKMEM	The trunk member table specifies the physical location of each trunk assigned to one of the trunk groups.

The following table shows sample input for datafilling TTL2 trunk groups.

Sample input for TTL2 trunk groups

Table	Sample input
CLLI	TERM102T 51 1 MI
TRKGRP	TERM102T TTL2 0 TLD NCOT TMW 1X00AB
TRKSGRP	TERM102T 0 2X82AA STD OG DP IM 0 0 NO NO N N N 160 UNEQ
TRKMEM	TERM102T 0 0 MTM 1 2

Datafilling table CLLI

The following table shows the datafill specific to TTL2 for table CLLI. Only those fields that apply directly to TTL2 are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table CLLI

Field	Subfield or refinement	Entry	Explanation and action
CLLI		alphanumeric (1 to 16 characters)	Common language location identifier. Enter a CLLI code to uniquely identify the far end of the TTL2 trunk group. Only alphabetic characters, numeric characters, and _ (underscores) can be used to datafill this field. The first character must be alphabetic. For optimum use, a CLLI code must contain not more than 12 characters, as only the first 12 characters are displayed on the MAP display. When a CLLI code is displayed in a log report, the entire 16-character CLLI code appears.

Datafill example for table CLLI

The following example shows sample datafill for table CLLI.

MAP display example for table CLLI

```
CLLI         ADNUM  TRKGRSIZ           ADMININF
-------------------------------------------------------
TERM102T      51     1                 MI
```

Changing datafill for table CLLI

Use the standard table editor commands to change datafill for table CLLI.

TTL2 trunk groups (continued)

Datafilling table TRKGRP

The following table shows the datafill specific to TTL2 for table TRKGRP. Only those fields that apply directly to TTL2 are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table TRKGRP (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 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. Note that among these subfields, only those directly affected by TTL2 are described in this table. Refer to table TRKGRP in the data schema section of this document for information on 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.

Datafilling table TRKGRP (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
	MWSPRTSN	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 (new version of 1X00AA) • 1X00AA for 0-dB level • 1X00AF for -10dB level • 1X00AH for -15dB level • 1X00AG for -20dB level • 1X00AE for -20dB level (ROH tone international) • 1X00KA for 950-Hz tone at 0 dB in compliance with the China specifications

Datafill example for table TRKGRP

The following example shows sample datafill for table TRKGRP.

MAP display example for table TRKGRP

```
GRPKEY                          GRPINFO
-------------------------------------------------------
TERM102T                        TTL2 0 TLD NCOT TMW 1X00AB
TERM102L                        TTL2 0 TLD NCOT LMW 1X00AB
TERM100Q                        TTL2 0 TLD NCOT BMW 1X00AB
```

Changing datafill for table TRKGRP

Use the standard table editor commands to change datafill for table TRKGRP.

TTL2 trunk groups (continued)

Datafilling table TRKSGRP

The following table shows the datafill specific to TTL2 for table TRKSGRP. Only those fields that apply directly to TTL2 are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table TRKSGRP

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 CLLI code assigned to the trunk group as datafilled in table CLLI.
	SGRP	0 or 1	Subgroup number. Enter the subgroup number assigned to the trunk group.

Datafill example for table TRKSGRP

The following example shows sample datafill for table TRKSGRP.

MAP display example for table TRKSGRP

```
SGRPKEY     CARDCODE
SGRPVAR       SGRPVAR
------------------------------------------------------------
TERM102T 0  2X82AA
STD           OG DP IM 0 0 NO NO N N N 160 UNEQ
```

Changing datafill for table TRKSGRP

Use the standard table editor commands to change datafill for table TRKSGRP.

Datafilling table TRKMEM

The following table shows the datafill specific to TTL2 for table TRKMEM. Only those fields that apply directly to TTL2 are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table TRKMEM

Field	Subfield or refinement	Entry	Explanation and action
CLLI		alphanumeric (1 to 16 characters)	Common language location identifier. Enter the CLLI code assigned in table CLLI to the trunk group of which the trunk is a member.
EXTRKNM		0 to 9999	External trunk number. Enter the external trunk number that is assigned to the trunk.
SGRP		0 to 1	Subgroup number. Enter the subgroup number to which the trunk is assigned.

Datafill example for table TRKMEM

The following example shows sample datafill for table TRKMEM.

MAP display example for table TRKMEM

```
CLLI            EXTRKNM  SGRP              MEMVAR
-------------------------------------------------------
TERM102T         0        0                MTM 1 2 $
```

Changing datafill for table TRKMEM

Use the standard table editor commands to change datafill for table TRKMEM.

VR trunk groups

VR trunk group functionality codes

VR trunk groups have no functionality codes.

Release applicability

TL03 and up

Prerequisites

VR trunk groups have no functional group prerequisites.

Description

Outgoing trunk group type VR (verification) in a DMS-100 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).

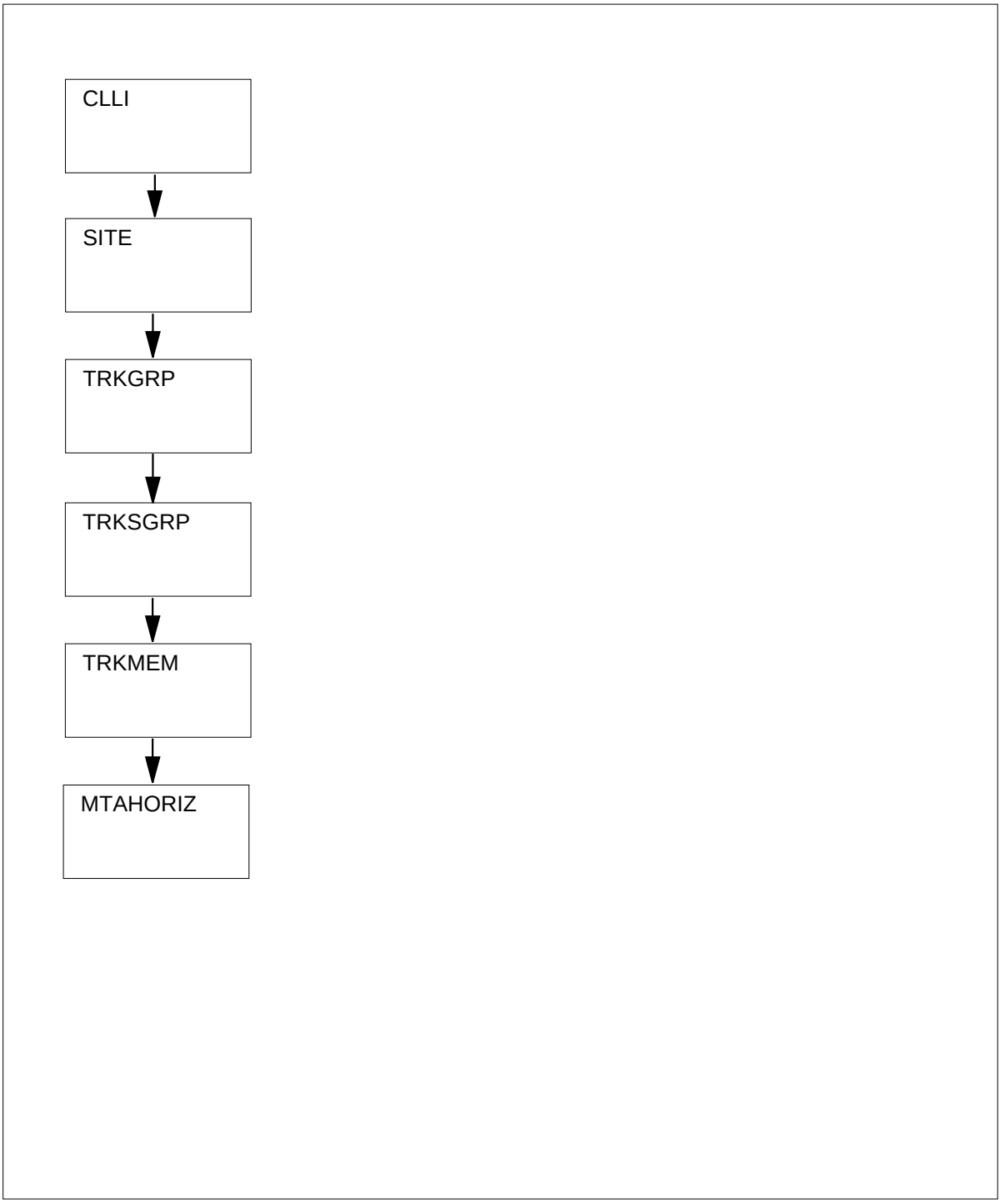
Trunks with the trunk group type VR are assigned to horizontals of the minibar switches in the table MTAHORIZ.

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.

The following figure shows the datafill dependencies for VR trunk groups.

VR trunk groups (continued)

Datafill dependencies for VR trunk groups



VR trunk groups (continued)

Limitations and restrictions

The following limitations and restrictions apply to VR trunk groups:

- Refer to the “Description" section.

Billing

For information on billing, refer to the Bellcore format AMA translations section of this document.

Datafilling office parameters

VR trunk groups do not affect office parameters.

Datafill sequence

The following table lists the tables used by VR trunk groups. The tables are listed in the order in which they are to be datafilled.

Tables used by VR trunk groups

Table	Purpose of table
CLLI	The common language location identifier table uniquely identifies the far end of each announcement, tone, or trunk group.
SITE	The site table contains site names and associated data for each remote location that depends on the host switching unit.
TRKGRP	The trunk group table contains customer-defined data associated with each trunk group.
TRKSGRP	The trunk subgroup table contains supplementary information for each trunk group.
TRKMEM	The trunk member table specifies the physical location of each trunk assigned to one of the trunk groups.
MTAHORIZ	The metallic test access horizontal connection table lists the assignment of VR trunk groups and other test equipment (horizontal agents) to horizontal connections on metallic test access minibar (MTAM) switches.

The following table shows sample input for datafilling VR trunk groups.

Sample input for VR trunk groups

Table	Sample input
CLLI	VER90 51 35 MI
SITE	HOST 00 0 VER90
TRKGRP	VER90 VR 0 ELO NCRT MI
TRKSGRP	VER90 0 2X82AA STD OG MF WK 7 0 NO NO N N N 70 UNEQ
TRKMEM	VER90 2 0 T8A 7 12 $
MTAHORIZ	0 3 T VER90 2 3 0 $

Datafilling table CLLI

The following table shows the datafill specific to VR for table CLLI. Only those fields that apply directly to VR are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table CLLI

Field	Subfield or refinement	Entry	Explanation and action
CLLI		alphanumeric (1 to 16 characters)	Common language location identifier. Enter a CLLI code to uniquely identify the far end of the VR trunk group. Only alphabetic characters, numeric characters, and _ (underscores) can be used to datafill this field. The first character must be alphabetic. For optimum use, a CLLI code must contain not more than 12 characters, as only the first 12 characters are displayed on the MAP (maintenance and administration position) display. When a CLLI code is displayed in a log report, the entire 16-character CLLI code appears.

Datafill example for table CLLI

The following example shows sample datafill for table CLLI.

VR trunk groups (continued)

MAP display example for table CLLI

```
CLLI           ADNUM   TRKGRSIZ                      ADMININF
-------------------------------------------------------------
VER90           51      35                           MI
```

Changing datafill for table CLLI

Use the standard table editor commands to change datafill for table CLLI.

Datafilling table SITE

The following table shows the datafill specific to VR for table SITE. Only those fields that apply directly to VR are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table SITE

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 alphabetic. Peripheral module (PM) type names cannot be used for site names. An exception is RLCM. The name ALL cannot be used as a site name.
OPVRCLLI		VER90 or alphanumeric	Operator verification CLLI. For the host switching unit, enter the fixed CLLI code VER90. For a remote location, enter the code assigned to the VR trunk in table CLLI.

Datafill example for table SITE

The following example shows sample datafill for table SITE.

MAP display example for table SITE

```
NAME      LTDSN  MODCOUNT  OPVRCLLI                ALMDATA
-------------------------------------------------------------
HOST       00     0         VER90                    $
```

Changing datafill for table SITE

Use the standard table editor commands to change datafill for table SITE.

Datafilling table TRKGRP

The following table shows the datafill specific to VR for table TRKGRP. Only those fields that apply directly to VR are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table TRKGRP

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 CLLI code assigned to the trunk group in table CLLI. Enter fixed CLLI code VER90 for the operator verification trunk group in the host switching unit. The CLLI codes for operator verification trunk groups at 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. Note that only those subfields directly affected by VR are described below.
	GRPTYP	VR	Group type. Enter the trunk group type VR.

VR trunk groups (continued)

Datafill example for table TRKGRP

The following example shows sample datafill for table TRKGRP.

MAP display example for table TRKGRP

```
GRPKEY                                                    GRPINFO
-------------------------------------------------------------------
VER90                                          VR 0 ELO NCRT MI
```

Changing datafill for table TRKGRP

Use the standard table editor commands to change datafill for table TRKGRP.

Datafilling table TRKSGRP

The following table shows the datafill specific to VR for table TRKSGRP. Only those fields that apply directly to VR are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table TRKSGRP

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 CLLI code assigned to the trunk group as datafilled in table CLLI.
	SGRP	0 or 1	Subgroup number. Enter the subgroup number assigned to the trunk group.

Datafill example for table TRKSGRP

The following example shows sample datafill for table TRKSGRP.

MAP display example for table TRKSGRP

```
           SGRPKEY    CARDCODE
SGRPVAR                                                    SGRPVAR
-------------------------------------------------------------------
           VER90 0    2X82AA
STD
                        OG MF WK 7 0   NO NO N N N   70 UNEQ
```

Changing datafill for table TRKSGRP

Use the standard table editor commands to change datafill for table TRKSGRP.

Datafilling table TRKMEM

The following table shows the datafill specific to VR for table TRKMEM. Only those fields that apply directly to VR are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table TRKMEM

Field	Subfield or refinement	Entry	Explanation and action
CLLI		alphanumeric (1 to 16 characters)	Common language location identifier. Enter the CLLI code assigned in table CLLI to the trunk group of which the trunk is a member.
EXTRKNM		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.
SGRP		0 or 1	Subgroup number. Enter the subgroup number to which the trunk is assigned.

Datafill example for table TRKMEM

The following example shows sample datafill for table TRKMEM.

VR trunk groups (continued)

MAP display example for table TRKMEM

```
CLLI      EXTRKNM  SGRP                                  MEMVAR
-------------------------------------------------------------
VER90     2        0                                T8A 7 12 $
```

Changing datafill for table TRKMEM

Use the standard table editor commands to change datafill for table TRKMEM.

Datafilling table MTAHORIZ

The following table shows the datafill specific to VR for table MTAHORIZ. Only those fields that apply directly to VR are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table MTAHORIZ (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
HORIZ		0 to 127	Metallic test access horizontal connection. Enter the metallic test access (MTA) horizontal connection to which the test equipment (horizontal agent) is connected.
HORIZGRP		0 to 159	Metallic test access horizontal group. Enter the horizontal group number which identifies the horizontal connection and its horizontal agent as a unique tuple. The horizontal group is used to assign different horizontal agents on the same MTA horizontal. A horizontal group can involve only one horizontal agent, but is cross-connected (multipled) at the main distribution frame (MDF) to a single or a number of MTAM driver horizontal connections.
HORIZAGT		see subfield	Horizontal agent. This field consists of subfield SELECTOR.
	SELECTOR	T	Selector. For an operator verification trunk, enter T and datafill refinements CLLI and EXTRKNM.

Datafilling table MTAHORIZ (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
	CLLI	VER90 or alphanumeric	Common language location identifier. For the host switching unit, enter the fixed CLLI code VER90. For a remote location, enter the code assigned to the VR trunk in table CLLI.
	EXTRKNM	0 to 9999	External trunk number. Enter the external trunk number assigned in table TRKMEM to the operator verification trunk.
MTAGRP		see subfields	Metallic test access group. This field consists of a list of MTA drivers that multiple to the test equipment and is a vector of up to 32 multiples of subfields MTAMEM and HORIZ. If fewer than 32 multiples are required, end the list with a $ (dollar sign).
	MTAMEM	0 to 511	Metallic test access minibar driver member. Enter the metallic test access minibar (MTAM) driver member number to which the horizontal connection is connected.
	HORIZ	0	Horizontal. This read-only field gives information about the MTA drivers physical horizontal connection. Enter 0 (zero) to satisfy table control.

Datafill example for table MTAHORIZ

The following example shows sample datafill for table MTAHORIZ.

MAP display example for table MTAHORIZ

```
HORIZ  HORIZGRP       HORIZAGT
                                                    MTAGRP
-------------------------------------------------------------
0      3              T VER90 2
                                                      3 0 $
```

Changing datafill for table MTAHORIZ

Use the standard table editor commands to change datafill for table MTAHORIZ.

X75 trunk groups

Ordering codes

X75 trunk groups have no ordering codes.

Release applicability

TL03 and up

Prerequisites

X75 trunk groups have no functional group prerequisites.

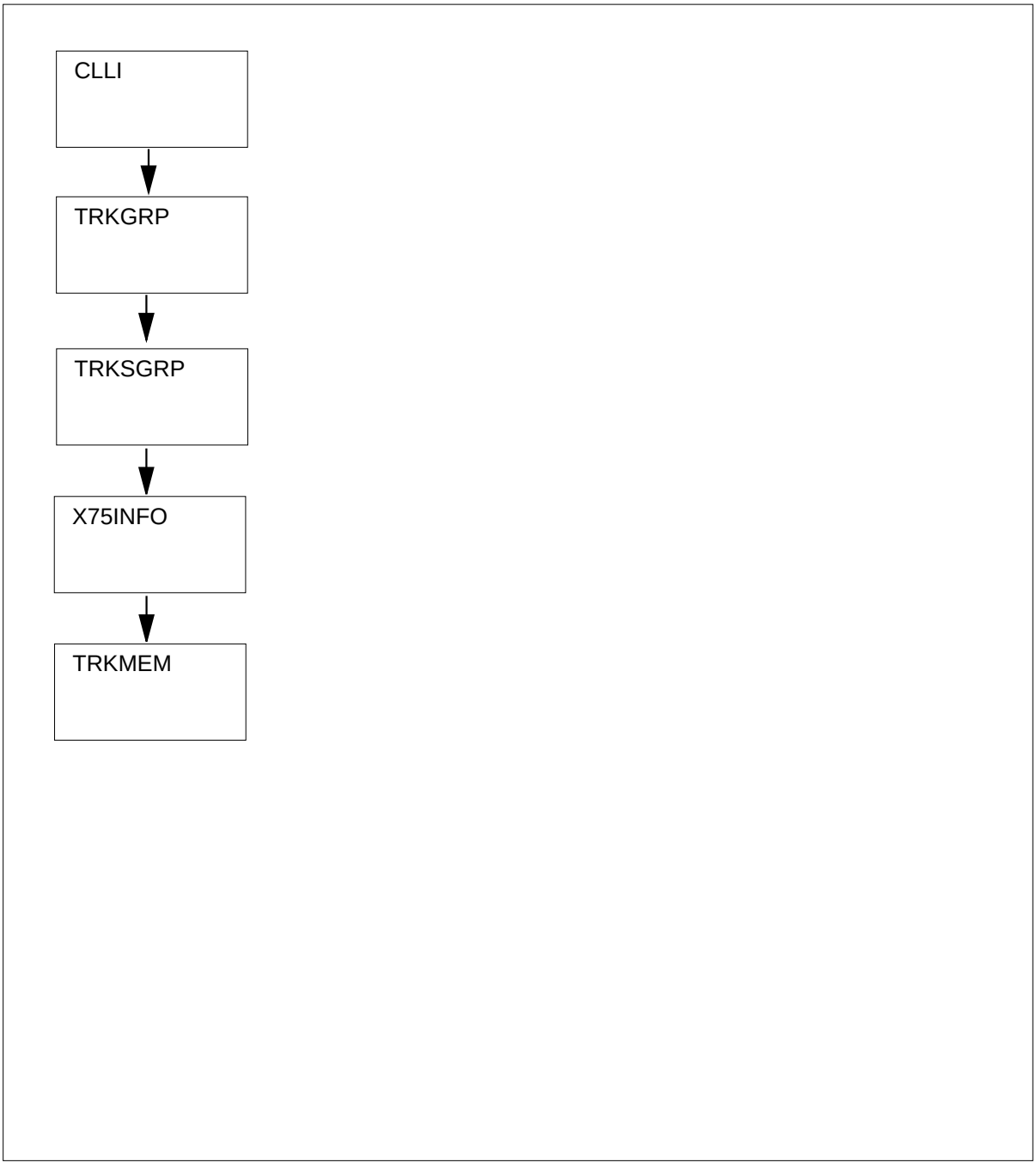
Description

The trunk group type X75 allows the connection of DMS trunking facilities to a DMS packet handler that uses the X.75 protocol.

The following figure shows the datafill dependencies for X75 trunk groups.

X75 trunk groups (continued)

Datafill dependencies for X75 trunk groups



X75 trunk groups (continued)

Limitations and restrictions

The following limitations and restrictions apply to X75 trunk groups:

- In table X75INFO, the combined total of the number of locigcal channels for permanent virtual circuits (field NPVC) and the number of locial channels for non-restricted circuits (field NNR) must be a minimum of one.
- In table X75INFO, the combined total of the beginning logical channel (field BLCN) and the total number of logical channels assigned (field NPVC + field NNR) cannot exceed 4096.
- There is no cross-checking between trunk group SLP members. Each SLP member can be datafilled independently.
- If options are not specified when adding a tuple in table X75INFO, default values are assigned to each optional parameter.
- Only the specified parameters are changed when a tuple is changed or replaced. The other parameters are not reset to default values and retain the original datafilled values.
- Changes to tuples in table X75INFO are not possible if the trunk is datafilled in table TRKMEM.
- The DS-1 channel must be datafilled in table SPECCONN against an XSG channel.

Billing

In table TRKGRP, if field BILLSUP is set to Y (yes), the recording of Inter-LATA billing information is suppressed. Otherwise normal recording of Inter-LATA billing is peformed.

Datafilling office parameters

The following table shows the office parameters used by X75 trunk groups. For more information about office parameters, refer to *Office Parameters Reference Manual.*

Office parameters used by X75 trunk groups

Table name	Parameter name	Explanation and action
OFCVAR	TRK_OOS_CHK_ON	This parameter specifies whether to check that the trunks in a trunk group are out of service before changing the values of specific fields in table TRKGRP by data modification order (DMO).

X75 trunk groups (continued)

Datafill sequence

The following table lists the tables used by X75 trunk groups. The tables are listed in the order in which they are to be datafilled.

Tables used by X75 trunk groups

Table	Purpose of table
CLLI	The common language location identifier table uniquely identifies the far end of each announcement, tone, or trunk group.
TRKGRP	The trunk group table contains customer-defined data associated with each trunk group.
TRKSGRP	The trunk subgroup table contains supplementary information for each trunk group.
X75INFO	The X.75 protocol information table is used to determine integrated services digital network (ISDN) X.75 protocol link and packet layer parameters.
TRKMEM	The trunk member table specifies the physical location of each trunk assigned to one of the trunk groups.

The following table shows sample input for datafilling X75 trunk groups.

Sample input for X75 trunk groups

Table	Sample input
CLLI	DPPSC 28 0 AUTO-NUMBER_ANNOUNCEMENT
TRKGRP	DPPSC X75 IE 0 NPDGP NCIT CWCTH TCA4 613 504 TCA4 Y
TRKSGRP	DPPSC 0 DS1SIG X75 X75P N N N N N N N N Y N N
X75INFO	DPPSC 2418 16137635555 IDTC 75 OMPS 128
TRKMEM	DPPSC 30 0 DTCI 1 2 0

X75 trunk groups (continued)

Datafilling table CLLI

The following table shows the datafill specific to X75 for table CLLI. Only those fields that apply directly to X75 are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table CLLI

Field	Subfield or refinement	Entry	Explanation and action
CLLI		alphanumeric (1 to 16 characters)	Common language location identifier. Enter a CLLI code to uniquely identify the far end of the trunk group. Only alphabetic characters, numeric characters, and _ (underscores) can be used to datafill this field. The first character must be alphabetic. For optimum use, a CLLI code must not contain more than 12 characters, as only the first 12 characters are displayed on the MAP (maintenance and administration position) display. When a CLLI code is displayed in a log report, the entire 16-character CLLI code appears.

Datafill example for table CLLI

The following example shows sample datafill for table CLLI.

MAP display example for table CLLI

```
CLLI    ADNUM    TRKGRSIZ    ADMININF
_____________________________________________________
DPPSC   28       0           AUTO-NUMBER_ANNOUNCEMENT
```

Changing datafill for table CLLI

Use the standard table editor commands to change datafill for table CLLI.

Datafilling table TRKGRP

The following table shows the datafill specific to X75 for table TRKGRP. Only those fields that apply directly to X75 are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table TRKGRP

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 CLLI code assigned to the trunk group in table CLLI.
GRPINFO		see subfields	Variable group data. This field consists of subfields TRAFSNO, PADGRP, NCCLS, SELSEQ. PRTNM, SNPA, RMTNPA, STS, and BILLSUP. Note that among these subfields, only those directly affected by X75 are described below.
	GRPTYP	X75	Group type. Enter the group type, X75.
	SELSEQ	CWCTH or CCWCTH	Select sequence. Enter CWCTH for circular trunk hunting, or CCWCTH for counter clock wise circular trunk hunting.
	BILLSUP	Y or N	Superbilling. Enter Y (yes) to suppress the recording of Inter-LATA billing information. Enter N (no) for normal recording of Inter-LATA billing information.

Datafill example for table TRKGRP

The following example shows sample datafill for table TRKGRP.

MAP display example for table TRKGRP

```
GRPKEY    GRPINFO
-------------------------------------------------------
DPPSC     X75 IE 0 NPDGP NCIT CWCTH TCA4 613 504 TCA4 Y
```

X75 trunk groups (continued)

Changing datafill for table TRKGRP

If office parameter TRK_OOS_CHK_ON in table OFCVAR is set to Y, all trunks in the trunk group must be taken out of service before changing the value of certain fields in table TRKGRP.

Datafilling table TRKSGRP

The following table shows the datafill specific to X75 for table TRKSGRP. Only those fields that apply directly to X75 are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table TRKSGRP (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 CLLI code assigned to the trunk group as datafilled in table CLLI.
	SGRP	numeric (0 or 1)	Subgroup number. Enter the subgroup number assigned to the trunk group.
CARDCODE		DS1SIG	Card code. Enter DS1SIG for X.75 trunks.
SGRPVAR		see subfields	Variable subgroup data. For trunk group type X75, datafill subfields SIGDATA, VERSION and X75IDS.
	SIGDATA	X75	Signaling data. Enter X75 to specify X.75 signaling.
	VERSION	X75 or X75P	Protocol version. Enter X75 for CCITT X.75 packet switch trunk protocol standard. Enter X75P for CCITT X.75' packet switch trunk protocol standard.
	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.

X75 trunk groups (continued)

Datafilling table TRKSGRP (Sheet 2 of 3)

Field	Subfield or refinement	Entry	Explanation and action
	TRFOUT	Y or N	Tariff outgoing call. Enter Y if the international optional X.75 network 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 network 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.
	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 screening on outgoing calls. Otherwise, enter N. If the entry in field VERSION is X75, datafill for SIGDATA = X75 is now complete.
	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.

X75 trunk groups (continued)

Datafilling table TRKSGRP (Sheet 3 of 3)

Field	Subfield or refinement	Entry	Explanation and action
	PCP	Y or N	Protocol conversion permissions. If the entry in field SIGDATA is X75P, datafill this field. Enter Y if the Bell operating companies' (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 that is used to pass the X.75 identifier between subnetworks is inserted or passed. Otherwise, enter N.

Datafill example for table TRKSGRP

The following example shows sample datafill for table TRKSGRP.

MAP display example for table TRKSGRP

```
SGRPKEY   CARDCODE
SGRPVAR           SGRPVAR
-------------------------------------------------------
DPPSC 0   DS1SIG
X75               X75 X75P N N N N N N N N Y N N
```

Changing datafill for table TRKSGRP

Use the standard table editor commands to change datafill for table TRKSGRP.

Datafilling table X75INFO

The following table shows the datafill specific to X75 for table X75INFO. Only those fields that apply directly to X75 are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table X75INFO

Field	Subfield or refinement	Entry	Explanation and action
KEY		see subfields	X75INFO key. This field consists of subfields CLLI and MEMB.
	CLLI	alphanumeric (1 to 16 characters)	Common language location identifier. Enter the CLLI code assigned in table CLLI to the trunk group of which the trunk is a member.
	MEMB	numeric (0 to 9999)	Member identification. Enter the member number used to identify the X75 interface.
X75ID		1 to 11 digits (0 to 9)	X75 identifier. Enter the unique identifier for the X75 interface.
OPTIONS		see subfield	Options. This field consits of subfield X75_OPTION. Refer to table X75INFO in the data schema section of this document for more information on subfield X75_OPTION.

Datafill example for table X75INFO

The following example shows sample datafill for table X75INFO.

MAP display example for table X75INFO

```
KEY           X75ID              OPTIONS
-------------------------------------------------------
DPPSC        2418 15137635555    IDTC 75  OMPS 128 $
```

Changing datafill for table X75INFO

Use the standard table editor commands to change datafill for table X75INFO.

X75 trunk groups (end)

Datafilling table TRKMEM

The following table shows the datafill specific to X75 for table TRKMEM. Only those fields that apply directly to X75 are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table TRKMEM

Field	Subfield or refinement	Entry	Explanation and action
CLLI		alphanumeric (1 to 16 characters)	Common language location identifier. Enter the CLLI code assigned in table CLLI to the trunk group of which the trunk is a member.
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.
SGRP		numeric 0 to 1)	Subgroup number. Enter the subgroup number to which the trunk is assigned.

Datafill example for table TRKMEM

The following example shows sample datafill for table TRKMEM.

MAP display example for table TRKMEM

```
CLLI             EXTRKNM   SGRP         MEMVAR
-------------------------------------------------------
DPPSC             30        0            DTCI 1 2 0 $
```

Changing datafill for table TRKMEM

Use the standard table editor commands to change datafill for table TRKMEM.

ZI trunk groups

Ordering codes

ZI trunk groups have no ordering codes.

Release applicability

TL03 and up

Prerequisites

ZI trunk groups have no functional group prerequisites.

Description

In a DMS toll office incoming trunk group type 0+ and 0- Tandem to TSPS or TOPS (ZI) performs tandem switching of traffic 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.

TRKGRP type ZI is only used in existing DMS central offices. For new applications, use one of the following trunk group types instead of TRKGRP type ZI:

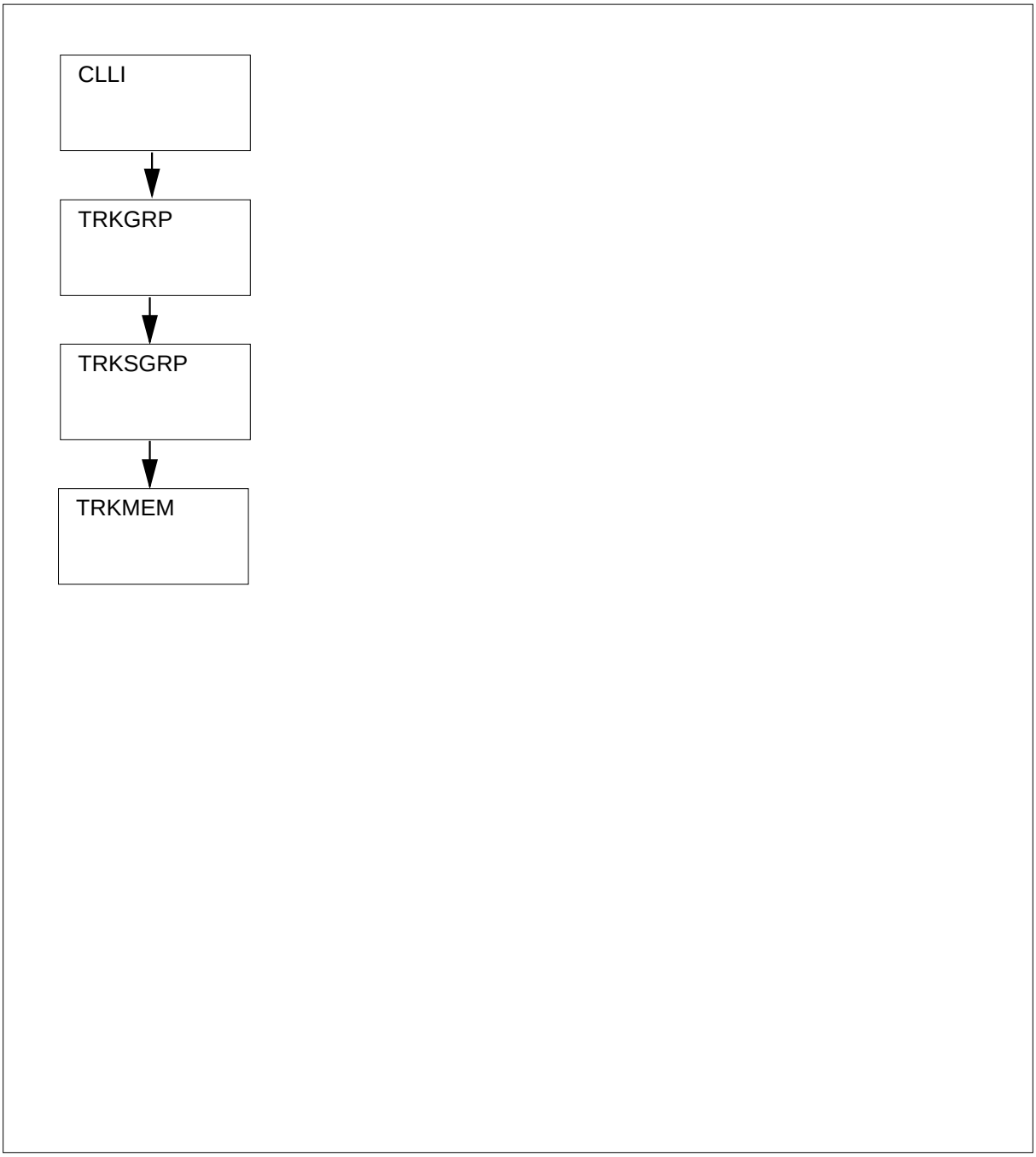
- TRKGRP type OP: outgoing or two-way from a local or toll trunk group to a TOPS or traffic service position system (TSPS) trunk group
- TRKGRP type OS: outgoing from toll trunk group
- TRKGRP type SC: two-way or incoming centralized automatic message accounting (CAMA) AMR5 trunk group

For related information, refer to trunk group types OP, OS, and SC.

The following figure shows the datafill dependencies for ZI trunk groups.

ZI trunk groups (continued)

Datafill dependencies for ZI trunk groups



ZI trunk groups (continued)

Limitations and restrictions

The following limitations and restrictions apply to ZI trunk groups:

- Position name TOPS is required in a toll or combined local and toll switch that performs tandem switching of 0+ or 0- calls to a TOPS switch through a ZI trunk group.
- Position name TSPS is required in a toll or combined local and toll switch that performs tandem switching of 0+ or 0- calls to a traffic service position system (TSPS) through a ZI trunk group.

Billing

For information on billing, refer to the Bellcore format AMA translations section of this document.

Datafilling office parameters

The following table shows the office parameters used by ZI trunk groups. For more information about office parameters, refer to *Office Parameters Reference Manual.*

Office parameters used by ZI trunk groups

Table name	Parameter name	Explanation and action
OFCVAR	TRK_OOS_CHK_ON	This parameter specifies whether to check that the trunks in a trunk group are out of service before changing the values of specific fields in table TRKGRP by data modification order (DMO).

Datafill sequence

The following table lists the tables used by ZI trunk groups. The tables are listed in the order in which they are to be datafilled.

Tables used byZI trunk groups (Sheet 1 of 2)

Table	Purpose of table
CLLI	The common language location identifier table uniquely identifies the far end of each announcement, tone, or trunk group.
TRKGRP	The trunk roup table contains customer-defined data associated with each trunk group.

ZI trunk groups (continued)

Tables used byZI trunk groups (Sheet 2 of 2)

Table	Purpose of table
TRKSGRP	The trunk subgroup table contains supplementary information for each trunk group.
TRKMEM	The trunk member table specifies the physical location of each trunk assigned to one of the trunk groups.

The following table shows sample input for datafilling ZI trunk groups.

Sample input for ZI trunk groups

Table	Sample input
CLLI	ICZI 3 0 MI
TRKGRP	ICZI ZI 0 ELO NCRT NIL NPRT NSCR 613 LCL N TSPS
TRKSGRP	ICZI 0 DS1SIG STD 09 NPIM 0 0 NO NO N N N 17 UNEQ
TRKMEM	ICZI 0 0 TM8 1 20

Datafilling table CLLI

The following table shows the datafill specific to ZI for table CLLI. Only those fields that apply directly to ZI are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table CLLI

Field	Subfield or refinement	Entry	Explanation and action
CLLI		alphanumeric (1 to 16 characters)	Common language location identifier. Enter a CLLI code to uniquely identify the far end of the ZI trunk group. Only alphabetic characters, numeric characters, and _ (underscores) can be used to datafill this field. The first character must be alphabetic. For optimum use, a CLLI code must not contain more than 12 characters, as only the first 12 characters are displayed on the maintenance and administration position (MAP). When a CLLI code is displayed in a log report, the entire 16-character CLLI code appears.

Datafill example for table CLLI

The following example shows sample datafill for table CLLI.

MAP display example for table CLLI

```
CLLI              ADNUM  TRKGRSIZ  ADMININF
-------------------------------------------------------
ICZI               3     0         MI
```

Changing datafill for table CLLI

Use the standard table editor commands to change datafill for table CLLI.

Datafilling table TRKGRP

The following table shows the datafill specific to ZI for table TRKGRP. Only those fields that apply directly to ZI are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table TRKGRP (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 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. Note that among these subfields, only those directly affected by ZI are described below.
	GRPTYP	ZI	Group type. Enter the trunk group type ZI.

ZI trunk groups (continued)

Datafilling table TRKGRP (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
	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).
	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).
	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.
	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	CTOPS, 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.

Datafill example for table TRKGRP

The following example shows sample datafill for table TRKGRP.

MAP display example for table TRKGRP

```
GRPKEY          GRPINFO
------------------------------------------------------
ICZI           ZI 0 ELO NCRT NIL NPRT NSCR 613 LCL N TSPS
```

Changing datafill for table TRKGRP

If office parameter TRK_OOS_CHK_ON in table OFCVAR is set to Y, all trunks in the trunk group must be taken out of service before changing the value of certain fields in table TRKGRP.

Datafilling table TRKSGRP

The following table shows the datafill specific to ZI for table TRKSGRP. Only those fields that apply directly to ZI are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table TRKSGRP

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 CLLI code assigned to the trunk group as datafilled in table CLLI.
	SGRP	numeric (0 or 1)	Subgroup number. Enter the subgroup number assigned to the trunk group.

Datafill example for table TRKSGRP

The following example shows sample datafill for table TRKSGRP.

ZI trunk groups (continued)

MAP display example for table TRKSGRP

```
SGRPKEY   CARDCODE
SGRPVAR         SGRPVAR
-------------------------------------------------------
ICZI 0    DS1SIG
STD             09 NPIM 0 0 NO NO N N N 17 UNEQ
```

Changing datafill for table TRKSGRP

Use the standard table editor commands to change datafill for table TRKSGRP.

Datafilling table TRKMEM

The following table shows the datafill specific to ZI for table TRKMEM. Only those fields that apply directly to ZI are shown. For a description of the other fields, refer to the data schema section of this document.

Datafilling table TRKMEM

Field	Subfield or refinement	Entry	Explanation and action
CLLI		alphanumeric (1 to 16 characters)	Common language location identifier. Enter the CLLI code assigned in table CLLI to the trunk group of which the trunk is a member.
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.
SGRP		numeric (0 to 1)	Subgroup number. Enter the subgroup number to which the trunk is assigned.

Datafill example for table TRKMEM

The following example shows sample datafill for table TRKMEM.

MAP display example for table TRKMEM

```
CLLI             EXTRKNM  SGRP  MEMVAR

-------------------------------------------------------
ICZI              0       0     TM8 1 20
```

Changing datafill for table TRKMEM

Use the standard table editor commands to change datafill for table TRKMEM.

Index

A

B

C

D

E

F

H

I

L

M

N

O

P

R

S

T

U

X

DMS-100 Family

North American DMS-100

Translations Guide Volume 1 of 25

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