Critical Release Notice

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The content of this customer NTP supports the SN07 (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 new or modified content for NA015 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.

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.*

December 2004

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

Volume 1
AINPRESC (new), ACDENLOG, ACDGRP, ACDLOGIN, ANNS

Volume 2
No changes

Volume 3
CMIPADDR, CUSTSTN option AINDENY

Volume 4
No changes

Volume 5
IBNFEAT feature ACD, IBNFEAT feature SUPR

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

Volume 7
No changes

Volume 8
MULTITM (new), OAFUNDEF, OANODINV

Volume 9
PADDATA, QMSMIS

Volume 10
No chnages

Volume 11
TOPSFTR, TOPTDROP, TRIGINFO, TRIGITM, TRKAIN

Volume 12
No changes

September 2004

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

Volume 1
ACDENLOG, ACDGRP, ACDLOGIN

Volume 2
AUTHCDE

Volume 3
CUSTN, CUSTN option VOWDN (new)

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

Volume 5
IBNFEAT feature ECM, IBNXLA

Volume 6
ISUPTRK, KSETFEAT feature ECM

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

Volume 8
MUMRTAB

Volume 9
RESFEAT

Volume 10
TDBDAOPT, TMTMAP

Volume 11
TOLLTRKS, TOPSFTR, TOPSPARM, TOPSTLDN

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

March 2004

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

Volume 1
DCA references changed / made obsolete

Volume 2
CARRMTC, C7UPTMR

Volume 3
DCA references changed / made obsolete

Volume 4
DNROUTE, DNROUTE feature DISA

Volume 5-6
No changes

Volume 7
LNPOPTS, LTDATA

Volume 8
OPTOPT

Volume 9
PADDATA, RDTINV

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

Volume 11-12
No changes

September 2003

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

Volume 1
No changes

Volume 2

BCCODES

Volume 3
CSEDPMAP

Volume 4
DSLIMIT, FNPACONT.RTEREF

Volume 5

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

Volume 6
ISDNPARM, ISERVOPT, KSETLINE

Volume 7
LENLINES, LTCINV, MNMGPIP

Volume 8
OFRT selector CND, OFRT selector NOT

Volume 9
No changes

Volume 10
STDPRTCT.STDPRT selector E911

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

Volume 12
TRKOPTS, VFGDATA, VIRGRPS

June 2003

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

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

Volume 2
No changes

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

Volume 4
FNPACONT

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

Volume 6
ISERVOPT, KSETLINE

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

Volume 8
OFRT selector CND, OFRT selector NOT

Volume 9
PADDATA, REXSCHED

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

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

Volume 12
TRKMEM, TRKOPTS, TRKSGRP, VFGDATA, VIRTGRPS

297-8021-351

DMS-100 Family

North American DMS-100

Customer Data Schema Reference Manual Volume 12 of 12

Data Schema TRKGRP type OC-ZONEORDR

LET0015 and up Standard 05.02 May 2001

NORTEL NETWORKS™

DMS-100 Family

North American DMS-100

Customer Data Schema Reference Manual Volume 12 of 12

Data Schema TRKGRP type OC-ZONEORDR

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Data Schema TRKGRP type OC-ZONEORDR

1 Data schema tables

The following pages contain the data schema tables.

TRKGRP type OC

OG/2W from Local to CAMA Trunk Group Type

Trunk group type OC is used in one of the following con gurations:

- In a DMS end of ce, outgoing trunk group type OC interf aces with a toll of ce to carry noncoin subscriber-dialed chargeable calls (TOPS operator assistance not required) recorded by centralized automatic message accounting (CAMA) in the toll of ce.

  Signaling formats include the CAMA automatic number identi cation (ANI) pulsing format (non-TSPS CAMA of ce).

  If the toll of ce is a DMS switch, the far end of trunk group type OC enters the DMS toll of ce as trunk group type SC.

- In a DMS end of ce, tw o-way trunk group type OC interfaces with a toll of ce to carry outgoing trunk traf c and the follo wing incoming trunk traf c:

  — dedicated to toll-completing

  — dedicated to veri cation

  — combined toll-completing and veri cation

For more information on veri cation calls, refer to table TRKGRP(VR).

- In a DMS equal-access end of ce (EAEO) or an access tandem of ce 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 of ce, outgoing trunk group type OC tandems a call to another toll of ce 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.

Data ll

The following table lists the data ll for table TRKGRP type OC.

Field descriptions (Sheet 1 of 5)

Field	Subfield or refinement	Entry	Explanation and action
GRPKEY		see subfield	*Group key* This field consists of subfield CLLI.
	CLLI	alphanumeric (1 to 16 characters)	*Common language location identifier* Enter the common language location identifier (CLLI) code assigned to the trunk group in table CLLI.
GRPINFO		see subfields	*Variable group data* This field consists of subfields GRPTYP, TRAFSNO, PADGRP, NCCLS, TRAFCLS, SELSEQ, ANITYPE, BILLSPILL, EA, and V2DATA. Refer to section “General field information" in table TRKGRP for information on an alternate structure for this field that results from the datafill of table CUSTFLDS.
	GRPTYP	OC	*Group type* Enter OC to specify the outgoing or two-way local to CAMA trunk group type.
	TRAFSNO	numeric (0 to 127)	*Traffic separation numbe* *r*Enter the incoming and outgoing traffic separation number assigned to the trunk group. If a traffic separation number is not required, enter 0 (zero). For switches with software package NTX085AA (Traffic Separation Peg Count), enter a value from 1 to the value of office parameter TFAN_OUT_MAX_NUMBER in table OFCENG. For switches without software package NTX085AA, enter a value from 1 to 15. Incoming and outgoing traffic separation numbers 1 to 9 should be reserved for generic traffic separation numbers. For more information, refer to table TFANINT.

TRKGRP type OC (continued)

Field descriptions (Sheet 2 of 5)

Field	Subfield or refinement	Entry	Explanation and action
	PADGRP	alphanumeric (1 to 5 characters)	*Pad group* Enter the name of the pad group assigned to the trunk group in table PADDATA. For more information, refer to table PADDATA.
	NCCLS	NCBN NCID NCIM NCIT NCLT NCOF NCON NCOT NCRT NCTC or NOSC	*Operational measurements no-circuit class* Enter the operational measurements (OM) no-circuit class (NCCLS) to indicate which OM register is incremented if treatment GNCT (generalized no circuit) occurs. If trunk direction is incoming (IC), this field is not required. Enter NCRT. The initial value for this trunk group type is NCRT (no circuit). For more information, refer to table the general section of TRKGRP and the *Operational Measurements Reference Manual*.
	TRAFCLS	alphabetic (2 characters)	*Traffic usage class* Enter the traffic usage class assigned to the trunk group. For more information, refer to the general section of table TRKGRP.

TRKGRP type OC (continued)

Field descriptions (Sheet 3 of 5)

Field	Subfield or refinement	Entry	Explanation and action
	SELSEQ	MIDL LIDL CWCTH CCWCT HASEQ or DSEQ	*Select sequence* If the trunk group direction is two-way (2W) and far end is a link list switcher, enter LIDL or MIDL (least or most idle) if far end is MIDL or LIDL respectively. If the trunk group direction is two-way, the far end is not a link list switcher and sequential selection does not apply, enter MIDL. If the trunk group direction is incoming (IC), sequential selection does not apply. Enter MIDL. If the trunk group is two-way, the far end is not a link list switcher, and feature package NTX244AB (Enhanced Sequential Trunk Hunting) is present, base the selection order on the order of the trunks in table TRKMEM, and enter • CWCTH or CCWCTH for clockwise or counterclockwise circular trunk hunting from the most recently released trunk in the trunk group, if the far end is CCWCTH or CWCTH respectively, or • ASEQ or DSEQ for ascending or descending sequential selection, if far end is DSEQ or ASEQ respectively. Entries outside this range are invalid. For more information, refer to the general section of table TRKGRP.
Note: The selection sequence for an existing trunk group can be changed from ASEQ to DSEQ, or from DSEQ to ASEQ, if all the members are made installation busy (INB) or unequipped (UNEQ). The selection method for an existing trunk group cannot be changed. To change the selection method for an existing trunk group from ASEQ or DSEQ to CWCTH or CCWCTH, or to MIDL or LIDL, define a new trunk group, as follows: Create a new trunk group with the required trunk selection method, delete the individual trunks from the old trunk group, and add the trunks to the new trunk group.			

TRKGRP type OC (continued)

Field descriptions (Sheet 4 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. ***Note:*** If optional feature package NTXE34AA (4X Operation - AMR5 Format ANI) is present, enter REV for this field value. Feature package NTXE34AA allows ANI to be forwarded if Feature Group C (FGC) signaling is used. If this package is present, other values for ANITYPE are not valid.
	BILLSPILL	Y or N	*Spill billing* In offices with feature package NTX159AA (AT&T LAMA Format) and feature package NTX986AA (ANI with AMA), enter Y (yes) if direct-dialed calls terminating to the trunk group are to be recorded in a Bellcore AMA-format billing record. Otherwise, enter N (no).

Field descriptions (Sheet 5 of 5)

Field	Subfield or refinement	Entry	Explanation and action
	EA (see Note 1)	Y or N	*Equal access* Enter Y if double ANI digits are to be sent out. Otherwise, enter N. ***Note 1:*** Canada only ***Note 2:*** If optional feature NTXE34AA (which allows ANI to be forwarded if Feature Group C [FGC] signaling is used) is present, enter N for this field. If NTXE34AA is present, Y is not a valid entry value.
	V2DATA	see subfields	*Trunk group data* This field consists of subfield DIR and refinements.

Outgoing local to CAMA trunk groups

For outgoing local to CAMA trunks, data ll sub eld DIR and re nements as described below.

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

Field	Subfield or refinement	Entry	Explanation and action
	DIR	OG	*Trunk direction* Enter OG to specify that the trunk group direction is outgoing. If office parameter TRK_OOS_CHK_ON in table OFCVAR is set to Y, all trunks in the group must be busy before the value of this field can be changed by data modification order (DMO).
	OPTIONS	see subfield	*Options* This field consists of subfield OPTION and refinement.

TRKGRP type OC (continued)

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

Field	Subfield or refinement	Entry	Explanation and action
	OPTION	BCNAME	*Option* To specify the bearer-capability-name option, enter BCNAME and datafill refinement BCNAME. If no options apply, leave this field blank.
	BCNAME	alphanumeric (1 to 16 characters)	*Bearer capability name* If the entry in field OPTION is BCNAME, enter the bearer capability to be used by this trunk group. Refer to table BCDEF for the current list of available bearer capabilities. If field OPTION and refinement BCNAME are left blank, the default bearer capability of the central office is used.

Two-way local to CAMA trunk groups

For two-way local to CAMA trunks, data ll sub eld DIR and re nements as described below.

Field descriptions for conditional data ll (Sheet 1 of 4)

Field	Subfield or refinement	Entry	Explanation and action
	DIR	2W	*Trunk direction* Enter 2W to specify that the trunk group direction is two-way. Office parameter TWO_WAY_FOR_OC in table OFCOPT must be set to Y for two-way trunk groups. If office parameter TRK_OOS_CHK_ON in table OFCVAR is set to Y, all trunks in the group must be busy before the value of this field can be changed by data modification order (DMO).
	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).
	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).

TRKGRP type OC (continued)

Field descriptions for conditional data II (Sheet 2 of 4)

Field	Subfield or refinement	Entry	Explanation and action
	SNPA	numeric (3 digits)	*Serving numbering plan area* Enter the code in table HNPACODE to which translation routes for digit translation. If office parameter TRK_OOS_CHK_ON in table OFCVAR is set to Y, all trunks in the group must be busy before the value of this field can be changed by DMO.
	ORIGSRCE	LCL or NLCL	*Originating source* Enter the originating source of the call, LCL (local) or NLCL (non-local). This field is used in subtable HNPACONT.HNPACODE to prevent a non-authorized originator from access to certain operators, and to verify that the number of digits received is correct. For more information, refer to the “Notes on originating source" section in table HNPACONT.HNPACODE.
	MODE	ARCRCV or VF	*Mode of operation* Enter one of the following modes of operation: • AR for toll-completing with automatic ringing • CR for toll-completing with control ringing • CV for combined toll-completing and verification • VF for dedicated verification If the number to which a verification call is to terminate is busy, the call is completed using the operator verification trunk group (trunk group type VR) and table MTATRK.
	VDEVAR	see subfields	*Variable digit data* This field consists of subfield VDESEL and refinements.

TRKGRP type OC (continued)

Field descriptions for conditional data II (Sheet 3 of 4)

Field	Subfield or refinement	Entry	Explanation and action
	VDESEL	Y or N	*Variable digit selector* If the number of incoming digits is fixed, enter N and datafill refinement DIGREGEN. If the number of incoming digits is variable, enter Y and datafill refinements DIGSIN1 and DIGSIN2.
	DIGREGEN	numeric (1 to 4 digits) or N	*Digits to be regenerated* Datafill this field if the value in field VDESEL is N. Enter the digit string to be prefixed to the incoming digits to regenerate a seven-digit number. The switch subtracts the length of the digit string from seven to determine the number of incoming digits to expect. The regenerated number is then translated in one or both of tables STDPRTCT.STDPRT and HNPACONT.HNPACODE. For example, if the entry is 73, the switch expects five incoming digits XXXXX and regenerates the number 73XXXXX. If no digits are to be prefixed, enter N. The switch then expects seven incoming digits.
	DIGSIN1	numeric (1 to 18)	*Minimum number of incoming digits* Datafill this field if the value in field VDESEL is Y. Enter the minimum number of incoming digits received on the trunk group. Entries outside the indicated range are not valid. If office parameter TRK_OOS_CHK_ON in table OFCVAR is set to Y, all trunks in the group must be busy before the value of this field can be changed by data modification order (DMO).

TRKGRP type OC (continued)

Field descriptions for conditional data ll (Sheet 4 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 value in field VDESEL is Y. Enter the maximum number of incoming digits received on the trunk group. Entries outside the indicated range are not valid. If office parameter TRK_OOS_CHK_ON in table OFCVAR is set to Y, all trunks in the group must be busy before the value of this field can be changed by data modification order (DMO).
	FGB_AREA	see subfield	*Feature group B information* This field consists of subfield FGBTRAFC and refinements.
	FGBTRAFC	Y or N	*Feature group B traffic* To indicate that a trunk group connects to an OCC switch and carries Feature Group B (FGB) calls, enter Y and datafill fields FGBANI and CARRNM. Otherwise, enter N.
	FGBANI	Y or N	*Feature group B ANI* Datafill this field if the value in field FGBTRAFC is Y. If normal ANI is provided, enter Y. If KP + ST is required, enter N.
	CARRNM	alphanumeric (1 to 16 characters) or NILC	*Carrier name* Datafill this field if the value in field FGBTRAFC is Y. Enter the name of the carrier, using an OC trunk group previously datafilled in table OCCINFO. NILC is the default entry.

Data ll e xample

An example of data ll for table TRKGRP and outgoing group type OC is shown below.

- The code of the trunk group is OTWAON2303TO.
- The trunk group type is OC.

- The outgoing traf c separation number is 11.
- TLD is the name of the pad group assigned to the trunk group.
- NCRT is the no-circuit class.
- The traf c class is CAMA.
- The select sequence is MIDL.
- The ANI request type is wink (WK).
- Billing is not required for direct-dialed calls terminating to this trunk group. Double ANI is not sent.
- The direction is outgoing (OG).
- The option is BCNAME, and the bearer capability is 56kdata.

MAP display example for table TRKGRP type OC

```
GRPKEY            GRPINFO
_____________________________________________________________________
OTWAON2303TO      OC 11 TLD NCRT CAMA MIDL WK N N OG BCNAME 56KDATA $
```

An example of data ll for table TRKGRP and tw o-way group type OC is shown below.

- The code of the trunk group is OTWAON2303TO.
- The outgoing traf c separation number is 11.
- TLD is the name of the pad group assigned to the trunk group. NCRT is the no-circuit class.
- The traf c class is CAMA.
- The select sequence is MIDL.
- The ANI request type is a reversal (REV).
- Billing is not required for direct-dialed calls terminating to this trunk group. Double ANI is not sent out (EA N).
- The direction is two-way.
- The standard pretranslator name is VRCT.
- No class of service screening is required.
- The serving NPA is 613.
- The originating source is local (LCL).

TRKGRP type OC (end)

- The mode is combined toll-completing and veri cation (CV).
- The number of incoming digits is variable, minimum 7, maximum 9. The trunk group connects to an OCC switch.
- Normal ANI is to be provided.
- The carrier name is CARR1.

MAP display example for table TRKGRP type OC

```
GRPKEY          GRPINFO
_____________________________________________________________________
OTWAON2303TO    OC 11 TLD NCRT CAMA MIDL REV N N 2W VRCT 613 LCL CV
 Y 7 9 Y Y CARR1
```

Incoming Operator Trunk Group Type

In a DMS end of ce, incoming trunk group type OI connects to an operator board or a Traf c Operator Position System (T OPS) of ce to carry simple call-processing traf c. An OI type trunk cannot handle feature-related call processing. An OI trunk type cannot terminate to an IBNTO trunk type.

Veri cation 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.

Data ll

The following table lists the data ll for table TRKGRP type OI.

Field descriptions (Sheet 1 of 6)

Field	Subfield or refinement	Entry	Explanation and action
GRPKEY		see subfield	*Group key* This field consists of subfield CLLI.
	CLLI	alphanumeric (1 to 16 characters)	*Common language location identifier* Enter the common language location identifier (CLLI) code 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. Refer to section “General field information" in table TRKGRP for information on an alternate structure for this field that results from the datafill of table CUSTFLDS.
	GRPTYP	OI	*Group type* Enter OI to specify the incoming operator trunk group type.

TRKGRP type OI (continued)

Field descriptions (Sheet 2 of 6)

Field	Subfield or refinement	Entry	Explanation and action
	TRAFSNO	numeric (0 to 127)	*Traffic separation number* Enter the incoming and outgoing traffic separation number assigned to the trunk group. If a traffic separation number is not required, enter 0 (zero). For switches with software package NTX085AA (Traffic Separation Peg Count), enter a value from 1 to the value of office parameter TFAN_OUT_MAX_NUMBER in table OFCENG. For switches without software package NTX085AA, enter a value from 1 to 15. Incoming and outgoing traffic separation numbers 1 to 9 should be reserved for generic traffic separation numbers. For more information, refer to table TFANINT.
	PADGRP	alphanumeric (1 to 5 characters)	*Pad group* Enter the name of the pad group assigned to the trunk group in table PADDATA. For more information, refer to table PADDATA.
	NCCLS	NCRT	*Operational measurements no-circuit class* For incoming trunk groups, this field is not required. Enter NCRT (no circuit). For more information, refer to the general section of table TRKGRP and the *Operational Measurements Reference Manual*.
	TRAFCLS	alphabetic (2 characters)	*Traffic usage class* Enter the traffic usage class assigned to the trunk group. For more information, refer to the general section of table TRKGRP.

TRKGRP type OI (continued)

Field descriptions (Sheet 3 of 6)

Field	Subfield or refinement	Entry	Explanation and action
	PRTNM	alphanumeric (1 to 4 characters) or NPRT	*Standard pretranslator name* If standard pretranslation is required, enter the name of the standard pretranslator defined in table STDPRTCT to which digit translation is to route after the receipt of the first digit. If pretranslation is not required, enter NPRT (no pretranslation). If office parameter TRK_OOS_CHK_ON in table OFCVAR is set to Y (yes), all trunks in the group must be busy before the value of this field can be changed by data modification order (DMO).
	SCRNCL	alphanumeric (1 to 32 characters)or NSCR	*Class-of-service screening table name* If class-of-service screening is required, enter the name of the class-of-service screening table (datafilled in table SCRNCLAS) to which digit translation routes. If class-of-service screening is not required, enter NSCR (no screening).
	SNPA	numeric (3 digits)	*Serving numbering plan area* Enter the code in table HNPACODE to which translation routes for digit translation. If office parameter TRK_OOS_CHK_ON in table OFCVAR is set to Y, all trunks in the group must be busy before the value of this field can be changed by DMO.
	ORIGSRCE	LCL or NLCL	*Originating source* Enter the originating source of the call, LCL (local) or NLCL (non-local). This field is used to screen calls in subtable HNPACONT.HNPACODE. For more information, refer to the “Notes on originating source" section in table HNPACONT.HNPACODE.

TRKGRP type OI (continued)

Field descriptions (Sheet 4 of 6)

Field	Subfield or refinement	Entry	Explanation and action
	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 selecto* If the number of incoming digits is fixed, enter N and datafill refinement DIGREGEN. If the number of incoming digits is variable, enter Y and datafill refinements DIGSIN1 and DIGSIN2. ***Note:*** If the number of incoming digits is variable, a corresponding variable-digit-format entry is required in the table STDPRTCT.STDPRT.

TRKGRP type OI (continued)

Field descriptions (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 data modification order (DMO).

TRKGRP type OI (continued)

Field descriptions (Sheet 6 of 6)

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 data modification order (DMO).
	COLOCATED	Y or N	*Collocated switchboard* Enter Y if operator switchboards NE 3, 3C, 3CL, or AE no. 30 or 31 are located in the same building as the switch. Otherwise, enter N. If switchboards are collocated, use trunk circuits with PEC NT3X07AA (incoming trunk to 3C, 3CL, or AE31 switchboard, sleeve lead circuit card).

Data ll e xample

An example of data ll for table TRKGRP and group type OI is shown below.

- The CLLI of the incoming operator trunk group is OTWAON231BB1.
- The trunk group type is incoming operator (OI).
- The incoming traf c separation number is 12.
- TLA is the pad group assigned to the trunk group.
- NCRT is the no-circuit class.
- The traf c class and mode of operation is v eri cation, VR and VF respectively.
- Routing is done using the standard pretranslator INCO.
- No class-of-service screening is provided.
- The operator trunk group is in serving NPA 613.
- The trunk group has an originating source of non-local (toll).

TRKGRP type OI (end)

- The number of incoming digits is x ed at 5 and the digits to be regenerated are 72.
- The operator switchboards are not co-located in the same building as the switch.

MAP display example for table TRKGRP type OI

```
GRPKEY           GRPINFO
_____________________________________________________________________
OTWAON231BB1     OI 12 TLA NCRT VR INCO NSCR 613 NLCL VF N 72 N $
```

TRKGRP type OP

OG/2W from Local or Toll to TOPS or TSPS Trunk Group Type

Trunk group type OP is used in one of the following two con gurations:

- In a DMS end of ce, outgoing trunk group type OP connects with a Traf c Operator Position System (TOPS) or Traf c Service Position System (TSPS) of ce and can be set up to carry any or all of the following types of traf c:
  - — noncoin subscriber-dialed chargeable calls recorded by centralized automatic message accounting (CAMA) in the TOPS of ce using automatic number identi cation (ANI) or operator number identi cation (ONI), provided they are not recorded by local automatic message accounting (LAMA) in the end of ce

    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 of ce using ANI or ONI

    Signaling formats include dial pulse for TSPS from the local of ce.

    If the far-end switch is a DMS TOPS of ce, the far end of trunk group type OP enters the of ce as trunk group type T OPS.
- In a DMS end of ce, tw o-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 veri cation
  - — combined toll completing and veri cation

Refer to TRKGRP type VR for additional information on veri cation calls.

Of ce parameter s 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 of ce parameters in table OFCV AR:

- 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, data ll the trunk using the pseudo common language location identi er (CLLI) ASCS in table CLLI.

If identi cation digit 9 is to be outpulsed on intercept calls, set the parameter SPILL_ANI_9 in table OFCENG to Y.

Data ll

The following table lists the data ll for table TRKGRP type OP .

Field descriptions (Sheet 1 of 6)

Field	Subfield or refinement	Entry	Explanation and action
GRPKEY		see subfield	*Group key* This field consists of subfield CLLI.
	CLLI	alphanumeric (1 to 16 characters)	*Common language location identifier* Enter the common language location identifier (CLLI) code 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, (CONTMARK on form only), HOLDTYPE, BILLSPILL, V2DATA, EADATA, and OPTIONS. Refer to section “General field information" in table TRKGRP for information on an alternate structure for this field that results from the datafill of table CUSTFLDS.
	GRPTYP	OP	*Group type* Enter OP to specify the outgoing or two-way local/toll to TOPS/TSTS trunk group type.

TRKGRP type OP (continued)

Field descriptions (Sheet 2 of 6)

Field	Subfield or refinement	Entry	Explanation and action
	TRAFSNO	numeric (0 to 127)	*Traffic separation number* Enter the incoming and outgoing traffic separation number assigned to the trunk group. If a traffic separation number is not required, enter 0 (zero). For switches with software package NTX085AA (Traffic Separation Peg Count), enter a value from 1 to the value of office parameter TFAN_OUT_MAX_NUMBER in table OFCENG. For switches without software package NTX085AA, enter a value from 1 to 15. Incoming and outgoing traffic separation numbers 1 to 9 should be reserved for generic traffic separation numbers. For more information, refer to table TFANINT.
	PADGRP	alphanumeric (1 to 5 characters)	*Pad group* Enter the name of the pad group assigned to the trunk group in table PADDATA. For more information, refer to table PADDATA.
	NCCLS	NCBN NCID NCIM NCIT NCLT NCOF NCON NCOT NCRT NCTC or NOSC	*Operational measurements no-circuit class* Enter the operational measurements (OM) no-circuit class (NCCLS) to indicate which OM register is incremented if treatment GNCT (generalized no circuit) occurs. If trunk direction is incoming (IC), this field is not required. Enter NCRT. The initial value for this trunk group type is NCRT (no circuit). For more information, refer to the general section of table TRKGRP and the *Operational Measurements Reference Manual*.
	TRAFCLS	alphabetic (2 characters)	*Traffic usage class* Enter the traffic usage class assigned to the trunk group. For more information, refer to the general section of table TRKGRP.

TRKGRP type OP (continued)

Field descriptions (Sheet 3 of 6)

Field	Subfield or refinement	Entry	Explanation and action
	SELSEQ	MIDL LIDL CWCTH CCWCTH ASEQ or DSEQ	*Select sequence* If the trunk group direction is two-way (2W) and far end is a link list switcher, enter LIDL or MIDL (least or most idle) if far end is MIDL or LIDL respectively. If the trunk group direction is two-way, the far end is not a link list switcher and sequential selection does not apply, enter MIDL. If the trunk group direction is incoming (IC), sequential selection does not apply. Enter MIDL. If the trunk group is two-way, the far end is not a link list switcher, and feature package NTX244AB (Enhanced Sequential Trunk Hunting) is present, base the selection order on the order of the trunks in table TRKMEM, and enter • CWCTH or CCWCTH for clockwise or counterclockwise circular trunk hunting from the most recently released trunk in the trunk group, if the far end is CCWCTH or CWCTH respectively, or • ASEQ or DSEQ for ascending or descending sequential selection, if far end is DSEQ or ASEQ respectively. Entries outside this range are invalid. For more information, refer to the general section of table TRKGRP.
Note: The selection sequence for an existing trunk group can be changed from ASEQ to DSEQ, or from DSEQ to ASEQ, if all the members are made installation busy (INB) or unequipped (UNEQ). The selection method for an existing trunk group cannot be changed. To change the selection method for an existing trunk group from ASEQ or DSEQ to CWCTH or CCWCTH, or to MIDL or LIDL, define a new trunk group, as follows: Create a new trunk group with the required trunk selection method, delete the individual trunks from the old trunk group, and add the trunks to the new trunk group.			

TRKGRP type OP (continued)

Field descriptions (Sheet 4 of 6)

Field	Subfield or refinement	Entry	Explanation and action
	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
	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.

TRKGRP type OP (continued)

Field descriptions (Sheet 5 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 automatic number identification (ANI) fail-and-answer supervision on the second leg of a remote call-forwarding call. For normal Bell standard offices, enter REV (reversal or answer). This is the default datafill value. If ANI is not performed, enter NO. If interworking with DMS-250 TOPS trunks is required, enter REVUK. REVUK uses the UK250 ANI protocol format. ***Note:*** If optional feature package NTXE34AA (4X Operation - AMR5 Format ANI) is present, enter REV for this field value. Feature package NTXE34AA allows ANI to be forwarded if Feature Group C (FGC) signaling is used. If this package is present, other values for ANITYPE are not valid.
	HOLDTYPE	NOHOLD or TERMHOLD	*Hold type* Enter NOHOLD if the call is to come down if either the originator or terminator goes on-hook. Use NOHOLD in no-operator configurations when trunk group type OP is used for ANI. Enter TERMHOLD (terminating operator hold) if the call is to come down only if the terminator goes on-hook. Entries outside this range are not valid.

TRKGRP type OP (continued)

Field descriptions (Sheet 6 of 6)

Field	Subfield or refinement	Entry	Explanation and action
	BILLSPILL	Y or N	*Spi ll billing* In offices with feature package NTX159AA (Bellcore LAMA Format) and feature package NTX986AA (ANI with AMA), enter Y (yes) if direct-dialed calls terminating to the trunk group are to be recorded in a Bellcore AMA format billing record. Otherwise, enter N (no).
	V2DATA	see subfields	*Data for two way trunk grou* This field consists of subfield DIR and refinements.

Outgoing trunks

For outgoing trunks, data ll eld DIR as described belo w and then data ll elds EAD ATA and OPTIONS as described in "Outgoing and two-way trunks" on page -33.

Field descriptions for conditional data ll

Field	Subfield or refinement	Entry	Explanation and action
	DIR	OG	*Direction* Enter OG to specify that the trunk group direction is outgoing. If office parameter TRK_OOS_CHK_ON in table OFCVAR is set to Y (yes), all trunks in the group must be busy before the value of this field can be changed by data modification order (DMO). If the trunk group is two-way, set option TWO_WAY_FOR_OP in table OFCOPT to Y.

Two-way trunks

For two-way trunks, data ll eld DIR and re nements PR TNM, SCRNCL, SNPA, ORIGSRC, MODE, and VDEVAR as described below, and then

data ll elds EADATA and OPTIONS as described in "Outgoing and two-way trunks" on page -33.

Field descriptions for conditional data ll (Sheet 1 of 4)

Field	Subfield or refinement	Entry	Explanation and action
	DIR	2W	*Direction* Enter 2W to specify that the trunk group direction is two-way. If office parameter TRK_OOS_CHK_ON in table OFCVAR is set to Y, all trunks in the group must be busy before the value of this field can be changed by data modification order (DMO). For two-way trunk groups, option TWO_WAY_FOR_OP in table OFCOPT must be set to Y.
	PRTNM	alphanumeric (1 to 4 characters) or NPRT	*Standard pretranslator nam* If standard pretranslation is required, enter the name of the standard pretranslator defined in table STDPRTCT to which digit translation is to route after the receipt of the first digit. If pretranslation is not required, enter NPRT (no pretranslation). If office parameter TRK_OOS_CHK_ON in table OFCVAR is set to Y, all trunks in the group must be busy before the value of this field can be changed by data modification order (DMO).
	SCRNCL	alphanumeric (1 to 32 characters)or NSCR	*Class-of-service screening table name* If class-of-service screening is required, enter the name of the class-of-service screening table (datafilled in table SCRNCLAS) to which digit translation routes. If class-of-service screening is not required, enter NSCR (no screening).

TRKGRP type OP (continued)

Field descriptions for conditional data II (Sheet 2 of 4)

Field	Subfield or refinement	Entry	Explanation and action
	SNPA	numeric (3 digits)	*Serving numbering plan area* Enter the code in table HNPACODE to which translation routes for digit translation. If office parameter TRK_OOS_CHK_ON in table OFCVAR is set to Y, all trunks in the group must be busy before the value of this field can be changed by DMO.
	ORIGSRCE	LCL or NLCL	*Originating source* Enter the originating source of the call, LCL (local) or NLCL (non-local). This field is used to screen calls in subtable HNPACONT.HNPACODE. For more information, refer to the “Notes on originating source" section in table HNPACONT.HNPACODE.
	MODE	AR CR CV or VF	*Mode of operation* Enter one of the following modes of operation: • AR for toll-completing with automatic ringing • CR for toll-completing with control ringing • CV for combined toll-completing and verification • VF for dedicated verification If the number to which a verification call is to terminate is busy, the call is completed using the operator verification trunk group (trunk group type VR) and table MTATRK.
	VDEVAR	see subfields	*Variable digit data* This field consists of subfield VDESEL and refinements.

TRKGRP type OP (continued)

Field descriptions for conditional data II (Sheet 3 of 4)

Field	Subfield or refinement	Entry	Explanation and action
	VDESEL	Y or N	*Variable digit selector* If the number of incoming digits is fixed, enter N and datafill refinement DIGREGEN. If the number of incoming digits is variable, enter Y and datafill refinements DIGSIN1 and DIGSIN2. ***Note:*** If the number of incoming digits is variable, a corresponding variable-digit-format entry is required in the table STDPRTCT.STDPRT.
	DIGREGEN	numeric (1 to 4 digits) or N	*Digits to be regenerated* Datafill this field if the value in field VDESEL is N. Enter the digit string to be prefixed to the incoming digits to regenerate a seven-digit number. The switch subtracts the length of the digit string from seven to determine the number of incoming digits to expect. The regenerated number is then translated in one or both of tables STDPRTCT.STDPRT and HNPACONT.HNPACODE. For example, if the entry is 73, the switch expects five incoming digits XXXXX and regenerates the number 73XXXXX. If no digits are to be prefixed, enter N. The switch then expects seven incoming digits.

TRKGRP type OP (continued)

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

Field	Subfield or refinement	Entry	Explanation and action
	DIGSIN1	numeric (0 to 18)	*Minimum number of incoming digits* Datafill this field if the value in field VDESEL is Y. Enter the minimum number of incoming digits received on the trunk group. Entries outside the indicated range are not valid. If office parameter TRK_OOS_CHK_ON in table OFCVAR is set to Y, all trunks in the group must be busy before the value of this field can be changed by data modification order (DMO).
	DIGSIN2	numeric (0 to 18)	*Maximum number of incoming digits* Datafill this field if the value in field VDESEL is Y. Enter the maximum number of incoming digits received on the trunk group. Entries outside the indicated range are not valid. If office parameter TRK_OOS_CHK_ON in table OFCVAR is set to Y, all trunks in the group must be busy before the value of this field can be changed by data modification order (DMO).

Outgoing and two-way trunks

For all outgoing and two-way trunks, data ll elds EAD ATA and OPTIONS as described below.

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

Field	Subfield or refinement	Entry	Explanation and action
	EAEADATA	see subfield	*Equal access data* This field consists of subfield EA and refinements.
	EA	Y or N	*Equal access selector* If equal-access signaling (double ANI digits) is required, enter Y and datafill refinements EAOSS and RTEVIAAT. Otherwise, enter N (no). ***Note:*** If optional feature NTXE34AA (which allows ANI to be forwarded if Feature Group C [FGC] signaling is used) is present, enter N for this field. If NTXE34AA is present, Y is not a valid entry value.
	EAOSS	Y or N	*Exchange access operator services signaling* Datafill this field if the value in field EA is Y. Enter Y if EAOSS signaling is to be used on the trunk. Enter N if EAOSS signaling is not used. Enter N if the trunk is datafilled in table KP2TRUNK.
	RTEVIAAT	Y or N	*Route via access tandem* Datafill this field if the value in field EA is Y. Enter Y if the trunk is between an equal access end office and a TOPS access tandem switch. Otherwise, enter N.
	OPTIONS	see subfield	*Options* This field consists of subfield OPTION and refinements.

TRKGRP type OP (continued)

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

Field	Subfield or refinement	Entry	Explanation and action
	OPTION	BCNAME or NRMLTRAF	*Option* To specify the bearer-capability-name option, enter BCNAME and datafill refinement BCNAME. Use NRMLTRAF to indicate that the OP trunk carries normal traffic. When the NRMLTRAF option is not datafilled, the OP trunk defaults to carrying essential services. ***Note:*** Only OP trunks that carry normal traffic should encounter AIN 0.1 triggers. If no options apply, leave this field blank.
	BCNAME	alphanumeric (1 to 16 characters)	*Bearer capability name* If the entry in field OPTION is BCNAME, enter the bearer capability to be used by this trunk group. Refer to table BCDEF for the current list of available bearer capabilities. If field OPTION and refinement BCNAME are left blank, the default bearer capability of the central office is used.

Data ll e xample

The following example for table TRKGRP type OP shows data ll for an outgoing and a two-way trunk from a local or toll of ce to a T OPS or TSPS of ce.

MAP display example for table TRKGRP type OP

```
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 $
```

Supplementary information

When a T1 (off a DCM) is terminated on a two wire circuit, tones are audible. While outpulsing or during an ANI spill, the DCM is incapable of disabling the return speech path.

TRKGRP type OPR

International Operator (No Metering) Trunk Group Type

Trunk group type OPR is used by international extended multiprocessor system (XMS)-based peripheral module (IXPM) trunks. The direction of this trunk group is incoming, outgoing or two-way, and metering is not allowed. Ring forward is available through the line signaling system (see table LNSIGSYS for more information). This trunk group is intended for any trunk carrying operator-involved calls, and supports BA-1 operator capability through the selection of appropriate line and register signaling systems, as speci ed 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 data lled in table NET ATTR instead of table TRKGRP.

End-to-end connections

Under certain conditions, an of ce only needs to collect enough digits to route a call. Once the call has been routed, the outgoing trunk to the next of ce is seized. A speech path between the incoming and outgoing trunk is then connected, and a signal is sent back to the previous of ce instructing it to resend the digits. The outgoing register of the previous of ce can then signal to the incoming register of the next of ce. This situation is shown inthe gure “End to end connection”.

If an end-to-end connection cannot be established through an of ce, the incoming trunk must collect all signals from the previous of ce, and then once routed to the next of ce, send the signals out. This mode of operation is referred to as link-by-link, or transfer. End-to-end connections set up toll calls faster than link-by-link connections. When possible, the international DMS-100 (DMS-100i) switch attempts to establish end-to-end connections.

The following describes cases in which end-to-end connections cannot be established (for switches in China):

- In the automatic toll network, inter-register signals cannot be sent to transit toll exchanges or terminating toll exchanges directly from an originating local exchange. They must be sent from the originating toll exchange.
- In general, inter-register signals cannot be sent to the local terminating exchange by transit toll or originating toll exchanges. They must be sent from the terminating toll exchange.

- In the local network, there are situations in which tandem exchanges use transfer mode for transmission quality reasons.
- In the automatic toll network, there are situations in which incoming registers of a transit toll exchange must transfer all inter-register signals for transmission quality reasons.

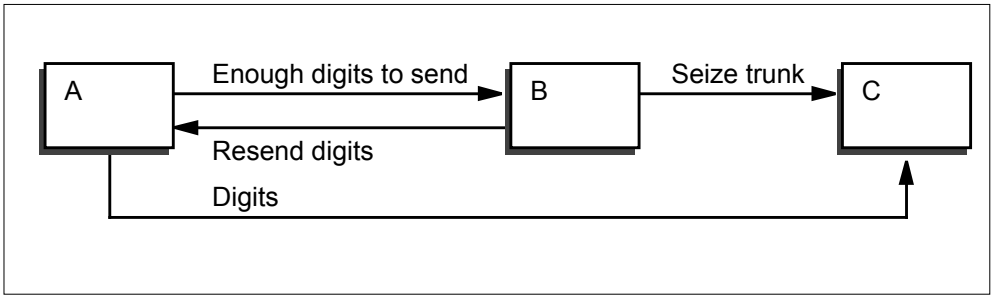
End-to-end connections cannot be established at originating toll or terminating toll of ces. If an incoming trunk group is data lled with a traf c class of either centralized automatic message accounting (CAMA) (originating toll) or TLLC (toll completion) (terminating toll), no attempt is made to establish an end-to-end connection.

For other incoming trunks that must not establish end-to-end connections, eld TANDEM in table TRKGRP must be set to LNK. With this eld set to LNK, all incoming trunk circuits belonging to the trunk group (regardless of their traf c class) cannot establish end-to-end connections.

End-to-end connections can only be established on incoming trunks with eld TRFC in table TRKGRP set to either ITLL, EASV, or NONE, and with eld TANDEM set to EEND.

The gure "End to end connection" sho ws an example of how an end-to-end connection is established. Once of ce B collects enough digits to route the call, the outgoing trunk from of ce B to of ce C is seized. Of ce B then connects a speech path and then requests of ce A to resend the digits. At this point, the outgoing register at of ce A is signaling to the incoming register to of ce C.

End-to-end connection



TRKGRP type OPR (continued)

Traf c c lass

CAMA Centralized automatic message accounting is used for trunk groups between of ces in which the calling subscriber number and KA information can be signaled.

> ***Note:*** KA is the billing party category signal used in Chinese No.1 trunk signaling for national calls.

EASV Extended area service is used for trunk groups that handle local (non-toll) traf c only .

ITLL Inter-toll is used for trunk groups between toll of ces.

TLLC Toll completion is used for trunk groups between a toll of ce and a terminating toll of ce.

TNCA Tandem CAMA is used to collect the calling party information, but not to do toll billing. It is used on trunk group type MTR in China for malicious call identi cation.

NONE The traf c class of NONE is used for trunk groups that do not t one of the other traf c classes.

CAMA traf c c lass

Trunk groups must be data lled with a traf c class of CAMA whene ver 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 of ce and a local/toll of ce

An outgoing trunk group only sends the calling subscriber information forward in response to an A6 backwards signal if that outgoing trunk group is data lled with a traf c 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 data lled with a traf c class of CAMA receives an A6 backwards signal, it sends forward the following information:

- KA signal (contains calling subscriber category)
- calling subscriber number (of ce code + station number)
- end-of-digits (I15) signal

If an outgoing trunk group with a traf c class not data lled 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 data lled with a traf c class of CAMA, it does not necessarily send back an A6 signal. It is possible (from a stored program control (SPC) of ce, for e xample) to handle local calls over a trunk group data lled as CAMA.

If an incoming trunk group with a traf c 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 of ce. 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 rst fe w digits have been reported, more digits are collected until a route can be determined. It is important to data ll the digit analysis and digit translation systems together. If the rst fe w 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 traf c class of CAMA are required to pro vide extra information to the outgoing register. This extra information is sent to the next of ce. Because of the additional information, calls made over these trunk groups are slower than calls made over trunk groups with a traf c class other than CAMA.

EASV traf c c lass

Trunk groups must be data lled with a traf c class of EASV if they carry local traf c only .

TRKGRP type OPR (continued)

ITLL traf c c lass

Trunk groups must be data lled with a traf c class of ITLL if the y carry toll traf c between toll of ces. In the C1 MFC signaling system, a KC signal (indicating the priority of the calling subscriber) is sent between of ces in the toll network. Some of ces use this information for special routing. A traf c class of ITLL on an incoming trunk group indicates to the DMS-100i switching unit that a KC signal can be expected in the o w of inter-register signals from the previous of ce.

Note: KC is the connection control signal used in Chinese No. 1 trunk signaling for national calls.

If an outgoing trunk group is data lled with a traf c class of ITLL, it sends the KC information along with the outpulsed digits to the next of ce (if this of ce has not established an end-to-end connection). If an incoming trunk group is data lled with a traf c class of ITLL, the DMS-100i attempts to establish an end-to-end connection through the of ce.

Note: The above does not provide the ability to perform priority routing at a toll of ce based on the KC information.

Incoming trunk groups with this traf c class do not attempt to establish enlightened connections.

TLLC traf c c lass

Trunk groups must be data lled with a traf c class of TLLC if they carry traf c from a toll of ce to a terminating toll of ce.

TNCA traf c c lass

The tandem CAMA traf c class enables a call to collect calling party information. It does not enable the call to do toll billing. A tandem of ce between a local and a toll of ce can pass calling party information without the occurrence of billing at the tandem of ce.

NONE traf c c lass

Data ll trunk groups with a traf c class of NONE if none of the other traf c classes apply. For example, for trunk groups that carry traf c between local of ces, use a traf c class of NONE. Similarly , for trunk groups that carry traf c from a terminating toll of ce to a terminating local of ce, use a traf c class of NONE.

Digit analysis

For a DMS-100i switching unit, digit analysis can be performed for both trunk groups and line attributes.

TRKGRP type OPR (continued)

Two main tables are used for specifying digit analysis: DGHEAD and DGCODE. Each tuple in table DGCODE speci es the type of analysis that is carried out for the digit range given in the key to that tuple. The key for each tuple consists of an instance name and a digit range. The digit range is composed of “from" digits and “to" digits. The “from" and “to" digits can be either one or two digits in length. The names of all instances must be in table DGHEAD. Table DGHEAD is used to associate default values with each instance. The values in table DGHEAD are only used if the instance does not appear in table DGCODE.

To associate an incoming trunk with a particular type of analysis, the name of the required instance in table DGHEAD is entered in eld DGNAME of table TRKGRP type OPR.

By providing digit analysis for trunk groups, the DMS-100i switching unit is able to use different digit analyses for incoming trunks from different of ces. This system also enables trunks carrying different classes of traf c to use different digit analysis schemes.

Digit regeneration

Field DIGREGEN is used by the incoming and two-way international trunk group OPR to pre x incoming digits with up to four additional digits. This eld contains the digits that require regeneration so that the number dialed in the remote of ce can be re generated. If no digits require regeneration, the entry is N (no).

Of ce parameter s

If of ce 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 eld through a data modi cation 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 data ll.

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

TRKGRP type OPR (continued)

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.

Incoming international trunk group eld descriptions

The following table lists the data ll for incoming international trunk groups (type OPR) in table TRKGRP.

Field descriptions (Sheet 1 of 4)

Field	Subfield or refinement	Entry	Explanation and action
GRPKEY		see subfield	*Group key* This field consists of subfield CLLI.
	CLLI	alphanumeric (1 to 16 characters)	*Common language location identifier* Enter the common language location identifier (CLLI) code assigned to the trunk group in table CLLI.
GRPINFO		see subfields	*Variable group data* This field consists of subfields GRPTYP, TRAFSNO, PADGRP, NCCLS, SAT, ESUPR, IAA, TANDEM, TRFC, DIR, MCTANI, XLAD, MTRIC, DIGREGEN, DGNAME, PROTIDX, and TRTMTIDX. Refer to section “General field information" in table TRKGRP for information 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.

TRKGRP type OPR (continued)

Field descriptions (Sheet 2 of 4)

Field	Subfield or refinement	Entry	Explanation and action
	TRAFSNO	numeric (0 to 127)	*Traffic separation number* Enter the incoming and outgoing traffic separation number assigned to the trunk group. If a traffic separation number is not required, enter 0 (zero). For switches with software package NTX085AA (Traffic Separation Peg Count), enter a value from 1 to the value of office parameter TFAN_OUT_MAX_NUMBER in table OFCENG. For switches without software package NTX085AA, enter a value from 1 to 15. Incoming and outgoing traffic separation numbers 1 to 9 should be reserved for generic traffic separation numbers. For more information, refer to table TFANINT.
	PADGRP	alphanumeric (1 to 5 characters)	*Pad group* Enter the name of the pad group assigned to the trunk group in table PADDATA. For more information, refer to table PADDATA.
	NCCLS	NCRT	*Operational measurements no-circuit class* This field is not required. Enter the operational measurements (OM) no circuit (NCRT). For more information, refer to section “General field information" in table TRKGRP and the *Operational Measurements Reference Manual*.
	SAT	Y or N	*Satellite* Enter Y (yes) if the trunk is configured to switch through a satellite connection. Otherwise, enter N (no).
	ESUPR	Y or N	*Echo suppressor* If the trunk subgroup has echo suppressors, enter Y. Otherwise, enter N.

TRKGRP type OPR (continued)

Field descriptions (Sheet 3 of 4)

Field	Subfield or refinement	Entry	Explanation and action
	IAA	N	*Interadministration accounting* Enter N. Interadministration accounting (IAA) is not applicable to OPR trunk groups.
	TANDEM	EEND or LNK	*Tandem mode* Enter EEND (end-to-end operation) if end-to-end connections are enabled over the trunk group. Enter LNK (link-by-link) if end-to-end connections are not enabled over the trunk group. End-to-end connections are only applicable to MFC R2 signaling trunk groups. For non-R2 MFC signaling trunk groups, this field is ignored.
	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.

TRKGRP type OPR (continued)

Field descriptions (Sheet 4 of 4)

Field	Subfield or refinement	Entry	Explanation and action
	DIR	IC	*Direction* This field specifies the trunk group direction. Enter IC for incoming. If office parameter TRK_OOS_CHK_ON in table OFCVAR is set to Y (yes), all trunks in the group must be busy before the value of this field can be changed by data modification order (DMO).
	MCTANI	Y or N	*Forward automatic number identification enable* Enter Y to indicate that for MCT calls connected to trunks that do not already send DN and category, a backwards request for DN or CATEGORY is required. Enter N to indicate that for MCT calls connected to trunks that do not already send DN and category, a backwards request for DN or CATEGORY is not required. This option is applicable for R2 calls only.
	XLAD	see subfield	*Translation fields* This field consists of subfield XLADSEL and refinements.
	XLADSEL	NALT NETATTR or UNIV	*Translation selector* If the North American translation system is used, enter NALT and datafill refinements PRTNM, SCRNCL, SNPA, and ORIGSRC. If this table indexes into table NETATTR, enter NETATTR and datafill refinement NETINDX. If the universal translation system is used, enter UNIV and datafill refinement XLAAREA.

TRKGRP type OPR (continued)

XLADSEL = NALT

If the entry in sub eld XLADSEL is N ALT, data ll re nements PR TNM, SCRNCL, SNPA, and ORIGSRC as described below.

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

Field	Subfield or refinement	Entry	Explanation and action
	PRTNM	alphanumeric (1 to 4 characters) or NPRT	*Standard pretranslator name* If standard pretranslation is required, enter the name of the standard pretranslator defined in table STDPRTCT to which digit translation is to route after the receipt of the first digit. If pretranslation is not required, enter NPRT (no pretranslation). If office parameter TRK_OOS_CHK_ON in table OFCVAR is set to Y (yes), all trunks in the group must be busy before the value of this field can be changed by data modification order (DMO).
	SCRNCL	alphanumeric (1 to 4 characters)or NSCR	*Class-of-service screening table name* If class-of-service screening is required, enter the name of the class-of-service screening table (datafilled in table SCRNCLAS) to which digit translation routes. If class-of-service screening is not required, enter NSCR (no screening).

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

Field	Subfield or refinement	Entry	Explanation and action
	SNPA	numeric (3 digits)	*Serving numbering plan area* Enter the serving numbering plan area (NPA) for the trunk group. If office parameter TRK_OOS_CHK_ON in table OFCVAR is set to Y, all trunks in the group must be busy before the value of this field can be changed by DMO.
	ORIGSRCE	LCL or NLCL	*Originating source* Enter the originating source of the call, LCL (local) or NLCL (non-local). The originating source determines, for the code dialed, whether the call is routed or blocked by the code type in the HNPACODE subtable. For more information, refer to the “Notes on originating source" section in table HNPACONT.HNPACODE.

XLADSEL = NETATTR

If the entry in sub eld XLADSEL is NET ATTR, data ll re nement NETINDX as described below.

Field descriptions for conditional data II

Field	Subfield or refinement	Entry	Explanation and action
	NETINDX	numeric (0 to 1023)	*Network attribute index* Enter a valid network attribute index from table NETATTR. No other translation data is required, since it is available in table NETATTR.

TRKGRP type OPR (continued)

XLADSEL = UNIV

If the entry in sub eld XLADSEL is UNIV, data ll re nement XLAAREA as described below.

Field descriptions for conditional data ll

Field	Subfield or refinement	Entry	Explanation and action
	XLAAREA	see subfield	*Universal translation fields* This field consists of subfield XLASYS and refinement XLANAME.
	XLASYS	AC AM CT CTY DN FA FT NSC OFC PX or NIL	*Translation system* Enter the name of the head table from which translation begins. Entry values other than those listed are not valid.
	XLANAME	alphanumeric (1 to 8 characters) or NIL	*Translation name* Enter a name from the code table that belongs to the head table referenced by field XLASYS.

Metering and other data for all incoming trunks

For the metering and other data for all incoming trunks, data ll additional re nements as described belo w.

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

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. Menter N. Metering is not supported for OPR trunk groups.
	MDI	leave blank	*Metering data index* This field is left blank for OPR trunks.

TRKGRP type OPR (continued)

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

Field	Subfield or refinement	Entry	Explanation and action
	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.

TRKGRP type OPR (continued)

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

Field	Subfield or refinement	Entry	Explanation and action
	PROTIDX	BELR2 BRAR2 CHILER2 CHIR2 GUYR2 HAITIR2 IRER2L IRER2T MEXR2 MORR2L MORR2T PERU1R2 SOCR24 SOCR26 SOCR26A SOCR27 orNIL	*R2 protocol* This field references table indexes in table R2PROT that are required by this trunk group for R2 signal/activity mappings and control. All valid entries are five to eight alphanumeric characters in length, with the characters before R2 corresponding to the target area. T or L after the characters R2 indicates that the protocol is for toll or local calls, respectively. Enter the required R2 protocol for the trunk, or enter NIL if trunk group does not use R2 signaling. Entry values other than those listed are not valid.
	TRTMTIDX	BELTRT BRATRT CHILETRT CHITRT GUYTRT HAITITRT MEXTRT MORTRTL MORTRTT PERUTRT SOCTRTL SOCTRTT or NIL	*R2 treatment* This field references table indexes in tables TRTMTACT and TRTTRTMT required by this trunk group. All valid entries are six to eight alphanumeric characters in length, with the characters before TRT corresponding to the target area. T or L after the characters TRT indicates that the treatment is for toll or local calls, respectively. Enter the required R2 treatment for the trunk, or enter NIL if the trunk group does not use R2 signaling. Entry values other than those listed are invalid.

Two-way international trunk group eld descriptions

The following table lists the data ll for tw o-way international trunk goups (type OPR) in table TRKGRP.

Field descriptions (Sheet 1 of 5)

Field	Subfield or refinement	Entry	Explanation and action
GRPKEY		see subfield	*Group key* This field consists of subfield CLLI.
	CLLI	alphanumeric (1 to 16 characters)	*Common language location identifier* Enter the common language location identifier (CLLI) code 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, SELSEQ, MTROG, DIGREGEN, ANIIDX, DGNAME, PROTIDX, and TRTMTIDX. 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	OPR	*Group type* Enter OPR for the international trunk group.

TRKGRP type OPR (continued)

Field descriptions (Sheet 2 of 5)

Field	Subfield or refinement	Entry	Explanation and action
	TRAFSNO	numeric (0 to 127)	*Traffic separation number* Enter the incoming and outgoing traffic separation number assigned to the trunk group. If a traffic separation number is not required, enter 0 (zero). For switches with software package NTX085AA (Traffic Separation Peg Count), enter a value from 1 to the value of office parameter TFAN_OUT_MAX_NUMBER in table OFCENG. For switches without software package NTX085AA, enter a value from 1 to 15. Incoming and outgoing traffic separation numbers 1 to 9 should be reserved for generic traffic separation numbers. For more information, refer to table TFANINT.
	PADGRP	alphanumeric (1 to 5 characters)	*Pad group* Enter the name of the pad group assigned to the trunk group in table PADDATA. For more information, refer to table PADDATA.
	NCCLS	NCBN NCID NCIM NCIT NCLT NCOF NCON NCOT NCRT NCTC or NOSC	*Operational measurements no-circuit class* Enter the operational measurements (OM) no-circuit class (NCCLS) to indicate which OM register (in OM groups OFZ2 and SOTS) is incremented if treatment GNCT (generalized no circuit) occurs. If the trunk group direction is incoming, this field is not required. Enter NCRT (no circuit). For more information, refer to section “General field information" in table TRKGRP and the *Operational Measurements Reference Manual*.
	SAT	Y or N	*Satellite* Enter Y (yes) if the trunk is configured to switch through a satellite connection. Otherwise, enter N (no).

TRKGRP type OPR (continued)

Field descriptions (Sheet 3 of 5)

Field	Subfield or refinement	Entry	Explanation and action
	ESUPR	Y or N	*Echo suppressor* If the trunk subgroup has echo suppressors, enter Y. Otherwise, enter N.
	IAA	N	*Interadministration accounting*Enter N. Interadministration accounting (IAA) is not applicable to OPR trunk groups.
	TANDEM	EEND or LNK	*Tandem mode* Enter EEND (end-to-end operation) if end-to-end connections are enabled over the trunk group. Enter LNK (link-by-link) if end-to-end connections are not enabled over the trunk group. End-to-end connections are only applicable to MFC R2 signaling trunk groups. For non-R2 MFC signaling trunk groups, this field is ignored.

TRKGRP type OPR (continued)

Field descriptions (Sheet 4 of 5)

Field	Subfield or refinement	Entry	Explanation and action
	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.
	DIR	2W	*Direction* This field specifies the trunk group direction. Enter 2W for two-way. If office parameter TRK_OOS_CHK_ON in table OFCVAR is set to Y (yes), all trunks in the group must be busy before the value of this field can be changed by data modification order (DMO).

TRKGRP type OPR (continued)

Field descriptions (Sheet 5 of 5)

Field	Subfield or refinement	Entry	Explanation and action
	MCTANI	Y or N	*Forward automatic number identification enable* Enter Y to indicate that for MCT calls connected to trunks that do not already send DN and category, a backwards request for DN or CATEGORY is required. Enter N to indicate that for MCT calls connected to trunks that do not already send DN and category, a backwards request for DN or CATEGORY is not required. This option is applicable for R2 calls only.
	XLAD	see subfield	*Translation fields* This field consists of subfield XLADSEL and refinements.
	XLADSEL	NALT NETATT 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.

TRKGRP type OPR (continued)

XLADSEL = NALT

If the entry in sub eld XLADSEL is N ALT, data ll re nements PR TNM, SCRNCL, SNPA, and ORIGSRC as described below.

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

Field	Subfield or refinement	Entry	Explanation and action
	PRTNM	alphanumeric (1 to 4 characters) or NPRT	*Standard pretranslator name* If standard pretranslation is required, enter the name of the standard pretranslator defined in table STDPRTCT to which digit translation is to route after the receipt of the first digit. If pretranslation is not required, enter NPRT (no pretranslation). If office parameter TRK_OOS_CHK_ON in table OFCVAR is set to Y (yes), all trunks in the group must be busy before the value of this field can be changed by data modification order (DMO).
	SCRNCL	alphanumeric (1 to 4 characters)or NSCR	*Class-of-service screening table name* If class-of-service screening is required, enter the name of the class-of-service screening table (datafilled in table SCRNCLAS) to which digit translation routes. If class-of-service screening is not required, enter NSCR (no screening).

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

Field	Subfield or refinement	Entry	Explanation and action
	SNPA	numeric (3 digits)	*Serving numbering plan area* Enter the serving numbering plan area (NPA) for the trunk group. If office parameter TRK_OOS_CHK_ON in table OFCVAR is set to Y, all trunks in the group must be busy before the value of this field can be changed by DMO.
	ORIGSRCE	LCL or NLCL	*Originating source* Enter the originating source of the call, LCL (local) or NLCL (non-local). The originating source determines, for the code dialed, whether the call is routed or blocked by the code type in the HNPACODE subtable. For more information, refer to the “Notes on originating source" section in table HNPACONT.HNPACODE.

XLADSEL = NETATTR

If the entry in sub eld XLADSEL is NET ATTR, data ll re nement NETINDX as described below.

Field descriptions for conditional data ll

Field	Subfield or refinement	Entry	Explanation and action
	NETINDX	numeric (0 to 1023)	*Network attribute index* Enter a valid network attribute index from table NETATTR. No other translation data is required, since it is available in table NETATTR.

TRKGRP type OPR (continued)

XLADSEL = UNIV

If the entry in sub eld XLADSEL is UNIV, data ll re nement XLAAREA as described below.

Field descriptions for conditional data ll

Field	Subfield or refinement	Entry	Explanation and action
	XLAAREA	see subfield	*Universal translation fields* This field consists of subfield XLASYS and refinement XLANAME.
	XLASYS	AC AM CT CTY DN FA FT NSC OFC PX or NIL	*Translation system* Enter the name of the head table from which translation begins. Entry values other than those listed are not valid.
	XLANAME	alphanumeric (1 to 8 characters) or NIL	*Translation name* Enter a name from the code table that belongs to the head table referenced by field XLASYS.

Metering and other data for all two-way trunks

For the metering and other data for all two-way trunks, data ll additional re nements as described belo w.

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

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.

TRKGRP type OPR (continued)

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

Field	Subfield or refinement	Entry	Explanation and action
	MDI	leave blank	*Metering data index* This field is left blank for OPR trunks.
	SELSEQ	ASEQ CCWCTH CWCTH DSEQ LIDL or MIDL	*Select sequence* If the trunk group direction is outgoing (OG) or two-way (2W) and the far end is a link list switcher, enter LIDL or MIDL (least or most idle) if the far end is MIDL or LIDL respectively. If the trunk group direction is outgoing or two-way, the far end is not a link list switcher, and sequential selection does not apply, enter MIDL. If the trunk group is outgoing or two-way, the far end is not a link list switcher, and feature package NTX244AB (Enhanced Sequential Trunk Hunting) is present, base the selection order on the order of the trunks in table TRKMEM, and enter • CWCTH or CCWCTH for clockwise or counterclockwise circular trunk hunting from the most recently released trunk in the trunk group, if the far end is CCWCTH or CWCTH respectively, or • ASEQ or DSEQ for ascending or descending sequential selection, if far end is DSEQ or ASEQ respectively. If the trunk group direction is incoming, sequential selection does not apply. Enter MIDL. Entries outside this range are not valid. For more information, refer to section “General field information" in table TRKGRP.

TRKGRP type OPR (continued)

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

Field	Subfield or refinement	Entry	Explanation and action
			Note: A trunk group trunk selection method cannot be changed. If a change in the selection method is required, a new trunk group must be created with the required trunk selection method. The individual trunks with the old selection sequence must be deleted from the old trunk group and then added to the new trunk group. For an existing trunk group, the selection sequence can be changed to the opposite select sequence type (for example, ASEQ to DSEQ, LIDL to MIDL, or CCWCTH to CWCTH) if all the trunk members are installation busy (INB) or unequipped (UNEQ). Refer to table TRKGRP for additional information concerning field SELSEQ.
	MTROG	see subfields	*Meter outgoing information* This field consists of subfields METEROG and MDI.
	METEROG	N	*Meter option* Enter N. Metering is not allowed on OPR trunks.
	MDI	leave blank	*Metering data index* This field is left blank for OPR trunks.

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

Field	Subfield or refinement	Entry	Explanation and action
	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.
	ANIIDX	alphanumeric (1 to 8 characters)or NIL	*Fixed automatic number identification index* Enter the index into table FIXEDANI for this trunk group. If this field is datafilled, automatic number identification (ANI) is taken from table FIXEDANI rather than the calling party. For trunks with a traffic class other than CAMA or TNCA, enter the value NIL.
	DGNAME	alphanumeric (1 to 8 characters)or NIL	*Digit collection name* Enter the digit analysis instance required for an incoming trunk group. The digit analysis instance must have been previously defined in table DGHEAD. Enter NIL if no digit analysis is required.

TRKGRP type OPR (continued)

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

Field	Subfield or refinement	Entry	Explanation and action
	PROTIDX	BELR2 BRAR2 CHILER2 CHIR2 GUYR2 HAITIR2 IRER2L IRER2T MEXR2 MORR2L MORR2T PERU1R2 SOCR24 SOCR26 SOCR26A SOCR27 or NIL	*R2 protocol* This field references table indexes in table R2PROT that are required by this trunk group for R2 signal/activity mappings and control. All valid entries are five to eight alphanumeric characters in length, with the characters before R2 corresponding to the target area. T or L after the characters R2 indicates that the protocol is for toll or local calls, respectively. Enter the required R2 protocol for the trunk, or enter NIL if trunk group does not use R2 signaling. Entry values other than those listed are not valid.
	TRTMTIDX	BELTRT BRATRT CHILETRT CHITRT GUYTRT HAITITRT MEXTRT MORTRTL MORTRTT PERUTRT SOCTRTL SOCTRTT or NIL	*R2 treatment* This field references table indexes in tables TRTMTACT and TRTTRTMT required by this trunk group. All valid entries are six to eight alphanumeric characters in length, with the characters before TRT corresponding to the target area. T or L after the characters TRT indicates that the treatment is for toll or local calls, respectively. Enter the required R2 treatment for the trunk, or enter NIL if the trunk group does not use R2 signaling. Entry values other than those listed are invalid.

Outgoing international trunk group eld descriptions

The following table lists the data ll for outgoing international trunk groups (type OPR) in table GRKGRP.

Field descriptions (Sheet 1 of 3)

Field	Subfield or refinement	Entry	Explanation and action
GRPKEY		see subfield	*Group key* This field consists of subfield CLLI.
	CLLI	alphanumeric (1 to 16 characters)	*Common language location identifier* Enter the common language location identifier (CLLI) code assigned to the trunk group in table CLLI.
GRPINFO		see subfields	*Variable group data* This field consists of subfields GRPTYP, TRAFSNO, PADGRP, NCCLS, SAT, ESUPR, IAA, TANDEM, TRFC, DIR, SELSEQ, MTROG, ANIIDX, PROTIDX, and TRTMTIDX. Refer to section “General field information" in table TRKGRP for information 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.
	TRAFSNO	numeric (0 to 127)	*Traffic separation number* Enter the incoming and outgoing traffic separation number assigned to the trunk group. If a traffic separation number is not required, enter 0 (zero). For switches with software package NTX085AA (Traffic Separation Peg Count), enter a value from 1 to the value of office parameter TFAN_OUT_MAX_NUMBER in table OFCENG. For switches without software package NTX085AA, enter a value from 1 to 15. Incoming and outgoing traffic separation numbers 1 to 9 should be reserved for generic traffic separation numbers. For more information, refer to table TFANINT.

TRKGRP type OPR (continued)

Field descriptions (Sheet 2 of 3)

Field	Subfield or refinement	Entry	Explanation and action
	PADGRP	alphanumeric (1 to 5 characters)	*Pad group* Enter the name of the pad group assigned to the trunk group in table PADDATA. For more information, refer to table PADDATA.
	NCCLS	NCBN NCID NCIM NCIT NCLT NCOF NCON NCOT NCRT NCTC or NOSC	*Operational measurements no-circuit class* Enter the operational measurements (OM) no-circuit class (NCCLS) to indicate which OM register (in OM groups OFZ2 and SOTS) is incremented if treatment GNCT (generalized no circuit) occurs. If the trunk group direction is incoming, this field is not required. Enter NCRT (no circuit). For more information, refer to section “General field information" in table TRKGRP and the *Operational Measurements Reference Manual*.
	SAT	Y or N	*Satellite* Enter Y (yes) if the trunk is configured to switch through a satellite connection. Otherwise, enter N (no).
	ESUPR	Y or N	*Echo suppressor* If the trunk subgroup has echo suppressors, enter Y. Otherwise, enter N.
	IAA	N	*Interadministration accounting* Enter N. Interadministration accounting (IAA) is not applicable to OPR trunk groups.
	TANDEM	EEND or LNK	*Tandem mode* Enter EEND (end-to-end operation) if end-to-end connections are enabled over the trunk group. Enter LNK (link-by-link) if end-to-end connections are not enabled over the trunk group. End-to-end connections are only applicable to MFC R2 signaling trunk groups. For non-R2 MFC signaling trunk groups, this field is ignored.

TRKGRP type OPR (continued)

Field descriptions (Sheet 3 of 3)

Field	Subfield or refinement	Entry	Explanation and action
	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.
	DIR	OG	*Direction* This field specifies the trunk group direction. Enter OG for outgoing. If office parameter TRK_OOS_CHK_ON in table OFCVAR is set to Y (yes), all trunks in the group must be busy before the value of this field can be changed by data modification order (DMO).

TRKGRP type OPR (continued)

Metering and other data for all outgoing trunks

For the metering and other data for all outgoing trunks, data ll additional re nements as described belo w.

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

Field	Subfield or refinement	Entry	Explanation and action
	SELSEQ	ASEQ CCWCTH CWCTH DSEQ LIDL or MIDL	*Select sequence* If the trunk group direction is outgoing (OG) or two-way (2W) and the far end is a link list switcher, enter LIDL or MIDL (least or most idle) if the far end is MIDL or LIDL respectively. If the trunk group direction is outgoing or two-way, the far end is not a link list switcher, and sequential selection does not apply, enter MIDL. If the trunk group is outgoing or two-way, the far end is not a link list switcher, and feature package NTX244AB (Enhanced Sequential Trunk Hunting) is present, base the selection order on the order of the trunks in table TRKMEM, and enter • CWCTH or CCWCTH for clockwise or counterclockwise circular trunk hunting from the most recently released trunk in the trunk group, if the far end is CCWCTH or CWCTH respectively, or • ASEQ or DSEQ for ascending or descending sequential selection, if far end is DSEQ or ASEQ respectively. If the trunk group direction is incoming, sequential selection does not apply. Enter MIDL. Entries outside this range are not valid. For more information, refer to section “General field information" in table TRKGRP.

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

Field	Subfield or refinement	Entry	Explanation and action
			Note: A trunk group trunk selection method cannot be changed. If a change in the selection method is required, a new trunk group must be created with the required trunk selection method. The individual trunks with the old selection sequence must be deleted from the old trunk group and then added to the new trunk group. For an existing trunk group, the selection sequence can be changed to the opposite select sequence type (for example, ASEQ to DSEQ, LIDL to MIDL, or CCWCTH to CWCTH) if all the trunk members are installation busy (INB) or unequipped (UNEQ). Refer to table TRKGRP for additional information concerning field SELSEQ.
	MTROG	see subfields	*Meter outgoing informatio* This field consists of subfields METEROG and MDI.
	METEROG	N	*Meter option* Enter N. Metering is not allowed on OPR trunks.
	MDI	leave blank	*Metering data index* This field is left blank for OPR trunks.
	ANIIDX	alphanumeric (1 to 8 characters)or NIL	*Fixed automatic number identification index* Enter the index into table FIXEDANI for this trunk group. If this field is datafilled, automatic number identification (ANI) is taken from table FIXEDANI rather than the calling party. For trunks with a traffic class other than CAMA or TNCA, enter the value NIL.

TRKGRP type OPR (continued)

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

Field	Subfield or refinement	Entry	Explanation and action
	PROTIDX	BELR2 BRAR2 CHILER2 CHIR2 GUYR2 HAITIR2 IRER2L IRER2T MEXR2 MORR2L MORR2T PERU1R2 SOCR24 SOCR26 SOCR26A SOCR27 o rNIL	*R2 protocol* This field references table indexes in table R2PROT that are required by this trunk group for R2 signal/activity mappings and control. All valid entries are five to eight alphanumeric characters in length, with the characters before R2 corresponding to the target area. T or L after the characters R2 indicates that the protocol is for toll or local calls, respectively. Enter the required R2 protocol for the trunk, or enter NIL if trunk group does not use R2 signaling. Entry values other than those listed are not valid.
	TRTMTIDX	BELTRT BRATRT CHILETRT CHITRT GUYTRT HAITITRT MEXTRT MORTRTL MORTRTT PERUTRT SOCTRTL SOCTRTT orNIL	*R2 treatment* This field references table indexes in tables TRTMTACT and TRTTRTMT required by this trunk group. All valid entries are six to eight alphanumeric characters in length, with the characters before TRT corresponding to the target area. T or L after the characters TRT indicates that the treatment is for toll or local calls, respectively. Enter the required R2 treatment for the trunk, or enter NIL if the trunk group does not use R2 signaling. Entry values other than those listed are invalid.

Data ll e xample

The following example shows sample data ll for table TRKGRP type OPR.

TRKGRP type OPR (continued)

The example consists of data ll 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 traf c separation number for the outgoing trunk group is 10 and for the incoming trunk group is 0.
- 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 traf c 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 pre x translation table.
- The translation name for the incoming trunk group is ICTOLLCN.
- Neither trunk group uses metering.
- No digit pre xing is done for the incoming trunk group.
- The outgoing trunk group selection sequence is most idle (MIDL)
- The x ed 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.

TRKGRP type OPR (end)

MAP display example for table TRKGRP type OPRx

```
 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
```

Outgoing from Toll Trunk Group type

In a DMS toll of ce equipped with feature package NTXE34AA (4X Operation - AMR5 Format ANI), outgoing trunk group type OS is used for toll-completing and toll-tandem calls requiring joint hold on timeout. Feature package NTXE34AA allows ANI to be forwarded if feature group C (FGC) signaling is used.

Data ll

The following table lists the data ll for table TRKGRP type OS.

Field descriptions (Sheet 1 of 5)

Field	Subfield or refinement	Entry	Explanation and action
GRPKEY		see subfield	*Group key* This field consists of subfield CLLI.
	CLLI	alphanumeric (1 to 16 characters)	*Common language location identifier* Enter the common language location identifier (CLLI) code assigned to the trunk group in table CLLI.
GRPINFO		see subfields	*Variable group data* This field consists of subfields GRPTYP, TRAFSNO, PADGRP, NCCLS, TRAFCLS, SELSEQ, ANIREQ, OUTPANI, CHARGE, and JNTHOLD. Refer to section “General field information" in table TRKGRP for information on an alternate structure for this field that results from the datafill of table CUSTFLDS.
	GRPTYP	OS	*Group type* Enter OS to specify the outgoing from toll trunk group type.

TRKGRP type OS (continued)

Field descriptions (Sheet 2 of 5)

Field	Subfield or refinement	Entry	Explanation and action
	TRAFSNO	numeric (0 to 127)	*Traffic separation number* Enter the incoming and outgoing traffic separation number assigned to the trunk group. If a traffic separation number is not required, enter 0 (zero). For switches with software package NTX085AA (Traffic Separation Peg Count), enter a value from 1 to the value of office parameter TFAN_OUT_MAX_NUMBER in table OFCENG. For switches without software package NTX085AA, enter a value from 1 to 15. Incoming and outgoing traffic separation numbers 1 to 9 should be reserved for generic traffic separation numbers. For more information, refer to table TFANINT.
	PADGRP	alphanumeric (1 to 5 characters)	*Pad group* Enter the name of the pad group assigned to the trunk group in table PADDATA. For more information, refer to table PADDATA.
	NCCLS	NCBN NCID NCIM NCIT NCLT NCOF NCON NCOT NCRT NCTC or NOSC	*Operational measurements no-circuit class* Enter the operational measurements (OM) no-circuit class (NCCLS) to indicate which OM register is incremented if treatment GNCT (generalized no circuit) occurs. If trunk direction is incoming (IC), this field is not required. Enter NCRT. The initial value for this trunk group type is NCRT (no circuit). For more information, refer to table TRKGRP and the *Operational Measurements Reference Manual*.
	TRAFCLS	alphabetic (2 characters)	*Traffic usage class* Enter the traffic usage class assigned to the trunk group. For more information, refer to table TRKGRP.

TRKGRP type OS (continued)

Field descriptions (Sheet 3 of 5)

Field	Subfield or refinement	Entry	Explanation and action
	SELSEQ	MIDL LIDL CWCTH, CCWCTH ASEQ or DSEQ	*Select sequence* If the trunk group direction is two-way (2W) and far end is a link list switcher, enter LIDL or MIDL (least or most idle) if far end is MIDL or LIDL respectively. If the trunk group direction is two-way, the far end is not a link list switcher and sequential selection does not apply, enter MIDL. If the trunk group direction is incoming (IC), sequential selection does not apply. Enter MIDL. If the trunk group is two-way, the far end is not a link list switcher, and feature package NTX244AB (Enhanced Sequential Trunk Hunting) is present, base the selection order on the order of the trunks in table TRKMEM, and enter • CWCTH or CCWCTH for clockwise or counterclockwise circular trunk hunting from the most recently released trunk in the trunk group, if the far end is CCWCTH or CWCTH respectively, or • ASEQ or DSEQ for ascending or descending sequential selection, if far end is DSEQ or ASEQ respectively. Entries outside this range are invalid. For more information, refer to table TRKGRP.

TRKGRP type OS (continued)

Field descriptions (Sheet 4 of 5)

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.
	ANIREQ	REV	*Automatic number identification request* If feature package NTXE34AA (4X Operation - AMR5 Format ANI) is present, enter REV (reversal or answer). Entries outside this range are invalid. If office parameter TRK_OOS_CHK_ON in table OFCVAR is set to Y, all trunks in the group must be busy before the value of this field can be changed by data modification order (DMO).
	OUTPANI	Y or N	*Outpulse ANI* Enter Y (yes) if ANI is to be outpulsed. Otherwise, enter N (no). If ANI is not outpulsed, the trunk does not wait for an ANI request signal, wink, or reversal. If ANI is outpulsed and no calling or called digits are present, only KP + ST (an ANIFAIL message) is sent. If office parameter TRK_OOS_CHK_ON in table OFCVAR is set to Y, all trunks in the group must be busy before the value of this field can be changed by DMO.

Field descriptions (Sheet 5 of 5)

Field	Subfield or refinement	Entry	Explanation and action
	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.

Data ll e xample

The following example shows sample data ll for table TRKGRP type OS.

MAP display example for table TRKGRP type OS

```
GRPKEY          GRPINFO
_____________________________________________________________

OSCAMA          OS 0 ELO NCRT NIL MIDL WK Y N Y
```

TRKGRP type P2

Two-way DID/DOD PBX Trunk Group Type

In a DMS end of ce, tw o-way, incoming, or outgoing trunk group type P2 connects with a private branch exchange (PBX) for direct inward dialing (DID), direct outward dialing (DOD), or both.

If the trunk group is AT&T message rate, all trunks in the group must belong to the same message rate service area.

One trunk group is required for each message rate service area.

Data ll

The following table lists the data ll for table TRKGRP type P2.

Field descriptions (Sheet 1 of 9)

Field	Subfield or refinement	Entry	Explanation and action
GRPKEY		see subfield	*Group key* This field consists of subfield CLLI.
	CLLI	alphanumeric (1 to 16 characters)	*Common language location identifier* Enter the common language location identifier (CLLI) code 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. 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	P2	*Group type* Enter P2 to specify the group type for two-way DID/DOD PBX trunks.

Note: Canada only.

TRKGRP type P2 (continued)

Field descriptions (Sheet 2 of 9)

Field	Subfield or refinement	Entry	Explanation and action
	TRAFSNO	numeric (0 to 127)	*Traffic separation number* Enter the incoming and outgoing traffic separation number assigned to the trunk group. If a traffic separation number is not required, enter 0 (zero). For switches with software package NTX085AA (Traffic Separation Peg Count), enter a value from 1 to the value of the appropriate office parameter, TFAN_IN_MAX_NUMBER or TFAN_OUT_MAX_NUMBER, in table OFCENG. For switches without software package NTX085AA, enter a value from 1 to 15. Incoming and outgoing traffic separation numbers 1 to 9 should be reserved for generic traffic separation numbers. For more information, refer to table TFANINT.
	PADGRP	alphanumeric (1 to 5 characters	*Pad group* Enter the name of the pad group assigned to the trunk group in table PADDATA. For more information, refer to table PADDATA.
	NCCLS	NCBN NCID NCIM NCIT NCLT NCOF NCON NCOT NCRT NCTC or NOSC	*Operational measurements no-circuit class* Enter the operational measurements (OM) no-circuit class (NCCLS) to indicate which OM register is incremented if treatment GNCT (generalized no circuit) occurs. The initial value for this trunk group type is NCID (no-circuit inward dial. For more information, refer to table TRKGRP and the *Operational Measurements Reference Manual*.
Note: Canada only.			

TRKGRP type P2 (continued)

Field descriptions (Sheet 3 of 9)

Field	Subfield or refinement	Entry	Explanation and action
	TRAFCLS	alphabetic (2 characters)	*Traffic usage class* Enter the traffic usage class assigned to the trunk group. For more information, refer to table TRKGRP.
	SELSEQ	ASEQ CCWCTH CWCTH DSEQ LIDL or MIDL	*Select sequence* If the trunk group direction is two-way (2W) and far end is a link list switcher, enter LIDL or MIDL (least or most idle) if the far end is MIDL or LIDL respectively. If the trunk group direction is two-way, the far end is not a link list switcher, and sequential selection does not apply, enter MIDL. If the trunk group direction is incoming (IC), sequential selection does not apply. Enter MIDL. If the trunk group is two-way, the far end is not a link list switcher, and feature package NTX244AB (Enhanced Sequential Trunk Hunting) is present, base the selection order on the order of the trunks in table TRKMEM, and enter • CWCTH or CCWCTH for clockwise or counterclockwise circular trunk hunting from the most recently released trunk in the trunk group, if the far end is CCWCTH or CWCTH respectively, or • ASEQ or DSEQ for ascending or descending sequential selection, if far end is DSEQ or ASEQ respectively. Entries outside this range are not valid. For more information, refer to table TRKGRP.
Note: Canada only.			

TRKGRP type P2 (continued)

Field descriptions (Sheet 4 of 9)

Field	Subfield or refinement	Entry	Explanation and action
			Note: A trunk group trunk selection method cannot be changed. If a change in the selection method is required, a new trunk group must be created with the required trunk selection method. The individual trunks with the old selection sequence must be deleted from the old trunk group and then added to the new trunk group. For an existing trunk group, the selection sequence may be changed to ASEQ from DSEQ or from DSEQ to ASEQ if all the trunk members are installation busy (INB) or unequipped (UNEQ). Refer to table TRKGRP for additional information concerning field SELSEQ.
	DIGSOUT	numeric (0 to 18)	*Digits outpulsed* Enter the number of digits to be outpulsed. If this field is set to anything other than 0 (zero), the digits to be deleted or prefixed (indicated in table OFRT) are ignored. If office parameter TRK_OOS_CHK_ON in table OFCVAR is set to Y, all trunks in the group must be busy before the value of this field can be changed by data modification order (DMO).
	TOLL	Y or N	*Toll* If the PBX is toll, enter Y. Otherwise, enter N.
	PRTNM	alphanumeric (1 to 4 characters) or NPRT	*Standard pretranslator name* If standard peregrinations is required, enter the name of the standard pretranslator table assigned to the trunk group. If peregrinations is not required, enter NPRT (no pretranslation). If office parameter TRK_OOS_CHK_ON in table OFCVAR is set to Y, all trunks in the group must be busy before the value of this field can be changed by DMO.
Note: Canada only.			

TRKGRP type P2 (continued)

Field descriptions (Sheet 5 of 9)

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 (entry in table SCRNCLAS) to which digit translation routes. If class-of-service screening is not required, enter NSCR (no screening).
	SNPA	numeric (3 digits)	*Serving NPA* Enter the serving NPA code for the trunk group. This code, which is specified in table HNPACODE, specifies routing for digit translation. If office parameter TRK_OOS_CHK_ON in table OFCVAR is set to Y, all trunks in the group must be busy before the value of this field can be changed by DMO.
	ORIGSRCE	LCL or NLCL	*Originating source* Enter the originating source of the call, LCL (local) or NLCL (nonlocal). This field is used to screen calls in subtable HNPACONT.HNPACODE. For more information, refer to the “Notes on originating source" section in table HNPACONT.HNPACODE.
	CHGCLSS	CAM0 DATO LCDR RCFW SPCL TOPS TUXO WAT0 or NONE	*Charge class* If a switch is configured for Local Automatic Message Accounting (LAMA), enter the charge class assigned to the trunk group. Otherwise, enter NONE.
Note: Canada only.			

Field descriptions (Sheet 6 of 9)

Field	Subfield or refinement	Entry	Explanation and action
	ZEROMPOS	AMRX CAMA CTOP RTE1 RTE2 RTE3 RTE4 TOPS TSPS or NONE	*Zero minus position* If a trunk group is configured for operator (0-) and special toll (0+) dialing, enter the position in the position table to which operator (0-) calls are to be routed. Otherwise, enter NONE.
	BILLNO	numeric (7 or 10 digits)	*Billing number* If the switch is non-LAMA, enter the seven-digit billing number assigned to the trunk group. If the switch is LAMA, enter the ten-digit billing number (NPA + DN) assigned to the trunk group.
	LCANAME	alphanumeric (1 to 8 characters) or NLCA	*Local calling area screening name*. If you require screening of local NNX codes, enter the local calling area screening name assigned to the trunk group. Enter a local calling area screening name provisioned in either table LCASCRCN or LCAINFO. If screening of local NNX codes is not required, enter NLCA.
	LCABILL	Y or N	*Local calling area billing* If a non-incoming call is considered a local call for billing purposes, enter Y. If a non-incoming call is considered a toll call for billing purposes, enter N.
	AIOD	see subfields	*Auto-identified outward dialing information* This field consists of subfield AIOD and refinement AIODGRP.
Note: Canada only.			

TRKGRP type P2 (continued)

Field descriptions (Sheet 7 of 9)

Field	Subfield or refinement	Entry	Explanation and action
	AIOD	Y or N	*Auto-identified outward dialing* If the trunk group is from a PBX that has an auto-identified outward dialing (AIOD) data link to the office for the billing of outgoing calls from the PBX to individual PBX stations, enter Y to indicate that the trunk group is supported by AIOD, and datafill refinement AIODGRP. Otherwise, enter N.
	AIODGRP	alphanumeric (1 to 16 characters) or blank	*Auto-identified outward dialing data link trunk group* Datafill this field if the value in field AIOD is Y. Enter the CLLI that is assigned to the AIOD data link trunk group in table CLLI. This CLLI must exist in table AIODGRP. Up to seven trunk groups of type P2 (from the same PBX) can be datafilled for service by the same AIOD data link trunk group.
	TDN	Y or N	*Toll denied* Enter Y if toll calls on a trunk group are to be routed to toll denied (TDND) treatment. Otherwise, enter N.
	TDV	Y or N	*Toll diverted* Enter Y if toll calls on a trunk group are to be routed to a PBX attendant. Otherwise, enter N.
	CPH	Y or N	*Called party hold* Enter Y if called party hold is required. Otherwise, enter N. (See note.)
	RMR	Y or N	*Answer supervision local calls* Enter Y if answer supervision for local calls is required. Otherwise, enter N. (See note.)
	RMT	Y or N	*Answer supervision toll calls* Enter Y if answer supervision for toll calls is required. Otherwise, enter N. (See note.)

Note: Canada only.

TRKGRP type P2 (continued)

Field descriptions (Sheet 8 of 9)

Field	Subfield or refinement	Entry	Explanation and action
	MRSA	alphanumeric (1 to 8 characters) or nil	*Message rate service area* If the trunk group is AT&T message rate, enter the name of the message rate service area to which the trunk group belongs. Otherwise, enter NIL.
	EA	see subfield	*Equal access information* This field consists of subfield EA and refinements.
	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.
	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 local access and transport area (LATA) name specified in table LATANAME.
Note: Canada only.			

TRKGRP type P2 (end)

Field descriptions (Sheet 9 of 9)

Field	Subfield or refinement	Entry	Explanation and action
	BCLID	Y or N	*Bulk calling line identification* If the bulk calling line identification feature (BCLID) is used, enter Y and datafill refinement BCLID. Otherwise, enter N. Enter the bulk calling line identification group number for the trunk group.
	BCLID	see subfield	*Bulk calling line identification information* This field consists of subfield BCLID and refinement.
	BCGRPNUM	numeric (0 to 2047)	*Bulk calling line identification group number* Datafill this field if the value in field BCLID is Y.
	OPTION	CHGNUM	*Charge number delivery* Enter CHGNUM to send a charge number and originating line information parameter (OLI) with the initial address message (IAM).
Note: Canada only.			

Data ll e xample

The following example shows sample data ll for table TRKGRP type P2.

MAP display example for table TRKGRP type P2

```
GRPKEY  GRPINFO
_____________________________________________________________________________

X95PBX      P2 55 ELO NCID MI MIDL 7 Y P621 PBX1 613 LCL NONE TSPS
6211234 NLCA N N N N N N NIL Y CARR1 N LATA1 Y 10 CHGNUM
```

TRKGRP type PRA

ISDN Primary Rate Access Trunk Group Type

In a DMS of ce, the primary rate access (PRA) trunk group type is used when a minimum of service and translation related data, such as billing and trunk selection information, is required.

Data ll

The following table lists the data ll for table TRKGRP type PRA.

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
GRPKEY		see subfield	*Group key* This field consists of subfield CLLI.
	CLLI	alphanumeric (1 to 16 characters)	*Common language location identifier* Enter the common language location identifier (CLLI) code assigned to the trunk group in table CLLI.
GRPINFO		see subfields	*Variable group data* This field consists of subfields GRPTYP, TRAFSNO, PADGRP, NCCLS, SELSEQ, BILLDN, LTID, and OPTIONS. Refer to section “General field information" in table TRKGRP for information on an alternate structure for this field that results from the datafill of table CUSTFLDS.
	GRPTYP	PRA	*Group type* Enter PRA to specify the primary rate access trunk group type.

TRKGRP type PRA (continued)

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
	TRAFSNO	numeric (0 to 127)	*Traffic separation number* Enter the incoming and outgoing traffic separation number assigned to the trunk group. If a traffic separation number is not required, enter 0 (zero). For switches with software package NTX085AA (Traffic Separation Peg Count), enter a value from 1 to the value of office parameter TFAN_OUT_MAX_NUMBER in table OFCENG. For switches without software package NTX085AA, enter a value from 1 to 15. Incoming and outgoing traffic separation numbers 1 to 9 should be reserved for generic traffic separation numbers. For more information, refer to table TFANINT.
	PADGRP	alphanumeric (1 to 5 characters)	*Pad group* Enter the name of the pad group assigned to the trunk group in table PADDATA. For more information, refer to table PADDATA.
	NCCLS	NCBN, NCID, NCIM, NCIT, NCLT, NCOF, NCON, NCOT, NCRT, NCTC, or NOSC	*Operational measurements no-circuit class* Enter the operational measurements (OM) no-circuit class (NCCLS) to indicate which OM register is incremented if treatment GNCT (generalized no circuit) occurs. If trunk direction is incoming (IC), this field is not required. Enter NCRT. The initial value for this trunk group type is NCRT (no circuit). For more information, refer to table TRKGRP and the *Operational Measurements Reference Manual*.

TRKGRP type PRA (continued)

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
	SELSEQ	ASEQ, CNTLEVN, CNTLODD, CCWCTH, CWCTH, DSEQ, LIDL, MIDL, or WIDEBAND	*Select sequence* Enter ASEQ or DSEQ for ascending or descending sequential selection, based on the order of trunk members in table TRKMEM. The trunk circuit connected to the other end can use the opposite selection sequence in order to reduce B-channel glare. Enter select sequence LIDL (least idle) if trunk selection is made on a status of least idle. The connecting trunk at the end office must be a link list switcher and must be set up with the LIDL select sequence. Enter select sequence MIDL (most idle) if trunk selection is made on a status of most idle. The connecting trunk at the end office must be a link list switcher and must be set up with the MIDL select sequence. If the end office is not a link list switcher and feature package NTX244AB (Enhanced Sequential Trunk Hunting) is in the switching unit, base the selection order on the order of the trunks in table TRKMEM and enter CWCTH for clockwise or CCWCTH for counterclockwise circular trunk hunting based on the most recently released trunk in the trunk group (if the far end is CWCTH or CCWCTH respectively). The entries CNTLEVN and CNTLODD are only valid if the Japan Public Network ISDN user part (JPNISUP) trunks are installed in the switching unit. The JPNISUP trunks are divided into controlling groups and non-controlling groups. These groups in turn are divided into even and odd circuit identification codes (CICs). The differences in the four groups relates to the selection sequence used for locating idle trunks. Enter CNTLEVN in order to select the MIDL selection sequence algorithm for even numbered CICs in the controlling group.

TRKGRP type PRA (continued)

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
			Enter CNTLODD in order to select the MIDL selection sequence algorithm for odd numbered CICs in the controlling group. If all circuits in the controlling group are busy, the least idle (LIDL) trunk in the noncontrolling group is selected. This applies to both CNTLEVN and CNTLODD selection sequences. If wideband trunk selection is allowed for primary rate access (PRI) ISUP trunks, enter WIDEBAND and datafill refinements WBSELSEQ, WBGRPING, and WBSEARCH. The WIDEBAND entry value is only valid if feature NTXR49AA (Dialable Wide Band Service PRI) is in the switching unit. ***Note:*** A trunk group trunk selection method cannot be changed. If a change in the selection method is required, a new trunk group must be created with the required trunk selection method. The individual trunks with the old selection sequence must be deleted from the old trunk group and then added to the new trunk group. For an existing trunk group, the selection sequence may be changed to ASEQ from DSEQ or from DSEQ to ASEQ if all the trunk members are installation busy (INB) or unequipped (UNEQ). Refer to table TRKGRP for additional information concerning field SELSEQ.
	WBSELSEQ	ASEQ or DSEQ	*Wideband select sequence* If the value in field SELSEQ is WIDEBAND, datafill this field. Enter ASEQ or DSEQ for ascending or descending sequential selection respectively, based on the order of trunk members in table TRKMEM. The trunk circuit connected to the other end can use the opposite selection sequence in order to reduce B-channel glare.

TRKGRP type PRA (continued)

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
	WBGRPING	FIXED, FLEXIBLE, or FLOATING	*Wideband DS-0 time-slot grouping method* If the value in field SELSEQ is WIDEBAND, datafill this field. Enter FIXED if the usable idle DS-0 time-slots in a DS-1 carrier are fixed in number and must be in consecutive numeric group. Enter FLEXIBLE if the usable idle DS-0 time-slots in a DS-1 carrier vary in number and are in a non-consecutive numeric group. Enter FLOATING if the usable idle DS-0 time-slots in a DS-1 carrier vary in number and must be in a consecutive numeric group.
	WBSEARCH	BESTFIT or FIRSTFIT	*Wideband DS-0 time-slot search method* If the value in field SELSEQ is WIDEBAND, datafill this field. Enter FIRSTFIT if the FIRSTFIT search algorithm is required. The FIRSTFIT algorithm searches the list of digital trunks in table TRKMEM in order to find one or more vacant DS-0 time-slots in available DS-1 trunks. The FIRSTFIT algorithm takes the first fitting match even though there may be excess time-slots in the first DS-1 found. Enter BESTFIT if the BESTFIT search algorithm is required. The BESTFIT algorithm searches the list of digital trunks in table TRKMEM in order to find one or more vacant DS-0 time-slots in available DS-1 trunks. The BESTFIT algorithm takes the best fitting match. For example, the BESTFIT for a ten-time-slot carrier is eleven if the search list contains DS-1s with 7, 11, 14, and 20 time-slots.
	BILLDN	numeric (10 digits or N)	*Billing directory number* Enter the directory number that all calls are billed to. If no BILLDN is required, enter N (no).

TRKGRP type PRA (continued)

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
	LTID	$	*Logical terminal identifier* This field consists of subfields LTGRP and LTNUM. These read-only fields display the LTID that has been mapped to the trunk group by table LTMAP. Field LTID cannot be datafilled by operating company personnel. Enter $. ***Note:*** If the PRA trunk is NIL-2, check table LTDATA for the BNS SBN option. The BNS SBN option allows the BILLDN of the trunk group to be used.
	LTGRP	ISDN or INTEC	*Logical terminal group* This read-only field contains the logical terminal group.
	LTNUM	numeric (1 to 1022)	*Logical terminal number* This read-only field contains the logical terminal number within the group.
	OPTIONS	see subfield	*Options* This field consists of subfield OPTION and refinement.
	OPTION	MCH	*Option* Enter MCH to specify malicious call hold for PRA trunks. This option is supported on TS14 trunks for the Australian market.

Data ll e xample

The following example shows sample data ll for table TRKGRP type PRA. This example is data lled as follo ws:

- The code in the CLLI table for the trunk group is MENPRA1.
- The trunk group type is PRA.
- A traf c separation number is not required.
- No pad group is required.
- NCRT is the no circuit class.
- The selection sequence is ASEQ.

TRKGRP type PRA (end)

- WIDEBAND trunking is selected
- FLEXIBLE time-slot grouping is selected.
- FIRSTFIT search method is used for time-slots.
- The billing directory number is 6137262000.
- Field LTID is read-only. The entry value is $.

MAP display example for table TRKGRP type PRA

```
GRPKEY          GRPINFO
_____________________________________________________________________________

JPNPRAA12       PRA 1 NPDGP NCRT ASEQ WIDEBAND ASEQ FLEXIBLE
                                FIRSTFIT 5147471111 $
MENPRA1         PRA 0 NPDGP NCRT ASEQ 6137262000 $
```

Table history

NA017

In accordance with customer service request (CSR) UD10019, information is added to the billing directory number eld.

APC006

Added value MCH to sub eld 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.

BCS35

Added WIDEBAND option and re nements. Added value FLEXIBLE to eld WBGRPING. Added values CNTLODD and CNTLEVN to eld SELSEQ.

Private Line Trunk Group Type

Trunk group type PRIVLN is used for private lines. The following switching unit dependent data must be data lled in this table for each pri vate line trunk group:

- the common language location identi er (CLLI)
- the trunk group type
- the traf c separation number
- the name of the pad group
- the no-circuit class
- the country code translator name
- the class of service screening
- the international pretranslator
- the call detail recorder class
- the select sequence
- the trunk group direction (incoming or outgoing)
- the common calling class category (incoming trunks only)

Note 1: Field PADGRP contains the name of the pad group in table PADDATA that lists the value of pad circuits that can be switched into the network when one of the members of the group is involved in a call. Different pad circuit values can be speci ed when the circuit connects to an agent with a different pad group. Network pad switching is only applicable when the circuit is connected to a new network.

Note 2: When the trunk group is the last route in a route list and a line or trunk encounters an all trunks busy condition in this list, the no-circuit class NCRT is incremented (OFZ2 NCRT), the originating line or trunk is routed to generalized no-circuit treatment (GNCT) in the appropriate treatment table, and treatment GNCT is incremented.

If parameter TRK_OOS_CHK_ON in table OFCVAR is set to Y, all trunks in the group must be busied prior to changing the value of elds through a data modi cation order (DMO).

Dial pulse (DP), Digitone (DT), and multifrequency (MF) dialing are allowed on incoming Gateway 101 test trunk groups and private line trunk groups. A switching unit must be equipped with DT or MF receivers for DT or MF reception, respectively. For a description of other trunk group formats, see the trunk group type descriptions in table TRKGRP.

TRKGRP type PRIVLN (continued)

For trunk subgroup data for Gateway 101 test trunk groups and private line trunk groups, see table TRKSGRP.

For trunk member data for Gateway 101 test trunk groups and private line trunk groups, see table TRKMEM.

Data ll

The following table lists the data ll for table TRKGRP type PRIVLN.

Field descriptions (Sheet 1 of 4)

Field	Subfield or refinement	Entry	Explanation and action
GRPKEY		see subfield	*Group key* This field consists of subfield CLLI.
	CLLI	alphanumeric (1 to 16 characters)	*Common language location identifier* Enter the common language location identifier (CLLI) code assigned to the trunk group in table CLLI.
GRPINFO		see subfields	*Variable group data* This field consists of subfields GRPTYP, TRAFSNO, PADGRP, NCCLS, CCTRNSL, SCRNCL, PRTNM, CDRCLASS, SELSEQ, and DIR_DEP. Refer to section “General field information" in table TRKGRP for information on an alternate structure for this field that results from the datafill of table CUSTFLDS.
	GRPTYP		*Group type* Enter PRIVLN to specify the private line trunk group type.

TRKGRP type PRIVLN (continued)

Field descriptions (Sheet 2 of 4)

Field	Subfield or refinement	Entry	Explanation and action
	TRAFSNO	numeric (0 to 127)	*Traffic separation number* Enter the incoming and outgoing traffic separation number assigned to the trunk group. If a traffic separation number is not required, enter 0 (zero). For switches with software package NTX085AA (Traffic Separation Peg Count), enter a value from 1 to the value of office parameter TFAN_OUT_MAX_NUMBER in table OFCENG. For switches without software package NTX085AA, enter a value from 1 to 15. Incoming and outgoing traffic separation numbers 1 to 9 should be reserved for generic traffic separation numbers. For more information, refer to table TFANINT.
	PADGRP	alphanumeric (1 to 5 characters)	*Pad group* Enter the name of the pad group assigned to the trunk group in table PADDATA, or enter NPDGP if a pad group name is not required. For more information, refer to table PADDATA.
	NCCLS	NCBN NCID NCIM NCIT NCLT NCOF NCON NCOT NCRT NCTC or NOSC	*Operational measurements no-circuit class* Enter the operational measurements (OM) no-circuit class (NCCLS) to indicate which OM register is incremented if treatment GNCT (generalized no circuit) occurs. If trunk direction is incoming (IC), this field is not required. Enter NCRT. The initial value for this trunk group type is NCRT (no circuit). For more information, refer to table TRKGRP and the *Operational Measurements Reference Manual*.

TRKGRP type PRIVLN (continued)

Field descriptions (Sheet 3 of 4)

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 data modification order (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 different classes can be assigned, each being represented by a four-character name. If no call detail recorder class is required, enter NCDR (no call detail recording).
	SELSEQ	MIDL	*Select sequence* This field is not required for this trunk group. Enter MIDL.

Field descriptions (Sheet 4 of 4)

Field	Subfield or refinement	Entry	Explanation and action
	DIR_DEP	see subfield	*Direction data* This field consists of subfield DIR and refinement.
	DIR	IC or OG	*Direction* If the direction of traffic flow is incoming, enter IC and datafill refinement CCPC. If the direction of traffic flow is outgoing, enter OG. An entry of 2W is not valid for this field.
	CCPC	numeric (0 to 15 or N)	*Common calling party category* Datafill this field If the value in field DIR is IC. Enter a numeric value to specify the common calling party category. If no common calling party category is required, enter N. The default value is N.

Data ll e xample

The following example shows sample data ll for table TRKGRP type PRIVLN.

- An incoming private line trunk has a CLLI of NCC01.
- The trunk group has no traf c separation and no pad group.
- The country code translator name is CC02.
- The class of service screening name is SCPL.
- The pretranslator name is IP21.
- The call detail recorder namSCP004e is LD1A.
- The common calling party category is 0.

MAP display example for table TRKGRP type PRIVLN

```
GRPKEY      GRPINFO
_____________________________________________________

NCC01       PRIVLN 0 NPDGP NCRT CC02 SCPL IP21
```

TRKGRP type PX

Two-way Digital PBX Trunk Group Type

In a DMS end office, two-way trunk group type PX is used in a digital private branch exchange (PBX) for either direct inward dialing (DID), direct outward dialing (DOD), or both.

MS-1 (teleconferencing) System 1+, 011 calls

For the MS-1 system to receive the proper answer supervision from the DMS-100 over the PX trunk group, route the call as follows:

- use outgoing trunk group type OC with field ANITYPE set to WK (wink)
- use incoming trunk group type SC with field ANITYPE set to WK

For the MS-1 system, do not route a call using outgoing trunk group type OP and incoming to a DMS-200 trunk group type TOPS. These trunk group types do not have the feature for WK supervision.

PX trunks and UTRs (Universal Tone Receivers)

PX trunks with ground start FX signalling cannot use UTRs. Digitone receivers will be used to collect digits even if a UTR exists in the same peripheral as the PX trunk. In addition, the CFRA (Call Forward Remote Activation) feature will use a digitone receiver instead of a UTR when a PX trunk with FX signalling (ground start or loop start) is used to access the CFRA feature.

Changing trunk selection method and sequence

The selection sequence for an existing trunk group can be changed from ascending sequence (ASEQ) to descending sequence (DSEQ), or from DSEQ to ASEQ, if all the members are made installation busy (INB) or unequipped (UNEQ).

The selection method for an existing trunk group cannot be changed.

To change the selection method for an existing trunk group from ASEQ or DSEQ to clockwise circular trunk hunt (CWCTH) or counterclockwise circular trunk hunt (CCWCTH), or to most idle (MIDL) or least idle (LIDL), (field SELSEQ), define a new trunk group, as follows:

1. Create a new trunk group with the required trunk selection method.
2. Delete the individual trunks from the old trunk group.
3. Add the trunks to the new trunk group.

Datafill

The following table lists the datafill for table TRKGRP type PX.

Field descriptions

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, TRAFLCS, SELSEQ, TOLL, PRTNM, SCRNCL, SNPA, ORIGSRCE, CHGCLSS, ZEROMPOS, LCANAME, LCABILL, AIOD, AIODGRP, PXCGRP, MRSA, BILLNO, DTONE, LOCALCMC, EA, PIC, CHOICE, and LATANM. Refer to section “General field information" in table TRKGRP for information concerning an alternate structure for this field that results from the datafill of table CUSTFLDS.
	GRPTYP	PX	*Group type* Enter the group type PX.
	TRAFSNO	numeric (0 to 127)	*Traffic separation number* Enter the incoming and outgoing traffic separation number assigned to the trunk group. If a traffic separation number is not required, enter 0 (zero). For switches with software package NTX085AA (Traffic Separation Peg Count), enter a value from 1 to the value of office parameter TFAN_OUT_MAX_NUMBER in table OFCENG. For switches without software package NTX085AA, enter a value from 1 to 15. Incoming and outgoing traffic separation numbers 1 to 9 should be reserved for generic traffic separation numbers. For more information, refer to table TFANINT.

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
	PADGRP	alphanumeric (1 to 5 characters)	*Pad group* Enter the name of the pad group assigned to the trunk group in table PADDATA. For more information, refer to table PADDATA.
	NCCLS	NCBN NCID NCIM NCIT NCLT NCOF NCON NCOT NCRT NCTC or NOSC	*Operational measurements no-circuit class* Enter the operational measurements (OM) no-circuit class (NCCLS) to indicate which OM register is incremented if treatment GNCT (generalized no circuit) occurs. If the trunk group direction is incoming, this field is not required. Enter NCRT (no circuit). For more information, refer to table TRKGRP and the *Operational Measurements Reference Manual*.
	DIR	IC, OG, or 2W	*Direction* This field specifies the trunk group direction. Enter IC for incoming, OG for outgoing, or 2W for two-way. If office parameter TRK_OOS_CHK_ON in table OFCVAR is set to Y (yes), all trunks in the group must be busy before the value of this field can be changed by data modification order (DMO).
	TRAFCLS	alphabetic (2 characters)	*Traffic usage class* Enter the traffic usage class assigned to the trunk group. For more information, refer to table TRKGRP.
	SELSEQ	ASEQ CCWCTH CWCTH DSEQ LIDL or MIDL	*Select sequence* If the trunk group direction is outgoing (OG) or two-way (2W) and the far end is a link list switcher, enter LIDL or MIDL (least or most idle) if the far end is MIDL or LIDL respectively. If the trunk group direction is outgoing or two-way, the far end is not a link list switcher, and sequential selection does not apply, enter MIDL.

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
	SELSEQ (contiunued)		If the trunk group is outgoing or two-way, the far end is not a link list switcher, and feature package NTX244AB (Enhanced Sequential Trunk Hunting) is present, base the selection order on the order of the trunks in table TRKMEM, and enter • CWCTH or CCWCTH for clockwise or counterclockwise circular trunk hunting from the most recently released trunk in the trunk group, if the far end is CCWCTH or CWCTH respectively, or • ASEQ or DSEQ for ascending or descending sequential selection, if far end is DSEQ or ASEQ respectively. If the trunk group direction is incoming, sequential selection does not apply. Enter MIDL. Entries outside this range are not valid. For more information, refer to table TRKGRP.
Note: A trunk group trunk selection method cannot be changed. If a change in the selection method is required, a new trunk group must be created with the required trunk selection method. The individual trunks with the old selection sequence must be deleted from the old trunk group and then added to the new trunk group. For an existing trunk group, the selection sequence can be changed to the opposite select sequence type (for example, ASEQ to DSEQ, LIDL to MIDL, or CCWCTH to CWCTH) if all the trunk members are installation busy (INB) or unequipped (UNEQ). Refer to table TRKGRP for additional information concerning field SELSEQ.			
	TOLL	Y or N	*Toll* If the private branch exchange (PBX) is toll, enter Y (yes). Otherwise, enter N (no).

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
	PRTNM	alphanumeric(1 to 4 characters) or NPRT	*Standard pretranslator name* If standard pretranslation is required, enter the name of the standard pretranslator defined in table STDPRTCT to which digit translation is to route after the receipt of the first digit. If pretranslation is not required, enter NPRT (no pretranslation). If office parameter TRK_OOS_CHK_ON in table OFCVAR is set to Y (yes), all trunks in the group must be busy before the value of this field can be changed by data modification order (DMO).
	SCRNCL	alphanumeric(1 to 4 characters)or NSCR	*Class-of-service screening table name* If class-of-service screening is required, enter the name of the class-of-service screening table (datafilled in table SCRNCLAS) to which digit translation routes. If class-of-service screening is not required, enter NSCR (no screening).
	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. For more information, refer to the “Notes on originating source" section in table HNPACONT.HNPACODE.

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
	CHGCLSS	CAM0, DAT0 LCDR RCFW SPCL TOPS TWX0 WAT0 or NONE	*Charge class* If the switch is arranged for local automatic message accounting (LAMA), enter the charge class assigned to the trunk group. Otherwise, enter NONE.
	ZEROMPOS	AMRX CAMA CTOP TOPS TSPS RTE1 RTE2 RTE3 RTE4 or NONE	*Zero minus position* If a trunk group is arranged for operator (0-) and special toll (0+) dialing, enter the position in the position table to which operator calls are to be routed. Otherwise, enter NONE.
	LCANAME	alphanumeric(1 to 8 characters) or NLCA	*Local calling area screening name*. If screening of local NNX codes is required, enter the name of the local calling area screening name assigned to the trunk group. Enter a local calling area screening name provisioned in either table LCASCRCN or LCAINFO. If screening of local NNX codes is not required, enter NLCA.
	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.

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
	AIOD	Y or N	*Automatically-identified outward dialing* If the trunk group is from a PBX that has an automatically-identified outward dialing (AIOD) data link to the office for billing of outgoing calls from the PBX to individual PBX stations, enter Y to indicate that the trunk group is supported by AIOD and datafill refinement AIODGRP. Then enter the CLLI of the AIOD data link in field AIODGRP below. Otherwise, enter N.
	AIODGRP	alphanumeric or blank	*Auto-identified outward dialing data link trunk group* If the entry in refinement AIOD is Y, datafill this refinement. Enter the CLLI of the AIOD data link trunk group. This CLLI must already exist in table AIODGRP. Up to seven trunk groups of type P2 from the same PBX can be datafilled for service by the same AIOD data link trunk group.
	PXCGRP	32 to 255	*Private branch exchange customer group* Enter the index into table CXGRP to define the options associated with this trunk group.
	MRSA	alphanumeric or NIL	*Message rate service area* If trunk group is AT&T message rate, enter the name of the message rate service area to which the trunk group belongs. Otherwise, enter NIL.
	BILLNO	numeric (7 or 10 digits)	*Billing number* If the switch is non-LAMA, enter the seven-digit billing number assigned to the trunk group. If the switch is LAMA, enter the ten-digit billing number (NPA ±DN) assigned to the trunk group.
	DTONE	DIALTN or NODIALTN	*Dial tone for FX circuits* If this trunk group is used with FX circuits then enter DIALTN if dial tone is to be provided. Otherwise, enter NODIALTN. If the non-FX trunk group requires dialtone as a start signal, datafill field ISTARTSG of table TRKSGRP with the value DIALTONE.

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
	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.
	EA	Y or N	*Equal access* Enter Y for an equal access end office (EAEO) and datafill refinements PIC, CHOICE, and LATANM. Enter N (the default) for a non-EAEO. If the EA field contains an N and the end office is an EAEO, all outgoing calls are treated as non-EA calls. Call routing is based on standard translations (HNPACODE), and non-EA billing is used.
	PIC	alphanumeric (1 to 16 characters)	*Primary inter-LATA carrier* If the entry in refinement EA is Y, datafill this refinement. Enter an inter-LATA (local access and transport area) or international carrier name or names specified in table OCCNAME.
	CHOICE	Y or N	*Choice* If the entry in refinement EA is Y, datafill this refinement. Enter Y if 10XXX dialing is allowed. If 10XXX dialing is not allowed, enter N.
	LATANM	alphanumeric (1 to 16 characters)	*Local access and transport area name* If the entry in refinement EA is Y, datafill this refinement. Enter a LATA name specified in table LATANAME.
	BCLID	Y or N	*Bulk Calling Line Identification* Enter Y if the Bulk Calling Line Identification (BCLID) feature is used and datafill refinement BCGRPNUM. Otherwise, enter N.
	BCGRPNUM	0 to 2047	*Bulk Calling Line Identification Group number* If the entry in refinement BCLID is Y, datafill this refinement. Enter the BCLID group number for the trunk group.

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
	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 for the current list of available bearer capabilities. If field OPTION and refinement BCNAME are left blank, the default bearer capability of the central office is used.
	CLID	CLID or $	The CLID (calling line identification) option allows the customer premise equipment (CPE) to know the telephone number of the calling party. The system prompts for a control value of CPNONLY, CPNREST, CPNPREF, or CHGONLY.
	DNIS	DNIS or $	The DNIS (dialed number identification service) option allows the delivery of additional call information to the CPE when a call requires DNIS.
	DTI	DTI or $	The DTI (dialtone incoming) option provides a wink plus dial tone start signal combination.
	OUTSCHM	OUTSCHM or $	The OUTSCHM (digits to be outpulsed) option prompts for a control value from one to eight.
	NODELAY	NODELAY or $	The NODELAY (no delay) option is used to indicate that the 4-second post dial delay will not be present for 1+10 digit calls using the AMBI TIM selector using an incoming or two-way PX trunk.

Datafill example

The following examples show sample datafill for table TRKGRP type PX.

MAP display example for table TRKGRP type PX

```
        GRPKEY
                                                                  GRPINFO
_____________________________________________________________________________
     OGR2NONECD
                      PX      25    ELO  NCID 2W         MI     MIDL Y P621
NSCR      613   LCL NONE     TSPS NLCA N               N  32 NIL     6211234
  DIALTN Y Y NZOCC Y NILLATA Y     7 (BCNAME           56KDATA)$
```

MAP display example for table TRKGRP type PX with DTI, DNIS, CLID, and OUTSCHM options

```
        CARYPX


_____________________________________________________________________________
     PX 10 ELO NCRT 2W NIL MIDL N P621 PBX1 613 LCL NONE TSPS L613 N
    N 32 NIL 7224121 DIALTN N Y MCI Y LATA1 N (DTI) (DNIS)
    (CLID CPNONLY CPNREST CPNPREF CHGONLY.) (OUTSCHM 5) $
```

MAP display example for table TRKGRP type PX with NODELAY option

```
        GRPKEY
                                                                  GRPINFO
_____________________________________________________________________________

RCC20PX
    PX  0  ELO NCRT  IC  NIL  MIDL N  POT1  NSCR  619  619  LCL  NONE  NONE  NLCA  N
    N 32 NIL  5400002  DIALTN  N  N  N  (NODELAY) $
```

Recording Completing Trunk Group Type

In a DMS of ce, trunk group type RC connects with a type 3CL switchboard and provides an audible class-of-service tone that is forwarded to the operator.

The type of class-of-service tone forwarded to the operator depends on the following items:

- the type of line or trunk originating the call
- the data ll in table TRKGRP for group type RC
- the class-of-service high tone (eld CSTHTONE) and class-of-service low tone (eld CSTL TONE) data lled in table OFR T
- the class-of-service tone (eld COST) data lled in table LINEA TTR

Table”Tone resulting from a combination of factors” shows the resulting tone for each combination of factors.

For the product engineering codes (PEC) of the trunk group circuits used for recording completing trunk groups, refer to table TRKSGRP.

Tone resulting from a combination of factors

Table OFRT field CSTHTONE	Table OFRT field CSTLTONE	Type of originator	Table LINEATTR field COST	Resulting tone
N	N	line or trunk	any entry value	none
N	Y	line or trunk	any entry value	low
Y	N	line or trunk	any entry value	high
Y	Y	trunk	not applicable	none
Y	Y	party lines	any entry value	none
Y	Y	other lines	NT	none
Y	Y	other lines	LO	low
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).

TRKGRP type RC (continued)

Data ll

The following table lists the data ll for table TRKGRP type RC.

Field descriptions (Sheet 1 of 3)

Field	Subfield or refinement	Entry	Explanation and action
GRPKEY		see subfield	*Group key* This field consists of subfield CLLI.
	CLLI	alphanumeric (1 to 16 characters)	*Common language location identifier* Enter the common language location identifier (CLLI) code assigned to the trunk group in table CLLI.
GRPINFO		see subfields	*Variable group data* This field consists of subfields GRPTYP, TRAFSNO, PADGRP, NCCLS, TRAFCLS, SELSEQ, AUDRING, COLOCATED, and HOLDTYPE. Refer to section “General field information" in table TRKGRP for information 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.
	TRAFSNO	numeric (0 to 127)	*Traffic separation number* Enter the incoming and outgoing traffic separation number assigned to the trunk group. If a traffic separation number is not required, enter 0 (zero). For switches with software package NTX085AA (Traffic Separation Peg Count), enter a value from 1 to the value of office parameter TFAN_OUT_MAX_NUMBER in table OFCENG. For switches without software package NTX085AA, enter a value from 1 to 15. Incoming and outgoing traffic separation numbers 1 to 9 should be reserved for generic traffic separation numbers. For more information, refer to table TFANINT.

TRKGRP type RC (continued)

Field descriptions (Sheet 2 of 3)

Field	Subfield or refinement	Entry	Explanation and action
	PADGRP	alphanumeric (1 to 5 characters)	*Pad group* Enter the name of the pad group assigned to the trunk group in table PADDATA. For more information, refer to table PADDATA.
	NCCLS	NCBN NCID NCIM NCIT NCLT NCOF NCON NCOT NCRT NCTC or NOSC	*Operational measurements no-circuit class* Enter the operational measurements (OM) no-circuit class (NCCLS) to indicate which OM register is incremented if treatment GNCT (generalized no circuit) occurs. The initial value for this trunk group type is NCRT (no circuit). For more information, refer to table TRKGRP and the *Operational Measurements Reference Manual*.
	TRAFCLS	RC	*Traffic usage class* Enter RC to specify the recording completing traffic class. For more information, refer to table TRKGRP.
	SELSEQ	ASEQ CCWCTH CWCTH, DSEQ LIDL or MIDL	*Select sequence* If the trunk group is outgoing and feature package NTX244AB (Enhanced Sequential Trunk Hunting) is present, base the selection order on the order of the trunks in table TRKMEM, and enter • CWCTH or CCWCTH for clockwise or counterclockwise circular trunk hunting from the most recently released trunk in the trunk group, if the far end is CCWCTH or CWCTH respectively, or • ASEQ or DSEQ for ascending or descending sequential selection, if far end is DSEQ or ASEQ respectively. Entries outside this range are not valid.

TRKGRP type RC (continued)

Field descriptions (Sheet 3 of 3)

Field	Subfield or refinement	Entry	Explanation and action
			For more information, refer to table TRKGRP. ***Note:*** A trunk group trunk selection method cannot be changed. If a change in the selection method is required, a new trunk group must be created with the required trunk selection method. The individual trunks with the old selection sequence must be deleted from the old trunk group and then added to the new trunk group. For an existing trunk group, the selection sequence may be changed to ASEQ from DSEQ or from DSEQ to ASEQ if all the trunk members are installation busy (INB) or unequipped (UNEQ). Refer to table TRKGRP for additional information concerning field SELSEQ.
	AUDRING	Y or N	*Audible ring* Enter Y (yes) if the switch is to provide audible ringing. Otherwise, enter (no).
	COLOCATED	Y or N	*Co-located switchboard* If switchboards are located in the same building as the switch, enter Y. Otherwise, enter N.
	HOLDTYPE	NOHOLD JNTHOLD or TERMHOLD	*Hold type* If the call must be taken down when either the originator or terminator goes on hook, enter NOHOLD. Use NOHOLD in no-operator configurations. If the call must be taken down only when both the originator and the terminator are on hook, enter JNTHOLD. If the call must be taken down only when both the originator and the terminator are on hook, enter JNTHOLD. If the call must be taken down only when the terminator goes on hook, enter TERMHOLD.

Data ll e xample

The following example shows sample data ll for table TRKGRP type RC. This example is data lled as follo ws:

- The code assigned to the trunk group in table CLLI is OTWAON231BB0.
- The trunk group type is RC.
- The trunk group is assigned outgoing traf c separation number 15.
- TLA is the name of the pad group assigned to the trunk group.
- NCRT is the no-circuit class.
- The traf c class is recording completing (RC).
- The trunk selection sequence is ascending based on the order of trunk members in table TRKMEM.
- Audible ringing to the originating line is provided by the switch.
- The switchboards are not co-located in the same building as the switch.
- The hold type is no hold.

MAP display example for table TRKGRP type RC

```
GRPKEY            GRPINFO
_____________________________________________________________

OTWAON231BB0      RC 15 TLA NCRT RC ASEQ Y N NOHOLD
```

TRKGRP type RONI

TOPS Remote ONI Trunk Group Type

In a TOPS of ce, trunk group type R ONI is part of a feature that enables operator number identi cation (ONI) calls to be recorded by Local Automatic Message Accounting (LAMA) or Centralized Automatic Message Accounting (CAMA) in an of ce with no CAMA positions in operation.

Traf c 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 Identi cation) 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 identi cation (RONI) con guration, calls requiring a CAMA operator (ONI or ANI fail) at a toll of ce 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 of ce for v alidity 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 of ce and the call oats.

This feature is necessary when the toll of ce does not ha ve CAMA or TOPS positions of its own, or these devices have been shut down. Note that the toll of ce can be an y type of switch (for example, 4A, XBT, SP1 4W, SP1 2/4W, or 5XB).

The toll of ce and the T OPS of ce communicate using on-hook/of f-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 of ce over the data trunk.

Data ll

The following table lists the data ll for table TRKGRP type R ONI.

Field descriptions (Sheet 1 of 3)

Field	Subfield or refinement	Entry	Explanation and action
GRPKEY		see subfield	*Group key* This field consists of subfield CLLI.
	CLLI	alphanumeric (1 to 16 characters)	*Common language location identifier* Enter the common language location identifier (CLLI) code assigned to the trunk group in table CLLI.
GRPINFO		see subfields	*Variable group data* This field consists of subfields GRPTYP, TRAFSNO, PADGRP, NCCLS, DIR, PROTOCOL, SIGINFO, NBECID, and SNPA. Refer to section “General field information" in table TRKGRP for information 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.
	TRAFSNO	numeric (0 to 127)	*Traffic separation number* Enter the incoming and outgoing traffic separation number assigned to the trunk group. If a traffic separation number is not required, enter 0 (zero). For switches with software package NTX085AA (Traffic Separation Peg Count), enter a value from 1 to the value of office parameter TFAN_OUT_MAX_NUMBER in table OFCENG. For switches without software package NTX085AA, enter a value from 1 to 15. Incoming and outgoing traffic separation numbers 1 to 9 should be reserved for generic traffic separation numbers. For more information, refer to table TFANINT.

TRKGRP type RONI (continued)

Field descriptions (Sheet 2 of 3)

Field	Subfield or refinement	Entry	Explanation and action
	PADGRP	alphanumeric (1 to 5 characters)	*Pad group* Enter the name of the pad group assigned to the trunk group in table PADDATA. For more information, refer to table PADDATA.
	NCCLS	NCRT	*Operational measurements no-circuit class* This field is not required for TOPS trunk groups. Enter NCRT. For more information, refer to section “General field information" in table TRKGRP and the *Operational Measurements Reference Manual*.
	DIR	IC	*Direction* Enter IC to specify that the trunk group direction is incoming.
	PROTOCOL	NT or TSPS	*Protoco* *I*f the POSITION_ATTACHED signal must be returned immediately after trunk seizure, enter NT. If the POSITION_ATTACHED signal must be returned when an actual position is connected, enter TSPS.
	SIGINFO	see subfields	*Signaling information* This field consists of subfield SIGTYPE and refinements.
	SIGTYPE	EANDM or LOOP	*Signaling type* Enter the type of signaling hardware being used. For E&M signaling, enter EANDM and datafill refinements REVSIG and CXRFAIL. For loop signaling, enter LOOP (no refinements apply for this entry value).

Field descriptions (Sheet 3 of 3)

Field	Subfield or refinement	Entry	Explanation and action
	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.

Data ll e xample

The following example shows sample data ll for table TRKGRP type RONI. The corresponding data ll for tables TRKSGRP and TRKMEM is also shown to illustrate the interaction of these tables with table TRKGRP.

TRKGRP type RONI (continued)

MAP display example for table TRKGRP type RONI

```
GRPKEY          GRPINFO
_____________________________________________________________________________

RONIL           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
```

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 $
```

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
```

Supplementary information

This section provides information related to table TRKGRP and group type RONI.

Notes concerning table TRKSGRP

Table TRKSGRP contains supplementary signaling information for trunk group type RONI and other trunk group types. There is one subgroup for every trunk group of type RONI.

The interaction between table TRKSGRP and TRKGRP type RONI is illustrated in the data ll e xample section.

For additional information, refer to table TRKSGRP.

Notes concerning table TRKMEM

Although voice and data trunks are data lled separately in table TRKMEM, these trunks must reside on the same card.

Analog trunks must be assigned consecutively on a card, with voice on the even circuits and data on the odd circuits.

For digital trunk assignments the “n, n 4" rule is used. Digital assignment for voice must be within the range 1 to 4, 9 to 12, or 17 to 20 and data assignments must be within the range 5 to 8, 13 to 16, or 21 to 24.

These assignment rules are used to post the voice or data side at the test trunk position (TTP).

The interaction between table TRKMEM and TRKGRP type RONI is illustrated in the data ll e xample section.

For additional information, refer to table TRKMEM.

TRKGRP type ROTL

Remote Of ce T est Line Trunk Group Type

Trunk group type ROTL is used for remote line testing in a DMS of ce.

This trunk group is represented in table CLLI by pseudo-common language location identi er (CLLI) R OTLTP.

Trunk cards for table TRKGRP and group type ROTL have product engineering code (PEC) NT3X91AA (remote of ce test line circuit).

Data ll

The following table lists the data ll for table TRKGRP type R OTL.

Field descriptions (Sheet 1 of 3)

Field	Subfield or refinement	Entry	Explanation and action
GRPKEY		see subfield	*Group key* This field consists of subfield CLLI.
	CLLI	ROTLTP	*Common language location identifier* Enter the pseudo-common language location identifier (CLLI) code ROTLTP.
GRPINFO		see subfields	*Variable group data* This field consists of subfields GRPTYP, TRAFSNO, PADGRP, NCCLS, TRAFCLS, PRTNM, SNPA, and SCRNCL. Refer to section “General field information" in table TRKGRP for information 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.
	TRAFSNO	numeric (0)	*Traffic separation number* Enter 0 (zero) to specify that a traffic separation number is not required.
	PADGRP	alphanumeric (1 to 5 characters)	*Pad group* Enter the name of the pad group assigned to the trunk group in table PADDATA. For more information, refer to table PADDATA.

TRKGRP type ROTL (continued)

Field descriptions (Sheet 2 of 3)

Field	Subfield or refinement	Entry	Explanation and action
	NCCLS	NCBN NCID NCIM NCIT NCLT NCOF NCON NCOT NCRT NCTC or NOSC	Enter the operational measurements (OM) no-circuit class (NCCLS) to indicate which OM register is incremented if treatment GNCT (generalized no circuit) occurs. The initial value for this trunk group type is NCOT (no circuit other trunk). For more information, refer to table TRKGRP and the *Operational Measurements Reference Manual*.
	TRAFCLS	alphabetic (2 characters)	*Traffic usage class* Enter the traffic usage class assigned to the trunk group. For more information, refer to table TRKGRP.
	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).

TRKGRP type ROTL (continued)

Field descriptions (Sheet 3 of 3)

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.
	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).

Data ll e xample

The following example shows sample data ll for table TRKGRP type ROTL. This example has been data lled as follo ws:

- The trunk group is represented by the pseudo-CLLI ROTLTP
- The group type is ROTL.
- The outgoing traf c separation number is set to 0 (zero).
- ELO is the pad group assigned to the trunk group
- NCOT is the no-circuit class.
- The traf c class is RS.
- The trunk group requires no pretranslation.

TRKGRP type ROTL (end)

- The serving NPA is 613.
- The trunk group requires no class-of-service screening.

MAP display example for table TRKGRP type ROTL

```
GRPKEY      GRPINFO
_____________________________________________________________

ROTLTP      ROTL 0 ELO NCOT RS NPRT 613 NSCR
```

TRKGRP type SC

2W/IC from North AMR5 or CAMA Trunk Group Type

Trunk group type superCAMA (centralized automatic message accounting) (SC) is used in one of the following two con gurations:

- Incoming trunk group type SC in a DMS toll of ce, and under certain conditions, in a DMS TOPS (Traf c Operator Position System) of ce, connects with an end of ce to carry non-coin, subscriber-dialed, chargeable calls (TOPS operator assistance not required) recorded by CAMA in the toll of ce.

  Signaling formats include the CAMA automatic number identi cation (ANI) dial-pulse format (that is, the of ce is not a traf c service position system (TSPS) of ce).

  Inband coin control is optional.

  ANI calls are recorded by CAMA automatically.

  ANI fail and operator number identi cation (ONI) calls are handled by the CAMA operator, who enters the calling number manually to record the call by CAMA. The call is then sent on for toll completion.

  If feature package NTX193AA (4X Operation—AMR5 Format ANI) is present, operator-assisted traf c (0+ and 0-) can tandem through the switch to a switch with TOPS or TSPS using outgoing trunk group type OP.

  When the far end is a DMS switch, the far end of trunk group type SC leaves the far end DMS switch as trunk group type OC.

- Two-way trunk group type SC in a DMS toll of ce, 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 veri cation

  — combined toll completing and veri cation

This trunk group cannot be con gured as an OG (outgoing) trunk.

Refer to TRKGRP type VR for additional information on veri cation calls.

Changing trunk selection method and sequence

The selection sequence for an existing trunk group can be changed from ascending sequence (ASEQ) to descending sequence (DSEQ), or from DSEQ to ASEQ, if all the members are made installation busy (INB) or unequipped (UNEQ).

The selection method for an existing trunk group cannot be changed.

To change the selection method for an existing trunk group from ASEQ or DSEQ to clockwise circular trunk hunt (CWCTH) or counterclockwise circular trunk hunt (CCWCTH), or to most idle (MIDL) or least idle (LIDL), (eld SELSEQ), de ne a ne w trunk group, as follows:

1. Create a new trunk group with the required trunk selection method.
2. Delete the individual trunks from the old trunk group.
3. Add the trunks to the new trunk group.

Data ll

The following table lists the data ll for table TRKGRP type SC.

Field descriptions (Sheet 1 of 10)

Field	Subfield or refinement	Entry	Explanation and action
GRPKEY		see subfield	*Group key* This field consists of subfield CLLI.
	CLLI	alphanumeric (1 to 16 characters)	*Common language location identifier* Enter the common language location identifier (CLLI) code assigned to the 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, and RECORDNP. 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	SC	*Group type* Enter the trunk group type SC.

TRKGRP type SC (continued)

Field descriptions (Sheet 2 of 10)

Field	Subfield or refinement	Entry	Explanation and action
	TRAFSNO	numeric (0 to 127)	*Traffic separation number* Enter the incoming and outgoing traffic separation number assigned to the trunk group. If a traffic separation number is not required, enter 0 (zero). For switches with software package NTX085AA (Traffic Separation Peg Count), enter a value from 1 to the value of office parameter TFAN_OUT_MAX_NUMBER in table OFCENG. For switches without software package NTX085AA, enter a value from 1 to 15. Incoming and outgoing traffic separation numbers 1 to 9 should be reserved for generic traffic separation numbers. For more information, refer to table TFANINT.
	PADGRP	alphanumeric (1 to 5 characters)	*Pad group* Enter the name of the pad group assigned to the trunk group in table PADDATA.
	NCCLS	NCBN NCID NCIM NCIT NCLT NCOF NCON NCOT NCRT NCTC or NOSC	*Operational measurements no-circuit class* Enter the operational measurements (OM) no-circuit class (NCCLS) to indicate which OM register is incremented if treatment GNCT (generalized no circuit) occurs. If the trunk group direction is incoming, this field is not required. Enter NCRT (no circuit). For more information, refer to table TRKGRP and the *Operational Measurements Reference Manual.*
	TRAFCLS	alphabetic (2 characters)	*Traffic usage class* Enter the traffic usage class assigned to the trunk group. For more information, refer to table TRKGRP.
	ONI	Y or N	*Operator number identification* Enter Y (yes) if traffic on trunk group is 100% operator number identification (ONI) traffic. Otherwise, enter N (no).

TRKGRP type SC (continued)

Field descriptions (Sheet 3 of 10)

Field	Subfield or refinement	Entry	Explanation and action
	SNPA	numeric (3 digits	*Serving numbering plan area* Enter the serving numbering plan area (NPA) code for the trunk group. This code, which is specified in table HNPACODE, specifies routing for digit translation. If office parameter TRK_OOS_CHK_ON in table OFCVAR is set to Y, all trunks in the group must be busy before the value of this field can be changed by data modification order (DMO).
	PRTNM	alphanumeric (1 to 4 characters) or NPRT	*Standard pretranslator name* If standard pretranslation is required, enter the name of the standard pretranslator defined in table STDPRTCT to which digit translation is to route after the receipt of the first digit. If pretranslation is not required, enter NPRT (no pretranslation). If office parameter TRK_OOS_CHK_ON in table OFCVAR is set to Y (yes), all trunks in the group must be busy before the value of this field can be changed by data modification order (DMO).
	NODIGRTE	NONE	*No-digit route* Enter the operator position to which incoming calls are routed when no digits are received. Enter NONE to indicate that all operator-assisted calls are routed to position CAMA in table POSITION. Entries outside this range are invalid.

TRKGRP type SC (continued)

Field descriptions (Sheet 4 of 10)

Field	Subfield or refinement	Entry	Explanation and action
	NODIGCTP	DD NP or OA	*No-digit call type* Enter the type of call to be assigned to calls with no incoming digits (seizure only): direct dial (DD), no prefix (NP), or operator assisted (OA). Entries outside the indicated range are invalid. If office parameter TRK_OOS_CHK_ON in table OFCVAR is set to Y (yes), all trunks in the group must be busy before the value of this field can be changed by data modification order (DMO).
	TRTMTSUP	OFFHOOK 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 (off-hook wink). Specify the type of return supervision required if the type of call is no-prefix (NP). If the no-prefix return supervision is set to OFFHOOK, then off-hook supervision is sent to the originator right away. Otherwise an off-hook signal is sent whenever the terminator goes off-hook. If the trunk group carries equal-access traffic, enter ONHOOK. If this field is set to ONHOOK, it does not send an off-hook signal back to the end office to start the automatic number identification (ANI) spill.
	NOBILLCD	1 to 63	*Number of bill codes* Enter the number of bill codes plus spares that are reserved in table BILLCODE. Entries outside the indicated range are invalid.

TRKGRP type SC (continued)

Field descriptions (Sheet 5 of 10)

Field	Subfield or refinement	Entry	Explanation and action
	ANISEIZ	2 to 30	*Automatic number identification seizure timing* Enter the time, in seconds, that the trunk waits for reception of first automatic number identification (ANI) digit or signal. If office parameter TRK_OOS_CHK_ON in table OFCVAR is set to Y (yes), all trunks in the group must be busy before the value of this field can be changed by data modification order (DMO).
	ANIPDIAL	2 to 30	*Automatic number identification partial dial timing* Enter the time, in seconds, that the trunk waits for reception of each ANI signal or digit after the first. If office parameter TRK_OOS_CHK_ON in table OFCVAR is set to Y (yes), all trunks in the group must be busy before the value of this field can be changed by data modification order (DMO).
	DIR	IC or 2W	*Direction* This field specifies the trunk group direction. Enter IC for incoming or 2W for two-way. If office parameter TRK_OOS_CHK_ON in table OFCVAR is set to Y (yes), all trunks in the group must be busy before the value of this field can be changed by data modification order (DMO).

TRKGRP type SC (continued)

Field descriptions (Sheet 6 of 10)

Field	Subfield or refinement	Entry	Explanation and action
	SELSEQ	ASEQ CCWCTH CWCTH DSEQ LIDL or MIDL	*Select sequence* If the trunk group direction is outgoing (OG) or two-way (2W) and the far end is a link list switcher, enter LIDL or MIDL (least or most idle) if the far end is MIDL or LIDL respectively. If the trunk group direction is outgoing or two-way, the far end is not a link list switcher, and sequential selection does not apply, enter MIDL. If the trunk group is outgoing or two-way, the far end is not a link list switcher, and feature package NTX244AB (Enhanced Sequential Trunk Hunting) is present, base the selection order on the order of the trunks in table TRKMEM, and enter • CWCTH or CCWCTH for clockwise or counterclockwise circular trunk hunting from the most recently released trunk in the trunk group, if the far end is CCWCTH or CWCTH respectively, or • ASEQ or DSEQ for ascending or descending sequential selection, if far end is DSEQ or ASEQ respectively.

TRKGRP type SC (continued)

Field descriptions (Sheet 7 of 10)

Field	Subfield or refinement	Entry	Explanation and action
			If the trunk group direction is incoming, sequential selection does not apply. Enter MIDL. Entries outside this range are not valid. For more information, refer to table TRKGRP. ***Note:*** A trunk group trunk selection method cannot be changed. If a change in the selection method is required, a new trunk group must be created with the required trunk selection method. The individual trunks with the old selection sequence must be deleted from the old trunk group and then added to the new trunk group. For an existing trunk group, the selection sequence can be changed to the opposite select sequence type (for example, ASEQ to DSEQ, LIDL to MIDL, or CCWCTH to CWCTH) if all the trunk members are installation busy (INB) or unequipped (UNEQ). Refer to table TRKGRP for additional information concerning field SELSEQ.
	DIGSOUT	numeric (0 to 18)	*Digits outpulsed* If the number of digits to be outpulsed is variable, enter 0 (zero) and specify the number of digits to be outpulsed in the appropriate route list. If the number of digits to be outpulsed is a fixed quantity, enter a value from 0 to 18.
	SDATA	see subfield	*Signaling data* This field consists of subfield SIGFMT and refinements CC_XLA_NAME and TRAFTYPE.

TRKGRP type SC (continued)

Field descriptions (Sheet 8 of 10)

Field	Subfield or refinement	Entry	Explanation and action
	SIGFMT	AMR5A	*Signaling format* Enter the signaling format AMR5A. If office parameter TRK_OOS_CHK_ON in table OFCVAR is set to Y (yes), all trunks in the group must be busy before the value of this field can be changed by data modification order (DMO).
	CC_XLA_ NAME	STD or alphabetic	*Category code translator* If signaling format is AMR5A, enter the category code translator assigned to the trunk group. ***Note:*** The value NIL is not allowed for this field.
	TRAFTYPE	AMRCOMB AMRONE or AMRZERO	*Traffic type* If signaling format is AMR5A, enter the traffic type: AMRCOMB (1+, 0, 0-), AMRONE (1+), or AMRZERO (0+, 0-).

TRKGRP type SC (continued)

Field descriptions (Sheet 9 of 10)

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 feature package NTXE34AA (4X Operation—AMR5 Format ANI) (which allows ANI to be forwarded if Feature Group C [FGC] signaling is used) is present, enter REV. If feature package NTXE34AA is present, other values for ANITYPE are invalid. Enter REVUK if interworking with DMS-250 TOPS trunks is required. REVUK uses the UK250 ANI protocol format. Enter WK for special requirements (RCF/TCF). (The correct ANI fail-and-answer supervision on the second leg of a remote call-forwarding call is WK [wink].) The default datafill is REV. If office parameter TRK_OOS_CHK_ON in table OFCVAR is set to Y (yes), all trunks in the group must be busy before the value of this field can be changed by data modification order (DMO).
	RECORDNP	Y or N	*Record calls of type np* If the office includes the feature package NTX386AA (Access Tandem Switch), enter Y to indicate that calls of are type NP are to be recorded. Otherwise, enter N.
	OPTIONS	see subfield	*Options* This field consists of subfield OPTION and refinements. Up to three options can be specified. If less than three options are required, end the list with a $ (dollar sign).

TRKGRP type SC (continued)

Field descriptions (Sheet 10 of 10)

Field	Subfield or refinement	Entry	Explanation and action
	OPTION	BCNAME NOUTR or PIA	*Option* To specify the bearer-capability-name option, enter BCNAME and datafill refinement BCNAME. To specify if the trunk group bypasses the use of the universal tone receiver (UTR), enter NOUTR. To specify the propagate immediate answer option, enter PIA. Option PIA is used to send a message back to the originator immediately. If this option is not set, propagation delays of up to 2 seconds can occur. For certain systems, the call drops due to long propogation delays. The PIA option is only valid for incoming or two-way trunks. If no options apply, leave this field blank.
	BCNAME	alphanumeric (1 to 16 characters)	*Bearer capability name* If the entry in field OPTION is BCNAME, enter the bearer capability to be used by this trunk group. Refer to table BCDEF for the current list of available bearer capabilities. If field OPTION and refinement BCNAME are left blank, the default bearer capability of the central office is used.

Field descriptions for two-way or incoming CAMA trunk group

Field names, sub eld names, and v alid data ranges for table TRKGRP (SC), two-way or incoming CAMA trunk groups, are described below.

Field descriptions (Sheet 1 of 11)

Field	Subfield or refinement	Entry	Explanation and action
GRPKEY		see subfield	*Group key* This field consists of subfield CLLI.
	CLLI	alphanumeric (1 to 16 characters)	*Common language location identifier* Enter the common language location identifier (CLLI) code assigned to the 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 OPTION. 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	SC	*Group type* Enter the trunk group type SC.

TRKGRP type SC (continued)

Field descriptions (Sheet 2 of 11)

Field	Subfield or refinement	Entry	Explanation and action
	TRAFSNO	numeric (0 to 127)	*Traffic separation number* Enter the incoming and outgoing traffic separation number assigned to the trunk group. If a traffic separation number is not required, enter 0 (zero). For switches with software package NTX085AA (Traffic Separation Peg Count), enter a value from 1 to the value of office parameter TFAN_OUT_MAX_NUMBER in table OFCENG. For switches without software package NTX085AA, enter a value from 1 to 15. Incoming and outgoing traffic separation numbers 1 to 9 should be reserved for generic traffic separation numbers. Incoming and outgoing traffic separation numbers 1 to 9 should be reserved for generic traffic separation numbers.
	PADGRP	alphanumeric (1 to 5 characters)	*Pad group* Enter the name of the pad group assigned to the trunk group in table PADDATA. For more information, refer to table PADDATA.
	NCCLS	NCBN NCID NCIM NCIT NCLT NCOF NCON NCOT NCRT NCTC or NOSC	*Operational measurements no-circuit class* Enter the operational measurements (OM) no-circuit class (NCCLS) to indicate which OM register is incremented if treatment GNCT (generalized no circuit) occurs. If the trunk group direction is incoming, this field is not required. Enter NCRT (no circuit). For more information, refer to table TRKGRP and the *Operational Measurements Reference Manual*.
	TRAFCLS	alphabetic (2 characters)	*Traffic usage class* Enter the traffic usage class assigned to the trunk group. For more information, refer to table TRKGRP.

TRKGRP type SC (continued)

Field descriptions (Sheet 3 of 11)

Field	Subfield or refinement	Entry	Explanation and action
	ONI	Y or N	*Operator number identification* Enter Y (yes) if traffic on trunk group is 100% operator number identification (ONI) traffic. Otherwise, enter N (no).
	SNPA	numeric (3 digits)	*Serving numbering plan area* Enter the serving numbering plan area (NPA) code for the trunk group. This code, which is specified in table HNPACODE, specifies routing for digit translation. If office parameter TRK_OOS_CHK_ON in table OFCVAR is set to Y, all trunks in the group must be busy before the value of this field can be changed by data modification order (DMO).
	PRTNM	alphanumeric (1 to 4 characters) or NPRT	*Standard pretranslator name* If standard pretranslation is required, enter the name of the standard pretranslator defined in table STDPRTCT to which digit translation is to route after the receipt of the first digit. If pretranslation is not required, enter NPRT (no pretranslation). If office parameter TRK_OOS_CHK_ON in table OFCVAR is set to Y (yes), all trunks in the group must be busy before the value of this field can be changed by data modification order (DMO).

TRKGRP type SC (continued)

Field descriptions (Sheet 4 of 11)

Field	Subfield or refinement	Entry	Explanation and action
	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 a two-way or incoming trunk group is from CAMA, and all operator-assisted calls are routed to the position CAMA in table POSITION, set the value of field NODIGRTE to NONE. If a two-way or incoming trunk group is from CAMA, and all operator-assisted calls are routed to a position other than CAMA in table POSITION, set the field NODIGRTE to the position in table POSITION that routes the call to a TSPS or TOPS trunk group that has trunk group type OP. If a value for field NODIGRTE is specified that is not datafilled in table POSITION, calls which require an operator are sent to DTFL (datafill failure) treatment. If office parameter TRK_OOS_CHK_ON in table OFCVAR is set to Y (yes), all trunks in the group must be busy before the value of this field can be changed by data modification order (DMO).
	NODIGCTP	DDNP or OA	*No-digit call type* Enter the type of call to be assigned to calls with no incoming digits (seizure only): direct dial (DD), no prefix (NP), or operator assisted (OA). Entries outside the indicated range are invalid. If office parameter TRK_OOS_CHK_ON in table OFCVAR is set to Y (yes), all trunks in the group must be busy before the value of this field can be changed by data modification order (DMO).

Field descriptions (Sheet 5 of 11)

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 (off-hook wink). Specify the type of return supervision required if the type of call is no-prefix (NP). If the no-prefix return supervision is set to OFFHOOK, then off-hook supervision is sent to the originator right away. Otherwise an off-hook signal is sent whenever the terminator goes off-hook. If the trunk group carries equal-access traffic, enter ONHOOK. If this field is set to ONHOOK, it does not send an off-hook signal back to the end office to start the automatic number identification (ANI) spill.
	NOBILLCD	1 to 63	*Number of bill codes* Enter the number of bill codes plus spares that are reserved in table BILLCODE. Entries outside the indicated range are invalid.
	ANISEIZ	2 to 30	*Automatic number identification seizure timing* Enter the time, in seconds, that the trunk waits for reception of first automatic number identification (ANI) digit or signal. If office parameter TRK_OOS_CHK_ON in table OFCVAR is set to Y (yes), all trunks in the group must be busy before the value of this field can be changed by data modification order (DMO).

TRKGRP type SC (continued)

Field descriptions (Sheet 6 of 11)

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 (yes), all trunks in the group must be busy before the value of this field can be changed by data modification order (DMO).
	DIR	IC or 2W	This field specifies the trunk group direction. Enter IC for incoming or 2W for two-way. If office parameter TRK_OOS_CHK_ON in table OFCVAR is set to Y (yes), all trunks in the group must be busy before the value of this field can be changed by data modification order (DMO).

TRKGRP type SC (continued)

Field descriptions (Sheet 7 of 11)

Field	Subfield or refinement	Entry	Explanation and action
	SELSEQ	ASEQ CCWCTH CWCTH DSEQ LIDL or MIDL	*Select sequence* If the trunk group direction is outgoing (OG) or two-way (2W) and the far end is a link list switcher, enter LIDL or MIDL (least or most idle) if the far end is MIDL or LIDL respectively. If the trunk group direction is OG or 2W, the far end is not a link list switcher, and sequential selection does not apply, enter MIDL. If the trunk group is OG or 2W, the far end is not a link list switcher, and feature package NTX244AB (Enhanced Sequential Trunk Hunting) is present, base the selection order on the order of the trunks in table TRKMEM, and enter • CWCTH or CCWCTH for clockwise or counterclockwise circular trunk hunting from the most recently released trunk in the trunk group, if the far end is CCWCTH or CWCTH respectively, or • ASEQ or DSEQ for ascending or descending sequential selection, if far end is DSEQ or ASEQ respectively. If the trunk group direction is incoming, sequential selection does not apply. Enter MIDL. Entries outside this range are not valid. For more information, refer to table TRKGRP.

TRKGRP type SC (continued)

Field descriptions (Sheet 8 of 11)

Field	Subfield or refinement	Entry	Explanation and action
			Note: A trunk group trunk selection method cannot be changed. If a change in the selection method is required, a new trunk group must be created with the required trunk selection method. The individual trunks with the old selection sequence must be deleted from the old trunk group and then added to the new trunk group. For an existing trunk group, the selection sequence can be changed to the opposite select sequence type (for example, ASEQ to DSEQ, LIDL to MIDL, or CCWCTH to CWCTH) if all the trunk members are installation busy (INB) or unequipped (UNEQ). Refer to table TRKGRP for additional information concerning field SELSEQ.
	DIGSOUT	numeric (0 to 18)	*Digits outpulsed* If the number of digits to be outpulsed is variable, enter 0 (zero) and specify the number of digits to be outpulsed in the appropriate route list. If the number of digits to be outpulsed is a fixed quantity, enter a value from 0 to 18.
	SDATA	see subfield	*Signaling data* This field consists of subfield SIGFMT and refinements GRPTYPE and DEFANIFL.
	SIGFMT	BELL	*Signaling format* Specify the signaling format BELL. If the signaling format is BELL and no called number is received, the call is routed to permanent signal timeout (PSIG) treatment. If office parameter TRK_OOS_CHK_ON in table OFCVAR is set to Y (yes), all trunks in the group must be busy before the value of this field can be changed by data modification order (DMO).

TRKGRP type SC (continued)

Field descriptions (Sheet 9 of 11)

Field	Subfield or refinement	Entry	Explanation and action
	GRPTYPE	OSS R EGULAR or SUPER	*Group type* Enter OSS if the start signal for DD calls is ST and two information digits are expected and datafill refinement IC_ROUTE. ***Note:*** Option OSS is related to equal access (EA) calls. Enter REGULAR if the start signal (ST) for direct dial (DD) calls is ST and one information digit is received. Enter SUPER if the start signal for DD calls is ST2P and one information digit is received.
	IC_ROUTE	alphanumeric (1 to 8 characters) or NONE	*Independent carrier route* If the entry in field GRPTYPE is OSS, datafill this refinement. Enter the position, known to table POSITION, field POS, to specify the route that is taken if the call is identified by the start signal as an independent carrier (IC) equal-access (EA) call.
	DEFANIFL	CAMA TREAT or TSPS	*Default automatic number identification fail* This field determines the route taken by translations if no ANI (ANI FAIL) is received. Enter CAMA if translation routes to position CAMA in table POSITION. Enter TREAT if translation routed to a hard-coded, toll-denied treatment. This treatment routes the originator to reorder tone. Enter TSPS if translation routes to position TSPS in table POSITION.

TRKGRP type SC (continued)

Field descriptions (Sheet 10 of 11)

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 feature package NTXE34AA (4X Operation—AMR5 Format ANI) (which allows ANI to be forwarded if Feature Group C [FGC] signaling is used) is present, enter REV. If feature package NTXE34AA is present, other values for ANITYPE are invalid. Enter REVUK if interworking with DMS-250 TOPS trunks is required. REVUK uses the UK250 ANI protocol format. Enter WK for special requirements (RCF/TCF). (The correct ANI fail-and-answer supervision on the second leg of a remote call-forwarding call is WK [wink].) The default datafill is REV. If office parameter TRK_OOS_CHK_ON in table OFCVAR is set to Y (yes), all trunks in the group must be busy before the value of this field can be changed by data modification order (DMO).
	RECORDNP	Y or N	*Record calls of type NP* If the office includes the feature package NTX386AA (Access Tandem Switch), enter Y to indicate that calls of are type NP are to be recorded. Otherwise, enter N.
	SPLOOKUP	Y or N	*Special lookup* Enter Y if the non-equal access end office is not capable of outpulsing the correct ANI information digit, and all incoming calls on the trunk group require a lookup in table SPLANILN. Otherwise, enter N.

Field descriptions (Sheet 11 of 11)

Field	Subfield or refinement	Entry	Explanation and action
	OPTIONS	see subfield	*Options* This field consists of subfield OPTION and refinements. Up to three options can be specified. If less than three options are required, end the list with a $ (dollar sign).
	OPTION	BCNAME NOUTR or PIA	*Option* To specify the bearer-capability-name option, enter BCNAME and datafill refinement BCNAME. To specify if the trunk group bypasses the use of the universal tone receiver (UTR), enter NOUTR. To specify the propagate immediate answer option, enter PIA. Option PIA is used to send a message back to the originator immediately. If this option is not set, propagation delays of up to 2 seconds can occur. For certain systems, the call drops due to long propogation delays. The PIA option is only valid for incoming or two-way trunks. If no options apply, leave this field blank.
	BCNAME	alphanumeric (1 to 16 characters)	*Bearer capability name* If the entry in field OPTION is BCNAME, enter the bearer capability to be used by this trunk group. Refer to table BCDEF for the current list of available bearer capabilities.

Data ll e xample

The following example shows sample data ll for table TRKGRP type SC.

TRKGRP type SC (end)

MAP display example for table TRKGRP type SC

```
        GRPKEY
                                                                    GRPINFO
_____________________________________________________________________________

     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 )$
```

Short or Open Circuit Test Line (OCKT) or SCKT

Trunk group type SOCKT is used in switches that are con gured for short- and open-circuit testing.

Each transmission termination trunk consists of a trunk circuit with product engineering code (PEC) NT2X71AA (transmission termination trunk), and is represented in table CLLI by two pseudo-common language location identi ers (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 speci ed (e ven circuit number incremented by 1) in table TRKMEM.

For each member of the trunk group, set eld DBREC and DBTRANS in subtable CLLIMTCE.DIAGDATA equal to 36 and 20 respectively.

For related information, refer to table TRKGRP type MAINT.

Data ll

The following table lists the data ll for table TRKGRP type SOCKT .

Field descriptions (Sheet 1 of 3)

Field	Subfield or refinement	Entry	Explanation and action
GRPKEY		see subfield	*Group key* This field consists of subfield CLLI.
	CLLI	OCKT or SCKT	*Common language location identifier* Enter the pseudo-CLLI for the transmission termination trunk group.

TRKGRP type SOCKT (continued)

Field descriptions (Sheet 2 of 3)

Field	Subfield or refinement	Entry	Explanation and action
GRPINFO		see subfields	*Variable group data* This field consists of subfields GRPTYP, TRAFSNO, PADGRP, NCCLS, and CARDCODE. Refer to section “General field information" in table TRKGRP for information concerning an alternate structure for this field that results from the datafill of table CUSTFLDS.
	GRPTYP	SOCKT	*Group type* Enter SOCKT to specify the group type for transmission terminating trunks.
	TRAFSNO	numeric (0 to 127)	*Traffic separation number* Enter the incoming and outgoing traffic separation number assigned to the trunk group. If a traffic separation number is not required, enter 0 (zero). For switches with software package NTX085AA (Traffic Separation Peg Count), enter a value from 1 to the value of office parameter TFAN_OUT_MAX_NUMBER in table OFCENG. For switches without software package NTX085AA, enter a value from 1 to 15. Incoming and outgoing traffic separation numbers 1 to 9 should be reserved for generic traffic separation numbers. For more information, refer to table TFANINT.
	PADGRP	alphanumeric (1 to 5 characters)	*Pad group* Enter the name of the pad group assigned to the trunk group in table PADDATA. For more information, refer to table PADDATA.

Field descriptions (Sheet 3 of 3)

Field	Subfield or refinement	Entry	Explanation and action
	NCCLS	NCBN NCID NCIM NCIT NCLT NCOF NCON NCOT NCRT NCTC or NOSC	*Operational measurements no-circuit class* Enter the operational measurements (OM) no-circuit class (NCCLS) to indicate which OM register is incremented if treatment GNCT (generalized no circuit) occurs. The initial value for this trunk group type is NCRT (no circuit). For more information, refer to table TRKGRP and the *Operational Measurements Reference Manual*.
	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).

Data ll e xample

The following example shows sample data ll for table TRKGRP type SOCKT.

MAP display example for table TRKGRP type SOCKT

```
GRPKEY      GRPINFO
_____________________________________________________
SCKT        SOCKT 0 TLD NCRT 2X71AA
OCKT        SOCKT 0 TLD NCRT 2X71AA
```

TRKGRP type SPC

Semi-permanent Connections Trunk Group Type

Trunk group type SPC is used to de ne one of the agents used in a semi-permanent connection. The other agent is another trunk or a line.

A semi-permanent connection is one that can be set up or taken down by operating company personnel. Such a connection cannot be set up or taken down by signaling.

Trunk group type SPC can be data lled to allow a trunk group to be used in a semi-permanent connection. Once such a trunk group is de ned, it can only exist in a connection of this type.

Trunk group type SPC currently exists only in DMS-100 international software.

For more information on semi-permanent connections, refer to table SPECCON.

Data ll

The following table lists the data ll for table TRKGRP type SPC.

Field descriptions (Sheet 1 of 3)

Field	Subfield or refinement	Entry	Explanation and action
GRPKEY		see subfield	*Group key* This field consists of subfield CLLI.
	CLLI	alphanumeric (1 to 16 characters)	*Common language location identifier* Enter the common language location identifier (CLLI) code assigned to the trunk group in table CLLI.
GRPINFO		see subfields	*Variable group data* This field consists of subfields GRPTYP, TRAFSNO, PADGRP, NCCLS, and DIR. Refer to section “General field information" in table TRKGRP for information concerning an alternate structure for this field that results from the datafill of table CUSTFLDS.

TRKGRP type SPC (continued)

Field descriptions (Sheet 2 of 3)

Field	Subfield or refinement	Entry	Explanation and action
	GRPTYP	SPC	*Group type* Enter SPC to specify the group type that applies for semi-permanent connection trunks.
	TRAFSNO	numeric (0 to 127)	*Traffic separation number*Enter the incoming and outgoing traffic separation number assigned to the trunk group. If a traffic separation number is not required, enter 0 (zero). For switches with software package NTX085AA (Traffic Separation Peg Count), enter a value from 1 to the value of office parameter TFAN_OUT_MAX_NUMBER in table OFCENG. For switches without software package NTX085AA, enter a value from 1 to 15. Incoming and outgoing traffic separation numbers 1 to 9 should be reserved for generic traffic separation numbers. For more information, refer to table TFANINT.
	PADGRP	alphanumeric (1 to 5 characters)	*Pad group*Enter the name of the pad group assigned to the trunk group in table PADDATA. For more information, refer to table PADDATA.

TRKGRP type SPC (continued)

Field descriptions (Sheet 3 of 3)

Field	Subfield or refinement	Entry	Explanation and action
	NCCLS	NCBN NCID NCIM NCIT NCLT NCOF NCON NCOT NCRT NCTC or NOSC	*Operational measurements no-circuit class* Enter the operational measurements (OM) no-circuit class (NCCLS) to indicate which OM register is incremented if treatment GNCT (generalized no circuit) occurs. The initial value for this trunk group type is NCOT (no circuit other trunk). For more information, refer to table TRKGRP and the *Operational Measurements Reference Manual*.
	DIR	OG	*Direction* Enter OG to specify that the trunk group is outgoing.

Data ll e xample

The following example shows sample data ll for table TRKGRP type SPC.

MAP display example for table TRKGRP type SPC

```
GRPKEY          GRPINFO
_____________________________________________________________
SEMIPERM1       SPC 0 ELO NOSC OG
```

Supplementary information

This section provides additional information related to table TRKGRP and group type SPC.

SPC trunks

The following information applies to SPC trunks:

- A stored program control (SPC) trunk involved in an SPC connection has a state of seized.
- Call processing busy (CPB) is not a valid state for SPC trunks.

- It is not possible to force the release (FRLS) of SPC trunks.
- SPC lines and trunks do not support testline tests such as the milliwatt and looparound tests.

CAUTION

Automatic trunk testing on SPC trunks can cause data corruption

Do not set up automatic trunk testing on SPC trunks. Perform manual testing with care to avoid data corruption.

TRKGRP type T2

Two-Way End Of ce T runk Group Type

In a DMS of ce, tw o-way trunk group type T2 connects with an end or toll of ce for local, direct, or tandem switching.

If the trunk group uses dial pulse signaling and trunk-to-trunk overlap outpulsing is required, the variable number of digits format is required and the minimum number of digits is the number of digits received before overlap outpulsing starts.

Data ll sequence

For trunk group type T2, table TRIGGRP must be data lled before table TRKGRP.

Refer to table TRKGRP for additional data ll dependencies.

Data ll

The following table lists the data ll for table TRKGRP type T2.

Field descriptions (Sheet 1 of 8)

Field	Subfield or refinement	Entry	Explanation and action
GRPKEY		see subfield	*Group key* This field consists of subfield CLLI.
	CLLI	alphanumeric (1 to 16 characters)	*Common language location identifier* Enter the common language location identifier (CLLI) code 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. Refer to section “General field information" in table TRKGRP for information on an alternate structure for this field that results from the datafill of table CUSTFLDS.
	GRPTYP	T2	*Group type* Enter the two-way end office trunk group type T2.

Field descriptions (Sheet 2 of 8)

Field	Subfield or refinement	Entry	Explanation and action
	TRAFSNO	numeric (0 to 127)	*Traffic separation number* Enter the incoming and outgoing traffic separation number assigned to the trunk group. If a traffic separation number is not required, enter 0 (zero). For switches with software package NTX085AA (Traffic Separation Peg Count), enter a value from 1 to the value of office parameter TFAN_OUT_MAX_NUMBER in table OFCENG. For switches without software package NTX085AA, enter a value from 1 to 15. It is recommended that incoming and outgoing traffic separation numbers 1 to 9 be reserved for generic traffic separation numbers. For more information, refer to table TFANINT.
	PADGRP	alphanumeric (1 to 5 characters)	*Pad group* Enter the name of the pad group assigned to the trunk group in table PADDATA. For more information, refer to table PADDATA.
	NCCLS	NCBN NCID NCIM NCIT NCLT NCOF NCON NCOT NCRT NCTC or NOSC	*Operational measurements no-circuit class* Enter the operational measurements (OM) no-circuit class (NCCLS) to indicate which OM register is incremented if treatment GNCT (generalized no circuit) occurs. The initial value for this trunk group type is NCRT (no circuit). For more information, refer to the overview section of table TRKGRP and the *Operational Measurements Reference Manual*.

TRKGRP type T2 (continued)

Field descriptions (Sheet 3 of 8)

Field	Subfield or refinement	Entry	Explanation and action
	TRAFCLS	alphabetic (2 characters)	*Traffic usage class* Enter the traffic usage class assigned to the trunk group. For more information, refer to table TRKGRP.
	SELSEQ	MIDL LIDL CWCTH CCWCTH ASEQ or DSEQ	*Select sequence* If the trunk group direction is two-way (2W) and the far end is a link list switcher, enter LIDL or MIDL (least or most idle) if the far end is MIDL or LIDL respectively. If the trunk group is 2W, the far end is not a link list switcher and sequential selection does not apply, enter MIDL. If the trunk group is 2W, the far end is not a link list switcher, and feature package NTX244AB (Enhanced Sequential Trunk Hunting) is present, base the selection order on the order of the trunks in table TRKMEM, and enter • CWCTH or CCWCTH for clockwise or counterclockwise circular trunk hunting from the most recently released trunk in the trunk group, if the far end is CCWCTH or CWCTH respectively, or • ASEQ or DSEQ for ascending or descending sequential selection, if far end is DSEQ or ASEQ respectively. Entries outside this range are invalid. For more information, refer to table TRKGRP.

TRKGRP type T2 (continued)

Field descriptions (Sheet 4 of 8)

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.
	DIGSOUT	numeric (0 to 18)	*Digits outpulsed* If the number of digits to be outpulsed is variable, enter 0 (zero) and specify the number of digits to be outpulsed in the appropriate route list. If the number of digits to be outpulsed is a fixed quantity, enter a value from 0 to 18.
	TOLL	Y or N	*Toll* If the trunk group is outgoing tandem and the connecting office is toll, enter Y (yes). Otherwise, enter N (no).
	PRTNM	alphanumeric (1 to 4 characters)	*Standard pretranslation name* Enter the name of the standard pretranslator datafilled in table STDPRTCT to which translation routes on receipt of the first incoming digit. If no pretranslation is required, enter NPRT (no pretranslator). If office parameter TRK_OOS_CHK_ON in table OFCVAR is set to Y, all trunks in the group must be busy before the value of this field can be changed by data modification order (DMO).

TRKGRP type T2 (continued)

Field descriptions (Sheet 5 of 8)

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 of the call, LCL (local) or NLCL (nonlocal). For more information, refer to the “Notes on originating source" section in table HNPACONT.HNPACODE.
	VDEVAR	see subfield	*Variable digit data* This field consists of subfield VDESEL.
	VDESEL	Y or N	*Variable digit selector* If the variable digit format is used for the standard pretranslator, enter Y and datafill refinements DIGSIN1 and DIGSIN2. Otherwise, enter N and datafill refinement DIGREGEN. If office parameter TRK_OOS_CHK_ON in table OFCVAR is set to Y, all trunks in the group must be busy before the value of this field can be changed by DMO.

TRKGRP type T2 (continued)

Field descriptions (Sheet 6 of 8)

Field	Subfield or refinement	Entry	Explanation and action
	DIGSIN1	numeric(1 to 15)	*Minimum number of incoming digits* If the entry in subfield VDESEL is Y, enter the minimum number of incoming digits received on the trunk group. Entries outside the range indicated for this field are not valid. If office parameter TRK_OOS_CHK_ON in table OFCVAR is set to Y, all trunks in the group must be busy before the value of this field can be changed by DMO.
	DIGSIN2	numeric (1 to 15)	*Maximum number of incoming digits* If the entry in subfield VDESEL is Y, enter the maximum number of incoming digits received on the trunk group. Entries outside the range indicated for this field are not valid. If office parameter TRK_OOS_CHK_ON in table OFCVAR is set to Y, all trunks in the group must be busy before the value of this field can be changed by DMO.

TRKGRP type T2 (continued)

Field descriptions (Sheet 7 of 8)

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 three multiples of subfield OPTION and refinements.

Field descriptions (Sheet 8 of 8)

Field	Subfield or refinement	Entry	Explanation and action
	OPTION	BCNAME or CHGNUM	*Option* To specify the bearer-capability-name option, enter BCNAME and datafill refinement BCNAME. To specify the charge-number-delivery option, which sends a charge number and originating line information (OLI) parameter with the initial address message (IAM), enter CHGNUM. No refinements are required for this entry value. If no options apply, leave this field blank.
	BCNAME	alphanumeric (1 to 16 characters)	*Bearer capability name* If the entry in field OPTION is BCNAME, enter the bearer capability to be used by this trunk group. Refer to table BCDEF for the current list of available bearer capabilities. If field OPTION and refinement BCNAME are left blank, the default bearer capability of the central office is used.

Data ll e xample

The following example shows sample data ll for table TRKGRP type T2. This example has been data lled in accordance with the follo wing data ll requirements:

- The code in table CLLI for the trunk group is OTWAON11MG02.
- The trunk group type is T2.
- The incoming and outgoing traf c 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 traf c class is interof ce 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 de ned in a route list.
- The trunk group is not toll-protected.

TRKGRP type T2 (end)

- 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 (N), and the digits 72 are pre x ed to the incoming digits to reconstruct the dialed number.
- The bearer capability assigned to the trunk group is 56-k data.

MAP display example for table TRKGRP type T2

```
GRPKEY
                                          GRPINFO
_____________________________________________________________________
OTWAO11MG02
        T2 22 ELO NCRT IE MIDL 0 N INC1 +
        NSCR 613 LCL N 72 BCNAME 56KDATA $
```

Table history

NA004

Removed option AIN; table TRKAIN is used instead.

BCS36

Added option AIN.

101 Communication Test Line Trunk Group Type

Trunk group type T101, which can be incoming or outgoing, is used for 101 tests in DMS of ces.

Incoming 101 test lines use dial pulse (DP), Digitone (DT), and multifrequency (MF) dialing.

Data ll

The following table lists the data ll for table TRKGRP type T101.

Field descriptions (Sheet 1 of 5)

Field	Subfield or refinement	Entry	Explanation and action
GRPKEY		see subfield	*Group key* This field consists of subfield CLLI.
	CLLI	alphanumeric (1 to 16 characters)	*Common language location identifier* Enter the common language location identifier (CLLI) code assigned to the trunk group in table CLLI.
GRPINFO		see subfields	*Variable group data* This field consists of subfields GRPTYP, TRAFSNO, PADGRP, NCCLS, DIR, TRAFCLS, SELSEQ, PRTNM, SCRNCL, and SNPA. Refer to section “General field information" in table TRKGRP for information on an alternate structure for this field that results from the datafill of table CUSTFLDS.
	GRPTYP	T101	*Group type* Enter T101 to specify the group type for 101 test lines.

TRKGRP type T101 (continued)

Field descriptions (Sheet 2 of 5)

Field	Subfield or refinement	Entry	Explanation and action
	TRAFSNO	numeric (0 to 127)	*Traffic separation number* Enter the incoming and outgoing traffic separation number assigned to the trunk group. If a traffic separation number is not required, enter 0 (zero). For switches with software package NTX085AA (Traffic Separation Peg Count), enter a value from 1 to the value of office parameter TFAN_OUT_MAX_NUMBER in table OFCENG. For switches without software package NTX085AA, enter a value from 1 to 15. Incoming and outgoing traffic separation numbers 1 to 9 should be reserved for generic traffic separation numbers. For more information, refer to table TFANINT.
	PADGRP	alphanumeric (1 to 5 characters)	*Pad group* Enter the name of the pad group assigned to the trunk group in table PADDATA. For more information, refer to table PADDATA.
	NCCLS	NCBN NCID NCIM NCIT NCLT NCOF NCON NCOT NCRT NCTC or NOSC	*Operational measurements no-circuit class* Enter the operational measurements (OM) no-circuit class (NCCLS) to indicate which OM register is incremented if treatment GNCT (generalized no-circuit) occurs. If the trunk group direction is outgoing, the initial value for this trunk group type is NCOT (no-circuit other trunk). If the trunk group direction is incoming, this field is not required. Enter NCRT (no-circuit). For more information, refer to table TRKGRP and the *Operational Measurements Reference Manual*.

TRKGRP type T101 (continued)

Field descriptions (Sheet 3 of 5)

Field	Subfield or refinement	Entry	Explanation and action
	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).
	TRAFCLS	alphabetic (2 characters)	*Traffic usage class* Enter the traffic usage class assigned to the trunk group. For more information, refer to table TRKGRP.
	SELSEQ	ASEQ DSEQ CWCTH CCWCTH LIDL or MIDL	*Select sequence* If the trunk group direction is incoming, sequential selection does not apply. Enter MIDL. If the trunk group is outgoing, the far end is not a link list switcher, and feature package NTX244AB (Enhanced Sequential Trunk Hunting) is present, base the selection order on the order of the trunks in table TRKMEM, and enter • CWCTH or CCWCTH for clockwise or counterclockwise circular trunk hunting from the most recently released trunk in the trunk group, if the far end is CCWCTH or CWCTH respectively, or • ASEQ or DSEQ for ascending or descending sequential selection, if far end is DSEQ or ASEQ respectively. Entries outside this range are invalid. For more information, refer to table TRKGRP.

TRKGRP type T101 (continued)

Field descriptions (Sheet 4 of 5)

Field	Subfield or refinement	Entry	Explanation and action
			Note: A trunk group trunk selection method cannot be changed. If a change in the selection method is required, a new trunk group must be created with the required trunk selection method. The individual trunks with the old selection sequence must be deleted from the old trunk group and then added to the new trunk group. For an existing trunk group, the selection sequence may be changed to ASEQ from DSEQ or from DSEQ to ASEQ if all the trunk members are installation busy (INB) or unequipped (UNEQ). Refer to table TRKGRP for additional information concerning field SELSEQ.
	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.

Field descriptions (Sheet 5 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.

Data ll e xample

The following example shows sample data ll for table TRKGRP type T101. This example is data lled in accordance with the follo wing information:

- The code in table CLLI for the trunk group is T101GRP1IC.
- The trunk group type is T101.
- The incoming traf c separation number 29 is assigned to the trunk group.
- TLD is the pad group name assigned to the trunk group.
- NCRT is the no-circuit class.
- The direction is incoming (IC).
- The traf c class is miscellaneous (MI).
- The select sequence, which is not required is not required, is set to MIDL.
- Pretranslation and class-of-service screening are not required.
- The trunk group is assigned to SNPA 613.

TRKGRP type T101 (end)

MAP display example for table TRKGRP type T101

```
GRPKEY       GRPINFO
_____________________________________________________________

T101GRP11C   T101 29 TLD NCRT IC MI MIDL NPRT NSCR 613
```

Terminating105 Test Line Trunk Group Type

In a DMS of ce equipped with package ROTL, trunk group type T105 is used for terminating 105 test lines.

In of ces without the R OTL package, terminating 105 test line must be data lled as trunk group type IT (incoming trunk).

Data ll

The following table lists the data ll for table TRKGRP type T105.

Field descriptions (Sheet 1 of 4)

Field	Subfield or refinement	Entry	Explanation and action
GRPKEY		see subfield	*Group key* This field consists of subfield CLLI.
	CLLI	alphanumeric (1 to 16 characters)	*Common language location identifier* Enter the common language location identifier (CLLI) code assigned to the trunk group in table CLLI.
GRPINFO		see subfields	*Variable group data* This field consists of subfields GRPTYP, TRAFSNO, PADGRP, NCCLS, DIR, TRAFCLS, SELSEQ, CONNGNPA, PRTNM, SCRNCL, SNPA, TERMTC, TOLLCOMP, and CCWKVLD. Refer to section “General field information" in table TRKGRP for information on an alternate structure for this field that results from the datafill of table CUSTFLDS.
	GRPTYP	T105	*Group type* Enter T105 to specify the 105 test line trunk group.

TRKGRP type T105 (continued)

Field descriptions (Sheet 2 of 4)

Field	Subfield or refinement	Entry	Explanation and action
	TRAFSNO	numeric (0 to 127)	*Traffic separation number* Enter the incoming and outgoing traffic separation number assigned to the trunk group. If a traffic separation number is not required, enter 0 (zero). For switches with software package NTX085AA (Traffic Separation Peg Count), enter a value from 1 to the value of office parameter TFAN_OUT_MAX_NUMBER in table OFCENG. For switches without software package NTX085AA, enter a value from 1 to 15. Incoming and outgoing traffic separation numbers 1 to 9 should be reserved for generic traffic separation numbers. For more information, refer to table TFANINT.
	PADGRP	alphanumeric (1 to 5 characters)	*Pad group* Enter the name of the pad group assigned to the trunk group in table PADDATA For more information, refer to table PADDATA.
	NCCLS	NCBN NCID NCIM NCIT NCLT NCOF NCON NCOT NCRT NCTC or NOSC	*Operational measurements no-circuit class* Enter the operational measurements (OM) no-circuit class (NCCLS) to indicate which OM register is incremented if treatment GNCT (generalized no circuit) occurs. The initial value for this trunk group type is NCOT (no-circuit other trunk). For more information, refer to table TRKGRP and the *Operational Measurements Reference Manual*.
	DIR	OG	*Direction* Enter OG to specify that the trunk group is outgoing.

Field descriptions (Sheet 3 of 4)

Field	Subfield or refinement	Entry	Explanation and action
	TRAFCLS	alphabetic (2 characters)	*Traffic usage class* Enter the traffic usage class assigned to the trunk group. For more information, refer to table TRKGRP.
	SELSEQ	ASEQ DSEQ CWCTH CCWCTH LIDL or MIDL	*Select sequence* Enter the order of trunk selection. The order in which trunks are searched is determined by the order in which the trunk groups are datafilled in table TRKMEM, and by the value of SELSEQ. If sequential selection does not apply, enter MIDL. For outgoing trunk groups with feature package NTX244AB (Enhanced Sequential Trunk Hunting) present on the switch, enter • ASEQ for ascending, or DSEQ for descending sequential selection • CWCTH for clockwise, or CCWCTH for counterclockwise circular trunk hunting from the most recently released trunk in the trunk group ***Note 1:*** For more information on field SELSEQ, refer to table TRKGRP. ***Note 2:*** A trunk group trunk selection method cannot be changed. If a change in the selection method is required, a new trunk group must be created with the required trunk selection method. The individual trunks with the old selection sequence must be deleted from the old trunk group and then added to the new trunk group. For an existing trunk group, the selection sequence may be changed to ASEQ from DSEQ or from DSEQ to ASEQ if all the trunk members are installation busy (INB) or unequipped (UNEQ). Refer to table TRKGRP for additional information concerning field SELSEQ.

TRKGRP type T105 (continued)

Field descriptions (Sheet 4 of 4)

Field	Subfield or refinement	Entry	Explanation and action
	CONNGNPA	numeric (three digits)	*Connecting NPA* If the outpulsed digits are translated, enter the NPA code of the switch.
	PRTNM	NPRT	*Standard pretranslator name* Standard pretranslation is not required on outgoing trunk groups. Enter NPRT (no pretranslator).
	SCRNCL	NSCR	*Class-of-service screening table name* Class-of-service screening is not required on outgoing trunk groups. Enter NSCR (no screening).
	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 cente* *r*If the outpulsed digits are translated and the switch is assigned a terminating toll center code, enter the terminating toll center code. If there is no terminating toll center code, enter 000.
	TOLLCOMP	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.

Data ll e xample

The following example shows sample data ll for table TRKGRP type T105.

- The code in table CLLI for the 105 test line is TERM105.
- The trunk group type is T105.
- The outgoing traf c separation number 27 is assigned to the trunk group.
- TLD is the name of the pad group assigned to the trunk group.

TRKGRP type T105 (end)

- NCOT is the no-circuit class.
- The direction is outgoing (OG).
- The traf c class is miscellaneous (MI).
- The select sequence is not required, set to MIDL.
- The connecting NPA is 613.
- Pretranslation and class of service screening are not required for outgoing trunk groups. Set these values to NPRT and NSCR respectively.
- The trunk group is assigned to serving NPA 613.
- The terminating toll center code is 000.
- The trunk group is connected to an end of ce.
- Carrier connect wink is not used and is set to N.

MAP display example for table TRKGRP type T105

```
GRPKEY          GRPINFO
_____________________________________________________________

TERM105         T105 27 TLD NCOT OG MI MIDL 613 NPRT NSCCR
 613 000 Y N $
```

TRKGRP type TD

Incoming and Outgoing Test Desk Trunk Group Type

In a DMS end of ce, incoming and outgoing trunk group type TD connects with a test desk (for example, #14 LTD, #3 LTC). Members of these trunk groups have PECs NT2X90AB or NT2X90AD.

If the dialed number is busy, the trunk is connected automatically to the line through metallic test access.

Line equipment numbers that do not have associated directory numbers (for example, multiline hunt group members) can be addressed by (11 + LEN) for testing purposes.

For example, if a trunk group with eld VERSION equal to ML T 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 veri cation. Refer to table TRKGRP type VR for more information.

Data ll

The following table lists the data ll for table TRKGRP type TD.

Field descriptions (Sheet 1 of 7)

Field	Subfield or refinement	Entry	Explanation and action
GRPKEY		see subfield	*Group key* This field consists of subfield CLLI.
	CLLI	alphanumeric (1 to 16 characters)	*Common language location identifier* Enter the common language location identifier (CLLI) code assigned to the trunk group in table CLLI.

TRKGRP type TD (continued)

Field descriptions (Sheet 2 of 7)

Field	Subfield or refinement	Entry	Explanation and action
GRPINFO		see subfields	*Variable group data* This field consists of subfields GRPTYP, TRAFSNO, PADGRP, NCCLS, TRAFCLS, SELSEQ, TRKDIR, PRTNM, SCRNCL, SNPA, ORIGSCRE, VDEVAR, TDTYPE, and BARGE. Refer to section “General field information" in table TRKGRP for information on an alternate structure for this field that results from the datafill of table CUSTFLDS.
	GRPTYP	TD	*Group type* Enter TD to specify the incoming and outgoing test desk trunk group type.
	TRAFSNO	numeric (0 to 127)	*Traffic separation number* Enter the incoming and outgoing traffic separation number assigned to the trunk group. If a traffic separation number is not required, enter 0 (zero). For switches with software package NTX085AA (Traffic Separation Peg Count), enter a value from 1 to the value of office parameter TFAN_OUT_MAX_NUMBER in table OFCENG. For switches without software package NTX085AA, enter a value from 1 to 15. Incoming and outgoing traffic separation numbers 1 to 9 should be reserved for generic traffic separation numbers. For more information, refer to table TFANINT.
	PADGRP	alphanumeric (1 to 5 characters)	*Pad group* Enter the name of the pad group assigned to the trunk group in table PADDATA. For more information, refer to table PADDATA.

TRKGRP type TD (continued)

Field descriptions (Sheet 3 of 7)

Field	Subfield or refinement	Entry	Explanation and action
	NCCLS	NCBN NCID NCIM NCIT NCLT NCOF NCON NCOT NCRT NCTC or NOSC	*Operational measurements no-circuit class* Enter the operational measurements (OM) no-circuit class (NCCLS) to indicate which OM register is incremented if treatment GNCT (generalized no circuit) occurs. If the trunk group direction is incoming, this field is not required; enter NCRT (no circuit). The initial value for this trunk group type is NCRT. For more information, refer to table TRKGRP and the *Operational Measurements Reference Manual*.
	TRAFCLS	alphabetic (2 characters)	*Traffic usage class* Enter the traffic usage class assigned to the trunk group. For more information, refer to table TRKGRP.
	SELSEQ	LIDLMIDL CWCTH CCWCTH ASEQ or DSEQ	*Select sequence* If the trunk group direction is incoming, sequential selection does not apply. Enter MIDL. If the trunk group is outgoing and feature package NTX244AB (Enhanced Sequential Trunk Hunting) is present, base the selection order on the order of the trunks in table TRKMEM, and enter • CWCTH or CCWCTH for clockwise or counterclockwise circular trunk hunting from the most recently released trunk in the trunk group, if the far end is CCWCTH or CWCTH respectively, or • ASEQ or DSEQ for ascending or descending sequential selection, if far end is DSEQ or ASEQ respectively. Entries outside this range are not valid. For more information, refer to table TRKGRP.

Field descriptions (Sheet 4 of 7)

Field	Subfield or refinement	Entry	Explanation and action
			Note: A trunk group trunk selection method cannot be changed. If a change in the selection method is required, a new trunk group must be created with the required trunk selection method. The individual trunks with the old selection sequence must be deleted from the old trunk group and then added to the new trunk group. For an existing trunk group, the selection sequence may be changed to ASEQ from DSEQ or from DSEQ to ASEQ if all the trunk members are installation busy (INB) or unequipped (UNEQ). Refer to table TRKGRP for additional information concerning field SELSEQ.
	TRKDIR	IC or OG	*Trunk direction* Enter IC to specify that the direction of traffic flow is incoming or OG to specify that the direction of traffic flow is outgoing. If office parameter TRK_OOS_CHK_ON in table OFCVAR is set to Y, all trunks in the group must be busy before the value of this field can be changed by data modification order (DMO).
	PRTNM	alphanumeric (1 to 4 characters) or NPRT	*Standard pretranslator name* If the trunk group is incoming, enter the name of the standard pretranslator defined in table STDPRTCT to which translation is to route on receipt of the first incoming digit. If the trunk group is outgoing, enter NPRT (no pretranslator). If office parameter TRK_OOS_CHK_ON in table OFCVAR is set to Y, all trunks in the group must be busy before the value of this field can be changed by DMO.

TRKGRP type TD (continued)

Field descriptions (Sheet 5 of 7)

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). If the trunk group is outgoing, enter NSCR.
	SNPA	numeric (3 digits)	*Serving numbering plan area* Enter the code in table HNPACODE to which translation routes for digit translation. If the trunk group is outgoing, enter 000.
	ORIGSRCE	LCL or NLCL	*Originating source* If the trunk group is incoming, enter the originating source of the call, local (LCL) or non-local (NLCL). This field is used to screen calls in subtable HNPACONT.HNPACODE. If the trunk group is outgoing, enter LCL. For more information, refer to the “Notes on originating source" section in table HNPACONT.HNPACODE.
	VDEVAR	see subfield	*Variable digit data* This field consists of subfield VDESEL.
	VDESEL	Y or N	*Variable digit data* This field consists of subfield VDESEL.
	DIGSIN1	numeric (1 to 18)	*Minimum number of incoming digits* If the entry in subfield VDESEL is Y, enter the minimum number of incoming digits received on the trunk group. Entries outside the range indicated for this field are not valid. If office parameter TRK_OOS_CHK_ON in table OFCVAR is set to Y, all trunks in the group must be busy before the value of this field can be changed by DMO.

TRKGRP type TD (continued)

Field descriptions (Sheet 6 of 7)

Field	Subfield or refinement	Entry	Explanation and action
	DIGSIN2	numeric (1 to 18)	*Maximum number of incoming digits* If the entry in subfield VDESEL is Y, enter the maximum number of incoming digits received on the trunk group. Entries outside the range indicated for this field are not valid. If office parameter TRK_OOS_CHK_ON in table OFCVAR is set to Y, all trunks in the group must be busy before the value of this field can be changed by DMO.
	DIGREGEN	numeric (1 to 4 digits) or N	*Digits to be regenerate* If the entry in subfield VDESEL is N, enter the digit string to be prefixed to the incoming digits to regenerate a seven-digit number. The length of the digit string entered is subtracted from seven by the switch to determine the number of incoming digits to expect. The regenerated number is then translated in table STDPRTCT.STDPRT or HNPACONT.HNPACODE, or both. For example, if the entry is 73, the switch expects five incoming digits XXXXX and regenerates the number 73XXXXX. If no digits are to be prefixed, enter N. The switch then expects seven incoming digits. If office parameter TRK_OOS_CHK_ON in table OFCVAR is set to Y, all trunks in the group must be busy before the value of this field can be changed by DMO.
	TDTYP	see subfields	*Test desk type* This field consists of subfield VERSION and refinements.

TRKGRP type TD (continued)

Field descriptions (Sheet 7 of 7)

Field	Subfield or refinement	Entry	Explanation and action
	VERSION	MLT or TSTDK	*Version* If the incoming trunk group and switch has an interface for a mechanized loop tester, enter MLT and datafill refinement DGTTST. If the incoming trunk group and switch has an interface for signaling type 14 LTD, enter TSTDK and datafill refinements DGTTST and TKTYP. The default value for TD trunks is TSTDSK.
	DGTTST	EXTRCVR or INTRCVR	*Digit test* If the value in field VERSION is MLT or TSTDK, datafill this field to specify whether an internal or an external receiver is used in the NT2X90AB or NT2X90AD test trunk for the digit test. For an internal receiver, enter INTRCVR. For an external receiver, enter EXTRCVR. The default value is INTRCVR.
	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.

Data ll e xample

The following example shows sample data ll for table TRKGRP type TD. This example shows data ll for an incoming trunk group with an A T&T mechanized loop tester, an incoming trunk group with a signaling type 14 LTD, and an outgoing trunk group.

TRKGRP type TD (end)

MAP display example for table TRKGRP type TD

```
GRPKEY      GRPINFO
_____________________________________________________________
OTWAON23T051     TD 15 ELO NCOT TK MIDL IC INC3 NSCR 613
 NLCL N 72 MLT EXTRCVR N $
OTWAON23T052     TD 17 ELO NCOT TK MIDL IC INC3 NSCR 613
 NLCL N 72 TSTDK INTRCVR NOTEST N $
OTWAON23T050     TD 16 ELO NCOT TK MIDL OG NPRT NSCR 000
 LCL N N N $
```

TRKGRP type TDDO

Tandem Two-stage Direct-dial Overseas Trunk Group Type

Trunk group type TDDO is an outgoing or two-way trunk group that connects with an international originating toll center for tandem switching of two-stage calls. Only incoming and two-way intertoll and local trunk groups can terminate to trunk group type TDDO.

The outgoing pulsing and start signal types in table TRKSGRP must be no pulsing (NP) and immediate dial (IM), respectively.

Data ll

The following table lists the data ll for table TRKGRP type TDDO.

Field descriptions (Sheet 1 of 5)

Field	Subfield or refinement	Entry	Explanation and action
GRPKEY		see subfield	*Group key* This field consists of subfield CLLI.
	CLLI	alphanumeric (1 to 16 characters)	*Common language location identifier* Enter the common language location identifier (CLLI) code assigned to the trunk group in table CLLI.
GRPINFO		see subfields	*Variable group data* This field consists of subfields GRPTYP, TRAFSNO, PADGRP, NCCLS, and TDDO_VDATA. 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	TDDO	*Group type* Enter TDDO to specify the group type for tandem two-stage direct-dial overseas trunks.

TRKGRP type TDDO (continued)

Field descriptions (Sheet 2 of 5)

Field	Subfield or refinement	Entry	Explanation and action
	TRAFSNO	numeric (0 to 127)	*Traffic separation number* Enter the incoming and outgoing traffic separation number assigned to the trunk group. If a traffic separation number is not required, enter 0 (zero). For switches with software package NTX085AA (Traffic Separation Peg Count), enter a value from 1 to the value of office parameter TFAN_OUT_MAX_NUMBER in table OFCENG. For switches without software package NTX085AA, enter a value from 1 to 15. Incoming and outgoing traffic separation numbers 1 to 9 should be reserved for generic traffic separation numbers. For more information, refer to table TFANINT.
	PADGRP	alphanumeric (1 to 5 characters)	*Pad group* Enter the name of the pad group assigned to the trunk group in table PADDATA. For more information, refer to table PADDATA.
	NCCLS	NCBN NCID NCIM NCIT NCLT NCOF NCON NCOT NCRT NCTC or NOSC	*Operational measurements no-circuit class* Enter the operational measurements (OM) no-circuit class (NCCLS) to indicate which OM register is incremented if treatment GNCT (generalized no circuit) occurs. The initial value for this trunk group type is NCIT (no-circuit intertoll). For more information, refer to table TRKGRP and the *Operational Measurements Reference Manual*.
	TDDO_VDATA	see subfields	*Tandem two-stage direct-dial overseas data* This field consists of subfields DIR, SELSEQ, and refinements.

TRKGRP type TDDO (continued)

Field descriptions (Sheet 3 of 5)

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.
	SELSEQ	ASEQ CCWCTH CWCTH DSEQ LIDL or MIDL	*Select sequence* If the trunk group direction is outgoing (OG) or two-way (2W) and the far end is a link list switcher, enter LIDL or MIDL (least or most idle) if the far end is MIDL or LIDL respectively. If the trunk group direction is outgoing or two-way, the far end is not a link list switcher, and sequential selection does not apply, enter MIDL. • CWCTH or CCWCTH for clockwise or counterclockwise circular trunk hunting from the most recently released trunk in the trunk group, if the far end is CCWCTH or CWCTH respectively, or • ASEQ or DSEQ for ascending or descending sequential selection, if far end is DSEQ or ASEQ respectively. If the trunk group is outgoing and sequential selection does not apply, enter MIDL. If the trunk group direction is incoming, enter MIDL. Sequential selection does not apply to incoming trunks. Entries outside this range are not valid. For more information, refer to table TRKGRP.

Field descriptions (Sheet 4 of 5)

Field	Subfield or refinement	Entry	Explanation and action
			Note: A trunk group trunk selection method cannot be changed. If a change in the selection method is required, a new trunk group must be created with the required trunk selection method. The individual trunks with the old selection sequence must be deleted from the old trunk group and then added to the new trunk group. For an existing trunk group, the selection sequence can be changed to the opposite select sequence type (for example, ASEQ to DSEQ, LIDL to MIDL, or CCWCTH to CWCTH) if all the trunk members are installation busy (INB) or unequipped (UNEQ). Refer to table TRKGRP for additional information concerning field SELSEQ.
	TRAFCLS	alphabetic (2 characters)	*Traffic usage class* Datafill this field only if the value in field DIR is 2W. Enter the traffic usage class assigned to the trunk group. For more information, refer to table TRKGRP.
	TOLLCOMP	N or Y	*Toll completion* Datafill this field only if the value in field DIR is 2W. If the trunk group is toll completing, enter Y (yes). Otherwise, enter N (no).
	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 data modification order (DMO).

TRKGRP type TDDO (continued)

Field descriptions (Sheet 5 of 5)

Field	Subfield or refinement	Entry	Explanation and action
	SCRNCL	alphanumeric (1 to 4 characters) or NSCR	*Class-of-service screening table name* Datafill this field only if the value in field DIR is 2W. If class-of-service screening is required, enter the name of the class-of-service screening table (datafilled in table SCRNCLAS) to which digit translation routes. If class-of-service screening is not required, enter NSCR (no screening).
	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.
	TERMTC	numeric (3 digits)	*Terminating toll center* Datafill this field only if the value in field DIR is 2W. Enter the terminating toll centre code assigned to the far end of the trunk group. If no terminating toll centre code is applicable, enter 000.

TRKGRP type TDDO (end)

Data ll e xample

The following example shows sample data ll for table TRKGRP type TDDO.

MAP display example for table TRKGRP type TDDO

```
GRPKEY          GRPINFO
_____________________________________________________________________________

OTWAON0202T0     TDDO 20 TLD NCRT IC MIDL IT N 613 NSCR NPRT 000 000
```

TRKGRP type TI

Incoming End Of ce T runk Group Type

In a DMS of ce, incoming trunk group type TI connects with an end or toll of ce for local, direct, or tandem switching.

If the trunk group uses dial pulse signaling and trunk-to-trunk overlap outpulsing, the variable number of digits format is required. The minimum number of digits speci ed is the number of digits recei ved before overlap outpulsing starts.

Data ll sequence

For trunk group type TI, table TRIGGRP must be data lled before table TRKGRP.

For additional dependencies, refer to section “Table size" in table TRKGRP.

Data ll

The following table lists the data ll for table TRKGRP type TI.

Field descriptions (Sheet 1 of 5)

Field	Subfield or refinement	Entry	Explanation and action
GRPKEY		see subfield	*Group key* This field consists of subfield CLLI.
	CLLI	alphanumeric (1 to 16 characters)	*Common language location identifie* Enter the common language location identifier (CLLI) code assigned to the trunk group in table CLLI.
GRPINFO		see subfields	*Variable group data* This field consists of subfields GRPTYP, TRAFSNO, PADGRP, NCCLS, TRAFCLS, PRTNM, SCRNCL, SNPA, ORIGSRCE, VDEVAR, and OPTIONS. Refer to section “General field information" in table TRKGRP for information on an alternate structure for this field that results from the datafill of table CUSTFLDS.
	GRPTYP	TI	*Group type* Enter the incoming end office trunk group type TI.

TRKGRP type TI (continued)

Field descriptions (Sheet 2 of 5)

Field	Subfield or refinement	Entry	Explanation and action
	TRAFSNO	numeric (0 to 127)	*Traffic separation number* Enter the incoming traffic separation number assigned to the trunk group. If a traffic separation number is not required, enter 0 (zero). For switches with software package NTX085AA (Traffic Separation Peg Count), enter a value from 1 to the value of office parameter TFAN_OUT_MAX_NUMBER in table OFCENG. For switches without software package NTX085AA, enter a value from 1 to 15. It is recommended that incoming and outgoing traffic separation numbers 1 to 9 be reserved for generic traffic separation numbers. For more information, refer to table TFANINT.
	PADGRP	alphanumeric (1 to 5 characters)	*Pad group* Enter the name of the pad group assigned to the trunk group in table PADDATA.
	NCCLS	NCRT	*Operational measurements no-circuit class* This field is not required for incoming trunk groups. Enter NCRT (no circuit).
	TRAFCLS	alphabetic (2 characters)	*Traffic usage class* Enter the traffic usage class assigned to the trunk group. For more information, refer to table TRKGRP.

TRKGRP type TI (continued)

Field descriptions (Sheet 3 of 5)

Field	Subfield or refinement	Entry	Explanation and action
	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 (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 32 characters) or NSCR	*Class of service screening table name* If class-of-service screening is required, enter the name of the class-of-service screening table (datafilled in table SCRNCLAS) to which digit translation routes. If class-of-service screening is not required, enter NSCR (no screening).
	SNPA	numeric (3 digits)	*Serving numbering plan area* Enter the code in table HNPACODE to which translation routes for digit translation. If office parameter TRK_OOS_CHK_ON in table OFCVAR is set to Y, all trunks in the group must be busy before the value of this field can be changed by DMO.
	ORIGSRCE	LCL or NLCL	*Originating source* Enter the originating source LCL (local) or NLCL (nonlocal). For more information, refer to the “Notes on originating source" section in table HNPACONT.HNPACODE.
	VDEVAR	see subfield	*Variable digit data* This field consists of subfield VDESEL.

TRKGRP type TI (continued)

Field descriptions (Sheet 4 of 5)

Field	Subfield or refinement	Entry	Explanation and action
	VDESEL	Y or N	*Variable digit selecto* *r*If the number of incoming digits is variable, enter Y and datafill refinements DIGSIN1 and DIGSIN2. If the number of incoming digits is a fixed quantity, enter N and datafill refinement DIGREGEN. If office parameter TRK_OOS_CHK_ON in table OFCVAR is set to Y, all trunks in the group must be busy before the value of this field can be changed by DMO.
	DIGSIN1	numeric (1 to 18)	*Minimum number of incoming digits* If the entry in 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 (yes), all trunks in the group must be busy before the value of this field can be changed by data modification order (DMO).
	DIGSIN2	numeric (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 (yes), all trunks in the group must be busy before the value of this field can be changed by data modification order (DMO).

TRKGRP type TI (continued)

Field descriptions (Sheet 5 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 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.
	OPTIONS	see subfield	*Options* This field consists of up to two multiples of subfield OPTION and refinements.
	OPTION	BCNAME	*Option* To specify the bearer-capability-name option, enter BCNAME and datafill refinement BCNAME. If option BCNAME does not apply, leave this field blank.
	BCNAME	alphanumeric (1 to 16 characters)	*Bearer capability name* If the entry in field OPTION is BCNAME, enter the bearer capability to be used by this trunk group. Refer to table BCDEF for the current list of available bearer capabilities. If field OPTION and refinement BCNAME are left blank, the default bearer capability of the central office is used.

Data ll e xample

The following example shows sample data ll for table TRKGRP type TI.

The rst tuple sho ws the following information:

- An incoming end of ce trunk group that has a x ed number of incoming digits.
- The code in table CLLI for the trunk group is OTWAON2303T1.
- The trunk group type is TI.
- The incoming traf c separation number 20 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 traf c class is interof ce (IE).
- The standard pretranslator subtable name is INC31.
- 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 pre x ed to the incoming digits to reconstruct the number dialed. The bearer capability is 56k data.

The second tuple shows the following information:

- An incoming end of ce trunk group that has a v ariable number of incoming digits.
- The code in table CLLI for the trunk group is OTWAONllMG01.
- The trunk group type is TI.
- The incoming traf c 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 traf c class is interof ce (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-k data.

TRKGRP type TI (end)

MAP display example for table TRKGRP type TI

```
GRPKEY
                                                    GRPINFO

_____________________________________________________________________
OTWAON230T1
   T1 20 ELO NCRT IE INC3 NSCR 613 NLCL N 72
   BCNAME 56KDATA $
OTWAON11MG01
   T1 21 ELO NCRT IE INC2 NSCR 613 LCL Y 3 7
   BCNAME 56KDATA $
```

Table history

NA004

Removed option AIN; table TRKAIN is used instead.

BCS36

Added option AIN.

CCIS Transmission Link Trunk Group Type

Two-way trunk group type TL is used to connect a DMS of ce using common channel interof ce signaling (CCIS) with other of ces using CCIS, to transmit and receive signals between the two of ces.

Since trunk group type TL does not support call processing functions, the table does not have any elds pertaining to connecting numbering plan area (NPA), standard pretranslator, class of service screening, or serving NPA.

Data ll

The following table lists the data ll for table TRKGRP type TL.

Field descriptions (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
GRPKEY		see subfield	*Group key* This field consists of subfield CLLI.
	CLLI	alphanumeric (1 to 16 characters)	Common language location identifier Enter the common language location identifier (CLLI) code assigned to the trunk group in table CLLI.
GRPINFO		see subfields	*Variable group data* This field consists of subfields GRPTYP, TRAFSNO, PADGRP, and NCCLS. Refer to section “General field information" in table TRKGRP for information concerning 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 transmission link trunks.
	TRAFSNO	numeric (0)	*Traffic separation number* A traffic separation number is not required. Enter 0 (zero).

TRKGRP type TL (end)

Field descriptions (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
	PADGRP	NPDGP	*Pad group* Enter NPDGP to specify that no pad group is required for this trunk group type. For more information, refer to table PADDATA.
	NCCLS	NCRT	*Operational measurements no-circuit class* This field contains the operational measurements (OM) no-circuit class (NCCLS) that indicates which OM register is incremented if treatment GNCT (generalized no circuit) occurs. Enter NCRT (no circuit). For more information, refer to table TRKGRP and the *Operational Measurements Reference Manual*.

Data ll e xample

The following example shows sample data ll for table TRKGRP type TL. This example shows a signaling link (ORLDFLMA03T6) and its two dedicated voice frequency links, VFL000ORLD and VFL001ORLD.

MAP display example for table TRKGRP type TL

```
GRPKEY          GRPINFO
_____________________________________________________________
ORLDFLMA03T6       TL 0 NPDGRP NCRT
VFL000ORLD         TL 0 NPDGRP NCRT
VFL001ORLD        TL 0 NPDGRP NCRT
```

Outgoing End Of ce T runk Group Type

The outgoing end of ce trunk group type TO in a DMS of ce interfaces with toll of ce for local traf c, direct or tandem.

Data ll

The following table lists the data ll for table TRKGRP type T O.

Field descriptions (Sheet 1 of 4)

Field	Subfield or refinement	Entry	Explanation and action
GRPKEY		see subfield	*Group key* This field consists of subfield CLLI.
	CLLI	alphanumeric (1 to 16 characters)	*Common language location identifier* Enter the code assigned to the trunk group in table CLLI.
GRPINFO		see subfields	*Variable group data* This field consists of subfields GRPTYP, TRAFSNO, PADGRP, NCCLS, TRAFCLS, SELSEQ, DIGSOUT, and TOLL.
	GRPTYP	TO	*Group type* Enter the outgoing end office trunk group type TO.
	TRAFSNO	0 to 127	*Traffic separation number* Enter the incoming and outgoing traffic separation number assigned to the trunk group. If a traffic separation number is not required, enter 0 (zero). For switches with software package NTX085AA (Traffic Separation Peg Count), enter a value from 1 to the value of office parameter TFAN_OUT_MAX_NUMBER in table OFCENG. For switches without software package NTX085AA, enter a value from 1 to 15. Incoming and outgoing traffic separation numbers 1 to 9 should be reserved for generic traffic separation numbers. For more information, refer to table TFANINT.

TRKGRP type TO (continued)

Field descriptions (Sheet 2 of 4)

Field	Subfield or refinement	Entry	Explanation and action
	PADGRP	alphanumeric (1 to 5 characters)	*Pad group* Enter the name of the pad group assigned to the trunk group in table PADDATA. For more information, refer to table PADDATA.
	NCCLS	NCBN NCID NCIM NCIT NCLT NCOF NCON NCOT NCRT NCTC or NOSC	*Operational measurements no-circuit class* Enter the operational measurements (OM) no-circuit class (NCCLS) to indicate which OM register is incremented if treatment GNCT (generalized no circuit) occurs. If the trunk group direction is incoming, this field is not required. Enter NCRT (no circuit). For more information, refer to table TRKGRP and the *Operational Measurements Reference Manual*.
	TRAFCLS	alphabetic (2 characters)	*Traffic usage class* Enter the traffic usage class assigned to the trunk group. For more information, refer to table TRKGRP.

TRKGRP type TO (continued)

Field descriptions (Sheet 3 of 4)

Field	Subfield or refinement	Entry	Explanation and action
	SELSEQ	ASEQ CCWCTH CWCTH DSEQ LIDL or MIDL	*Select sequence* If the trunk group direction is outgoing (OG) or two-way (2W) and the far end is a link list switcher, enter LIDL or MIDL (least or most idle) if the far end is MIDL or LIDL respectively. If the trunk group direction is outgoing or two-way, the far end is not a link list switcher, and sequential selection does not apply, enter MIDL. If the trunk group is outgoing or two-way, the far end is not a link list switcher, and feature package NTX244AB (Enhanced Sequential Trunk Hunting) is present, base the selection order on the order of the trunks in table TRKMEM, and enter • CWCTH or CCWCTH for clockwise or counterclockwise circular trunk hunting from the most recently released trunk in the trunk group, if the far end is CCWCTH or CWCTH respectively, or • ASEQ or DSEQ for ascending or descending sequential selection, if far end is DSEQ or ASEQ respectively. If the trunk group direction is incoming, sequential selection does not apply. Enter MIDL. Entries outside this range are not valid. For more information, refer to table TRKGRP.

TRKGRP type TO (continued)

Field descriptions (Sheet 4 of 4)

Field	Subfield or refinement	Entry	Explanation and action
	DIGSOUT	0 to 15	*Digits outpulsed* If the number of digits outpulsed is a fixed quantity, enter the number of digits to be outpulsed. If the number of digits to be outpulsed is variable, enter 0 (zero), and specify the number of digits to be outpulsed in the appropriate route list. If software is not available for this feature, enter 0 (zero) and specify the number of digits to be deleted in the appropriate route list. If parameter TRK_OOS_CHK_ON in table OFCVAR is set to Y (Yes), it is required that all trunks in the group have to be busied out before changing the value of this field by the data modification order.
	TOLL	Y or N	*Toll* If the trunk group is outgoing tandem and the connecting office is toll, enter Y (yes). Otherwise, enter N (N). Trunk groups are classified as toll route calls if the toll essential line feature is activated.
	OPTIONS	see subfield	*Options* This field consists of subfield OPTION.
	OPTION	CHGNUM	*Option* Subfield OPTION can hold up to nine entries. Only the CHGMUM entry is available at this time. To specify the charge-number-delivery option, which sends a charge number and originating line information (OLI) parameter with the initial address message (IAM), enter CHGNUM. No refinements are required for this entry value.

Data ll e xample

The following example shows sample data ll for table TRKGRP type T O. The code in the table CLLI for the trunk group is OTWAON11MG00.

- The trunk group type is TO.
- The outgoing traf c 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 traf c class is interof ce IE.
- MIDL is the selection sequence.
- Field DIGSOUT is 0 (zero), digits deleted are de ned in the route list.
- The trunk group is not toll protected.

MAP display example for table TRKGRP type TO

```
GRPKEY
                                                        GRPINFO
_____________________________________________________________

OTWAON11MG00
                TO  25   ELO NCRT    IE    MIDL  0 N    $
```

TRKGRP type TOPS

TOPS Trunk Group Type

Table TRKGRP group type TOPS is provided with the Traf c Operator Position System (TOPS) package.

This group type is required in a toll of ce with a T OPS DMS-200 switching unit or in a combined local/toll of ce with a T OPS DMS-100/200 switching unit. TOPS is necessary for incoming traf c that requires one of the following actions:

- TOPS operator intervention
- recording on the CAMA tape
- both TOPS operator intervention and recording on the CAMA tape

If trunk group type TOPS is two way, the outgoing traf c is T oll Completing.

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 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 eld PRTNM) and the subtable name must be the same.

Only TOPS trunks that carry digits outpulsed from the originating of ce to the TOPS of ce are capable of originating an A OSS 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) automatic number identi cation (ANI) ID digit. The value of the ID digit corresponding to an intercept call is de ned through table BELLCA T, 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 identi er in the routing number is checked against the of ce parameter SSP_NSC_CARRIER_ID in table OFCENG. If the carrier identi er and the of ce parameter match, the call is translated as an intra-LATA call. Forintra-LATA 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.

When data lled for group type T OPS, table TRKGRP interacts with the following of ce parameters:

- TFAN_IN_MAX_NUMBER in table OFCENG
- TFAN_OUT_MAX_NUMBER in table OFCENG
- TRK_OOS_CHK_ON in table OFCVAR

For additional information that relates to group type TOPS, refer to table TOPEATRK.

Data ll

The following table lists the data ll for table TRKGRP type T OPS.

Field descriptions (Sheet 1 of 16)

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 SELSEQ, SNPA, PRTNM, LCANAME, SCRNCL, OHNXXSCR, TRAFCLS, STATCLAS, TIMEOUT, NPANXXRQ, DISPLAY, NBECCODE, CONNINFO, SIGINFO, BYPASUTR, ISDNAREA, and OPTIONS. Refer to section “General field information" in table TRKGRP for information on an alternate structure for this field that results from the datafill of table CUSTFLDS.
	GRPTYP	TOPS	*Group type* Enter TOPS to specify the trunk group type for traffic operator position systems.

TRKGRP type TOPS (continued)

Field descriptions (Sheet 2 of 16)

Field	Subfield or refinement	Entry	Explanation and action
	TRAFSNO	numeric (0 to 127)	*Traffic separation number* Enter the incoming and outgoing traffic separation number assigned to the trunk group. If a traffic separation number is not required, enter 0 (zero). For switches with software package NTX085AA (Traffic Separation Peg Count), enter a value from 1 to the value of office parameter TFAN_OUT_MAX_NUMBER or TFAN_OUT_MAX_NUMBER (whichever is lower) in table OFCENG. For switches without software package NTX085AA, enter a value from 1 to 15. Incoming and outgoing traffic separation numbers 1 to 9 should be reserved for generic traffic separation numbers. For more information, refer to table TFANINT.
	PADGRP	alphanumeric (1 to 5 characters)	*Pad group* Enter the name of the pad group assigned to the trunk group in table PADDATA. For more information, refer to table PADDATA.
	NCCLS	NCRT	*Operational measurements no-circuit class* This field is not required for TOPS trunk groups, enter NCRT.
	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. The MAP display also shows OG (outgoing), but that is not valid for TOPS trunks.

TRKGRP type TOPS (continued)

Field descriptions (Sheet 3 of 16)

Field	Subfield or refinement	Entry	Explanation and action
	SELSEQ	MIDL, LIDL CWCTH, CCWCTH, ASEQ, or DSEQ	*Select sequence* If the trunk group direction is two-way (2W) and the far end is a link list switcher, enter LIDL or MIDL (least or most idle) if the far end is MIDL or LIDL respectively. If the trunk group direction is two-way, the far end is not a link list switcher and sequential selection does not apply, enter MIDL. If the trunk group direction is incoming (IC), sequential selection does not apply. Enter MIDL. If the trunk group is two-way, the far end is not a link list switcher, and feature package NTX244AB (Enhanced Sequential Trunk Hunting) is present, base the selection order on the order of the trunks in table TRKMEM, and enter • CWCTH or CCWCTH for clockwise or counterclockwise circular trunk hunting from the most recently released trunk in the trunk group, if the far end is CCWCTH or CWCTH respectively, or • ASEQ or DSEQ for ascending or descending sequential selection, if far end is DSEQ or ASEQ respectively. Entries outside this range are valid.

TRKGRP type TOPS (continued)

Field descriptions (Sheet 4 of 16)

Field	Subfield or refinement	Entry	Explanation and action
			Value WIDEBAND appears on the MAP display, but is used in an IBN rather that a TOPS environment. Refer to table TRKGRP type IBNTO for further information. ***Note:*** A trunk group trunk selection method cannot be changed. If a change in the selection method is required, a new trunk group must be created with the required trunk selection method. The individual trunks with the old selection sequence must be deleted from the old trunk group and then added to the new trunk group. For an existing trunk group, the selection sequence may be changed to ASEQ from DSEQ or from DSEQ to ASEQ if all the trunk members are installation busy (INB) or unequipped (UNEQ). Refer to section “General field information" in table TRKGRP for additional information concerning field SELSEQ.
	SNPA	3 digits from HNPACONT or SNPANAME	*Serving NPA* Enter the serving NPA code for the trunk group. This code is used only to expand a 7-digit calling DN to a 10-digit calling number. The entry must be previously defined in either table HNPACONT or SNPANAME as applicable. 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).
	STS	3 digits from HNPACONT or SNPANAME	Serving translation scheme. This field is used to index the TOPS base translations and screening tables. The entry must be previously defined in either table HNPACONT or SNPANAME.

TRKGRP type TOPS (continued)

Field descriptions (Sheet 5 of 16)

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.
	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.

TRKGRP type TOPS (continued)

Field descriptions (Sheet 6 of 16)

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. 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 SIGTYPE 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 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.

TRKGRP type TOPS (continued)

Field descriptions (Sheet 7 of 16)

Field	Subfield or refinement	Entry	Explanation and action
		ALARM	Dedicated alarm: a station class for traffic from end offices indicating alarm conditions only. The TOPS position screen display includes ALM.
		APS	Attended pay station: a station class for traffic from an attended pay station.
		CAMA	Centralized automatic message accounting: a station class dedicated to 1+, direct-dialed, non-operator traffic from coin, non-coin, and hotel stations.
		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.
		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).
		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.
		DA	Directory assistance: a station class dedicated to local 411 calls for the served NPA.

TRKGRP type TOPS (continued)

Field descriptions (Sheet 8 of 16)

Field	Subfield or refinement	Entry	Explanation and action
		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.
		HOTEL	Dedicated hotel: a station class for traffic from hotel stations only. The TOPS position screen display includes HOTEL.
		INTCPT	Dedicated intercept: a station class for traffic from end office detected intercepts only. The TOPS position screen display includes INTC.
		MOBILE	Dedicated mobile: a station class for traffic from mobile stations only. The TOPS position screen display can be specified in table TOPS.
		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.

TRKGRP type TOPS (continued)

Field descriptions (Sheet 9 of 16)

Field	Subfield or refinement	Entry	Explanation and action
		NCSCREEN	Non-coin screen: supports non-coin traffic from end offices (for example, some older ones) that are not capable of sending combined start signals, but are capable of supporting the full range of ANI ID digit(s). Table BELLCAT or OSSCAT is used to map the ANI ID digit(s) to an initial calling station class. For NCSCREEN, ANI screening is available for signalling types BELL, MODBELL and OSS. ANI screening is not provided for signalling types ONI, DANI, EAOSS, EAOSSIC, AIS, EAFGD, COMFGD, OPENNUM, and R2 when the station class is NCSCREEN. Table control prevents datafilling field STATCLAS with station class NCSCREEN for these signalling types. Combined start signals are not supported. They are only used to indicate either direct dialed (ST or ST2P) or operator assisted (STP or ST3P). The start signals are not used to determine between coin and non-coin station classes. NCSCREEN can be used by the service analysis system to monitor TOPS traffic.
		OIC	Office identification code: a station class that carries a combination of DA call types (for example, 411, 555-1212, intercept, etc.). 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. For further information on these classes, refer to table TOPS to the descriptions of call origination types. Note that machine-type intercept cannot be sent over OIC trunks.

TRKGRP type TOPS (continued)

Field descriptions (Sheet 10 of 16)

Field	Subfield or refinement	Entry	Explanation and action
		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.
		TOLLSTA	Dedicated toll station: a station class for traffic from toll stations only. The TOPS position screen display includes TS.
		TOLLSUB	Toll subscriber: a station class for traffic from a toll subscriber.
	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-). ***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.

TRKGRP type TOPS (continued)

Field descriptions (Sheet 11 of 16)

Field	Subfield or refinement	Entry	Explanation and action
	NPANXXRQ	Y or N	*Display originating NPANXX to operator* Enter Y if the NPANXX 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 - NPANXX obtained from first entry for the trunk group in table TOPSBC • ONI - NPANXX 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.
	DISPLAY	numeric (0 to 254)	*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.
	NBECCODE	numeric (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 NBEC code can be changed in table TRKGRP for those TOPS trunk groups coming from NBECs. 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.
	CONNINFO	see subfield	*Connection information.* This field consists of subfield CONNTYPE and refinements.

TRKGRP type TOPS (continued)

Field descriptions (Sheet 12 of 16)

Field	Subfield or refinement	Entry	Explanation and action
	CONNTYPE	TYPE_A, TYPE_B, TYPE_D, CELL_ MOBILE, LOCAL_ TRANS or NONE	*Connection type* This subfield is used in AMA module 150, table 168, bytes 1-2. If CONNTYPE=NONE, module 150 is not recorded for calls on this trunk group. These entries are defined in Bellcore standards. The AMA values recorded are as follows: • 01 = TYPE_A • 02 = TYPE_B • 03 = TYPE_D • 04 = Cellular mobile • 05 = Local transport
	CARTYPE	NBEC or IEC	*Carrier type* This field points to the carrier code for AMA module 150, table 168, bytes 4-7. If CARTYPE=IEC, the carrier code is from table TOPEATRK. If CARTYPE=NBEC, the NBEC code is from table NBECODE if the calling number has an entry. Otherwise, field NBECID of table TRKGRP is used. Field CARTYPE is visible only if subfield CONNTYPE does not equal NONE. Field CARTYPE also determines ADACC screening. If CARTYPE=NBEC, the trunk is treated as an NBEC. Or, if CARTYPE=IEC, the trunk is treated as an IEC.
	SIGINFO	see subfields	*Signalling information* This field consists of subfield SIGTYPE and refinements.

TRKGRP type TOPS (continued)

Field descriptions (Sheet 13 of 16)

Field	Subfield or refinement	Entry	Explanation and action
	SIGTYPE	AIS, BELL, COMFGD, DANI, EAFGD, EAOSS, EAOSSIC, GOSS7, MODBELL, NILSIGTYPE ONI, OPENNUM, OSS, or R2	*Signalling* AIS: If field STATCLAS is set to INTCPT, enter AIS and datafill refinements BILLCD, ANISEIZ, ANIPDIAL, and TRTMTSUP. BELL: If the trunk group carries ANI and possible ONI traffic using standard Bell signaling format, enter BELL and datafill refinements BILLCD, ANISEIZ, ANIPDIAL, TRTMTSUP, STNOWAIT, and ANIREQ. COMFGD: If the trunk group uses combined equal access feature group D signaling only, or to connect cellular and interexchange carriers to TOPS for ADACC, enter COMFGD and datafill refinements BILLCD, ANISEIZ, ANIPDIAL, TRTMTSUP, ONLNRATE, COINPD, NXXVER. and OPRHOLD. ***Note:*** Parameter POST_WINK_PRE_OFFHOOK_DELAY in table TOPSPARM applies to TOPS trunks with COMFGD signaling.

TRKGRP type TOPS (continued)

Field descriptions (Sheet 14 of 16)

Field	Subfield or refinement	Entry	Explanation and action
			DANI: 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 SIGTYPE is DANI. If an attempt is made to datafill a TOPS trunk with SIGTYPE of DANI and OHNXXSCR set to Y, the following error message is output: OHNXXSCR MUST BE N WHEN SIGTYPE = DANI EAFGD: If the trunk group uses equal access feature group D signaled traffic only, enter EAFGD and datafill refinements BILLCD, ANISEIZ, ANIPDIAL, and TRTMTSUP. EAOSS: 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 BILLCD, ANISEIZ, ANIPDIAL, TRTMTSUP, ANIREQ, DCNVFROM, DCNVTO, INCVFROM, ICNVTO, and FOURWINK. EAOSSIC: To verify the CAC or PIC for two- and three-stage outpulsing calls between an EAEO and an AT, enter EAOSSIC and datafill refinements BILLCD, ANISEIZ, ANIPDIAL, and TRTMTSUP.

TRKGRP type TOPS (continued)

Field descriptions (Sheet 15 of 16)

Field	Subfield or refinement	Entry	Explanation and action
			GOSS7: For global operator signaling system #7 protocol, enter GOSS7 and datafill refinements XLASYS, XLANAME, ONITRMT, HOLDREQ, G7SETNO, and STDIGIT. GOSS7 is only valid in a global environment. GOSS7 uses open numbering, also referred to as universal translations. Universal translations does not use the following fields (but they must be datafilled): SNPA, PRTNM, LCANAME, SCRNCL, OHNXXSCR, TIMEOUT, and NPANXXRQ. MODBELL: 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 BILLCD, ANISEIZ, ANIPDIAL, TRTMTSUP, and ANIREQ. NILSIGTYPE: If no signalling type, enter NILSIGTYPE, and no further refinements are required. ONI: If the trunk group carries ONI traffic only, enter ONI and datafill refinements BILLCD, TONEREPT, and TRWKTIME. OPENNUM: 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. Note, effective TOPS07, this value is only supported in the TOPS Global environment where TOPSPARM parameter DEFAULT_PRODUCT = GLOBAL.

TRKGRP type TOPS (continued)

Field descriptions (Sheet 16 of 16)

Field	Subfield or refinement	Entry	Explanation and action
			OSS: If the trunk group uses the operator services signaling format, enter OSS and datafill refinements BILLCD, ANISEIZ, ANIPDIAL, TRTMTSUP, and ANIREQ. R2: If the trunk group uses R2 signalling, enter R2 and datafill refinements XLASYS, XLANAME, ANIREQ, and ANIFAIL. These fields apply to incoming, outgoing, and 2-way trunks. For more information, refer to functionality R2 on TOPS, GOS00001. Note, effective TOPS07, this value is only supported in the TOPS Global environment where TOPSPARM parameter DEFAULT_PRODUCT = GLOBAL.

SIGTYPE = AIS

If the value in eld SIGTYPE is AIS, data ll re nements BILLCD, ANISEIZ, ANIPDIAL, and TRTMTSUP as described below.

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

Field	Subfield or refinement	Entry	Explanation and action
	BILLCD	see subfield	Billing code. This field consists of subfield BCTYPE and refinements.
	BCTYPE	TOPSBC or ENHBC	Billing code type. This subfield indicates the TOPS billing code method for this trunk group. The values are the following: • TOPSBC - The earlier TOPS billing code method, which is the following: — For 7 to 10 digit expansion of the calling number, the SNPA is taken from table TOPSBC field ACTUALBC (first 3 digits). Also, the NXX in ACTUALBC overwrites the NXX of the 7 digit DN. — For 7 to 10 digit expansion of operator and delay calls, the SNPA is taken from table TOPSPARM, parameters OPR_SPECIFIED_SNPA and DELAY_SPECIFIED_SNPA. — For calling number verification, the NXX is checked in table TOPSBC, field BILLCODE. — For ONI and ANIF calls, the default NPA-NXX is displayed to the operator, taken from TOPBC field ACTUALBC in the first tuple for the trunk group. — For class charge, table TOPSBC field CHGCLSS is used to index table TOPSENTC. For value TOPSBC in this field, enter data in refinement NUMBC.

TRKGRP type TOPS (continued)

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

Field	Subfield or refinement	Entry	Explanation and action
			Billing code type (continued). • ENHBC - The enhanced TOPS billing code method, which is as follows: — For 7 to 10 digit expansion of the calling number, the SNPA is taken from table TRKGRP or TCLG7DIG (if trunk is present). Table TCLG7DIG does not overwrite the NXX of the calling number.0 — For 7 to 10 digit expansion of operator and delay calls, the SNPA is taken from table TOPSPARM, parameters OPR_SPECIFIED_SNPA and DELAY_SPECIFIED_SNPA. — For calling number verification, if subfield CLGVER = Y, the NXX is checked in table TCLGVER. Tthis verification is preformed after 7 to 10 digit expansion. — For ONI and ANIF calls, the NPA-NXX displayed to the operator is taken from table TRKGRP field DISPDIGS. — For class charge, value TOPS is always used to index table TOPSENTC. For value ENHBC in this field, enter data in refinements CLGVER and DISPDIGS.
	CLGVER	Y or N	Calling number verification. Enter data in this field if field BCTYPE = ENHBC. Enter Y to verify the calling NPA-NXX in table TCLGVER. Otherwise, enter N for no verification. For N, table TCLGVER is not accessed and all calling numbers are accepted.
	DISPDIGS	6 digits	Display digits. Enter data in this field if field BCTYPE = ENHBC. Enter the NPA-NXX for display to the operator for ONI and ANIF calls.

TRKGRP type TOPS (continued)

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

Field	Subfield or refinement	Entry	Explanation and action
	NUMBC	1 to 999	Number of billing codes. Enter data in this field if field BCTYPE = TOPSBC. Enter the number of billing codes (NXXs allocated to originate traffic on this trunk group) plus spares that are reserved in table TOPSBC. This field replaces field NOBILLCD. The MAP display indicates the range is 0-999; however, the system does not allow 0.
	ANISEIZ	numeric (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	numeric (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.

TRKGRP type TOPS (continued)

SIGTYPE = BELL

If the value in eld SIGTYPE is BELL, data ll re nements BILLCD, ANISEIZ, ANIPDIAL, TRTMTSUP, STNOWAIT, and ANIREQ as described below.

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

Field	Subfield or refinement	Entry	Explanation and action
	BILLCD	see subfield	Billing code. This field consists of subfield BCTYPE and refinements.
	BCTYPE	TOPSBC or ENHBC	Billing code type. This subfield indicates the TOPS billing code method for this trunk group. The values are the following: • TOPSBC - The earlier TOPS billing code method, which is the following: — For 7 to 10 digit expansion of the calling number, the SNPA is taken from table TOPSBC field ACTUALBC (first 3 digits). Also, the NXX in ACTUALBC overwrites the NXX of the 7 digit DN. — For 7 to 10 digit expansion of operator and delay calls, the SNPA is taken from table TOPSPARM, parameters OPR_SPECIFIED_SNPA and DELAY_SPECIFIED_SNPA. — For calling number verification, the NXX is checked in table TOPSBC, field BILLCODE. — For ONI and ANIF calls, the default NPA-NXX is displayed to the operator, taken from TOPBC field ACTUALBC in the first tuple for the trunk group. — For class charge, table TOPSBC field CHGCLSS is used to index table TOPSENTC. For value TOPSBC in this field, enter data in refinement NUMBC.

TRKGRP type TOPS (continued)

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

Field	Subfield or refinement	Entry	Explanation and action
			Billing code type (continued). • ENHBC - The enhanced TOPS billing code method, which is as follows: — For 7 to 10 digit expansion of the calling number, the SNPA is taken from table TRKGRP or TCLG7DIG (if trunk is present). Table TCLG7DIG does not overwrite the NXX of the calling number.0 — For 7 to 10 digit expansion of operator and delay calls, the SNPA is taken from table TOPSPARM, parameters OPR_SPECIFIED_SNPA and DELAY_SPECIFIED_SNPA. — For calling number verification, if subfield CLGVER = Y, the NXX is checked in table TCLGVER. Tthis verification is preformed after 7 to 10 digit expansion. — For ONI and ANIF calls, the NPA-NXX displayed to the operator is taken from table TRKGRP field DISPDIGS. — For class charge, value TOPS is always used to index table TOPSENTC. For value ENHBC in this field, enter data in refinements CLGVER and DISPDIGS.
	CLGVER	Y or N	Calling number verification. Enter data in this field if field BCTYPE = ENHBC. Enter Y to verify the calling NPA-NXX in table TCLGVER. Otherwise, enter N for no verification. For N, table TCLGVER is not accessed and all calling numbers are accepted.
	DISPDIGS	6 digits	Display digits. Enter data in this field if field BCTYPE = ENHBC. Enter the NPA-NXX for display to the operator for ONI and ANIF calls.

TRKGRP type TOPS (continued)

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

Field	Subfield or refinement	Entry	Explanation and action
	NUMBC	1 to 999	Number of billing codes. Enter data in this field if field BCTYPE = TOPSBC. Enter the number of billing codes (NXXs allocated to originate traffic on this trunk group) plus spares that are reserved in table TOPSBC. This field replaces field NOBILLCD. The MAP display indicates the range is 0-999; however, the system does not allow 0.
	ANISEIZ	numeric (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	numeric (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.
	STNOWAIT	Y or N	*ST signal not waited for* Enter Y if the DMS does not wait for the ST signal on ONI or ANI-fail calls from a crossbar switch. Enter N if crossbar signaling is not allowed.
	ANIREQ	OFFHK or WINK	*Automatic number identification 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 signal is returned to the end office to request the ANI spill. The default value is OFFHK.

SIGTYPE = COMFGD

If the value in eld SIGTYPE is COMFGD, data ll re nements BILLCD, ANISEIZ, ANIPDIAL, TRTMTSUP, ONLNRATE, COINPD, NXXVER, and OPRHOLD as described below.

Field descriptions for conditional data ll (Sheet 1 of 4)

Field	Subfield or refinement	Entry	Explanation and action
	BILLCD	see subfield	Billing code. This field consists of subfield BCTYPE and refinements.
	BCTYPE	TOPSBC or ENHBC	Billing code type. This subfield indicates the TOPS billing code method for this trunk group. The values are the following: • TOPSBC - The earlier TOPS billing code method, which is the following: — For 7 to 10 digit expansion of the calling number, the SNPA is taken from table TOPSBC field ACTUALBC (first 3 digits). Also, the NXX in ACTUALBC overwrites the NXX of the 7 digit DN. — For 7 to 10 digit expansion of operator and delay calls, the SNPA is taken from table TOPSPARM, parameters OPR_SPECIFIED_SNPA and DELAY_SPECIFIED_SNPA. — For calling number verification, the NXX is checked in table TOPSBC, field BILLCODE. — For ONI and ANIF calls, the default NPA-NXX is displayed to the operator, taken from TOPBC field ACTUALBC in the first tuple for the trunk group. — For class charge, table TOPSBC field CHGCLSS is used to index table TOPSENTC. For value TOPSBC in this field, enter data in refinement NUMBC.

TRKGRP type TOPS (continued)

Field descriptions for conditional data II (Sheet 2 of 4)

Field	Subfield or refinement	Entry	Explanation and action
			Billing code type (continued). • ENHBC - The enhanced TOPS billing code method, which is as follows: — For 7 to 10 digit expansion of the calling number, the SNPA is taken from table TRKGRP or TCLG7DIG (if trunk is present). Table TCLG7DIG does not overwrite the NXX of the calling number.0 — For 7 to 10 digit expansion of operator and delay calls, the SNPA is taken from table TOPSPARM, parameters OPR_SPECIFIED_SNPA and DELAY_SPECIFIED_SNPA. — For calling number verification, if subfield CLGVER = Y, the NXX is checked in table TCLGVER. Tthis verification is preformed after 7 to 10 digit expansion. — For ONI and ANIF calls, the NPA-NXX displayed to the operator is taken from table TRKGRP field DISPDIGS. — For class charge, value TOPS is always used to index table TOPSENTC. For value ENHBC in this field, enter data in refinements CLGVER and DISPDIGS.
	CLGVER	Y or N	Calling number verification. Enter data in this field if field BCTYPE = ENHBC. Enter Y to verify the calling NPA-NXX in table TCLGVER. Otherwise, enter N for no verification. For N, table TCLGVER is not accessed and all calling numbers are accepted.
	DISPDIGS	6 digits	Display digits. Enter data in this field if field BCTYPE = ENHBC. Enter the NPA-NXX for display to the operator for ONI and ANIF calls.

TRKGRP type TOPS (continued)

Field descriptions for conditional data II (Sheet 3 of 4)

Field	Subfield or refinement	Entry	Explanation and action
	NUMBC	1 to 999	Number of billing codes. Enter data in this field if field BCTYPE = TOPSBC. Enter the number of billing codes (NXXs allocated to originate traffic on this trunk group) plus spares that are reserved in table TOPSBC. This field replaces field NOBILLCD. The MAP display indicates the range is 0-999; however, the system does not allow 0.
	ANISEIZ	numeric (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	numeric (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.
	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.

TRKGRP type TOPS (continued)

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

Field	Subfield or refinement	Entry	Explanation and action
	NXXVER	Y or N	*NXX verification* Enter Y to verify the calling NXX in table TOPSBC. Otherwise, enter N. When connecting cellular and interexchange carriers to TOPS for ADACC (functionality Cellular/IEC/LEC ADACC, OSDA0005), carrier DA traffic can originate from any NXX from any NPA. Therefore, TOPSBC verification should be bypassed by setting NXXVER=N. This is not enforced by table control, but is required if the trunk is to handle traffic from multiple NPAs.
	OPRHOLD	Y or N	Operator hold. This field indicates whether operator hold is used on combined FGD (COMFGD) TOPS trunks. COMFGD signalling is only supported on MF trunks with STATCLAS of COMBINED. Set OPRHOLD = Y to enable operator hold. Then, signalling ends with an offhook rather than a wink (when OPRHOLD = N). When OPRHOLD = Y, true answer is no longer propagated to the originating office since the TOPS trunk is already offhook. An additional offhook cannot be sent to indicate true answer. In most cases, the “other end" of the COMFGD trunk is an ATC trunk using EAPLAN signalling. For full use of this activity, at the originating office, the outgoing EAPLAN trunk should be datafilled with OPRHOLD = Y. This datafill is only supported in a TOPS tandem office. If OPRHOLD = N, coin traffic should not be routed over a COMFGD trunk to the TOPS office. Coin traffic needs operator hold. For more information, refer to feature BY28832 in functionality TOPS Incoming FGD Signalling, OSEA00004.

SIGTYPE = DANI

If the value in eld SIGTYPE is DANI, data ll re nement LDN as described below.

Field descriptions for conditional data ll

Field	Subfield or refinement	Entry	Explanation and action
	LDN	numeric(7 digits)	*Listed directory number* Enter the seven-digit directory number for the calling number associated with the trunk group. All calls on this trunk group will originate from the same directory number. For alarms and intercept trunks, enter NXX-0000. For TOLLSTA, TOLLSUB and other dedicated trunks enter the LDN.

TRKGRP type TOPS (continued)

SIGTYPE = EAFGD

If the value in eld SIGTYPE is EAFGD, data ll re nements BILLCD, ANISEIZ, ANIPDIAL, and TRTMTSUP as described below.

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

Field	Subfield or refinement	Entry	Explanation and action
	BILLCD	see subfield	Billing code. This field consists of subfield BCTYPE and refinements.
	BCTYPE	TOPSBC or ENHBC	Billing code type. This subfield indicates the TOPS billing code method for this trunk group. The values are the following: • TOPSBC - The earlier TOPS billing code method, which is the following: — For 7 to 10 digit expansion of the calling number, the SNPA is taken from table TOPSBC field ACTUALBC (first 3 digits). Also, the NXX in ACTUALBC overwrites the NXX of the 7 digit DN. — For 7 to 10 digit expansion of operator and delay calls, the SNPA is taken from table TOPSPARM, parameters OPR_SPECIFIED_SNPA and DELAY_SPECIFIED_SNPA. — For calling number verification, the NXX is checked in table TOPSBC, field BILLCODE. — For ONI and ANIF calls, the default NPA-NXX is displayed to the operator, taken from TOPBC field ACTUALBC in the first tuple for the trunk group. — For class charge, table TOPSBC field CHGCLSS is used to index table TOPSENTC. For value TOPSBC in this field, enter data in refinement NUMBC.

TRKGRP type TOPS (continued)

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

Field	Subfield or refinement	Entry	Explanation and action
			Billing code type (continued). • ENHBC - The enhanced TOPS billing code method, which is as follows: — For 7 to 10 digit expansion of the calling number, the SNPA is taken from table TRKGRP or TCLG7DIG (if trunk is present). Table TCLG7DIG does not overwrite the NXX of the calling number.0 — For 7 to 10 digit expansion of operator and delay calls, the SNPA is taken from table TOPSPARM, parameters OPR_SPECIFIED_SNPA and DELAY_SPECIFIED_SNPA. — For calling number verification, if subfield CLGVER = Y, the NXX is checked in table TCLGVER. Tthis verification is preformed after 7 to 10 digit expansion. — For ONI and ANIF calls, the NPA-NXX displayed to the operator is taken from table TRKGRP field DISPDIGS. — For class charge, value TOPS is always used to index table TOPSENTC. For value ENHBC in this field, enter data in refinements CLGVER and DISPDIGS.
	CLGVER	Y or N	Calling number verification. Enter data in this field if field BCTYPE = ENHBC. Enter Y to verify the calling NPA-NXX in table TCLGVER. Otherwise, enter N for no verification. For N, table TCLGVER is not accessed and all calling numbers are accepted.
	DISPDIGS	6 digits	Display digits. Enter data in this field if field BCTYPE = ENHBC. Enter the NPA-NXX for display to the operator for ONI and ANIF calls.

TRKGRP type TOPS (continued)

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

Field	Subfield or refinement	Entry	Explanation and action
	NUMBC	1 to 999	Number of billing codes. Enter data in this field if field BCTYPE = TOPSBC. Enter the number of billing codes (NXXs allocated to originate traffic on this trunk group) plus spares that are reserved in table TOPSBC. This field replaces field NOBILLCD. The MAP display indicates the range is 0-999; however, the system does not allow 0.
	ANISEIZ	numeric (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.
0	ANIPDIAL	numeric (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.

SIGTYPE = EAOSS

If the value in eld SIGTYPE is EA OSS, data ll re nements BILLCD, ANISEIZ, ANIPDIAL, TRTMTSUP, ANIREQ, DCNVFROM, DCNVTO, INCVFROM, ICNVTO, and FOURWINK as described below.

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

Field	Subfield or refinement	Entry	Explanation and action
	BILLCD	see subfield	Billing code. This field consists of subfield BCTYPE and refinements.
	BCTYPE	TOPSBC or ENHBC	Billing code type. This subfield indicates the TOPS billing code method for this trunk group. The values are the following: • TOPSBC - The earlier TOPS billing code method, which is the following: — For 7 to 10 digit expansion of the calling number, the SNPA is taken from table TOPSBC field ACTUALBC (first 3 digits). Also, the NXX in ACTUALBC overwrites the NXX of the 7 digit DN. — For 7 to 10 digit expansion of operator and delay calls, the SNPA is taken from table TOPSPARM, parameters OPR_SPECIFIED_SNPA and DELAY_SPECIFIED_SNPA. — For calling number verification, the NXX is checked in table TOPSBC, field BILLCODE. — For ONI and ANIF calls, the default NPA-NXX is displayed to the operator, taken from TOPBC field ACTUALBC in the first tuple for the trunk group. — For class charge, table TOPSBC field CHGCLSS is used to index table TOPSENTC. For value TOPSBC in this field, enter data in refinement NUMBC.

TRKGRP type TOPS (continued)

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

Field	Subfield or refinement	Entry	Explanation and action
			Billing code type (continued). • ENHBC - The enhanced TOPS billing code method, which is as follows: — For 7 to 10 digit expansion of the calling number, the SNPA is taken from table TRKGRP or TCLG7DIG (if trunk is present). Table TCLG7DIG does not overwrite the NXX of the calling number.0 — For 7 to 10 digit expansion of operator and delay calls, the SNPA is taken from table TOPSPARM, parameters OPR_SPECIFIED_SNPA and DELAY_SPECIFIED_SNPA. — For calling number verification, if subfield CLGVER = Y, the NXX is checked in table TCLGVER. Tthis verification is preformed after 7 to 10 digit expansion. — For ONI and ANIF calls, the NPA-NXX displayed to the operator is taken from table TRKGRP field DISPDIGS. — For class charge, value TOPS is always used to index table TOPSENTC. For value ENHBC in this field, enter data in refinements CLGVER and DISPDIGS.
	CLGVER	Y or N	Calling number verification. Enter data in this field if field BCTYPE = ENHBC. Enter Y to verify the calling NPA-NXX in table TCLGVER. Otherwise, enter N for no verification. For N, table TCLGVER is not accessed and all calling numbers are accepted.
	DISPDIGS	6 digits	Display digits. Enter data in this field if field BCTYPE = ENHBC. Enter the NPA-NXX for display to the operator for ONI and ANIF calls.

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

Field	Subfield or refinement	Entry	Explanation and action
	NUMBC	1 to 999	Number of billing codes. Enter data in this field if field BCTYPE = TOPSBC. Enter the number of billing codes (NXXs allocated to originate traffic on this trunk group) plus spares that are reserved in table TOPSBC. This field replaces field NOBILLCD. The MAP display indicates the range is 0-999; however, the system does not allow 0.
	ANISEIZ	numeric (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	numeric (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, for routing digits comparison).			

TRKGRP type TOPS (continued)

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

Field	Subfield or refinement	Entry	Explanation and action
	DCNVFROM	numeric (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.
	DCNVTO	numeric (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

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

Field	Subfield or refinement	Entry	Explanation and action
	ICNVFROM	numeric (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.
	ICNVTO	numeric (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.

TRKGRP type TOPS (continued)

SIGTYPE = EAOSSIC

If the value in eld SIGTYPE is EA OSS, data ll re nements BILLCD, ANISEIZ, ANIPDIAL, and TRTMTSUP as described below.

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

Field	Subfield or refinement	Entry	Explanation and action
	BILLCD	see subfield	Billing code. This field consists of subfield BCTYPE and refinements.
	BCTYPE	TOPSBC or ENHBC	Billing code type. This subfield indicates the TOPS billing code method for this trunk group. The values are the following: • TOPSBC - The earlier TOPS billing code method, which is the following: — For 7 to 10 digit expansion of the calling number, the SNPA is taken from table TOPSBC field ACTUALBC (first 3 digits). Also, the NXX in ACTUALBC overwrites the NXX of the 7 digit DN. — For 7 to 10 digit expansion of operator and delay calls, the SNPA is taken from table TOPSPARM, parameters OPR_SPECIFIED_SNPA and DELAY_SPECIFIED_SNPA. — For calling number verification, the NXX is checked in table TOPSBC, field BILLCODE. — For ONI and ANIF calls, the default NPA-NXX is displayed to the operator, taken from TOPBC field ACTUALBC in the first tuple for the trunk group. — For class charge, table TOPSBC field CHGCLSS is used to index table TOPSENTC. For value TOPSBC in this field, enter data in refinement NUMBC.

TRKGRP type TOPS (continued)

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

Field	Subfield or refinement	Entry	Explanation and action
			Billing code type (continued). • ENHBC - The enhanced TOPS billing code method, which is as follows: — For 7 to 10 digit expansion of the calling number, the SNPA is taken from table TRKGRP or TCLG7DIG (if trunk is present). Table TCLG7DIG does not overwrite the NXX of the calling number.0 — For 7 to 10 digit expansion of operator and delay calls, the SNPA is taken from table TOPSPARM, parameters OPR_SPECIFIED_SNPA and DELAY_SPECIFIED_SNPA. — For calling number verification, if subfield CLGVER = Y, the NXX is checked in table TCLGVER. Tthis verification is preformed after 7 to 10 digit expansion. — For ONI and ANIF calls, the NPA-NXX displayed to the operator is taken from table TRKGRP field DISPDIGS. — For class charge, value TOPS is always used to index table TOPSENTC. For value ENHBC in this field, enter data in refinements CLGVER and DISPDIGS.
	CLGVER	Y or N	Calling number verification. Enter data in this field if field BCTYPE = ENHBC. Enter Y to verify the calling NPA-NXX in table TCLGVER. Otherwise, enter N for no verification. For N, table TCLGVER is not accessed and all calling numbers are accepted.
	DISPDIGS	6 digits	Display digits. Enter data in this field if field BCTYPE = ENHBC. Enter the NPA-NXX for display to the operator for ONI and ANIF calls.

TRKGRP type TOPS (continued)

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

Field	Subfield or refinement	Entry	Explanation and action
	NUMBC	1 to 999	Number of billing codes. Enter data in this field if field BCTYPE = TOPSBC. Enter the number of billing codes (NXXs allocated to originate traffic on this trunk group) plus spares that are reserved in table TOPSBC. This field replaces field NOBILLCD. The MAP display indicates the range is 0-999; however, the system does not allow 0.
	ANISEIZ	numeric(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	numeric(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.

SIGTYPE = GOSS7

If the value in eld SIGTYPE is GOSS7, data ll re nements XLASYS, XLANAME, LOCLSCRN, ONITRMT, HOLDREQ, G7SETNO, and STDIGIT as described below. This SIGTYPE is valid only in a global (non-North American) environment,

Field descriptions for conditional data ll (Sheet 1 of 4)

Field	Subfield or refinement	Entry	Explanation and action
	XLAINFO	see subfield	Universal translations information. This field consists of subfield XLASYS.
	XLASYS	NIL, AC, PX, CT, FA, OFC, AM, FT, or NSC	Universal translations system. Specify the starting point within the universal translations system. These entries (systems) are defined under table ACHEAD in the data schema section of this translations guide. Datafill refinement XLANAME. Value NIL is for no system.

TRKGRP type TOPS (continued)

Field descriptions for conditional data II (Sheet 2 of 4)

Field	Subfield or refinement	Entry	Explanation and action
	XLANAME	translator name	Translator name. This field is a refinement of XLASYS. Specify the translator name used to start translations.
	LOCLSCRN	Y or N	Local calling zone screening. This field enables local screening. The values are as follows: • Y - Use GOS Local Determination to determine if the call is local and datafill refinement LOCLZONE. For further information, refer to functionality GOS Local Determination in the Translations Guide. • N - Use the universal translations method with the CLASS option. This value is the default. For calls with no incoming trunk (Delay and system initiated calls), table TOPSPARM parameter DEFAULT_LOCLZONE enables screening and defines the initial zone name.
	LOCLZONE	name from TLCLZONE	Local zone. If field LOCLSCRN = Y, enter an initial local zone name, defined in table TLCLZONE.
	ONITRMT	see subfield	Operator number identification or treatment. This field consists of subfield ONITRMT and refinements.

TRKGRP type TOPS (continued)

Field descriptions for conditional data II (Sheet 3 of 4)

Field	Subfield or refinement	Entry	Explanation and action
	ONITRMT	Y or N	Operator number identification or treatment. This new field indicates call routing when the calling number is not signalled. The values are as follows: • Y - Route the call to treatment and enter data in refinement TRMT. This value cannot be used for a GOSS7 outgoing (OG) trunk. Treatment avoids having an operator ask for a calling number, which may be answered incorrectly. • N - Route the call to an operator to ask the caller for the calling number. If the GOSS7 trunk is outgoing (OG), enter N. This value is the default. This field does not apply to Country Direct and inward calls, or other calls whose signaling does not include a calling or charge number. On a two-way trunk, this field applies only to incoming (IC) calls.
	TRMT	name from TMTCNTL. TREAT	Treatment. Enter data in this field if field ONITRMT = Y. Enter a treatment name defined in table TMTCNTL.TREAT for a call without a calling number, which is required for billing.
	HOLDREQ	Y or N	Request connection hold. This field indicates whether the TOPS switch may request connection hold for calls on an incoming trunk group. Connection hold keeps the connection between the operator and calling party until the TOPS switch ends the call, even if the calling party hangs up. The values are the following: • Y - request connection hold. This value cannot be used for a GOSS7 outgoing trunk. • N - do not request connection hold. If the GOSS7 trunk is outgoing only, N must be entered. This value is the default. On a two-way trunk, this field applies only to incoming calls.

TRKGRP type TOPS (continued)

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

Field	Subfield or refinement	Entry	Explanation and action
	G7SETNO	value from G7MSGSET	GOSS7 message set number. This field is an index into table G7MSGSET. The value must be previously defined in table G7MSGSET. The default is 0. If the GOSS7 trunk is incoming only, 0 must be entered. Therefore, this field applies only to outgoing and two-way trunks.
	STDIGIT	Y or N	Start signal digit. This field indicates if an ST digit should be appended to the digit stream outpulsed forward for calls completed by the operator. Therefore, transit calls are not affected. The values are Y (append digit) and N (do not append digit). The default is N. If the GOSS7 trunk is incoming only, N must be entered. This means that this field is applicable only to outgoing and two-way trunks. This field is supported only for ETSI ISUP trunks. For ANSI ISUP trunks, this field is ignored and an ST digit is not appended.

TRKGRP type TOPS (continued)

SIGTYPE = MODBELL

If the value in eld SIGTYPE is MODBELL, data ll re nements BILLCD, ANISEIZ, ANIPDIAL, TRTMTSUP, and ANIREQ as described below.

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

Field	Subfield or refinement	Entry	Explanation and action
	BILLCD	see subfield	Billing code. This field consists of subfield BCTYPE and refinements.
	BCTYPE	TOPSBC or ENHBC	Billing code type. This subfield indicates the TOPS billing code method for this trunk group. The values are the following: • TOPSBC - The earlier TOPS billing code method, which is the following: — For 7 to 10 digit expansion of the calling number, the SNPA is taken from table TOPSBC field ACTUALBC (first 3 digits). Also, the NXX in ACTUALBC overwrites the NXX of the 7 digit DN. — For 7 to 10 digit expansion of operator and delay calls, the SNPA is taken from table TOPSPARM, parameters OPR_SPECIFIED_SNPA and DELAY_SPECIFIED_SNPA. — For calling number verification, the NXX is checked in table TOPSBC, field BILLCODE. — For ONI and ANIF calls, the default NPA-NXX is displayed to the operator, taken from TOPBC field ACTUALBC in the first tuple for the trunk group. — For class charge, table TOPSBC field CHGCLSS is used to index table TOPSENTC. For value TOPSBC in this field, enter data in refinement NUMBC.

TRKGRP type TOPS (continued)

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

Field	Subfield or refinement	Entry	Explanation and action
			Billing code type (continued). • ENHBC - The enhanced TOPS billing code method, which is as follows: — For 7 to 10 digit expansion of the calling number, the SNPA is taken from table TRKGRP or TCLG7DIG (if trunk is present). Table TCLG7DIG does not overwrite the NXX of the calling number.0 — For 7 to 10 digit expansion of operator and delay calls, the SNPA is taken from table TOPSPARM, parameters OPR_SPECIFIED_SNPA and DELAY_SPECIFIED_SNPA. — For calling number verification, if subfield CLGVER = Y, the NXX is checked in table TCLGVER. Tthis verification is preformed after 7 to 10 digit expansion. — For ONI and ANIF calls, the NPA-NXX displayed to the operator is taken from table TRKGRP field DISPDIGS. — For class charge, value TOPS is always used to index table TOPSENTC. For value ENHBC in this field, enter data in refinements CLGVER and DISPDIGS.
	CLGVER	Y or N	Calling number verification. Enter data in this field if field BCTYPE = ENHBC. Enter Y to verify the calling NPA-NXX in table TCLGVER. Otherwise, enter N for no verification. For N, table TCLGVER is not accessed and all calling numbers are accepted.
	DISPDIGS	6 digits	Display digits. Enter data in this field if field BCTYPE = ENHBC. Enter the NPA-NXX for display to the operator for ONI and ANIF calls.

TRKGRP type TOPS (continued)

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

Field	Subfield or refinement	Entry	Explanation and action
	NUMBC	1 to 999	Number of billing codes. Enter data in this field if field BCTYPE = TOPSBC. Enter the number of billing codes (NXXs allocated to originate traffic on this trunk group) plus spares that are reserved in table TOPSBC. This field replaces field NOBILLCD. The MAP display indicates the range is 0-999; however, the system does not allow 0.
	ANISEIZ	numeric(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	numeric(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	OFFHKorWINK	*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.

SIGTYPE = ONI

If the value in eld SIGTYPE is ONI, data ll re nements BILLCD, TONEREPT, and TRWKTIME as described below.

Field descriptions for conditional data ll (Sheet 1 of 4)

Field	Subfield or refinement	Entry	Explanation and action
	BILLCD	see subfield	Billing code. This field consists of subfield BCTYPE and refinements.
	BCTYPE	TOPSBC or ENHBC	Billing code type. This subfield indicates the TOPS billing code method for this trunk group. The values are the following: • TOPSBC - The earlier TOPS billing code method, which is the following: — For 7 to 10 digit expansion of the calling number, the SNPA is taken from table TOPSBC field ACTUALBC (first 3 digits). Also, the NXX in ACTUALBC overwrites the NXX of the 7 digit DN. — For 7 to 10 digit expansion of operator and delay calls, the SNPA is taken from table TOPSPARM, parameters OPR_SPECIFIED_SNPA and DELAY_SPECIFIED_SNPA. — For calling number verification, the NXX is checked in table TOPSBC, field BILLCODE. — For ONI and ANIF calls, the default NPA-NXX is displayed to the operator, taken from TOPBC field ACTUALBC in the first tuple for the trunk group. — For class charge, table TOPSBC field CHGCLSS is used to index table TOPSENTC. For value TOPSBC in this field, enter data in refinement NUMBC.

TRKGRP type TOPS (continued)

Field descriptions for conditional data II (Sheet 2 of 4)

Field	Subfield or refinement	Entry	Explanation and action
			Billing code type (continued). • ENHBC - The enhanced TOPS billing code method, which is as follows: — For 7 to 10 digit expansion of the calling number, the SNPA is taken from table TRKGRP or TCLG7DIG (if trunk is present). Table TCLG7DIG does not overwrite the NXX of the calling number.0 — For 7 to 10 digit expansion of operator and delay calls, the SNPA is taken from table TOPSPARM, parameters OPR_SPECIFIED_SNPA and DELAY_SPECIFIED_SNPA. — For calling number verification, if subfield CLGVER = Y, the NXX is checked in table TCLGVER. Tthis verification is preformed after 7 to 10 digit expansion. — For ONI and ANIF calls, the NPA-NXX displayed to the operator is taken from table TRKGRP field DISPDIGS. — For class charge, value TOPS is always used to index table TOPSENTC. For value ENHBC in this field, enter data in refinements CLGVER and DISPDIGS.
	CLGVER	Y or N	Calling number verification. Enter data in this field if field BCTYPE = ENHBC. Enter Y to verify the calling NPA-NXX in table TCLGVER. Otherwise, enter N for no verification. For N, table TCLGVER is not accessed and all calling numbers are accepted.
	DISPDIGS	6 digits	Display digits. Enter data in this field if field BCTYPE = ENHBC. Enter the NPA-NXX for display to the operator for ONI and ANIF calls.

TRKGRP type TOPS (continued)

Field descriptions for conditional data II (Sheet 3 of 4)

Field	Subfield or refinement	Entry	Explanation and action
	NUMBC	1 to 999	Number of billing codes. Enter data in this field if field BCTYPE = TOPSBC. Enter the number of billing codes (NXXs allocated to originate traffic on this trunk group) plus spares that are reserved in table TOPSBC. This field replaces field NOBILLCD. The MAP display indicates the range is 0-999; however, the system does not allow 0.
	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	NT - No tone is required. Answer supervision is returned.
		TR	TR - Manual tone is repeat from the operator.
		AT	AT - Answer supervision is returned when waiting in queue and tone repeat signal is returned when presenting the call.
		NA	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.

TRKGRP type TOPS (continued)

Field descriptions for conditional data ll (Sheet 4 of 4)

Field	Subfield or refinement	Entry	Explanation and action
			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	numeric (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.

SIGTYPE = OPENNUM

Some elds in the TOPS environment do not apply in an open numbering plan environment. The following list contains the required data ll for the open numbering plan environment.

Field name	Required value
DIR	IC, 2W
LCANAME	NLCA
NPANXXRQ	N
OHNXXSCR	N
SCRNCL	NSCR
STATCLAS	APS, COIN, COMBINED, DNLOOKUP, HOTEL INTCPT, MOBILE, RESTBIL
TIMEOUT	N

If the value in eld SIGTYPE is OPENNUM, data ll re nements ANISEIZ, ANIPDIAL, TRTMTSUP, ANIREQ, and LOCLSCRN as described below.

Effective TOPS07, OPENNUM is only supported in the TOPS Global environment where TOPSPARM parameter DEFAULT_PRODUCT = GLOBAL.

Field descriptions for conditional data II

Field	Subfield or refinement	Entry	Explanation and action
	ANISEIZ	numeric (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	numeric (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 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.
	LOCLSCRN	Y or N	Local calling zone screening. This field enables local screening. The values are as follows: • Y - Use GOS Local Determination to determine if the call is local and datafill refinement LOCLZONE. For further information, refer to functionality GOS Local Determination, GOS00001, in the Translations Guide. • N - Use the universal translations method with the CLASS option. This value is the default. For calls with no incoming trunk (Delay and system initiated calls), table TOPSPARM parameter DEFAULT_LOCLZONE enables screening and defines the initial zone name.
	LOCLZONE	name from TLCLZONE	Local zone. If field LOCLSCRN = Y, enter an initial local zone name, defined in table TLCLZONE.

TRKGRP type TOPS (continued)

SIGTYPE = OSS

If the value in eld SIGTYPE is OSS, data ll re nements BILLCD, ANISEIZ, ANIPDIAL, TRTMTSUP, and ANIREQ as described below.

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

Field	Subfield or refinement	Entry	Explanation and action
	BILLCD	see subfield	Billing code. This field consists of subfield BCTYPE and refinements.
	BCTYPE	TOPSBC or ENHBC	Billing code type. This subfield indicates the TOPS billing code method for this trunk group. The values are the following: • TOPSBC - The earlier TOPS billing code method, which is the following: — For 7 to 10 digit expansion of the calling number, the SNPA is taken from table TOPSBC field ACTUALBC (first 3 digits). Also, the NXX in ACTUALBC overwrites the NXX of the 7 digit DN. — For 7 to 10 digit expansion of operator and delay calls, the SNPA is taken from table TOPSPARM, parameters OPR_SPECIFIED_SNPA and DELAY_SPECIFIED_SNPA. — For calling number verification, the NXX is checked in table TOPSBC, field BILLCODE. — For ONI and ANIF calls, the default NPA-NXX is displayed to the operator, taken from TOPBC field ACTUALBC in the first tuple for the trunk group. — For class charge, table TOPSBC field CHGCLSS is used to index table TOPSENTC. For value TOPSBC in this field, enter data in refinement NUMBC.

TRKGRP type TOPS (continued)

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

Field	Subfield or refinement	Entry	Explanation and action
			Billing code type (continued). • ENHBC - The enhanced TOPS billing code method, which is as follows: — For 7 to 10 digit expansion of the calling number, the SNPA is taken from table TRKGRP or TCLG7DIG (if trunk is present). Table TCLG7DIG does not overwrite the NXX of the calling number.0 — For 7 to 10 digit expansion of operator and delay calls, the SNPA is taken from table TOPSPARM, parameters OPR_SPECIFIED_SNPA and DELAY_SPECIFIED_SNPA. — For calling number verification, if subfield CLGVER = Y, the NXX is checked in table TCLGVER. Tthis verification is preformed after 7 to 10 digit expansion. — For ONI and ANIF calls, the NPA-NXX displayed to the operator is taken from table TRKGRP field DISPDIGS. — For class charge, value TOPS is always used to index table TOPSENTC. For value ENHBC in this field, enter data in refinements CLGVER and DISPDIGS.
	CLGVER	Y or N	Calling number verification. Enter data in this field if field BCTYPE = ENHBC. Enter Y to verify the calling NPA-NXX in table TCLGVER. Otherwise, enter N for no verification. For N, table TCLGVER is not accessed and all calling numbers are accepted.
	DISPDIGS	6 digits	Display digits. Enter data in this field if field BCTYPE = ENHBC. Enter the NPA-NXX for display to the operator for ONI and ANIF calls.

TRKGRP type TOPS (continued)

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

Field	Subfield or refinement	Entry	Explanation and action
	NUMBC	1 to 999	Number of billing codes. Enter data in this field if field BCTYPE = TOPSBC. Enter the number of billing codes (NXXs allocated to originate traffic on this trunk group) plus spares that are reserved in table TOPSBC. This field replaces field NOBILLCD. The MAP display indicates the range is 0-999; however, the system does not allow 0.
	ANISEIZ	numeric (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	numeric (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* 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.

SIGTYPE = R2

If the value in eld SIGTYPE is R2, data ll re nements XLASYS, LOCLSCRN, and ANIREQ as described below:

Effective TOPS07, R2 is only supported in the TOPS Global environment where TOPSPARM parameter DEFAULT_PRODUCT = GLOBAL.

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

Field	Subfield or refinement	Entry	Explanation and action
	XLAINFO	see subfield	Universal translations information. This field consists of subfield XLASYS.
	XLASYS	NIL, AC, PX, CT, FA, OFC, AM, FT, or NSC	Translations System. Specifies the starting point within the universal translations system. For more information, refer to the description of the universal translations tables under table ACHEAD. The entries specify the applicable head table, for example AC points to table ACHEAD. Datafill refinement XLANAME.
	XLANAME	translator name	Translator Name. This name is used to index into the applicable head table pointed to in field XLASYS. For example, if XLASYS=AC, then the head table is ACHEAD. If XLASYS=NIL, field XLANAME does not appear.
	LOCLSCRN	Y or N	Local calling zone screening. This field enables local screening. The values are as follows: • Y - Use GOS Local Determination to determine if the call is local and datafill refinement LOCLZONE. For further information, refer to functionality GOS Local Determination, GOS00001, in the Translations Guide. • N - Use the universal translations method with the CLASS option. This value is the default. For calls with no incoming trunk (Delay and system initiated calls), table TOPSPARM parameter DEFAULT_LOCLZONE enables screening and defines the initial zone name.
	LOCLZONE	name from TLCLZONE	Local zone. If field LOCLSCRN = Y, enter an initial local zone name, defined in table TLCLZONE.
	ANIAREA	see subfield	Automatic number Identification area. This field consists of subfield ANIREQ.

TRKGRP type TOPS (continued)

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

Field	Subfield or refinement	Entry	Explanation and action
	ANIREQ	Y or N	ANI required. This field specifies if the DMS switch should request ANI from the preceding exchange. If ANIREQ=Y, then datafill refinement field ANIFAIL. If ANIREQ=N, ANIFAIL does not appear. If the trunk is outgoing, then ANIFAIL must be set to N. This is enforced by table control.
	ANIFAIL	R2OPER or R2TRMT	ANI Failure. This field applies to incoming and 2-way trunks. It specifies handling of an ANI failure. This field is a refinement of ANIREQ and only appears when ANIREQ=Y. Enter R2OPER for handling by an operator; then datafill refinement OPER. Or, enter R2TRMT to send the call to treatment; then datafill refinement TRMT. Field ANIFAIL is used for tandem calls (that is, calls not destined for an operator) where ANI has been requested but not received.
	OPER	ANIF or ONI	Operator. If field ANIFAIL=R2OPER, datafill this field. This field indicates how an ANI fail call will be presented to the operator: as an ANIF call or an ONI call.
	TRMT	treatment name	Treatment. If field ANIFAIL=R2TRMT, datafill this field with a treatment name. This field indicates to discontinue the call and apply the datafilled treatment. If the treatment name is in table TRTMTACT, then the previous office is notified to provide the treatment. Otherwise, the treatment is applied locally.

For all SIGTYPE values

For all tuples, data ll elds BYP ASUTR, ISDNAREA, and OPTIONS as described below.

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

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 area* This field consists of subfield ISDNOPTS and a refinement.
	ISDNOPTS	Y or N	*ISDN 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 current list of available bearer capabilities.
OPTIONS		see subfield	*Options* This field consists of subfield OPTION and refinements.

TRKGRP type TOPS (continued)

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

Field	Subfield or refinement	Entry	Explanation and action
	OPTION	LNP	New value LNP (local number portability) can be datafilled. This option allows datafill of the location routing number (LRN) against the originating trunk group for use in the AMA module 720 record. If table TOPSTOPT field LNPCLGAM = Y and the calling number is in table PORTNUMS, the calling LRN is required for the AMA record. This number is obtained by an LNP query; however, a query can be avoided if this LNP option is datafilled (unless the operator requests to connect back to the number or requests LNP information). The following restrictions apply to the LNP option: • It can be datafilled only for incoming and two-way trunk groups. • The LRN must be entered and must contain ten digits. • Only one LNP option is allowed for each trunk group. • Valid GRPTYPs are BELL, COMFGD, DANI, EAFGD, EAOSS, EAOSSIC, MODBELL, ONI, and OSS.
	LRN	10-digit directory number	Location routing number. If field OPTION = LNP, datafill a 10-digit directory number that identifies the adjacent end office and is used in recording AMA module 720 of the calling number. Exactly 10 digits must be datafilled.

Data ll e xample

The following example shows sample data ll for table TRKGRP type T OPS.

1. TOPS trunk group OTWAON0342C1 has the following characteristics:
   - incoming
   - most idle select sequence
   - in serving NPA 613
   - no local area screening
   - the trunk group has a standard pretranslator SPRT
   - screening class is OTWA
   - NXX screening is required on operator-handled calls
   - traf c class is RC
   - trunk group carries traf c from a mix on noncoin, coin, and hotel station types
   - the 0- traf c is indicated by seizure of trunk and timing out with no digits received
   - display of the NPANXX of originator to the operator is required
   - instructional display to the operator is required
   - 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
   - treatment supervision is on-hook
2. TOPS trunk group OTWAON7281C2 has characteristics similar to number 1 except
   - the trunk group has a standard pretranslator PRT1
   - the trunk group carries traf c from hotel station types only
   - the trunk group is ONI (ANI seizure, ANI partial dial, and treatment supervision elds do not apply)
   - for coin zip tone the DMS should return answer supervision when call is to wait in queue, and send tone repeat signal to end of ce when the operator answers

TRKGRP type TOPS (continued)

3. TOPS trunk group TOPAOSMF has characteristics similar to number 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 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 trunk seizure
   - no display of originating NPANXX to operator is required
4. TOPS trunk group ICTOPS has characteristics similar to number 1 except
   - the trunk group serving NPA is 214
   - the trunk group has a standard pretranslator TXLA
   - eld SCRNCL is NSCR
   - NXX screening is not required on operator handled calls
   - time out is not required to detect zero minus calls if 0- is indicated by the absence of digits following trunk seizure
   - no display of originating NPANXX to operator is required
5. TOPS trunk group TEAOSSICI has characteristics similar to number 1 except
   - the trunk group serving NPA is 619
   - the trunk group has a standard pretranslator EAOS
   - eld SCRNCL is NSCR
   - eld DCNVFR OM is 9
   - eld DCNVT O is 9
   - eld ICNVFR OM is 9
   - eld ICNVT O is 9
   - eld FOUR WINK is N
6. TOPS trunk group TCOMFGDIC1 shows eld CONNTYPE set to other than NONE, therefore eld CAR TYPE is visible. Also, eld

SIGTYPE=COMFGD to connect cellular and interexchange carriers to TOPS for ADACC. Therefore, eld NXXVER=N.

MAP display example for table TRKGRP type TOPS

```
OTWAONO342C1          TOPS 0 AA NCRT IC MIDL 613 613 SPRT NLCA OTWA Y RC
  COMBINED Y Y 0 0000 NONE BELL TOPSBC 20 10 10 N Y WINK N BCNAME VOICE $
OTWAON7281C2          TOPS 0 AB NCRT IC MIDL 613 613 PRT1 NLCA OTWA Y RC
  HOTEL Y Y 0 0000 NONE ONI TOPSBC 20 AT N BCNAME 56KDATA $
TOPAOSMF             TOPS 31 NPRT NCRT IC MIDL 919 919 MFNL SUPR NSCR N RC
  COMBINED N N 0 0000 NONE BELL TOPSBC 10 5 5 N Y OFFHK Y BCNAME 56KDATA$
ICTOPS              TOPS 31 NPDGP NCRT IC MIDL 214 214 TXLA NCLA NSCR N RC
  COMBINED N N 0 0000 NONE OPENNUM 20 2 2 N OFFHK N N $
TEAOSSICI           TOPS 0 TLD NCRT IC MIDL 619 619 EAOS NLCA NSCR Y SP
  COMBINED N Y 0 0000 NONE EAOSS TOPSBC 50 10 10 Y OFFHK 9 9 9 0 N N $
TCOMFGDIC1          TOPS 0 TLD NCRT IC MIDL 629 629 PTOP NLCA NSCR Y SP
  COMBINED N Y 0 0000 CELL_MOBILE IEC COMFGD TOPSBC 0 10 10 Y N Y N N N $
TOSSIC              TOPS 0 TLD NCRT IC MIDL 619 619 PTOP NLCA NSCR Y SP
  NCSCREEN N Y  0 0000 NONE OSS TOPSBC 16 10 10 Y OFFHK N N
```

Error messages for table TRKGRP

The following error messages apply to table TRKGRP.

Error messages for table TRKGRP (Sheet 1 of 2)

Error message	Explanation and action
LNP OPTION NOT ALLOWED FOR THIS SIGNALLING TYPE	A TOPS trunk group with the LNP option must be datafilled with one of the following signalling type: BELL, COOMFGD, DANI, EAFGD, EAOSS, EAOSSIC, MODBELL, ONI, or OSS.
LRN MUST BE 10 DIGITS.	This error message is displayed for either of the following requirements: • The LRN parameter must be exactly 10 digits in length. • The LNP option must have the LRN parameter datafilled.
MULTIPLE LNP OPTIONS NOT ALLOWED.	Only one LNP option is allowed per trunk group.
LRN USED ONLY FOR IC OR 2W TRUNKS.	The LNP option can only be datafilled for incoming or 2-way TOPS trunk groups.

TRKGRP type TOPS (continued)

Error messages for table TRKGRP (Sheet 2 of 2)

Error message	Explanation and action
ONITRMT MUST BE N FOR OG TRUNKS.	If the GOSS7 trunk is outgoing only, N must be entered for field ONITRMT. In other words, treatment is only applicable for incoming (IC) and two-way (2W) trunk groups. If the user attempts to datafill ONITRMT as Y for an OG trunk, this error message is given.
HOLDREQ MUST BE N FOR OG TRUNKS.	If the GOSS7 trunk is outgoing only, N must be datafilled for field HOLDREQ. In other words, connection hold is only applicable for incoming (IC) and two-way (2W) trunk groups. If the user attempts to enter Y in HOLDREQ for an OG trunk, this error message is given.
G7SETNO MUST BE 0 FOR IC TRUNKS. STDIGIT MUST BE N FOR IC TRUNKS.	If the GOSS7 trunk is incoming only, 0 must be entered in field G7SETNO and N in field STDIGIT. In other words, G7SETNO and STDIGIT are only applicable for outgoing and two-way trunk groups. If the user attempts to enter G7SETNO with a value greater than 0 or STDIGIT as Y for an incoming trunk, this error message is given.
FIELD G7SETNO NOT DATAFILLED IN TABLE G7MSGSET PROCESSING ERRORUNEXPECTED ERROR CONDITION	The set number must be entered in table G7MSGSET before field G7SETNO can be changed. If an attempt is made to add or change the set number before it is entered in table G7MSGSET, this error message is displayed. Note, this requirement only applies when entering a new set number and does not affect the default datafill.
MUST FIRST DELETE TUPLE FROM TABLE TOPCATRK	In a TOPS global load, a TOPS trunk can not be deleted from table TRKGRP if it is still used in table TOPCATRK. If there is an attempt to delete such a tuple, this error message is given and the deletion is blocked.

Table history

TOPS14

Field SIGTYPE value AMR5 is deleted by feature 59015901 in functionality EOL for TOPS14, OSB00101.

Re nements LOCLSCRN and LOCLZONE are added to SIGTYPs GOSS7, OPENNUM, and R2 by feature 59015886 in functionality GOS Local Determination, GOS00001.

Added note about parameter POST_WINK_PRE_OFFHOOK_DELAY to table 1 sub eld SIGTYPE. T able TRKGRP type TOPS has been updated for the TOPS011 release of this document. This update was made in response to a Problem Resolution System (PRS) request for the NA008 timeframe.

TOPS11

An error message is added for data ll dependency with table TOPCATRK by feature AF7576 in functionality Global Competitive Access II, GOS00007.

The eld DISPLAY range is increased from {0 to 31} to {0 to 254} by feature AF7833 in functionality Table TOPSDISP Expansion, OSB00001.

TOPS10

Fields ONITRMT, HOLDREQ, G7SETNO, and STDIGIT are added by features AF7434 and AF7435 in functionality GOS ETSI-ISUP Signalling, GOS00005.

Field SNPA is only used for expanding a 7-digit calling DN to 10 digits. Field STS is added. Field NOBILLCD is deleted. Field BILLCD is added. These changes are made by feature AF7498 in functionality TOPS BC/STS/SNPA, OSB000001.

TOPS09

Field STATCLAS value APS is added by feature AF7161 in functionality Attendant Pay Station, OSB00001.

Added note about parameter POST_WINK_PRE_OFFHOOK_DELAY to table 1 sub eld SIGTYPE. T able TRKGRP type TOPS has been updated for the TOPS011 release of this document. This update was made in response to a Problem Resolution System (PRS) request for the NA008 timeframe.

TOPS08.1

Field SIGTYPE value GOSS7 is added by feature AF6815 in functionality GOSS7 Signaling, GOS00004.

TOPS07

Field OPTION with value LNP added by feature AF6550 in functionality TOPS LNP, OSEA0008.

TRKGRP type TOPS (end)

Value NCSCREEN is added to eld ST ATCLAS by feature AF6369 in functionality DNSCRN Enhancements, OSB00001.

Notes added to SIGTYPEs R2 and OPENNUM that they are only supported in the TOPS Global environment according to feature AF6428 in functionality Interface Signaling, OSB00001.

TOPS06

Field CLGID name is changed to SIGTYPE. Also, value MOPS is deleted from eld SIGTYPE. These changes are from feature AN1807 in functionality TOPS06 Robustness, OSB00001.

Field OPRHOLD is added to the re nements of SIGTYP = COMFGD by PRSDOC BY28832 in functionality TOPS Incoming FGD Signalling, OSEA00004.

TOPS04

The range of eld BILLCD is increased from 1-63 to 0-999 per feature AN1379 in functionality TOPS Robustness, OSB00001.

Value R2 is added to eld CLGID per feature AN1228 in functionality R2 on TOPS, GOS00001.

TOPS03

Feature AN0262 in Cellular/IEC/LEC ADACC, OSDA0005:

- Added elds CONNTYPE and CAR TYPE.
- Can set eld SIGTYPE=COMFGD to connect cellular and interexchange carriers to TOPS for ADACC. Then, set eld NXXVER=N.

BCS36

Added eld TRWKTIME to re nements that apply if eld SIGTYPE is set to value ONI.

BCS35

The following changes were made:

- added note regarding translation of PVN calls
- added ve elds to T OPS EAOSS
- added note regarding N entry in eld OHNXXSCR

TOPS External Audio Response Unit Trunk Group Type

Table TRKGRP.TOPSARU adds a new trunk group type to accommodate external audio response units (ARU).

There is a relationship between table TRKGRP and table ARUMEMBR. TRKGRP data for Traf c Operator Position System (T OPS) ARU (TOPSARU) trunks must be data lled prior to table AR UMEMBR. Table CLLI must be data lled prior to table TRKGRP for T OPSARU trunks.

Conversely, a group cannot be removed from table TRKGRP without all its members being deleted from table ARUMEMBR rst.

Changes are not allowed in table TRKGRP if there is data in table ARUMEMBR for that CLLI.

Data ll sequence

Table CLLI must be data lled before table TRKGRP type T OPSARU.

Table ARUMEMBR must be data lled after table TRKGRP type TOPSARU.

Refer to the general section of table TRKGRP for additional data ll sequence information.

Data ll

The following table lists the data ll for table TRKGRP type T OPSARU.

Field descriptions (Sheet 1 of 3)

Field	Subfield or refinement	Entry	Explanation and action
GRPKEY		see subfield	*Group key* This field consists of subfield CLLI.
	CLLI	alphanumeric (1 to 16 characters)	*Common language location identifier* Enter the common language location identifier (CLLI) code assigned to the trunk group in table CLLI.

TRKGRP type TOPSARU (continued)

Field descriptions (Sheet 2 of 3)

Field	Subfield or refinement	Entry	Explanation and action
GRPINFO		see subfields	*Variable group data* This field consists of subfields GRPTYP, TRAFSNO, PADGRP, and NCCLS. Refer to section “General field information" in table TRKGRP for information concerning an alternate structure for this field that results from the datafill of table CUSTFLDS.
	GRPTYP	TOPSARU	*Group type* Enter a new group type for external aurio response units (ARU) associated with the Traffic Operator Position System (TOPS) directory assistance (DA) voice response.
	TRAFSNO	numeri (0 to 127)	*Traffic separation number* Enter the incoming and outgoing traffic separation number assigned to the trunk group. If a traffic separation number is not required, enter 0 (zero). For switches with software package NTX085AA (Traffic Separation Peg Count), enter a value from 1 to the value of office parameter TFAN_OUT_MAX_NUMBER in table OFCENG. For switches without software package NTX085AA, enter a value from 1 to 15. Incoming and outgoing traffic separation numbers 1 to 9 should be reserved for generic traffic separation numbers. For more information, refer to table TFANINT.

Field descriptions (Sheet 3 of 3)

Field	Subfield or refinement	Entry	Explanation and action
	PADGRP	alphanumeric (1 to 5 characters)	*Pad group* Enter the name of the pad group assigned to the trunk group in table PADDATA. For more information, refer to table PADDATA.
	NCCLS	NCRT	*Operational measurements no-circuit class* This field is not required for the TOPSARU trunk group. Enter NCRT (no circuit). For more information, refer to table TRKGRP and the *Operational Measurements Reference Manual*.

Data ll e xample

The following example shows sample data ll for table TRKGRP type TOPSARU.

MAP display example for table TRKGRP type TOPSARU

```
GRPKEY
                                                    GRPINFO
_____________________________________________________________

DAARU1
                                    TOPSARU  31 NPDGP NCRT
```

Supplementary information

This section provides information on error messages when data lling table TRKGRP type TOPSARU.

If an attempt is made to data ll table AR UMEMBR rst, the follo wing error message is produced:

```
MEMBER IS NOT IN TABLE TRKGRP
```

TRKGRP type TOPSARU (end)

If an attempt is made to delete a group with members remaining in table ARUMEMBR, the following error message is produced:

```
MEMBERS EXIST IN ARUMEMBR
```

TOPS Voice Link Trunk Group Type

Trunks of type TOPSVL (Traf c Operator Position System voice link) are the voice links to external applications such as Automated Alternate Billing Service (AABS).

Data ll

The following table lists the data ll for table TRKGRP type T OPSVL.

Field descriptions (Sheet 1 of 3)

Field	Subfield or refinement	Entry	Explanation and action
GRPKEY		see subfield	*Group key* This field consists of subfield CLLI.
	CLLI	alphanumeric (1 to 16 characters)	*Common language location identifier* Enter the common language location identifier (CLLI) code assigned to the trunk group in table CLLI.
GRPINFO		see subfields	*Variable group data* This field consists of subfields GRPTYP, TRAFSNO, PADGRP, NCCLS, SELSEQ, and DIR. Refer to section “General field information" in table TRKGRP for information concerning an alternate structure for this field that results from the datafill of table CUSTFLDS.
	GRPTYP	TOPSVL	*Group type* Enter the trunk group type TOPSVL.

TRKGRP type TOPSVL (continued)

Field descriptions (Sheet 2 of 3)

Field	Subfield or refinement	Entry	Explanation and action
	TRAFSNO	numeric (0 to 127)	*Traffic separation number* Enter the incoming and outgoing traffic separation number assigned to the trunk group. If a traffic separation number is not required, enter 0 (zero). For switches with software package NTX085AA (Traffic Separation Peg Count), enter a value from 1 to the value of office parameter TFAN_OUT_MAX_NUMBER in table OFCENG. For switches without software package NTX085AA, enter a value from 1 to 15. Incoming and outgoing traffic separation numbers 1 to 9 should be reserved for generic traffic separation numbers. For more information, refer to table TFANINT.
	PADGRP	alphanumeric (1 to 5 characters)	*Pad group* Enter the name of the pad group assigned to the trunk group in table PADDATA. NPDGP (no pad group) is the only valid entry. For more information, refer to table PADDATA.
	NCCLS	NCRT	*Operational measurements no-circuit class* This field is not required. Enter the operational measurements (OM) no circuit (NCRT). Entries outside this range are not valid. For more information, refer to table TRKGRP and the *Operational Measurements Reference Manual*.

Field descriptions (Sheet 3 of 3)

Field	Subfield or refinement	Entry	Explanation and action
	SELSEQ	MIDL	*Selection sequence* Enter MIDL, for most idle selection sequence. Entries outside this range are not valid. For more information, refer to table TRKGRP.
	DIR	IC, OG, or 2W	*Direction* Enter IC to specify that the traffic flow is incoming, OG for out-going, or 2W for two-way. For OSSAIN, datafill trunks according to the node type as follows: • Standalone - Datafill OG for links to service nodes. • OSAC host - Datafill OG for links to OSAC remotes and service nodes. • OSAC remote - Datafill IC for the link to the OSAC host. This direction must match with the direction in table TRKSGRP.

Data ll e xample

The following example shows sample data ll for table TRKGRP type TOPSVL.

MAP display example for table TRKGRP type TOPSVL

```
GRPKEY                                              GRPINFO
-------------------------------------------------------------
OSSAINVL1            TOPSVL  31  NPDGP  NCRT  MIDL  OG
OSSAINVL2            TOPSVL  31  NPDGP  NCRT  MIDL  OG
```

Table history

TOPS07

Field DIR added by feature AN1536 in functionality OSSAIN Enhancements, ENSV0020.

TRKGRP type TPS101

International 101 Test Line Trunk Group Type

The 101 test line is a communication test line enabling two-way talking capability between a test card or test position and any trunk incoming from or outgoing to a DMS-200 family switch. This enables personnel to discuss problems between of ces. A 101 call from a distant of ce causes ringing on every test position in the of ce.

The 101 test line provides the International DMS-200 with the following capabilities:

- CALLTRF (call transfer, a trunk test position [TTP] level MAP [maintenance and administration position] command): Call transfer capability enables maintenance functions, in addition to talking, on 101 calls.
- FLASH (also RE_RING or RINGFORWARD): The ash 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 ash sends ringing to the called end of the line.

Note: The FLASH feature of the 101 communication test line does not work if either end of the call does not have a ring-forward signal in its signaling system.

The 101 test line can be either incoming or outgoing, but not two-way. Only dial pulse (DP), and DIGITONE (DT) dialing are allowed on international 101 test lines.

When data lling table TRKSGRP for the international 101 test line trunk, use the signaling system equal to STD.

Use of T101 lines in a PTM

Package trunk modules (PTM) peripheral modules (PM) are manufacturer discontinued. PTMs that are data lled as PTMs in table TMINV cause international 101 test lines to fail. PTMs must be data lled as MTMs (maintenance trunk modules) to avoid this problem.

Data ll

The following tables list the data ll for table TRKGRP type TPS101.

Incoming International 101 Test Line

The following is the switching unit dependent data required for each of the incoming international 101 test lines.

Field descriptions (Sheet 1 of 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)	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, and XLADATA. Refer to section “General field information" in table TRKGRP for information concerning an alternate structure for this field that results from the datafill of table CUSTFLDS.
	GRPTYP	TPS101	*Group type* Enter TPS101 to specify the international 101 test line trunk type.

TRKGRP type TPS101 (continued)

Field descriptions (Sheet 2 of 3)

Field	Subfield or refinement	Entry	Explanation and action
	TRAFSNO	numeric (0 to 127)	*Traffic separation number* Enter the incoming and outgoing traffic separation number assigned to the trunk group. If a traffic separation number is not required, enter 0 (zero). For switches with software package NTX085AA (Traffic Separation Peg Count), enter a value from 1 to the value of office parameter TFAN_OUT_MAX_NUMBER in table OFCENG. For switches without software package NTX085AA, enter a value from 1 to 15. Incoming and outgoing traffic separation numbers 1 to 9 should be reserved for generic traffic separation numbers. For more information, refer to table TFANINT.
	PADGRP	alphanumeric (1 to 5 characters)	*Pad group* Enter the name of the pad group assigned to the trunk group in table PADDATA. For more information, refer to table PADDATA.
	NCCLS	NCRT	*Operational measurements no-circuit class* This field is not required. Enter the operational measurements (OM) no circuit (NCRT). Entries outside this range are not valid. For more information, refer to table TRKGRP and the *Operational Measurements Reference Manual*.

TRKGRP type TPS101 (continued)

Field descriptions (Sheet 3 of 3)

Field	Subfield or refinement	Entry	Explanation and action
	DIR	IC	*Direction* This field specifies the trunk group direction. Enter IC for incoming. If office parameter TRK_OOS_CHK_ON in table OFCVAR is set to Y (yes), all trunks in the group must be busy before the value of this field can be changed by data modification order (DMO). Entry values other than those listed are not valid.
	TRAFCLS	alphabetic (2 characters)	*Traffic usage class* Enter the traffic usage class assigned to the trunk group. For more information, refer to table TRKGRP.
	SELSEQ	MIDL	*Select sequence* If the trunk group direction is incoming, sequential selection does not apply. Enter MIDL (most idle). Entries outside this range are not valid. For more information, refer to table TRKGRP.
	XLADATA	see subfields	*Translation data* This field consists of subfields XLADSEL, PRTNM, SCRNCL, SNPA, ORIGSRC, NETINDX, XLASYS, and XLANAME.
	XLADSEL	NALT NETATTR or UNIV	*Translation selector* If the North American translation system is used, enter NALT and datafill refinements PRTNM, SCRNCL, SNPA, and ORIGSRC. If this table indexes into table NETATTR, enter NETATTR and datafill refinement NETINDX. If the universal translation system is used, enter UNIV and datafill refinement XLAAREA.

TRKGRP type TPS101 (continued)

XLADSEL = NALT

If the entry in sub eld XLADSEL is N ALT, data ll re nements PR TNM, SCRNCL, SNPA, and ORIGSRC as described below.

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

Field	Subfield or refinement	Entry	Explanation and action
	PRTNM	alphanumeric (1 to 4 characters) or NPRT	*Standard pretranslator nam* If standard pretranslation is required, enter the name of the standard pretranslator defined in table STDPRTCT to which digit translation is to route after the receipt of the first digit. If pretranslation is not required, enter NPRT (no pretranslation). If office parameter TRK_OOS_CHK_ON in table OFCVAR is set to Y (yes), all trunks in the group must be busy before the value of this field can be changed by data modification order (DMO).
	SCRNCL	alphanumeric (1 to 4 characters) or NSCR	*Class-of-service screening table name* If class-of-service screening is required, enter the name of the class-of-service screening table (datafilled in table SCRNCLAS) to which digit translation routes. If class-of-service screening is not required, enter NSCR (no screening).

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

Field	Subfield or refinement	Entry	Explanation and action
	SNPA	numeric (3 digits)	*Serving numbering plan area* Enter the serving numbering plan area (NPA) for the trunk group. If office parameter TRK_OOS_CHK_ON in table OFCVAR is set to Y, all trunks in the group must be busy before the value of this field can be changed by DMO.
	ORIGSRCE	LCL or NLCL	*Originating source* Enter the originating source of the call, LCL (local) or NLCL (non-local). The originating source determines, for the code dialed, whether the call is routed or blocked by the code type in the HNPACODE subtable. For more information, refer to the “Notes on originating source" section in table HNPACONT.HNPACODE.

XLADSEL = NETATTR

If the entry in sub eld XLADSEL is NET ATTR, data ll re nement NETINDX as described below.

Field descriptions for conditional data II

Field	Subfield or refinement	Entry	Explanation and action
	NETINDX	numeric (0 to 1023)	*Network attribute index* Enter a valid network attribute index from table NETATTR. No other translation data is required, since it is available in table NETATTR.

TRKGRP type TPS101 (continued)

XLADSEL = UNIV

If the entry in sub eld XLADSEL is UNIV, data ll re nement XLAAREA as described below.

Field descriptions for conditional data ll

Field	Subfield or refinement	Entry	Explanation and action
	XLAAREA	see subfield	*Universal translation fields* This field consists of subfield XLASYS and refinement XLANAME.
	XLASYS	AC AM CT CTY DN FA FT NSC OFC PX or NIL	*Translation system* Enter the name of the head table from which translation begins. Entry values other than those listed are not valid.
	XLANAME	alphanumeric (1 to 8 characters) or NIL	*Translation name* Enter a name from the code table that belongs to the head table referenced by field XLASYS.

Data ll e xample

The following example shows sample data ll for table TRKGRP type TPS101.

An example of data ll for table TRKGRP with group type TPS101, incoming, is shown below.

- The code in table CLLI for the trunk group is T101GRP1IC.
- The trunk group type is TPS101.
- The incoming traf c separation number is not required.
- STDLN is the pad group name assigned to the trunk group.
- NCRT is the no circuit class.
- The direction is incoming (IC).
- The traf c class is miscellaneous (MI).
- The select sequence is not required.

- The generalized or universal translation system (UNIV) is referenced.
- Translations begin at the pre x head table (PX).
- The entry in the pre x code table is ICT OLLCN.

MAP display example for table TRKGRP type TPS101

```
GRPKEY          GRPINFO
_____________________________________________________________________

T101GRP1IC      TPS101 0 STDLN NCRT IC MI MIDL UNIV PX ICTOLLCN
```

Outgoing International 101 Test Line

The following is the switching unit dependent data required for each of the outgoing international 101 test lines.

Field descriptions (Sheet 1 of 4)

Field	Subfield or refinement	Entry	Explanation and action
GRPKEY		see subfields	*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, and XLADATA. Refer to section “General field information" in table TRKGRP for information concerning an alternate structure for this field that results from the datafill of table CUSTFLDS.
	GRPTYP	TPS101	GROUP TYPE Enter TPS101 to specify the international 101 test line trunk type.

TRKGRP type TPS101 (continued)

Field descriptions (Sheet 2 of 4)

Field	Subfield or refinement	Entry	Explanation and action
	TRAFSNO	numeric (0 to 127)	*Traffic separation numbe* *r*Enter the incoming and outgoing traffic separation number assigned to the trunk group. If a traffic separation number is not required, enter 0 (zero). For switches with software package NTX085AA (Traffic Separation Peg Count), enter a value from 1 to the value of office parameter TFAN_OUT_MAX_NUMBER in table OFCENG. For switches without software package NTX085AA, enter a value from 1 to 15. Incoming and outgoing traffic separation numbers 1 to 9 should be reserved for generic traffic separation numbers. For more information, refer to table TFANINT.
	PADGRP	alphanumeric (1 to 5 characters)	*Pad group* Enter the name of the pad group assigned to the trunk group in table PADDATA. For more information, refer to table PADDATA.
	NCCLS	NCBN NCID NCIM NCIT NCLT NCOF NCON NCOT NCRT NCTC or NOSC	*Operational measurements no-circuit class* Enter the operational measurements (OM) no-circuit class (NCCLS) to indicate which OM register is incremented if treatment GNCT (generalized no circuit) occurs. If the trunk group direction is incoming, this field is not required. Enter NCRT (no circuit). For more information, refer to table TRKGRP and the *Operational Measurements Reference Manual*.

TRKGRP type TPS101 (continued)

Field descriptions (Sheet 3 of 4)

Field	Subfield or refinement	Entry	Explanation and action
	DIR	OG	*Direction* This field specifies the trunk group direction. Enter OG for outgoing. If office parameter TRK_OOS_CHK_ON in table OFCVAR is set to Y (yes), all trunks in the group must be busy before the value of this field can be changed by data modification order (DMO). Entry values other than those listed are not valid.
	TRAFCLS	alphabetic (2 characters)	*Traffic usage class* Enter the traffic usage class assigned to the trunk group. For more information, refer to table TRKGRP.
	SELSEQ	ASEQ DSEQ LIDL or MIDL	*Select sequence* If the trunk group is outgoing and sequential selection applies (feature package NTX244AB must be present), enter ASEQ for ascending sequential selection or DSEQ for sequential descending selection (based on the order of trunk members in table TRKMEM). If the trunk group direction is outgoing or two-way, the far end is not a link list switcher, and sequential selection does not apply, enter MIDL.
	KLADATA	see subfields	*Translation data* If the trunk group is outgoing, this field consists of subfields XLADSEL, XLASYS, and XLANAME.
	XLADSEL	UNIV	*Translation selector* If the universal translation system is used, enter UNIV and datafill refinement XLAAREA. Entry values other than those listed are not valid.

TRKGRP type TPS101 (continued)

Field descriptions (Sheet 4 of 4)

Field	Subfield or refinement	Entry	Explanation and action
	XLASYS	NIL	*Translation system* Enter the name of the head table from which translation begins. Entry values other than those listed are not valid.
	XLANAME	alphanumeric (1 to 8 characters) or NIL	*Translation name* Leave this field blank. Entry values other than those listed are not valid.

Data ll e xample

An example of data ll for table TRKGRP with group type TPS101, outgoing, is shown below.

- The code in table CLLI for the trunk group is T101GRP1OG.
- The trunk group type is TPS101.
- The outgoing traf c separation number is not required.
- STDLN is the pad group assigned to the trunk group.
- NCRT is the no circuit class.
- The direction is outgoing (OG).
- The traf c class is miscellaneous (MI).
- The select sequence is not required.

TRKGRP type TPS101 (end)

- Since the trunk group is outgoing, the translation selector is UNIV.
- Since the trunk group is outgoing, the translation system is NIL and the translation name is left blank.

MAP display example for table TRKGRP type TPS101

```
GRPKEY              GRPINFO
_____________________________________________________
T101GRP1OG          TPS101 0 STDLN NCRT OG MI MIDL UNIV
NIL
```

TRKGRP type TTL2

Terminating 102 Test Line Trunk Group Type

The carrier milliwatt test termination trunk groups (type TTL2) are used in switches con gured for milliw att supply and balance termination testing. Decibel level and supervision combinations that are used are shown in table . “Decibel leveles and supervision combinations”.

Decibel level and supervision combinations

Level	Card code	Supervision
0 dB	1X00AA1X00AB	100 balance102 toll102 local102 steady (DMS-250 only)
- 10 dB	1X00AF	100 balance102 toll102 local102 steady (DMS-250 only)
- 15 dB	1X00AH	100 balance102 toll102 local102 steady (DMS-250 only)
- 20 dB	1X00AE1X00AG	100 balance102 toll102 local102 steady (DMS-250 only)

Note 1: Cards NT1X00AA and NT1X00AB emit a milliwatt source of 1004 Hz at a 0-dB level. Their function is the same. The NT1X00AB card is an enhanced version of the NT1X00AA card.

Note 2: If using PMTYPE DTM in table TRKMEM, the NT1X80 (enhanced digital recorded announcement machine) card provides all the above milliwatt tones according to the data ll in eld MWDBLEVEL. For example, if MWDBLEVEL is data lled as 1X100AB, then the milliw att source of 1004 Hz at a 0 dB level comes from the NT1X80 card. Similarly, if this eld is data lled as 1X00AH, then the NT1X80 provides the -15 dB tone.

For related information, refer to TRKGRP type MAINT.

Data ll

The following table lists the data ll for table TRKGRP type TTL2.

Field descriptions (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
GRPKEY		see subfield	*Group key* This field consists of subfield CLLI.
	CLLI	alphanumeric (1 to 16 characters)	*Common language location identifier* Enter the common language location identifier (CLLI) code assigned to the trunk group in table CLLI.
GRPINFO		see subfields	*Variable group data* This field consists of subfields GRPTYP, TRAFSNO, PADGRP, NCCLS, MWSPRVSN, and MWDBLVL.Refer to section “General field information" in table TRKGRP for information on an alternate structure for this field that results from the datafill of table CUSTFLDS.
	GRPTYP	TTL2	*Group type* Enter TTL2 to specify the terminating 102 test line trunk group type.
	TRAFSNO	numeric (0 to 127)	*Traffic separation number* Enter the incoming and outgoing traffic separation number assigned to the trunk group. If a traffic separation number is not required, enter 0 (zero). For switches with software package NTX085AA (Traffic Separation Peg Count), enter a value from 1 to the value of office parameter TFAN_OUT_MAX_NUMBER in table OFCENG. For switches without software package NTX085AA, enter a value from 1 to 15. Incoming and outgoing traffic separation numbers 1 to 9 should be reserved for generic traffic separation numbers. For more information, refer to table TFANINT.

TRKGRP type TTL2 (continued)

Field descriptions (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
	PADGRP	alphanumeric (1 to 5 characters)	*Pad group* Enter the name of the pad group assigned to the trunk group in table PADDATA. For more information, refer to table PADDATA.
	NCCLS	NCBN NCID NCIM NCIT NCLT NCOF NCON NCOT NCRT NCTC or NOSC	*Operational measurements no-circuit class* Enter the operational measurements (OM) no-circuit class (NCCLS) to indicate which OM register is incremented if treatment GNCT (generalized no circuit) occurs. If the trunk group direction is incoming, this field is not required. Enter NCRT (no circuit). For more information, refer to table TRKGRP and the *Operational Measurements Reference Manual*.
	MWSPRVSN	BMW LMW TMW or SMW	• *Milliwatt supervision*Enter one of the following milliwatt supervision types: • BMW for 100 balance • LMW for 102 local • SMW for 102 steady • TMW for 102 toll
	MWDBLEVL	1X00AA 1X00AB 1X00AE 1X00AF 1X00AG 1X00AHor1X 00KA	• *Milliwatt decibel level*Specify the required decibel level by entering one of the following card codes: • 1X00AB (enhanced version of 1X00AA) • 1X00AA for 0 dB level • 1X00AF for -10 dB level • 1X00AH for -15 dB level • 1X00AG for -20 dB level • 1X00AE for -20 dB level (ROH tone international) • 1X00KA for 950 Hz tone at 0 dB in compliance with the China specifications

TRKGRP type TTL2 (end)

Data ll e xample

The following example shows sample data ll for table TRKGRP type TTL2.

MAP display example for table TRKGRP type TTL2

```
GRPKEY              GRPINFO
_____________________________________________________
TERM102T            TTL2 0 TLD NCOT TMW 1X00AB
TERM102L            TTL2 0 TLD NCOT LMW 1X00AB
TERM100Q            TTL2 0 TLD NCOT BMW 1X00AB
```

TRKGRP type UT

Utility Telemetry Trunk Group Type

Trunk group type UT is used to assign utility telemetry (UT) trunks, which connect a Central Of ce Service Unit (COSU) to a DMS of ce. When connected to the DMS of ce by UT trunks, the COSU can initiate and control telemetry calls to subscriber lines through the DMS of ce, which attempts to establish the connections.

Data ll

The following table lists the data ll for table TRKGRP type UT .

Field descriptions for table TRKGRP type UT (Sheet 1 of 5)

Field	Subfield or refinement	Entry	Explanation and action
GRPKEY		see subfield	*Group key* This field consists of subfield CLLI.
	CLLI	alphanumeric (1 to 16 characters)	*Common language location identifier* Enter the common language location identifier (CLLI) code assigned to the trunk group in table CLLI.
GRPINFO		see subfields	*Variable group data* This field consists of subfields GRPTYP, TRAFSNO, PADGRP, NCCLS, TRAFCLS, PRTNM, SCRNCL, SNPA, ORIGSRCE, OFFHKID, STDGT, STPDGT, ST2PDGT, MAXTIME, ANSWTIME, BILLING, CALLINTR, OPENDISC, and SFTRCODE. Refer to section “General field information" in table TRKGRP for information concerning an alternate structure for this field that results from the datafill of table CUSTFLDS.
	GRPTYP	UT	*Group type* Enter UT to specify the group type for utility telemetry trunks.

Field descriptions for table TRKGRP type UT (Sheet 2 of 5)

Field	Subfield or refinement	Entry	Explanation and action
	TRAFSNO	numeric (0 to 127)	*Traffic separation number* Enter the incoming and outgoing traffic separation number assigned to the trunk group. If a traffic separation number is not required, enter 0 (zero). For switches with software package NTX085AA (Traffic Separation Peg Count), enter a value from 1 to the value of office parameter TFAN_OUT_MAX_NUMBER in table OFCENG. For switches without software package NTX085AA, enter a value from 1 to 15. Incoming and outgoing traffic separation numbers 1 to 9 should be reserved for generic traffic separation numbers. For more information, refer to table TFANINT.
	PADGRP	alphanumeric (1 to 5 characters)	*Pad group* Enter the name of the pad group assigned to the trunk group in table PADDATA. For more information, refer to table PADDATA.
	NCCLS	NCBN NCID NCIM NCIT NCLT NCOF NCON NCOT NCRT NCTC or NOSC	*Operational measurements no-circuit class* Enter the operational measurements (OM) no-circuit class (NCCLS) to indicate which OM register is incremented if treatment GNCT (generalized no circuit) occurs. If the trunk group direction is incoming, this field is not required. Enter NCRT (no circuit). For more information, refer to table TRKGRP and the *Operational Measurements Reference Manual*.
	TRAFCLS	alphabetic (2 characters)	*Traffic usage class* Enter the traffic usage class assigned to the trunk group. For more information, refer to table TRKGRP.

TRKGRP type UT (continued)

Field descriptions for table TRKGRP type UT (Sheet 3 of 5)

Field	Subfield or refinement	Entry	Explanation and action
	PRTNM	alphanumeric (1 to 4 characters) or NPRT	*Standard pretranslator name* If standard pretranslation is required, enter the name of the standard pretranslator defined in table STDPRTCT to which digit translation is to route after the receipt of the first digit. If pretranslation is not required, enter NPRT (no pretranslation). If office parameter TRK_OOS_CHK_ON in table OFCVAR is set to Y (yes), all trunks in the group must be busy before the value of this field can be changed by data modification order (DMO).
	SCRNCL	alphanumeric (1 to 4 characters) or NSCR	*Class-of-service screening table name* If class-of-service screening is required, enter the name of the class-of-service screening table (datafilled in table SCRNCLAS) to which digit translation routes. If class-of-service screening is not required, enter NSCR (no screening).
	SNPA	numeric (3 digits)	*Serving NPA* Enter the serving NPA code for the trunk group. This code, which is specified in table HNPACODE, specifies routing for digit translation. If office parameter TRK_OOS_CHK_ON in table OFCVAR is set to Y (yes), all trunks in the group must be busy before the value of this field can be changed by DMO.
	ORIGSRCE	LCL or NLCL	*Originating source* Enter the originating source of the call, LCL (local) or NLCL (nonlocal). This field is used to screen calls in subtable HNPACONT.HNPACODE. For more information, refer to section “Notes on originating source" in table HNPACONT.HNPACODE.

Field descriptions for table TRKGRP type UT (Sheet 4 of 5)

Field	Subfield or refinement	Entry	Explanation and action
	OFFHKID	0 to 99	*Off-hook transmission protocol identifier* Enter the ANI II identifier for off-hook transmission. The default value is 70.
	STDGT	0	*ST digit abbreviated ring duration* Enter 0 (zero). An abbreviated ring duration is not supported in this version. The default value is 0.
	STPDGT	0	*STP digit abbreviated ring duration* Enter 0 (zero). An abbreviated ring duration is not supported in this version. The default value is 0.
	ST2PDGT	0	*ST2P digit abbreviated ring duration* Enter 0 (zero). An abbreviated ring duration is not supported in this version. The default value is 0.
	MAXTIME	1 to 999	*Maximum call time* Enter the maximum duration (in seconds) of a telemetry call. The default value is 20.
	ANSWTIME	0 to 20	*Answer timeout* Enter a timeout value (in units of 100 ms) for the interval between the generation of the post-cut-through wink sent to the trunk and the TIU answering the call. For no timeout, enter 0 (zero). The default value is 5.

TRKGRP type UT (continued)

Field descriptions for table TRKGRP type UT (Sheet 5 of 5)

Field	Subfield or refinement	Entry	Explanation and action
	BILLING	Y or N	*Billing record required* If calls originating on this trunk group will generate a billing record, enter Y (yes). Otherwise, enter N (no). The default value is Y. • *Note:* The DMS office must meet the following two conditions for BILLING to be set to Y: • It must use the Bellcore AMA format for its billing records. The billing format is specified in table CRSFMT. • The LAMA software feature must be present. It is present if the office parameter LAMA_OFFICE is set to Y (yes) in table OFCOPT.
	CALLINTR	Y or N	*Call interrupt* If calls originated on this trunk group can be interrupted by a new incoming call to the end user's line, enter Y (yes). Otherwise, enter N (no). The default value is N.
	OPENDISC	Y or N	*Open battery interval for disconnect* If an 800-ms open battery interval is to be applied to the line to disconnect the Telemetry Interface Unit (TIU), enter Y (yes). Otherwise, enter N (no). The default value is Y.
	SFTRCODE	0 to 999	*Service feature code* Enter the service feature code that is to appear in the AMA record (if one is generated). The default value is 0.

Data ll e xample

The following example shows sample data ll for table TRKGRP type UT .

MAP display example for table TRKGRP type UT

```
GRPKEY          GRPINFO
_____________________________________________________________

UTGRP1          UT 0 NPDGP NCRT NIL P621 NSCR 613 LCL 70
                0 0 0 20 5 Y N Y 0
```

The data ll in this e xample de nes a trunk group as follo ws:

- UTGRP1 is the code in table CLLI for this trunk group.
- UT is the trunk group type.
- 0 indicates that no traf c separation number is required.
- NPDGP is the pad group.
- NCRT (no circuit) is required because the trunk group is incoming.
- NIL indicates that no traf c class code is associated with this trunk group.
- P621 is the standard pretranslator to which translation routes after the rst digit is received.
- NSCR indicates no class-of-service screening is required.
- 613 is the serving NPA.
- LCL indicates that the originating source of calls on this trunk group is local.
- 70 is the ANI II identi er for of f-hook transmission.
- 0 is the ring duration associated with the ST digit.
- 0 is the ring duration associated with the STP digit.
- 0 is the ring duration associated with the ST2P digit.
- 20 seconds is the maximum duration of a telemetry call on this trunk group.
- 5 units of 100 milliseconds (500 milliseconds) is the timeout interval between the generation of the post-cut-through wink sent to the trunk and the TIU answering the call.
- Y indicates that calls originating on this trunk group are billable.

TRKGRP type UT (end)

- N indicates that calls originating on this trunk group cannot be interrupted by new incoming calls to the subscriber line.
- Y indicates that an 800-millisecond open battery interval is applied to disconnect the TIU.
- 0 is the service feature code that is to appear in the AMA record.

Operator Veri cation T runk Group Type

Outgoing trunk group type VR (veri cation) in a DMS end of ce 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 veri cation on a line that is b usy.

Veri cation 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 veri cation (eld MODE is VF)
- the trunk group is dedicated to toll completing and veri cation (eld MODE is CV), and the type of call is OA (operator assisted)

Trunks with the trunk group type VR are assigned to horizontals of the minibar switches in the table MTAMDRVE.

Trunks with trunk group type VR are data lled with card code NT2X90A in table TRKSGRP.

The hold type for trunk group type veri cation (VR) type is joint hold. This means that the call is taken down if both the originator and the terminator are on hook.

TRKGRP type VR (continued)

Data ll

The following table lists the data ll for table TRKGRP type VR.

Field descriptions (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
GRPKEY		see subfield	*Group key* This field consists of subfield CLLI.
	CLLI	alphanumeric (1 to 16 characters)	Enter the common language location identifier (CLLI) code assigned to the trunk group in table CLLI. The operator verification trunk group for the switch has pseudo-CLLI VER90 in table CLLI. The codes in table CLLI for operator verification trunk groups for remote sites are defined by the operating company. For assignment of operation verification trunk groups for remote switches, see table SITE.
GRPINFO		see subfields	*Variable group data* This field consists of subfields GRPTYP, TRAFSNO, PADGRP, NCCLS, and TRAFCLS. Refer to section “General field information" in table TRKGRP for information concerning an alternate structure for this field that results from the datafill of table CUSTFLDS.
	GRPTYP	VR	*Group type* Enter the trunk group type VR.

Field descriptions (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
	TRAFSNO	numeric (0 to 127)	*Traffic separation number* Enter the incoming and outgoing traffic separation number assigned to the trunk group. If a traffic separation number is not required, enter 0 (zero). For switches with software package NTX085AA (Traffic Separation Peg Count), enter a value from 1 to the value of office parameter TFAN_OUT_MAX_NUMBER in table OFCENG. For switches without software package NTX085AA, enter a value from 1 to 15. Incoming and outgoing traffic separation numbers 1 to 9 should be reserved for generic traffic separation numbers. For more information, refer to table TFANINT.
	PADGRP	alphanumeric (1 to 5 characters)	*Pad group* Enter the name of the pad group assigned to the trunk group in table PADDATA. For more information, refer to table PADDATA.
	NCCLS	NCBN NCID NCIM NCIT NCLT NCOF NCON NCOT NCRT NCTC or NOSC	*Operational measurements no-circuit class* Enter the operational measurements (OM) no-circuit class (NCCLS) to indicate which OM register is incremented if treatment GNCT (generalized no circuit) occurs. If the trunk group direction is incoming, this field is not required. Enter NCRT (no circuit). For more information, refer to table TRKGRP and the *Operational Measurements Reference Manual*.
	TRAFCLS	alphabetic (2 characters)	*Traffic usage class* Enter the traffic usage class assigned to the trunk group. For more information, refer to table TRKGRP.

TRKGRP type VR (end)

Data ll e xample

The following example shows sample data ll for table TRKGRP type VR.

MAP display example for table TRKGRP type VR

```
GRPKEY                  GRPINFO
_____________________________________________________________
VER90                   VR 0 ELO NCRT MI
```

0+ and 0- Tandem to TSPS or TOPS Trunk Group Type

For related information, refer to TRKGRP types OP, OS, and SC.

Incoming trunk group type ZI in a DMS toll of ce performs tandem switching of 0+ and 0- traf c to Traf c Operator Position Systems (TOPS) over outgoing trunk group type OP (operator position).

If the far-end switch is a DMS switch, the far-end trunk group type ZI leaves the far-end DMS of ce as trunk group type OP .

Signaling from the operator to the end of ce must be either inband or multiwink. If signaling is multiwink, it is transmitted directly through the switching network to the end of ce.

Note: TRKGRP type ZI is only used in currently existing DMS central of ces.

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 traf c 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

Data ll

The following table lists the data ll for table TRKGRP type ZI.

Field descriptions (Sheet 1 of 4)

Field	Subfield or refinement	Entry	Explanation and action
GRPKEY		see subfield	*Group key* This field consists of subfield CLLI.
	CLLI	alphanumeric (1 to 16 characters)	*Common language location identifier* Enter the common language location identifier (CLLI) code assigned to the trunk group in table CLLI.

TRKGRP type ZI (continued)

Field descriptions (Sheet 2 of 4)

Field	Subfield or refinement	Entry	Explanation and action
GRPINFO		see subfields	*Variable group data* This field consists of subfields GRPTYP, TRAFSNO, PADGRP, NCCLS, TRAFCLS, PRTNM, SCRNCL, SNPA, ORIGSRCE, COIN, and POS. Refer to section “General field information" in table TRKGRP for information concerning an alternate structure for this field that results from the datafill of table CUSTFLDS.
	GRPTYP	ZI	*Group type* Enter the trunk group type ZI.
	TRAFSNO	numeric (0 to 127)	*Traffic separation number* Enter the incoming and outgoing traffic separation number assigned to the trunk group. If a traffic separation number is not required, enter 0 (zero). For switches with software package NTX085AA (Traffic Separation Peg Count), enter a value from 1 to the value of office parameter TFAN_OUT_MAX_NUMBER in table OFCENG. For switches without software package NTX085AA, enter a value from 1 to 15. Incoming and outgoing traffic separation numbers 1 to 9 should be reserved for generic traffic separation numbers. For more information, refer to table TFANINT.
	PADGRP	alphanumeric (1 to 5 characters)	*Pad group* Enter the name of the pad group assigned to the trunk group in table PADDATA. For more information, refer to table PADDATA.

TRKGRP type ZI (continued)

Field descriptions (Sheet 3 of 4)

Field	Subfield or refinement	Entry	Explanation and action
	NCCLS	NCRT	*Operational measurements no-circuit class* This field is not required. Enter the operational measurements (OM) no circuit (NCRT). Entries outside the range indicated for this field are not valid. For more information, refer to table TRKGRP and the *Operational Measurements Reference Manual*.
	TRAFCLS	alphabetic (2 characters)	*Traffic usage class*Enter the traffic usage class assigned to the trunk group. For more information, refer to table TRKGRP.
	PRTNM	alphanumeric (1 to 4 characters) or NPRT	*Standard pretranslator name* No pretranslation is required. Enter NPRT (no pretranslation). If office parameter TRK_OOS_CHK_ON in table OFCVAR is set to Y (yes), all trunks in the group must be busy before the value of this field can be changed by data modification order (DMO).
	SCRNCL	alphanumeric (1 to 4 characters)or NSCR	*Class-of-service screening table name* Class-of-service screening is not required. Enter NSCR (no screening).
	SNPA	numeric (3 digits)	*Serving numbering plan area* Enter the serving 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).

TRKGRP type ZI (end)

Field descriptions (Sheet 4 of 4)

Field	Subfield or refinement	Entry	Explanation and action
	ORIGSRCE	LCL or NLCL	*Originating source* Enter the originating source of the call, LCL (local) or NLCL (nonlocal). This field is used to screen calls in subtable HNPACONT.HNPACODE. For more information, refer to the “Notes on originating source" section in table HNPACONT.HNPACODE.
	COIN	Y or N	*Coin* Enter Y (yes) if the trunk group carries coin traffic. Otherwise, enter N (no). If office parameter TRK_OOS_CHK_ON in table OFCVAR is set to Y (yes), all trunks in the group must be busy before the value of this field can be changed by data modification order (DMO).
	POS	CTOP, TOPS, or TSPS	*Position* Enter the position in the position table that lists the CLLI of the terminating trunk group. Enter CTOP for the Centralized Traffic Operator Position, TOPS for the Traffic Operator Position System, or TSPS for the Traffic Service Position System.

Data ll e xample

The following example shows sample data ll for table TRKGRP type ZI.

MAP display example for table TRKGRP type ZI

```
GRPKEY                          GRPINFO
_____________________________________________________________
ICZI                            ZI 0 ELO NCRT NIL NPRT NSCR 613
LCL N TSPS
```

TRKLATA

Table name

Trunk Local Access and Transport Area Table

Functional description

Table TRKLATA allows the operating company to determine the originating local access and transport area (LATA) of a call. Table TRKLATA uses the common language location identi er (CLLI) of the incoming trunk group and either the calling numbering plan area (NPA) code, or the NPA and the station code together (NPA-NXX), to determine the originating LATA of the call.

Table TRKLATA must contain at least one tuple for each incoming trunk for which the INTERLATA conditional route selector is used in table OFRT.

If the end of ce associated with a trunk group serv es more than one LATA, multiple entries can be made to associate different NPA or NPA-NXX codes with LATAs.

If an incoming trunk group and the associated calling digits are not data lled in table TRKLATA, the call is treated as an intraLATA call.

Table TRKLATA must contain at least two tuples for each super centralized automatic message accounting (superCAMA) and each Traf c Operator Position System (TOPS) trunk group that carries LATA Equal Access System (LEAS) traf c. One of these tuples must have the entry in eld DIGITS equal to 000, so that the trunk group can be identi ed as included in LEAS prior to the arrival of automatic number identi cation (ANI), and in cases of ANI fail.

Table TRKLATA is data lled initially by operating company personnel when the of ce is commissioned. The table can be modi ed by operating company personnel using the table editor.

Data ll sequence and implications

The following tables must be data lled before table TRKLA TA:

- LATANAME
- TRKGRP
- PICNAME (in an LEAS switch)

Table size

0 to 32 767 tuples

TRKLATA (continued)

Table TRKLATA can have one or more entries for any trunk group. Up to 8191 trunk groups can be included in the table. The size of table TRKLATA is controlled by the entry for table TRKGRP in table DATASIZE.

Data ll

The following table lists data ll for table TRKLA TA.

Field descriptions (Sheet 1 of 3)

Field	Subfield or refinement	Entry	Explanation and action
ORIGKEY		see subfields	*Originating key* This field consists of subfields TRUNKNM and DIGITS.
	TRUNKNM	alphanumeric (1 to 16 characters)	*Trunk name* Enter the common language location identifier (CLLI) name of the incoming trunk group as defined in table CLLI.
	DIGITS	numeric (1 to 18 digits)	*Digits of calling number* Enter the numbering plan area (NPA) or the NPA and station code (NPA-NXX) of the calling number in an incoming call. Enter 000 for intertoll trunks, and for all centralized automatic message accounting (CAMA) trunks that do not provide the calling number for automatic number identification (ANI) fail and operator number identification (ONI) calls.
ORIGLATA		alphanumeric (1 to 8 characters)	*Originating local access and transport area name* Enter the name of the local access and transport area (LATA) defined in table LATANAME for the originating non-equal access end office.

TRKLATA (continued)

Field descriptions (Sheet 2 of 3)

Field	Subfield or refinement	Entry	Explanation and action
LEASTRNK		see subfield	*Local Access and Transport Area Equal Access System trunk* This field indicates whether or not a trunk carries LATA Equal Access System (LEAS) traffic, and specifies the default carrier or treatment for that trunk. Field LEASTRNK consists of subfield LEASTRK.
	LEASTTRK	Y or N	*LATA Equal Access System trunk selector* Enter N for all trunks in a non-LEAS office. In a LEAS office, enter Y (yes) for Traffic Operator Position System (TOPS) trunks if field ENDOFFICE in table TOPEATRK is set to NCONFORM, or for superCAMA trunks. Datafill refinement CARRTRMT. Enter N for all other types of trunks in a LEAS office. No refinements require datafill.
CARRTRMT		C or T	*Carrier or treatment selector* If the entry in subfield LEASTRK is Y, datafill this refinement. This field specifies the default assignment for the LEAS trunk group. Enter C (carrier) and datafill refinement CARRIER. Enter T (treatment) and datafill refinement TREAT.

TRKLATA (end)

Field descriptions (Sheet 3 of 3)

Field	Subfield or refinement	Entry	Explanation and action
CARRIER		alphanumeric (1 to 16 characters	*Carrier name* If the entry in subfield LEASTRK is Y and the entry in refinement CARRTRMT is C, datafill this refinement. Enter the name of the interLATA carrier or international carrier defined in table OCCNAME, used as the default assignment.
TREAT		alphabetic (4 characters)	*Treatment name* If the entry in subfield LEASTRK is Y and the entry in refinement CARRTRMT is T, datafill this refinement. Enter the name of the treatment used as the default assignment. The recommended treatment is DACD (dial access code announcement), which instructs the subscriber to dial 10XXX.

Data ll e xample

The following example shows sample data ll for table TRKLA TA.

MAP display example for table TRKLATA

```
                          ORIGKEY ORIGLATA   LEASTRNK
_____________________________________________________
        TRKLPBK             000    LATA1 Y C  NOCAR
```

TRKMEM

Table name

Trunk Member Table

Functional description

Table TRKMEM lists the data for each trunk specified in tables TRKGRP and TRKSGRP.

Table TRKMEM does not include members of intertoll trunk groups that have common channel interoffice signaling (CCIS) and members of CCITT7 trunk groups in DMS-300 gateway switches.

For members of intertoll trunk groups with CCIS, see table C7TRKMEM. For members of CCITT7 trunk groups in DMS-300 switches, see tables N7TRKMEM and NO7TKMEM. For members of Global Trunks, see table TRKBCHNL.

Spectrum Peripheral Module (SPM) is datafilled into the PMTYPE field of table TRKMEM.

TRKMEM records the following data for each trunk group member and for each analog or digital trunk, including the spare trunks:

- the code assigned to the trunk group in table CLLI
- the external trunk number assigned by the operating company
- the number of the trunk subgroup
- the equipment number

To change a trunk member from a working trunk group to a spare, delete the member from the working trunk group in table TRKMEM, then add the member to the spare trunk group in table TRKMEM.

> ***Note:*** If the switch has remote operation, the digital carrier module (DCM) assignments in table LMINV cannot be used for assignment to trunk groups.

Assign Common Channel Signaling (CCS7) links with a linkset type (field LSTYPE value ALINK in table C7LKSET) and an allocation scheme (field ALLOC value STBASIC or STPOOL in table C7LINK) to different digital trunk controllers (DTC) in table TRKMEM to provide for redundancy. Failure to do this leads to CCS7 outage if the DTC goes out of service.

Cross checking is performed on table TRKMEM tuples to table TRKSGRP and TRKOPTs to ensure that only BICC IT trunks have the ECSTAT field in TRKSGRP set to INTERNAL. If an attempt is made to add an tuple for an IT

TRKMEM (continued)

trunk group to table TRKMEM (BICC trunks are not datafilled in table TRKMEM) with ECSTAT in TRKSGRP set to INTERNAL, the attempt is rejected.

Packet Telephony (PT) solutions PT-IP / PT-AAL1 / UA-AAL1 do not support trunk subgroups with both legacy and packet members. This restriction derives from the fact that all members in a given trunk subgroup share the same echo cancellation datafill via TRKSGRP and these values may be interpreted differently by packet and legacy peripherals.

For this reason, we suggest that packet members be combined in one trunk subgroup and legacy members be combined in a second trunk subgroup if both types are needed in the same trunk group. This requirement is not enforced but a notification message is generated during provisioning when both packet and legacy members are detected in the same trunk subgroup.

Trunk groups DTU, LTU, MTU, TTT, and TTU

Each member of the trunk groups with a common language location identifier (CLLI) of DTU, LTU, MTU, TTT or TTU consists of two trunk circuits that are always located in adjacent slots in the trunk or maintenance trunk module. For product engineering code DTU4X23AA both circuits must be specified in the trunk member table. For the following PECs, only the physical location of the circuit is required in the trunk member table:

- TTT2X96AA
- TTU2X47AA
- LTU2X11AA
- MTU4X97AA
- DTU4X23AA

The line test units for the host switch and its associated remote location are all listed under the fixed pseudo-CLLI code LTU.

Datafill an LTU or MTU in table TRKMEM before adding them to table MTAHORIZ. If the LTU or MTU is deleted from table TRKMEM, the corresponding tuple in table MTAHORIZ is marked as deleted, but it is automatically restored if the LTU or MTU is reentered in table TRKMEM.

The following table indicates how the datafill in table TRKMEM corresponds with the time slots.

Datafill and time slots

Trunk	Time slot	Trunk	Time slot
1	1	16	17
2	2	17	18
3	3	18	19
4	4	19	20
5	5	20	21
6	6	21	22
7	7	22	23
8	8	23	24
9	9	24	25
10	10	25	26
11	11	26	27
12	12	27	28
13	13	28	29
14	14	29	30
15	15	30	31

Note 1: Time slot 16 cannot be datafilled because it is reserved for signaling. Only a maximum of 30 trunks can be datafilled in a particular carrier. If time slot 16 is activated, a maximum of 31 trunks can be datafilled. To activate time slot 16, the following conditions must be met:

- Table LTCINV must be datafilled for optional card NT6X28.
- Table LTCPSINV carriers must be CCS. Channel 16 cannot be datafilled on a CAS or digital private network signaling system (DPNSS) carrier.

Note 2: If offices are equipped with time slot flexibility for PCM30 carriers, the maximum number of non-signaling trunks that can be added to a PDTC is 480. Since datafill checks are not made to prevent operating company personnel from datafilling more than 480 non-signaling trunks,

TRKMEM (continued)

care must be exercised when adding new trunk circuits to a PDTC. If a PDTC is equipped with more than 480 trunks, PM180 switch error messages will result. In such a case, the following message is an indication that the capacity of the non-signaling trunks in the PDTC has been exceeded:

```
NO DB AVAIL
```

Note 3: All trunks with a signaling type of a DPNSS in table TRKSGRP must have their associated signaling links and inter-peripheral message links datafilled before they can be added to table TRKMEM.

Note 4: For trunk groups using the auto-identified outward dialing (AIOD) trunk feature, a tuple is automatically added to or deleted from table AIODTKN for each TRKMEM tuple added or deleted. The external trunk number of the trunk member is used as the AIOD token for table AIODTKN. The external trunk number must be unique over all trunks and lines using the same AIOD group for AIOD servicing.

X.75 trunk groups

For an X.75 trunk member to be datafilled in table TRKMEM, the following conditions must be satisfied:

- The trunk member must be datafilled first in table X75INFO.
- The DS0 channel must be datafilled in table SPECCONN against an XSG channel.

X.25 trunk groups

For an X.25 trunk member to be datafilled in table TRKMEM, the DS0 channel must be datafilled in table SPECCONN against an XSG channel.

Restricting access to table TRKMEM

Access to table TRKMEM can be restricted by datafilling table CUSTPROT. For United Kingdom customers, access to table TRKMEM must be restricted by datafilling table CUSTPROT to prevent the operating company from moving physical trunks into a different trunk group.

Datafill sequence and implications

The following tables must be datafilled before table TRKMEM:

- CLLI
- TRKGRP
- TRKSGRP
- RCCINV
- RCCPSINV

- X75INFO (for an X.75 trunk member)
- SPECCONN (for an X.75 or X.25 trunk member)
- DS0 links on a PCM30 digital trunk controller (PDTC) must first be datafilled in table LTCPSINV before digital jack trunks can be datafilled
- RCCINV (Synchronous Optical Network (SONET) remote cluster controllers (SRCC) must be datafilled first in table RCCINV)
- DS1 must be defined on its P-side in table RCCPSINV
- For PMTYPE of DTM, tables TMINV and TRSGRP must be datafilled before this table. Tables DRAMS and EDRAMINV must also be datafilled.
- When the office is configured with SPMs that have integrated services digital network (ISDN) user part (ISUP) or per trunk signaling (PTS) trunks, datafill table TRKMEM after table MNCKTPAK.

Table OAVLMAP must be datafilled after table TRKMEM. Deletions in table TRKMEM are not allowed if table OAVLMAP has a reference to the tuple being deleted.

When an ISUP or a PTS trunk is added to an SPM, the following dependencies apply:

- AB-bit resources must be datafilled in table MNCKTPAK before a PTS trunk is added in TRKMEM.
- At least one MF resource must be datafilled in table MNCKTPAK before a PTS trunk with an incoming pulse type of MF is added to table TRKMEM (on a given SPM node). The incoming pulse type is datafilled in the associated trunk subgroup (table TRKSGRP).
- At least one dual-tone multifrequency (DTMF) resource must be datafilled in table MNCKTPAK before a PTS trunk with an incoming pulse type of DT is added to table TRKMEM (on a given SPM node).
- If the PM type of the TRKMEM tuple = SPM, the incoming pulse type (IPULSTYP) field in the associated table TRKSGRP tuple cannot be datafilled as NP (nil_pulse_type).
- An ISUP trunk must be datafilled in table TRKMEM before it can be datafilled in table C7TRKMEM.

TRKMEM (continued)

Table size

0 to 16 000 000 tuples

Note: The SPM tuples in the TRKMEM table use a refinement of the MEM_VAR_AREA, which is part of the TRUNK_MEMBER_DATA_TUPLE area. Therefore, no reformats are needed for dump and restore.

Datafill

The following table lists datafill for table TRKMEM.

Field descriptions

Field	Subfield	Entry	Explanation and action
CLLI		alphanumeric (1 to 16 characters)	*Common language location identifier* Enter the common language location identifier (CLLI) code that is assigned to the trunk group to which the trunk is a member. This CLLI code is assigned in table CLLI.
EXTRKNM		numeric (0 to 9999)	*External trunk number* Enter the external trunk number that is assigned to the trunk. For members of trunk groups using the AIOD option, the external trunk number must be unique over all trunks and lines using the same AIOD group.
SGRP		numeric (0 to 1)	*Subgroup number* Enter the subgroup number to which the trunk is assigned.
MEMVAR		see subfield	*Variable data for members* This field consists of subfield PMTYPE and refinements.

TRKMEM (continued)

Field descriptions

Field	Subfield	Entry	Explanation and action
	PMTYPE	ADTC AIM ALGC ARCC ATM DCA DCM DTC DTCI DTC GWC ICP IDT IDTC ILTC ISM LGC LTC MMA MTM OAU PDTC PLGC PTM RCC RCC2 RCO2 RMM RMSC RSM SMA SMA2 SPM SMU SRCC STM TAN T8A TM2	*Peripheral module type* Enter the peripheral module (PM) type on which the trunk is mounted and datafill the refinements associated with this entry value. Each refinement entry must be separated from the next by a blank space. If the CLLI code is for a trunk group of type TPS101, it must be assigned to a maintenance trunk module (MTM) or packaged trunk module (PTM). If the value of field PMTYPE is ADTC, ALGC, ARCC, DCA, IDTC, ILTC, PDTC, PLGC, datafill subfields DEQNO, DEQCKTNO, and DEQCKTTS. If the value of field PMTYPE is AIM, ATM, DTM, ISM, MMA, MTM, OAU, PTM, RMM, RSM, STM, TAN, T8A, TM2, TM4, TM8, or TMA, datafill subfields TMNO and TMCKTNO. If the value of field PMTYPE is DCM, datafill subfields DCMNO, DCMCKTNO, and DCMCKTTS. If the value of field PMTYPE is DTC, datafill subfields DTCNO, DTCCKTNO, and DTCCKTTS. If the value of field PMTYPE is DTCI, datafill subfields DTCINO, DTCICKTNO, and DTCICKTTS.

TRKMEM (continued)

Field descriptions

Field	Subfield	Entry	Explanation and action
		TM4 TM8 TMA or TMS	If the value of field PMTYPE is ICP, datafill subfields ICPNO, ICPCKTNO, and ICPCKTTS. If the value of field PMTYPE is IDT, datafill subfields IDTNO and SHELFSLT. If the value of field PMTYPE is GWC, datafill subfields GWCNO, GWCNODENO, and GWCTRMNO for CS 2000 only. If the value of field PMTYPE is LGC, datafill subfields LGCNO, LGCCKTNO, and LGCCKTTS. If the value of field PMTYPE is LTC, datafill subfields LTCNO, LTCCKTNO, and LTCCKTTS. If the value of field PMTYPE is RCC, datafill subfields RCCNO, RCCCKTNO, and RCCCKTTS. If the value of field PMTYPE is RCC2, datafill subfields RCC2NO, RCC2CKTNO, and RCC2CKTTS. If the value of field PMTYPE is RCO2, datafill subfields RCO2NO, RCO2CKTNO, and RCO2CKTTS. If the value of field PMTYPE is RMSC, datafill subfields RMSCNO, RMCCKTNO, and RMCCKTTS. If the value of field PMTYPE is RMSC, datafill subfields RMSCNO, RMCCKTNO, and RMCCKTTS. If the value of field PMTYPE is SMA, datafill subfields SMANO, SMACKTNO, and SMACKTTS. If the value of field PMTYPE is SMA2, datafill subfields SMA2NO, SMA2CKTNO, and SMA2CKTTS. If the value of field PMTYPE is SMU, datafill subfields SMUNO, SMUCKTNO, and SMUCKTTS.

TRKMEM (continued)

Field descriptions

Field	Subfield	Entry	Explanation and action
			If the value of field PMTYPE is SPM, datafill subfields SPMNO, SPMCKTNO, and SPMCKTTS. If the value of field PMTYPE is SRCC, datafill subfields SRCCNO, SRCCCKTNO, and SRCCCKTTS. If the value of field PMTYPE is TMS, datafill subfields TMSNO, TMSCKTNO, and TMSCKTTS. ***Note:*** PRA type trunks can be datafilled on an ISDN Austrian digital trunk controller (ADTC). These trunks can be datafilled on ports 1 to 31. All members must have an interface identifier specified in table LTCPSINV before they can be added. An ISDN capable ADTC shelf differs from the standard ADTC because it has an ISP card NTBX01AA and a universal time switch NT6X44EA card present. The shelf PEC is 6X02NA, the frame type is LTEI. Time switch cards AX73 and AX79 can also be used. For offices with PTMs, datafill the value MTM. PTMs are manufacturer discontinued. If the peripheral module is PDTC, digital jack trunks can be datafilled if optional package NTXK50AA (TTP-digital jack ended trunks) is in the load. Digital jack trunks can only be datafilled on time slot 1. The PDTC must be datafilled in table LTCINV and the specified circuit must be datafilled as a DS0 link in table LTCPSINV.

TRKMEM (continued)

Field descriptions

Field	Subfield	Entry	Explanation and action
			If the peripheral module is PDTC, PRA type trunks can be datafilled on ports 0 through 15 and on circuits 1 through 31. Time slot 16 can be datafilled for IDTCs with carriers of signaling type CCS. If an attempt is made to datafill time slot 16 with carriers of type CAS or DPNSS, an error message is output. For NFA trunk member, the type of peripheral module (PM) is restricted to either DTC or LTC. These PMs must be equipped with universal tone receiver (UTR). The RCO2 is a remote unit part of the CPM (Common Peripheral Module) family, used in the DMS-100 family for international applications. It is the international version of the RCC2. The RCO2 has the same architecture as the RCC2 and is based on two shelves (introduced for the Domestic RCC2 program in BCS33). RCO2 supports up to 16 PCM30 on the C-side (mapping towards the LGCO) and up to 46 PCM30 on the P-side including 24 PCM30 on the extension shelf. RCO2 supports several types of lines, trunks, and certain small remotes on its P-side, as listed below: • line concentrating module (LCM) • extended line concentrating module (LCME) • community dial office (CDO) trunks • PBX trunks • remote unit (TBD) RCO2 supports up to 16 PCM30s on the C-side (mapping towards the LGCO) and up to 46 PCM30s on the P-side, including 24 PCM30s on the extension shelf.

PMTYPE = ADTC, ALGC, ARCC, DCA, IDTC, ILTC, PDTC, or PLGC

If the value of field PMTYPE is ADTC, ALGC, ARCC, DCA, IDTC, ILTC, PDTC, or PLGC, datafill subfields DEQNO, DEQCKTNO, and DEQCKTTS as described below.

Field descriptions for conditional datafill

Field	Subfield	Entry	Explanation and action
	DEQNO	numeric (0 to 511)	*Digital equipment number* Enter the number of the digital equipment module to which the trunk group member is assigned.
	DEQCKTNO	numeric (0 to 19)	*Digital equipment circuit number* Enter the number of the digital equipment module circuit card to which the trunk group member is assigned.
	DEQCKTTS	numeric (1 to 31)	*Digital equipment circuit time slot* Enter the number of the digital equipment circuit card time slot to which the trunk group member is assigned. If the flexible time slot feature is not turned on, the range of valid entries is 1 to 30. Datafill NT6X28 as an optional card in table LTCINV to turn on the flexible time slot feature.

TRKMEM (continued)

PMTYPE = AIM, ATM, ISM, DTM, MMA, MTM, OAU, PTM, RMM, RSM, STM, TAN, T8A, TM2, TM4, TM8, or TMA

If the value of field PMTYPE is AIM, ATM, ISM, DTM, MMA, MTM, OAU, PTM, RMM, RSM, STM, TAN, T8A, TM2, TM4, TM8, or TMA, datafill subfields TMNO and TMCKTNO as described below.

Field descriptions for conditional datafill

Field	Subfield	Entry	Explanation and action
	TMNO	numeric (0 to 2047)	*Trunk module number* Enter the number assigned to the trunk module on which the trunk group member is assigned.
	TMCKTNO	numeric (0 to 29)	*Trunk module circuit number* Enter the number of the trunk module circuit to which the trunk group member is assigned. The value for each subfield must be separated by a blank space. or See note added to table STN. or (AIM type TM only) If trunk emulation is provided for NT2X75AA/BA, enter 7 to 10. If trunk emulation is provided for NT1X54AA or NT2X72AA/AB/AC/BA and FX48AA is datafilled for AIM in table TMINV, enter 11. ***Note:*** Only one emulation type can be used at a time for NT2X72xx, NT2X81xx and NT2X90xx If trunk emulation is provided for Montalk and FX48AA is datafilled for AIM in table TMINV, enter 12.
		numeric (1 to 15 and 17 to 29)	
		numeric (7 to 10) 11 12 13 to 16 17 or 18 19 20 or 21 22 23 24 25 26 to 28	

TRKMEM (continued)

Field descriptions for conditional datafill

Field	Subfield	Entry	Explanation and action
			If trunk emulation is provided for NT5X30AA/BA, NT2X95AA, NT2X82AA or Montalk and FX48AA is datafilled for AIM in table TMINV, enter 13 to 16. If trunk emulation is provided for NT2X82AA, NT2X95AA or Montalk and FX48AA is datafilled for AIM in table TMINV, enter 17 or 18. If trunk emulation is provided for NT5X30AA/BA and FX48AA is datafilled for AIM in table TMINV, enter 19. If trunk emulation is provided for NT2X71AA and FX48AA is datafilled for AIM in table TMINV, enter 20 or 21. If trunk emulation is provided for NT2X81AA/AB/BA, NT2X90AD or Montalk and FX48AA is datafilled for AIM in table TMINV, enter 22. ***Note:*** Only one emulation type can be used at a time for NT2X72xx, NT2X81xx and NT2X90xx If trunk emulation is provided for NT1X54AA, NT2X72AA/AB/AC/BA, enter 23. ***Note:*** Emulation of NT2X72xx on circuit 23 and NT2X81xx on circuit 25 may not be used at the same time If trunk emulation is provided for NT5X30AA/BA, enter 24.

TRKMEM (continued)

Field descriptions for conditional datafill

Field	Subfield	Entry	Explanation and action
			If trunk emulation is provided for NT2X81AA/AB/BA, NT2X90AD or Montalk, enter 25. ***Note:*** Emulation of NT2X72xx on circuit 23 and NT2X81xx on circuit 25 may not be used at the same time If trunk emulation is provided for NT2X90AD or Montalk, enter 26 to 28.
		numeric (4 to 24, 25 to 27, 28)	(AIM based RMM type TM only) If trunk emulation is provided by a pass-through to the RMM shelf, enter 4 to 24. ***Note:*** Non-AIM circuit packs can be provisioned in these circuits and used if the RMM is not AIM based If trunk emulation is provided for NT2X90AD or Montalk, enter 25 to 27. If trunk emulation is provided for Montalk, enter 28.

PMTYPE = DCM

If the value of field PMTYPE is DCM, datafill subfields DCMNO, DCMCKTNO, and DCMCKTTS as described below.

Field descriptions for conditional datafill

Field	Subfield	Entry	Explanation and action
	DCMNO	numeric (0 to 511)	*Digital carrier module number* Enter number of the digital carrier module (DCM) to which the trunk group member is assigned.

Field descriptions for conditional datafill

Field	Subfield	Entry	Explanation and action
	DCMCKTNO	numeric (0 to 4)	*Digital carrier module circuit number* Enter the number of the DCM circuit card to which the trunk group member is assigned.
	DCMCKTTS	numeric (1 to 24)	*Digital carrier module circuit time slot* Enter the number of the DCM circuit card DS1 time slot to which the trunk group member is assigned.

PMTYPE = DTC

If the value of field PMTYPE is DTC, datafill subfields DTCNO, DTCCKTNO, and DTCCKTTS as described below.

Field descriptions for conditional datafill

Field	Subfield	Entry	Explanation and action
	DTCNO	numeric (0 to 511)	*Digital trunk controller number* Enter the number of the digital trunk controller (DTC) module to which the trunk group member is assigned.
	DTCCKTNO	numeric (0 to 19)	*Digital trunk controller circuit number* Enter the number of the DTC circuit card to which the trunk group member is assigned.
	DTCCKTTS	numeric (1 to 24)	*Digital trunk controller circuit time slot* Enter the number of the circuit card DS0 time slot to which the trunk group member is assigned.

TRKMEM (continued)

PMTYPE = DTCI

If the value of field PMTYPE is DTCI, datafill subfields DTCINO, DTCICKTNO, and DTCICKTTS as described below.

Field descriptions for conditional datafill

Field	Subfield	Entry	Explanation and action
	DTCINO	numeric (0 to 511)	*ISDN digital trunk controller number* Enter the number of the ISDN DTC (DTCI) module to which the trunk group member is assigned.
	DTCICKTNO	numeric (0 to 19)	*ISDN digital trunk controller circuit number* Enter the number of the DTCI DS1 span to which the trunk group member is assigned.
	DTCICKTTS	numeric (1 to 24)	*ISDN digital trunk controller circuit time slot* Enter the number of the circuit card DS0 time slot to which the trunk group member is assigned.

PMTYPE = GWC

If the value of field PMTYPE is GWC, datafill subfields GWCNO, GWCNODENO, and GWCTRMNO as described below. The peripheral module type of GWC applies to CS 2000 only.

Field descriptions for conditional datafill

Field	Subfield	Entry	Explanation and action
	GWCNO	numeric (0 to 255)	*Gateway control number* Enter the number of the Gateway control number (GWC) for the assignment of the trunk group number.
	GWCNODENO	numeric (0 to 4095)	*Gateway control node number* Enter the number of the GWC node number for the assignment of the trunk group member.
	GWCTRMNO	numeric (1 to 3999)	*Gateway control terminal number* Enter the number of the GWC terminal number for the assignment of the trunk group member.

PMTYPE = ICP

If the value of field PMTYPE is ICP, datafill subfields ICPNO, ICPCKTNO, and ICPCKTTS as described below.

Field descriptions for conditional datafill

Field	Subfield	Entry	Explanation and action
	ICPNO	numeric (0 to 511)	*Integrated cellular peripheral number* Enter the number of the integrated cellular peripheral (ICP) to which the trunk group member is assigned.
	ICPCKTNO	numeric (0 to 19)	*Integrated cellular peripheral circuit number* Enter the number of the ICP circuit card to which the trunk group member is assigned.
	ICPCKTTS	numeric (1 to 31)	*Integrated cellular peripheral circuit time slot* Enter the number of the ICP circuit card time slot to which the trunk group member is assigned.

PMTYPE = IDT

If the value of field PMTYPE is IDT, datafill subfields IDTNO and SHELFSLT as described below.

Field descriptions for conditional datafill

Field	Subfield	Entry	Explanation and action
	IDTNO	numeric (0 to 255)	*Integrated digital terminal number* Enter the number of the integrated digital terminal (IDT) to which the trunk group member is assigned.
	SHELFSLT	see subfields	*Integrated digital terminal shelf and slot* This subfield consists of refinements SHELF and SLOT.

TRKMEM (continued)

Field descriptions for conditional datafill

Field	Subfield	Entry	Explanation and action
	SHELF	numeric (1 to 31)	*Integrated digital terminal shelf number* Enter the number of the IDT shelf to which the trunk group member is assigned.
	SLOT	numeric (1 to 99)	*Integrated digital terminal slot number* Enter the number of the IDT slot number to which the trunk group is assigned.

PMTYPE = LGC

If the value of field PMTYPE is LGC, datafill subfields LGCNO, LGCCKTNO, and LGCCKTTS as described below.

Field descriptions for conditional datafill

Field	Subfield	Entry	Explanation and action
	LGCNO	numeric (0 to 511)	*Line group controller number* Enter the number of the line group controller (LGC) to which the trunk group member is assigned.
	LGCCKTNO	numeric (0 to 19)	*Line group controller circuit number* Enter the number of the LGC circuit card to which the trunk group member is assigned.
	LGCCKTTS	numeric (1 to 24)	*Line group controller circuit time slot* Enter the number of the LGC circuit card time slot to which the trunk group member is assigned.

PMTYPE = LTC

If the value of field PMTYPE is LTC, datafill subfields LTCNO, LTCCKTNO, and LTCCKTTS as described below.

Field descriptions for conditional datafill

Field	Subfield	Entry	Explanation and action
	LTCNO	numeric (0 to 511)	*Line trunk controller number* Enter the number of the line trunk controller (LTC) module to which the trunk group member is assigned.
	LTCCKTNO	numeric (0 to 19)	*Line trunk controller circuit number* Enter the number of the LTC circuit card to which trunk group member is assigned.
	LTCCKTTS	numeric (1 to 24)	*Line trunk controller circuit time slot* Enter the number of the LTC circuit card DS0 time slot to which the trunk group member is assigned.

PMTYPE = RCC

If the value of field PMTYPE is RCC, datafill subfields RCCNO, RCCCKTNO, and RCCCKTTS as described below.

Field descriptions for conditional datafill

Field	Subfield	Entry	Explanation and action
	RCCNO	numeric (0 to 511)	*Remote cluster controller equipment number* Enter the number of the remote cluster controller (RCC) equipment to which the trunk group member is assigned.

TRKMEM (continued)

Field descriptions for conditional datafill

Field	Subfield	Entry	Explanation and action
	RCCCKTNO	numeric (0 to 19)	*Remote cluster controller equipment circuit number* Enter the number of the RCC equipment circuit card to which the trunk group member is assigned.
	RCCCKTTS	numeric (1 to 24)	*Remote cluster controller equipment circuit time slot* Enter the number of the RCC equipment circuit card time slot to which the trunk group member is assigned.

PMTYPE = RCC2

If the value of field PMTYPE is RCC2, datafill subfields RCC2NO, RCC2CKTNO, and RCC2CKTTS as described below.

Field descriptions for conditional datafill

Field	Subfield	Entry	Explanation and action
	RCC2NO	numeric (0 to 511)	*Compact remote cluster controller equipment number* Enter the number of the compact RCC (RCC2) equipment to which the trunk group member is assigned.
	RCC2CKTNO	numeric (0 to 47)	*Compact remote cluster controller equipment circuit number* Enter the number of the RCC2 equipment circuit card to which the trunk group member is assigned.
	RCC2CKTTS	numeric (1 to 24)	*Compact remote cluster controller equipment circuit time slot* Enter the number of the RCC2 equipment circuit card time slot to which the trunk group member is assigned.

PMTYPE = RC02

If the value of field PMTYPE is RCO2, datafill subfields RCO2NO, RCO2CKTNO, and RCO2CKTTS as described below.

Field descriptions for conditional datafill

Field	Subfield	Entry	Explanation and action
	RCO2NO	numeric (0 to 511)	*Offshore remote cluster controller equipment number* Enter the number of the offshore RCC (RCCO) equipment to which the trunk group member is assigned.
	RCO2CKTNO	numeric (0 to 47)	*Offshore remote cluster controller equipment circuit number* Enter the number of the RCCO equipment circuit card to which the trunk group member is assigned.
	RCO2CKTTS	numeric (1 to 31)	*Offshore remote cluster controller equipment circuit time slot* Enter the number of the RCCO equipment circuit card time slot to which the trunk group member is assigned.

PMTYPE = RMSC

If the value of field PMTYPE is RMSC, datafill subfields RMSCNO, RMCCKTNO, and RMCCKTTS as described below.

Field descriptions for conditional datafill

Field	Subfield	Entry	Explanation and action
	RMSCNO	numeric (0 to 511)	*Remote mobile switching center number* Enter the number of the remote mobile switching center (RMSC) module to which the trunk group member is assigned.

TRKMEM (continued)

Field descriptions for conditional datafill

Field	Subfield	Entry	Explanation and action
	RMCCKTNO	numeric (0 to 19)	*Remote mobile switching center circuit number* Enter the number of the RMSC module circuit card to which the trunk group member is assigned.
	RMCCKTTS	numeric (1 to 31)	*Remote mobile switching center circuit time slot* Enter the number of the RMSC module circuit card time slot to which the trunk group member is assigned.

PMTYPE = SMA

If the value of field PMTYPE is SMA, datafill subfields SMANO, SMACKTNO, and SMACKTTS as described below.

Field descriptions for conditional datafill

Field	Subfield	Entry	Explanation and action
	SMANO	numeric (0 to 511)	*Subscriber carrier module-100s access mobile switching center number* Enter the number of the subscriber carrier module-100S access (SMA) mobile switching center module to which the trunk group member is assigned.
	SMACKTNO	numeric (0 to 19)	*Subscriber carrier module-100s access mobile switching center circuit number* Enter the number of the subscriber module access (SMA) mobile switching center module circuit card to which the trunk group member is assigned.
	SMACKTTS	numeric (1 to 24)	*Subscriber carrier module-100s access mobile switching center circuit time slot* Enter the number of the SMA mobile switching center module circuit card time slot to which the trunk group member is assigned.

PMTYPE = SMA2

If the value of field PMTYPE is SMA2, datafill subfields SMA2NO, SMA2CKTNO, and SMA2CKTTS as described below.

Field descriptions for conditional datafill

Field	Subfield	Entry	Explanation and action
	SMA2NO	numeric (0 to 511)	*Expanded subscriber carrier module-100s access mobile switching center number* Enter the number of the expanded subscriber carrier module-100S access (SMA2) mobile switching center module to which the trunk group member is assigned.
	SMA2CKTNO	numeric (0 to 47)	*Expanded subscriber carrier module-100s access mobile switching center circuit number* Enter the number of the expanded subscriber module access (SMA2) mobile switching center module circuit card to which the trunk group member is assigned.
	SMA2CKTTS	numeric (1 to 24)	*Expanded subscriber carrier module-100s access mobile switching center circuit time slot* Enter the number of the SMA2 mobile switching center module circuit card time slot to which the trunk group member is assigned.

TRKMEM (continued)

PMTYPE = SMU

If the value of field PMTYPE is SMU, datafill subfields SMUNO, SMUCKTNO, and SMUCKTTS as described below.

Field descriptions for conditional datafill

Field	Subfield	Entry	Explanation and action
	SMUNO	numeric (0 to 511)	*Subscriber carrier module-100 urban number* Enter the number of the subscriber carrier module-100 urban (SMU) to which the trunk group member is assigned.
	SMUCKTNO	numeric (0 to 19)	*Subscriber carrier module-100 urban circuit number* Enter the number of the SMU circuit card to which the trunk group member is assigned.
	SMUCKTTS	numeric (1 to 24)	*Subscriber carrier module-100 urban circuit time slot* Enter the number of the SMU circuit card time slot to which the trunk group member is assigned.

PMTYPE = SPM

If the value in field PMTYPE is SPM, datafill subfields SPMNO, SPMCKTNO, and SPMCKTTS as described below.

Field descriptions for conditional datafill

Field	Subfield	Entry	Explanation and action
	SPMNO	numeric (0 to 63)	*SPM number* Enter the number of the SPM to which the trunk group member is assigned.

Field descriptions for conditional datafill

Field	Subfield	Entry	Explanation and action
	SPMCKTNO	numeric (0 to 181)	*SPM circuit number* Enter the number of the circuit card to which the trunk group member is assigned. The maximum number of circuits in an SPM is 84.
	SPMCKTTS	numeric (1 to 31)	*SPM circuit time slot* Enter the number of the PCM30 time slot to which the trunk group member is assigned. Enter the number (in the range 1 to 24) of the DS1 time slot to which the trunk group member is assigned. The DMS-100 MMP switch generates an error message if you attempt to enter data for a DS1 carrier with a time slot greater than 24.

PMTYPE = SRCC

If the value of field PMTYPE is SRCC, datafill subfields SRCCNO, SRCCCKTNO, and SRCCCKTTS as described below.

Field descriptions for conditional datafill

Field	Subfield	Entry	Explanation and action
	SRCCNO	numeric (0 to 511)	*SONET remote cluster controller number* Enter the number of the SONET remote cluster controller (SRCC) to which the trunk group member is assigned.
	SRCCCKTNO	numeric (0 to 47)	*SONET remote cluster controller circuit number* Enter the number of the SRCC circuit card to which the trunk group member is assigned.
	SRCCCKTTS	numeric (1 to 24)	*SONET remote cluster controller circuit time slot* Enter the number of the SRCC circuit card time slot to which the trunk group member is assigned.

TRKMEM (continued)

PMTYPE = TMS

If the value of field PMTYPE is TMS, datafill subfields TMSNO, TMSCKTNO, and TMSCKTTS as described below.

Field descriptions for conditional datafill

Field	Subfield	Entry	Explanation and action
	TMSNO	numeric (0 to 255)	*TMS number* Enter the number of the Traffic Operator Position System (TOPS) message switch (TMS) to which the trunk group member is assigned.
	TMSCKTNO	numeric (0 to 19)	*TMS circuit number* Enter the number of the TMS circuit card to which the trunk group member is assigned.
	TMSCKTTS	numeric (1 to 31)	*TMS circuit time slot* Enter the number of the TMS circuit card time slot to which the trunk group member is assigned.

Datafill example

Six examples of datafill for table TRKMEM are shown below.

The first example is for a local/toll switch and consists of two digital trunks and one analog trunk.

MAP display example for table TRKMEM

```
CLLI            EXTRKNM     SGRP    MEMVAR
_____________________________________________________

OTWAON1002T0    303         0       DCM 1 1 5 $
CCIS4A            0         0       DTC 3 0 4 $
OTWAON0872AO     47         0       TM8 12 5 1 $
SRCCTRK           0         0       SRCC 0 0 1 $
```

The second example is for a gateway switch and consists of four members of trunk group with CLLI of BEL01CANMTL and four members of trunk group with CLLI of NAS01BAH.

MAP display example for table TRKMEM

```
CLLI            EXTRKNM     SGRP    MEMVAR
_____________________________________________________

BEL01CANMTL     101         0       DCM 0 0 1 $
BEL01CANMTL     102         0       DCM 0 1 7 $
BEL01CANMTL     103         0       DCM 1 1 17 $
BEL01CANMTL     104         0       DCM 1 2 11 $
NAS01BAH          2         0       T8A 7 12 $
NAS01BAH          3         0       T8A 13 12 $
NAS01BAH          4         0       T8A 15 12 $
NAS01BAH          5         0       T8A 18 12 $
```

The third example shows datafill for loads including an analog jack and a digital jack. This example also shows datafill for when a PRA type trunk can be datafilled on the PDTC.

MAP display example for table TRKMEM

```
CLLI            EXTRKNM     SGRP    MEMVAR
_____________________________________________________

JACK            0           0       MTM 10 10 $
JACK            1           1       PDTC 4 0 1 $
PCM30TG1        0           0       PDTC 1 1 0 $
```

The fourth example is for a DMS-100 ISDN office with ISDN PRI and X25/X75 packet trunks.

MAP display example for table TRKMEM

```
CLLI            EXTRKNM     SGRP    MEMVAR
_____________________________________________________

PRAISDN         1           0       DTCI 0 0 1 $
X75PKT          1           0       DTC  0 0 0 $
X25PKT          1           0       DTCI 0 0 2 $
```

The fifth example shows datafill when an SPM is provisioned. The last line shows a trunk group member assigned to PCM30 time slot 25.

TRKMEM (continued)

MAP display example for table TRKMEM

```
CLLI            EXTRKNM     SGRP    MEMVAR
_____________________________________________________

SPM13OG         0           0       SPM 40 5 1
SPM13OG         1           0       SPM 40 5 2
SPM13OG         2           0       SPM 40 5 3
SPM13OG         22          0       SPM 40 5 23
SPM13OG         23          0       SPM 40 5 24
SPM13IC         0           0       SPM 40 4 1
SPM13IC         1           0       SPM 40 4 2
SPM13IC         2           0       SPM 40 4 3
SPM13IC         3           0       SPM 40 4 4
SPM13IC         4           0       SPM 40 4 5
SPM13IC         5           0       SPM 40 4 6
SPM13IC         6           0       SPM 40 4 7
TLINK           1           0       SPM  2 6 24
TLINK           2           0       SPM  3 6 24
SPMCRS0OG2      0           0       SPM  3 9 25
```

The ‘TLINK’ lines show the transmission link provisioning for STM-1 channelized access. TLINK 1 is provisioned on SPM 2, circuit 6, time slot 24. TLINK 2 is provisioned on SPM 3, circuit 6, time slot 24.

> ***Note:*** The name ‘TLINK’ must be already defined in table CLLI. See table MNHSCARR for the datafill sequence required to provision the channelized access path from an STM-1 carrier to the LIU7.

The last line of the datafill example shows a trunk group member assigned to PCM30 time slot 25.

The last example is for table TRKMEM when the PMTYPE is GWC. The PMTYPE of GWC is for CS 2000 only.

MAP display example for table TRKMEM

```
CLLI            EXTRKNM     SGRP    MEMVAR
_____________________________________________________

CVXPRI          1           0       GWC 8 52 1$
```

Supplementary information

This section explains the error messages that can occur if you enter data incorrectly in table TRKMEM.

Error message table

Error message	Explanation and action
`Delete the AINPRI entry before deleting TRKMEM.`	An attempt was made to delete a tuple that is being referenced by table AINPRI.
`DATA IN ASSOCIATED TABLES NOT DELETED YET`	An attempt was made to enter data out of sequence. A tuple in table TRKMEM can be deleted, added, or changed only if the tuple is empty or has been deleted from table C7TRKMEM.
`Failed to get AB bit resource. Increase count of AB bit resources for DSPs on this SPM in table MNCKTPAK.`	An AB-bit resource is not available for the SPM DS1 carrier to be used by the given PTS trunk.
`ERROR: The IPULSTYP field = nil_pulse_type in table TRKSGRP. Trunks datafilled on an SPM node cannot have a nil incoming pulse type.`	An attempt was made to enter data for an SPM PTS trunk and the associated incoming pulse type (IPULSTYP) field in table TRKSGRP = NP (nil_pulse_type).
`ERROR: This trunk has an associated IPULSTYP = MF in table TRKSGRP, but there are no MF resources provisioned in table MNCKTPAK.`	An attempt was made to enter data for a PTS trunk whose associated incoming pulse type = MF, but there are no MF resources provisioned in table MNCKTPAK.
`ERROR: This trunk has an associated IPULSTYP = DT in table TRKSGRP, but there are no DTMF resources provisioned in table MNCKTPAK.`	An attempt was made to enter data for a PTS trunk whose associated incoming pulse type = DT, but there are no DTMF resources provisioned in table MNCKTPAK.
`ERROR: Carrier does not support the time slot specified.`	An attempt was made to enter data for a DS1 carrier with a time slot greater than 24 (time slots 25 to 31 are for PCM30 carriers only).

TRKMEM (continued)

Error message table

Error message	Explanation and action
`Table TRKOPTS DYNAMIC option is assigned. Manual operations are not allowed in Table TRKMEM.`	No tuples of a dynamic trunk group can be manually added, changed, or removed from table TRKMEM. Trunk groups are defined as dynamic in table TRKOPTS by field OPTION = DYNAMIC. In order to make changes to trunk members of a dynamic trunk group, use the application-specific method, such as table IPINV for the TOPS OC application. The TOPS OC application automatically allocates 48 dynamic trunk members in table TRKMEM when an IP gateway node is defined in table IPINV.
`ERROR: MG4000 does not support this GRPTYP in Table TRKGRP.`	An attempt was made to provision an unsupported trunk type on a Multi-service Gateway 4000 (MG 4000) node. Refer to *Multi-service Gateway 4000 Customer Information Guide* the list of supported trunk types.

Error messages specific to PRI with Semipermanent Packet

Use the following information for an explanation of the error messages associated with table TRKMEM.

Reason: While tables CLLI, TRKGRP, and TRKSGRP datafill, table SPECCONN does not datafill. When table TRKMEM datafills, table TRKMEM searches for a DS0 connection on table SPECCONN. If the DS0 connection is not present on table SPECCONN, the following error message displays.

```
DS-0 must be nailed up in SPECCONN for X25 PRA.
```

Action: Datafill table SPECCONN before table TRKMEM.

Reason: All the tables datafill for PRI with Semipermanent Packet LTID. An error message displays when operating company personnel try to change the DS0, which maps to a PRI with Semipermanent Packet LTID.

```
Delete the LTMAP entry first.
```

Action: Delete the tuple in table LTMAP. Then try to change the tuple in table TRKMEM for the corresponding DS0.

Error messages specific to the PRI-PRI Over Multiple XPMs feature

Error messages appear under the following conditions:

If the CLLI is not mapped in table LTMAP and the protocol variant is other than NTNI:

- adding a distributed B-channel displays a warning message as follows:

```
Warning: Members spanning different PMs are supported only
for NTNI protocol variant
```

- changing a normal/distributed B-channel to distributed B-channel displays a warning message as follows:

```
Warning: Members spanning different PMs are supported only
for NTNI protocol variant
```

If the CLLI is mapped in table LTMAP and the protocol variant is other than NTNI:

- adding a distributed B-channel is rejected and the switch displays the following error message

```
ERROR: Members spanning different PMs are supported only for
NTNI protocol variant
```

- changing a normal/distributed B-channel to distributed B-channel is rejected and the switch displays the following error message:

```
ERROR: Members spanning different PMs are supported only for
NTNI protocol variant
```

If the protocol variant is NTNI, adding a distributed B-channel in the 17th distributed XPM as an interface, the switch displays the following error message

```
ERROR: Distributed PRI interface can span only 16 XPMs
```

Error messages specific to the SPM DS-1 Assignment SOC Control feature

If the The upper limit of provisioned carriers with either PRI or ISUP/PTS is reached, the following error message is displayed:

```
ERROR: This office has reached its upper limit of carriers
provisioned with PRI (ISUP/PTS) trunks in SOC option id SPMS0017
(SPMS0016)
```

TRKMEM (continued)

Error messages specific to provision of ECAN resources

If an attempt is made to add a tuple to table TRKMEM for a non-BICC IT trunk, the attempt will be rejected with the following error message:

```
Internal ECSTAT in TABLE TRKSGRP is not supported for this trunk
type.
```

If both packet and legacy trunk members are datafilled in table TRKMEM in the same trunk subgroup, the following warning is generated:

```
WARNING: This trunk subgroup contains a mix of packet and legacy
members. Echo cancellor datafill applies to all members and may
be interpreted differently based on the node type.
```

Translation verification

To verify datafill associated with a particular CLLI, use the CLLIREF tool to find associated tuples:

```
CLLIREF SEARCH <clli name>
```

Table history

SN06 (TDM)

In SN06, cross checking between table TRKMEM and tables TRKSGRP and TRKOPTS was implemented to ensure that only BICC IT trunks may have the ECSTAT field in table TRKSGRP set to INTERNAL.

NA017

CSR Q00272460 adds the warning message to the table that signify that the SOC functionality provides the hard usage control for provisioned SPM DS1P carriers assigned with either ISUP/PTS trunks or PRI trunks.

SN02

Feature 59023579 provided an error message for datafilling an unsupported trunk type on an MG 4000.

SNH01

Added the PMTYPE of GWC with the subfields and map display example for CS 2000 only.

MMP13

Added an example to illustrate the datafill required for STM-1 channelized access.

NA013

Added requirement to datafill ISUP trunks in table TRKMEM before datafilling them in table C7TRKMEM for the Succession Network VToA (Voice Trunking over ATM) application release 01.

Added error message about dynamic trunks.

MMP12

Changed the range of subfield SPMCKTTS from 1 to 24 to 1 to 31.

NA012

Added error messages for the PRI-PRI Over Multiple XPMs feature.

NA011

Added notes to the supplementary information about the error messages that display for the PRI with Semipermanent Packet feature. This information includes the reason the error messages displays and the corrective action.

CSP08

SPM system datafill was introduced to table TRKMEM.

NA010

Added note to the supplementary information about error message that the system generates when operating company personnel attempt to delete a tuple that table AINPRI is using.

NA008

Removed references to BITS from table 13. Table TRKMEM has been updated for the NA011 release of this document. This update was made in response to a Problem Resolution Solution (PRS) request for the NA008 timeframe.

CSP06

The following changes have been made:

- AIM added to subfield PMTYPE
- Restrictions added to field TMCKTNO for AIM type TM and AIM based RMM type TM
- Added table OAVLMAP to “Datafill sequence” section according to feature AN1589 in functionality Operator Services AIN, ENSV00014.

TRKMEM (end)

CSP04

The following changes were made to table LTCINV:

- added note stating that table TRKMEM interacts with table SYLNKINV and verifies that RCC2 DS1 links 0 or 8 are not defined as building integrated timing supply (BITS) links before defining the links as trunks
- removed references to PRCC, RCCI, HSI, HSIE, and IAC PM types that are no longer supported

The following changes have been made

- Note on PMTYPE DTM added to datafill sequence section.
- DTM added to subfield PMTYPE and entry to subfield TMCKTNO.

BCS26

Added note concerning the maximum number of non-signaling trunks that can be added to a PDTC.

TRKMTCE

Table name

Trunk Maintenance Table

Functional description

Table TRKMTCE is part of a maintenance feature that provides a MAP oriented approach to the maintenance of trunks as an alternative to the existing logs system. This table provides trunk maintenance capability through two main functions: thresholding and alarm generation on trunk troubles, and buffering of trunk trouble information.

The generation of alarms is caused by trunk troubles identi ed in software that reach or exceed operating company de ned thresholds. A f ailure count is incremented on all software failure paths, which is measured against the de ned le vels to determine which, if any, alarm should be generated. The operating company data lls table TRKMTCE for minor , major, and critical alarms as percentages of the data lled v alue in eld A TMPCNT (the number of call attempts). The data lled v alue in eld A TMPCNT represents the number of call attempts that must take place on a trunk group before the failure count for that trunk is decremented by one. In other words, the trunk group is given a credit of one for every N (the value in eld ATMPCNT) attempts that take place over that trunk group. This credit is provided by decrementing the failure count on that trunk group by one if it is non-zero.

Alarm generation is implemented by a thresholding process running once every 30 seconds. The purpose of the thresholding process is to establish when the failure count of a trunk group reaches or exceeds the de ned alarm thresholds. The thresholding process generates the appropriate alarm based on the current trouble count and the alarm threshold levels data lled for that trunk group. There are three different sources from which trouble reports can be generated: manual action, system initiated maintenance processes, and call processing. The algorithm is slightly different for each of these trouble report sources. The thresholding process performs its function for call processing troubles according to the following algorithm:

1. Compare adjusted failure count to maintenance and call processing critical alarm threshold levels. If the count is greater than or equal to critical, go to 5.
2. Compare adjusted failure count to maintenance and call processing major alarm threshold levels. If the count is greater than or equal to major, go to 5.
3. Compare adjusted failure count to maintenance and call processing minor alarm threshold levels. If the count is greater than or equal to minor, go to 5.

4. Get the next trunk group counter (that is, no alarm condition). Go to 1.
5. If a higher priority alarm is currently activated, go to 1. If an alarm of the same priority is currently activated, refresh the wake-up. Go to 1. If no alarm is currently activated, generate the appropriate alarm level with a 15-minute wake-up. Go to 1.

Call attempts are pegged in the same place as the corresponding operational measurements (OM). This attempt count is only necessary for trouble reports generated by call processing, and is used to adjust the failure count to more accurately represent the failure level on each trunk group.

The alarm threshold levels represent a percentage of the value in eld ATMPCNT (call attempts). The values are translated to an absolute trouble count, dependent on the data lled v alue in eld A TMPCNT, before being compared to the adjusted failure count. For example, if the value in eld ATMPCNT is 100 and the value in eld CPMAJ ALM is 20, the absolute trouble count is 20 for the major alarm threshold.

Thresholding on troubles reported by maintenance processes is slightly different in that attempt counters are not maintained. The alarm thresholds in table TRKMTCE represent absolute values of maintenance reported troubles. The failure count is incremented by the buffering procedure and the alarms are generated by the thresholding process. There is no adjustment of the failure count according to the attempts. In addition, the failure count is not incremented on reports that indicate that a trunk has passed a test.

No thresholding is performed on trouble reports generated due to manual action. These reports do not increment a failure count or attempt count, but are buffered in the maintenance upper buffers.

On generation of an alarm, a 15 minute wake-up is initiated during which the alarm level cannot decrease except when manually cleared. If a higher priority alarm is generated, it is set with a refreshed 15-minute wake-up.

The buffering capability places trunk trouble information in buffers for each trunk group, and trunks are identi ed by their member number within the buffer. The operating company has the capability to allocate buffers for each trunk group in the of ce.

For each trunk group, two groups of buffers exist to identify the members with the problem. One group is for problems reported by maintenance processes, and the other group is for problems reported by call processing. Each group consists of a pair of buffers. One of these is a trouble buffer that can contain up to ten entries representing the ten worst members of the group (this buffer

TRKMTCE (continued)

is referred to as the upper buffer for the remainder of this description). The other buffer can contain up to ve entries and is used to screen out members with only one occurrence of a problem (this buffer is referred to as the lower buffer).

Store for the two groups of buffers can be allocated selectively by table control for table TRKMTCE. Both maintenance and call processing buffers can be allocated, only one of the two, or neither, as required. If a group of buffers is required, the store for the upper and lower buffers is allocated in the manner described below.

One buffer has ten entries, and contains the ten most recent, worst members of the trunk group. This means that the trunk group members that have the highest failure count (greater than one) and had these failures most recently are found in this buffer. The other buffer has ve entries, and is used to screen out members with less than two troubles. Two elds in table TRKMTCE are used to allocate or deallocate the buffers. Field CPBUFRQD allocates the call processing buffers, and MTBUFRQD allocates the maintenance buffers. Both these elds tak e the values Y or N. Buffers cannot be deallocated while a continuous buffer display is in progress at the TRKSTRBL level at any MAP.

The upper buffer structure contains the following information:

- identi cation of the group member (trunk member number)
- time of the last trouble (yr/mon/day/hr/min/sec)
- count of the troubles on that member (integer)
- index to a table of trouble descriptions

The lower buffer structure contains the following information:

- identi cation of the group member (trunk member number)
- time of the last trouble (yr/mon/day/hr/min/sec)

Only the contents of the upper buffers are accessible through the TTP and TRKSTRBL levels of the MAP. MAP level TRKSTRBL is placed below the TRKS level, parallel to the STAT level.

When a trouble occurs on a trunk group member (for which a log report is generated) during call processing, maintenance processing, or manual action, a buffering procedure is called to update the trouble buffers associated with that member. This procedure searches the upper buffer of the group for an instance of the member with the problem. If the member is found in the upper buffer, the last trouble time and the trouble index elds of the entry is updated. In addition, the trouble count eld of the entry is incremented by one.

If the member is not found in the upper buffer, the procedure searches the lower buffer for the group member. If the member is found, the entry in the lower buffer is moved into the upper buffer. The entry being moved lls an empty spot in the ten-entry buffer if one is available, or overwrites the oldest entry. If the group member is not found in the lower buffer, it is placed there by lling an empty spot or o verwriting the oldest entry. Note that trouble information generated from manual action is placed directly in the upper buffer of the required trunk group and no entries are screened out by the lower buffer.

The following tables show examples of a trunk experiencing two troubles and the resulting buffer entries.

First trouble, upper buffer

Entry	ID	Count	Time stamp
0			
			.
			.
			.
9			

First trouble, lower buffer

Entry	ID	Time stamp
0	3	1984/05/09 04:33:21
		.
		.
		.
4		

Second trouble, upper buffer (Sheet 1 of 2)

Entry	ID	Count	Time stamp
0			1984/05/09 04:34:19
			.

TRKMTCE (continued)

Second trouble, upper buffer (Sheet 2 of 2)

.
.
9

Second trouble, lower buffer

Entry	ID	Time stamp
0	3	
		.
		.
		.
4		

Table TRKMTCE divides troubles found on trunks into three categories: troubles generated by call processing, troubles generated by maintenance processes, and trouble information generated by manual action. The trouble information generated by call processing and maintenance processes is buffered and subject to alarm generation. Separate alarm level de nition and buffering is available to the operating company for these two types of trunk troubles. Trouble information generated as a result of manual action is placed directly in the maintenance upper buffer and has no effect on alarm generation.

A list of all the text descriptions that can be seen in a buffer entry when it is displayed at the TRKSTRBL level is shown below.

- VACANT CODE ANNOUNCEMENT
- NO CIRCUIT AVAILABLE
- MISDIRECTED CAMA ANNOUNCEMENT
- UNAUTHORIZED CODE ANNOUNCEMENT
- EMERGENCY ANNOUNCEMENT
- INWATS OUTSIDE LEGAL ZONE
- PERMANENT SIGNAL
- PARTIAL DIAL
- EXTRA PULSE
- FALSE START

- MUTILATED PULSE
- MUTILATED DIGIT
- INVALID ST DIGIT RECEIVED
- ANI OFFICE FAILURE
- ANI NUMBER FAILURE
- ANI TIME OUT
- NO START DIAL
- INTEGRITY FAILURE
- INTEGRITY LOST
- FALSE KP
- REVERSED TRUNK
- UNEXPECTED STOP DIAL
- EXPECTED STOP TIME OUT
- CAMA POSITION FAULT
- CAMA POSITION TROUBLE
- ANNOUNCEMENT MATCH TROUBLE
- TRUNK RESET FAILED
- TRUNK RESET
- HIT DETECTED
- PRE ROUTE ABANDON
- NO5 SIGNALING VIOLATION
- DIG RCVR NOISE HIGH
- DIG RCVR NOISE MARGINAL
- NO INTERDIGIT PAUSE
- LARGE TWIST
- MORE THAN TWO FREQS
- FLUCTUATION ON MF RECEIVER
- RINGING FAILED
- COIN COLLECT FAIL
- COIN RETURN FAIL
- ANI TEST FAILED

TRKMTCE (continued)

- COIN PRESENT TEST FAILED
- CP IOMSG LOST
- BAD CP IOMSG
- ANI FAILED, ONI SUCCEEDED
- INVALID ANI REQUEST
- BAD KEYSET
- LINE CARD FAULT
- DU SYNC LOST
- GROUND LOOP FAIL
- ABANDON ON RP INC TRUNK
- OVERALL RP TIMEOUT
- INVALID RP DIGIT
- UNDETERMINED RP ERROR
- EXCESS DIGITS
- DP PERMANENT SIGNAL
- MF PERMANENT SIGNAL
- DGT PERMANENT SIGNAL
- DP RECEPTION TROUBLE
- MF RECEPTION TROUBLE
- DGT RECEPTION TROUBLE
- ANI RECEPTION TROUBLE
- ONI RECEPTION TROUBLE
- LOCKOUT ON
- LOCKOUT OFF
- OUTPULSING TROUBLE
- ROUTING TROUBLE
- BIPOLAR VIOLATION

Table TRKMTCE is part of an optional feature available to the operating companies. If this feature is present, the trunk logs that it replaces are automatically suppressed. These logs are still available to the operating company and can be produced by selectively removing suppression of the required logs.

The following logs are suppressed when this feature is present:

- TRK110 : lockout on report
- TRK111 : outpulsing trouble report
- TRK112 : lockout off report
- TRK113 : trunk integrity trouble report
- TRK114 : DP reception trouble report
- TRK115 : DP permanent signal report
- TRK116 : MF reception trouble report
- TRK117 : MF permanent signal report
- TRK118 : ANI trouble reception report
- TRK119 : ANI trouble reception report
- TRK120 : ONI trouble report
- TRK121 : outpulsing trouble report
- TRK122 : integrity trouble report
- TRK123 : PP CC communication trouble report
- TRK162 : DTMF trunk trouble report
- TRK182 : DGT reception trouble report
- TRK183 : DGT permanent signal report

The suppression of these logs is accomplished by data lling table LOGCLASS for the logs listed above. Field SUPPRESS in table LOGCLASS is used to suppress the log. The log class for these logs defaults to 31, so operating companies purchasing this feature should check their present data ll for table LOGCLASS. These logs can be resumed by setting eld SUPPRESS back to N (no).

Data ll sequence and implications

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

Table size

0 to 8191 tuples

Table size is allocated by table DATASIZE. The size of the table must be large enough to contain all the common language location identi ers (CLLI) in table CLLIMTCE, and cannot be greater than the maximum number of trunk groups that can be data lled in table TRKGRP .

TRKMTCE (continued)

Data ll

The following table lists data ll for table TRKMTCE.

Field descriptions (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
CLLI		alphanumeric (1 to 16 characters)	*Common language location identifier* Enter the common language location identifier (CLLI) code that is assigned to the trunk group in table CLLI.
CPMINALM		numeric (0 to 101)	*Call processing troubles minor alarm* Enter the percentage of failures, based on the call attempt value, that must be reached before a minor alarm is activated. If no alarm is required, enter 101. The default value is 101. Entries outside this range are invalid.
CPMAJALM		numeric (0 to 101)	*Call processing troubles major alarm* Enter the percentage of failures, based on the call attempt value, that must be reached before a major alarm is activated. If no alarm is required, enter 101. The default value is 101. Entries outside this range are invalid.
CPCRTALM		numeric (0 to 101)	*Call processing troubles critical alarm* Enter the percentage of failures, based on the call attempt value, that must be reached before a major alarm is activated. If no alarm is required, enter 101. The default value is 101. Entries outside this range are invalid.
CPBUFRQD		Y or N	*Call processing trouble buffer required* Enter Y (yes) if a call processing trouble buffer is required. Otherwise, enter N (no).
ATMPCNT		numeric (1 to 32767)	*Attempts counter* Enter the number of attempts that must occur before decrementing the failure count by one. The default value is 100.

Field descriptions (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
MTMINALM		numeric (0 to 32767)	*Maintenance troubles minor alarm* Enter the number of maintenance reported troubles that must be reached or exceeded before the minor alarm is activated. The default value is 0 (zero).
MTMAJALM		numeric (0 to 32767)	*Maintenance troubles major alarm* Enter the number of maintenance reported troubles that must be reached or exceeded before the major alarm is activated. The default value is 0 (zero).
MTCRTALM		numeric (0 to 32767)	*Maintenance troubles critical alarm* Enter the number of maintenance reported troubles that must be reached or exceeded before the critical alarm is activated. The default value is 0 (zero).
MTBUFRQD		Y or N	*Maintenance trouble buffer required* Enter Y if a maintenance trouble buffer is required. Otherwise, enter N.

Data ll e xample

The following example shows sample data ll for table TRKMTCE.

MAP display example for table TRKMTCE

```
CLLI         CPMINALM CPMAJALM CPCRTALM CPBUFRQD
 ATMPCNT MTMINALM MTMAJALM MTCRTALM MTBUFRQD
_____________________________________________________

TRKGRP1      10        20        30         Y
 100     11        21        35        Y
```

TRKNAME

Table name

Trunk Group ADNUM to CLLI Mapping Table

Functional description

Table TRKNAME is common to all DMS-100 software, and is a *read-only* table. Fields ADNUM and CLLI in table TRKNUM match the same elds in table CLLI with the same values. The DMS switch modi es eld ADNUM in table TRKNAME when eld ADNUM in table CLLI is modi ed. The changes to ADNUM in table CLLI are re ected in table TRKN AME.

The operating company associates an administrative number (ADNUM) with each DMS-100 family trunk group common language location identi er (CLLI). The data ll in table CLLI enables this association between a speci c trunk group CLLI and a x ed administration number (ADNUM). The ADNUM is unique and remains x ed throughout the life of the trunk group, regardless of the number of dump and restores performed on the DMS. The following downstream processors use the ADNUM to identify the CLLI:

- AMA (Automatic Message Accounting)
- CAROT (Centralized Automatic Reporting On Trunks [used by ROTL])
- EADAS/DC (Engineering and Administrative Data Acquisition System for Data Collection)
- EADAS/NM (Engineering and Administrative Data Acquisition System for Network Management)
- SES (Service Evaluation System)
- SMDR (Station Message Detail Recording)

In the case of AMA, table TRKNAME is also used to determine the value to be recorded in eld TRKGRP of AMA records. This eld is included in AMA records with structure codes equal to 047xx, 00734, or both. Structure code 047xx is used for inter-LATA (local access and transport area) carrier/international carrier (IC/INC) event information. Structure code 00734 is used for inter-LATA calls transferred to an IC/INC operator service system.

Data ll sequence and implications

Table CLLI must be data lled before table TRKN AME.

Table size

0 to 8192 tuples

Table TRKNAME is always equal in size to table CLLI. The size of both tables is controlled by the entry for table CLLI in table DATASIZE.

Data ll

The following table lists data ll for table TRKN AME.

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
ADNUM		numeric (0 to 8191)	*Administrative number* This field contains the administrative value defined in field ADNUM of table CLLI.
CLLI		alphanumeric (1 to 16 characters)	*CLLI character name* This field contains the name of the common language location identifiers (CLLI) defined in field CLLI of table CLLI.

Data ll e xample

An example of data ll for table TRKN AME is shown below. This example shows how the data ll in table CLLI is re ected in table TRKN AME. The CLLI in this example is OTWAON0202AT. The assigned eld ADNUM value corresponding to this CLLI is 51.

MAP display example for table CLLI

```
CLLI             ADNUM       TRKSIZE     ADMININF
_____________________________________________________

OTWAON0202AT     51          10          xx
```

MAP display example for table TRKNAME

```
ADNUM            CLLI
_____________________________________________________

51               OTWAON0202AT
```

TRKOPTS

Table name

Trunk Options

Functional description

Use table TRKOPTS to provision options on trunk groups.

Datafill sequence and meaning

Datafill the following tables before table TRKOPTS:

- CLLI
- ANNS
- TRKGRP
- TRKSGRP
- LSPINFO
- CLICNTL
- COSENG
- CCNTLGRP and/or CALLCNTL
- POECNM

Note: To use the LSPAO option, enter the name of the local service provider in table LSPINFO.

For correct use of options CGPNBLDR and CLIDLVPI (feature 59040499) the TRKGRP and TRKSGRP tables must be datafilled in the following sequence:

- TRKGRP
- TRKSGRP

Table size

0 to 131 072 tuples

Datafill

Table TRKOPTS has two major fields: OPTKEY and OPTINFO. The datafill for the two fields is described separately below. For both OPTKEY datafill and

TRKOPTS (continued)

OPTINFO datafill, options are listed in alphabetical order. Datafill examples are provided in the OPTINFO datafill section.

Note: A trunk group is defined as a BICC trunk group when the group is datafilled in table TRKOPTS with ISUPPLUS signaling.

OPTKEY datafill

The following table lists the OPTKEY datafill for table TRKOPTS.

Field descriptions

Field	Subfield	Entry	Explanation and action
OPTKEY		see subfields	Option key. This field consists of subfields CLLI and OPTION.
	CLLI	1 to 16 alphanumeric characters	Common language location identifier. This subfield indicates the CLLI code of the trunk group to which the option is assigned.

Field descriptions

Field	Subfield	Entry	Explanation and action
	OPTION	ANI AOC BCMAP BLOCKLNP BWRLSIND CALLREF CCNTLIDX CFR CFWOPT CGNBD_IN CGPNBLDR CITYCODE CLGDMI CLICNTL CLIDELV CLIDLVPI CLIOUTP CNAMINGN COS CPT CSSCRN CTC CUSTOM_CPC DCF DEFNUM DFLTPI DLYFWDXMT DYNAMIC FCI	Subfield OPTION specifies the name of the option assigned to the CLLI specified in subfield CLLI. Enter ANI to specify the name of the option assigned to the CLLI specified in subfield CLLI. Enter AOC for advice of charge during a call or at the end of a call. Refer to table OPTION=AOC for additional information. Enter BCMAP to set the connection type (bearer capability) for outgoing setup messages over BTUP, DASS2, and ETSI ISUP. The BCMAP option only applies to BTUP, DASS2, and ETSI ISUP trunk groups. Refer to OPTION=BCMAP for additional information. Enter BLOCKLNP to block calls where the previous switch did not perform a necessary LNP query. Activate option BLOCKLNP in table LNPOPTS before you add option BLOCKLNP in table TRKOPTS. When you datafill table TRKOPTS first, the switch does not use the BLOCKLNP information in table TRKOPTS. Refer to table OPTION=BLOCKLNP for additional information.
		FGD FWRLSIND HPCTQ HPCNOTQ ICDS ICMOG INTL INTMTR INTRACSE ISPARM ISUPSVC LDA	Enter BWRLSIND for the release indication to be applied to the incoming CAS trunk with a backward release. For Italy CAS, this indication is a congestion tone. This option is only valid on FDCP trunks. Refer to OPTION=BWRLSIND for additional information.

TRKOPTS (continued)

Field descriptions

Field	Subfield	Entry	Explanation and action
		LMG LOOPBACK LRNOPT LSPAO LSPFE MCIDP METER MPM MWI NATL_CPC NETOPTS NOANSWER OFFNET _CARRID OGMOG OSNC POECNAME PRESEL Q118OPT RCI REANSTMR REQCLI RINGBACK RLT RRID SCC SLOWREL SSUTR2_TAX_GEN SUBCOM SUPVOPT TELETAXE TELETAXE _NOSIG TREATONE TRTORLS TXICD	Enter CALLREF on an incoming trunk to indicate that the trunk can expect to receive a Call Reference parameter in the IAM message. The parameter could either be transitted unchanged or modified depending on the value in CALL_REF. For an outgoing trunk this works in conjunction with the CALL_REF value of DELETE. This option is only valid on ETSI ISUP V2 trunks. Refer to OPTION=CALLREF for additional information. Enter CCNTLIDX to allow control of call processing functionality by the operator. Only SCRN_INDX keys that already exist in table CALLCNTL or table CCNTLGRP can be datafilled in TRKOPTS, and this enables a SCRN_INDX index to be associated with an incoming trunk group. Refer to OPTION=CCNTLIDX for additional information. Enter CFR to activate/deactivate the restrictions on forwarded calls coming from ETSI ISUP or IBN7 ISUP trunk. Enter CFWOPT to make the system substitute the original calling number with the DN that activates the Call Forward feature. Refer to OPTION=CFWOPT for additional information. Enter CGNBD_IN to control whether to do PI mapping on an incoming agent which is set with IN trigger. It provides the index to the screening tables. The datafill of option CGNBD_IN is restricted to GSP CR11 and CR12 trunks. Enter CGPNBLDR to index table CGPNBLDR. Enter the two-digit CITYCODE to prefix the outgoing calling-number for Brazilian calls with a subscriber incoming nature-of-address (NOA). Refer to OPTION=CITYCODE for additional information.

TRKOPTS (continued)

Field descriptions

Field	Subfield	Entry	Explanation and action
			Enter CLGDMI to allow manipulation of the CLI over the terminating trunk. This option has one parameter which is an index to table DIGMAN Refer to OPTION=CLGDMI for additional information. Enter CLICNTL to allow control over the address which is screened, billed, and outpulsed. Enter CLIDELV to control delivery of the CLI over the terminating trunk. Refer to OPTION=CLIDELV for additional information. Enter CLIDLVPI to enable the CLI delivery enhancement. The datafill of this option is restricted to GSP ISUP trunks. Enter CLIOUTP to provide control over the selection of the address that is sent as CLI over the terminating trunk. Refer to OPTION=CLIOUTP for additional information. Enter CNAMINGN to allow the switch to send the calling party name in the GN parameter of ISUP IAM. Refer to OPTION=CNAMINGN for additional information. Enter COS to enable the operator to associate a Class Of Service (COS) value with a trunk group so that trunk-to-trunk calls can be restricted by using COS screening. The switch operator is allowed to assign this Class of Service to a trunk during the call control operation. The operator may override either the Class of Service Group, or the Class of Service Index, or both of them. Enter CPT to assign the Call Progress Tone feature to the trunk CLLI specified in subfield CLLI. Refer to OPTION=CPT for additional information.

TRKOPTS (continued)

Field descriptions

Field	Subfield	Entry	Explanation and action
			Enter CSSCRN to assign Carrier Selection screening to the trunk CLLI specified in subfield CLLI. Refer to OPTION=CSSCRN for additional information and subfields. Enter CTC to assign the trigger value sent in the Info_Analyse message when TRIGGER_INDEX=Y. Enter Australia in CUSTOM_CPC on the outgoing trunk to execute the mapping of the CPC parameters INHIBIT_CALL_DIVERSION (239 [base 10]) and MOBILE_CUSTOMER (247 [base 10]) on the ETSI ISUP V2. Enter DCF to permit the trunk to reject call-forwarded calls. This option applies to calls that have been forwarded to a PRI line. Refer to OPTION=DCF for additional information. Enter DEFNUM to trigger Calling Line Identity (CLI) default number functionality. The DEFNUM option, if datafilled on an incoming trunk, provides the ability to pick-up the default CLI, Charge Number or Contractor Number on the outgoing trunk. Enter DFLTPI to specify a default presentation indicator for an incoming CAS-PBX trunk. Enter DLYFWDXMT to select option Delay Forward Transmission. Option DLYFWDXMT blocks the forward speech path of an outgoing or two-way trunk until answer supervision is received or a specified time-out value is exceeded. Refer to OPTION=DLYFWDXMT for additional information. Enter DYNAMIC to specify a dynamic trunking application. Refer to OPTION=DYNAMIC for additional information.

TRKOPTS (continued)

Field descriptions

Field	Subfield	Entry	Explanation and action
			Enter FCI to indicate that the National/International call indicator in the outgoing FCI (in IAM message) is to be set according to this datafill. First, the outgoing trunk is checked, and if the datafill is present, it is used. Otherwise, the incoming trunk is checked. Refer to OPTION=FCI for additional information. Enter FGD to indicate that the protocol of the trunk is ISUP FGD. Refer to OPTION=FGD for additional information. Enter FWRLSIND for the release indication to be applied to the outgoing CAS trunk with a forward release. For Italy CAS, this indication is a congestion tone. This option is only valid on FDCP FST trunks. Refer to OPTION=FWRLSIND for additional information. Enter HPCTQ to enable GETS HPC trunk queuing, or enter HPCNOTQ to deny HPC trunk queuing on specific egress trunk groups when the HPC egress queuing feature is enabled on an office-wide basis through office parameter HPC_EGRESS_QUEUING. See the note marked “Attention” under OPTION=HPCTQ or HPCNOTQ and the additional information. Enter ICDS for the Inter-network Call Diversion feature. Refer to OPTION=ICDS for additional information. Enter ICMOG to request metering for an incoming trunk agent. Then enter data in the OPTINFO field. Enter INTL to indicate that the CLLI is for international calls. Enter INTMTR to send a BCM message during an outbound call setup. The INTMTR trunk option may be defined only for ISUP trunks.

TRKOPTS (continued)

Field descriptions

Field	Subfield	Entry	Explanation and action
			Enter INTRACSE to enable INTRA IMT route advance capabilities for CAUSE values 42, 47 and 51 and disable route advance capability of CAUSE value 34. Enter Y to subfield RTE_ADV_CHOICE for CAUSE 42, 47 and 51 to route advance. When datafilled to N, CAUSE values 34, 42, 47 and 51 will go to thier respective default treatments. Note: INTRACSE can only be assigned to INTRA IMT IC or 2W trunks To enable CAUSE 34 route advance using INTRACSE, OFCVAR parameter RTE_ADVANCE_FOR_INTRA_IMT_NCRT must be set to 'Y'. Enter ISPARM to enable specified ISUP IAM parameters to be handled in different ways. Enter ISUPSVC to hold a character string that indicates ISUP services defined by table ISUPSVC. Enter LDA to define the trunk as a dedicated toll trunk. All calls over this trunk are treated as toll calls. This option is limited to incoming IBN toll trunks. Refer to OPTION=LDC for additional information. Enter LMG to assign a logical meter group (LMG) for PRI trunk group billing. Then enter data in the OPTINFO field. Enter LOOPBACK to enable operators to prevent trunk-to-trunk calls from being routed back by using trunk loop prevention. Enter LRNOPT to derive the Routing Number for PBX ported-in number originated calls. Refer to OPTION=LRNOPT for additional information.

Field descriptions

Field	Subfield	Entry	Explanation and action
			Enter LSPAO to indicate that the traffic on a trunk is dedicated to a specific local service provider account owner and context. Context refers to the leasing arrangement between the account owner and switch owner. Refer to OPTION=LSPAO for additional information. Enter LSPFE to identify the switch owner on the far end of the trunk. Provision LSPFE when the far-end switch has a different switch owner (SO) value from the switch you are provisioning. A different SO indicates that the switch is from another network. Refer to OPTION=LSPFE for additional information. Enter MCID to register an outgoing access trunk for Malicious Call Identification procedures. This option allows a terminating user to request a log of the CLI for received calls from the network. This option is currently supported for FDCP trunks. Refer to OPTION=MCID for additional information. Enter METER to indicate that the trunk is the Poland R2 metering variant. This option supports incoming and 2-way FDCP trunks. Enter MPM for incoming or 2-way CTUP trunks to allow that trunk to generate MPM messages. MPM is a China specific metering message. Enter MWI to register specified PRI trunks for Message Waiting Indication as controlling and/or receiving users. Refer to OPTION=MWI for additional information. Enter NATL_CPC to use Saudi national CPC values on a Saudi trunk. If the OPTION subfield is not datafilled, NIL is displayed. Saudi trunks use international values if NIL is displayed. Refer to OPTION=NATL_CPC for additional information.

TRKOPTS (continued)

Field descriptions

Field	Subfield	Entry	Explanation and action
			Enter NETOPTS to assign the network options. Operating company personnel can enter all options on a trunk group. A trunk group can have a maximum of four suboptions. The same tuple cannot have the same suboption more than one time. Refer to OPTION=NETOPTS for additional information. Enter NOANSWER to be made available against a particular trunk for one or more of the following services - MONA, DISA, RSA, CALLING_CARD. Enter OFFNET_CARRID to assign the Carrier ID of the connected Network. Refer to OPTION=OFFNET_CARRID for additional information. Enter OGMOG to request metering for an outgoing trunk agent. Then enter data in the OPTINFO field. Enter OSNC to allow OSNC type calls. Refer to OPTION=OSNC for additional information. Enter POECNAME to enable the user to set the path of entry for trunk-originated calls. Refer to OPTION=POECNAME for additional information. Enter PRESEL to assign the Preselected Carrier ID to the trunk CLLI specified in subfield CLLI. Refer to OPTION=PRESEL for additional information. Enter Q118OPT for outgoing US CAS trunks. Refer to OPTION=Q118OPT for additional information. Enter RCI to specify the NO_RCI/ALTRTE option for incoming, outgoing, and two-way UK ISUP trunks.

Field descriptions

Field	Subfield	Entry	Explanation and action
			Enter REANSTMR to provide a datafillable reanswer timer for Korea R2 to ANSI ISUP calls. The value can be datafilled from 0 up to 255. This timer is datafilled against the outgoing ANSI ISUP trunk. Enter REQCLI to trigger a calling line identity (CLI) request on the R2 trunk. Option REQCLI is available for the following outgoing trunk types: IBN two way, outgoing, and primary rate access (PRA) trunks. Enter RINGBACK for the ringing tone to be fed upstream (incoming trunk), by the DMS-100 switch upon receipt of a progress message from an outgoing trunk. This option is only valid on FDCP trunks. Refer to OPTION=RINGBACK for additional information. Enter RLT to assign the Release Link Trunk option to integrated services digital network user part (ISUP) intertoll (IT) trunks only. The Equal-access End Office (EAEO) receives an ISUP REL message with a service parameter (SAP) of RLT_REQUEST_MSG. If an ISUP IT trunk without option RLT receives the RLT request, the call routes to feature not allowed (FNAL). The EAEO's host computer generates log report DFIL324. If the ISUP IT trunks have option RLT, then the routed RLT call uses reverse translations simplification (RLT2DIAL) to derive the dialing number. Enter SCC to allow the DMS-MMP to convert the incoming Calling Party Number (CgPN) into the international format by prefixing it with Serving Country Code (SCC) when a call is between subscribers in two different countries (International call). Refer to OPTION=SCC for additional information. Enter SLOWREL to ensure the CAS trunk is not deallocated before RLG is received.

TRKOPTS (continued)

Field descriptions

Field	Subfield	Entry	Explanation and action
			Enter SLOWREL for trunks that take more than 1.5 s to release. This is the time between the sending of CLF and receipt of RLG. This option is only valid on IBN two-way (IBNT2) and IBN outgoing (IBNTO), FDCP protocol, FST trunks. Refer to OPTION=SLOWREL for additional information. Enter SSUTR2_TAX_GEN to send a TAX message backward on the incoming SSUTR2 trunk just before the ACF. The TAX message is sent only if the Nature of Address field in the incoming MIF message indicates "International". Enter SUBCOM to allow the addition of a Sub-community per CLLI. If the call is a trunk origination call, a prefix is retrieved from table EMSUBCOM and used with the dialled emergency number. Enter SUPVOPT for incoming US CAS trunks. Refer to OPTION=SUPVOPT for additional information. Enter TELETAXE to identify that the trunk can support backward charging information in ITX messages (available on French Telephony User Part (FTUP) trunks). This activity sends charging information during the call to the calling subscriber's switch that performs the billing. This allows the service provider to control the billing of the call. Enter TELETAXE_NOSIG to block backward charging information. Enter TREATONE to feed a treatment tone to the calling party after the called party has disconnected first after answer. This tone is datafillable for different patterns for different markets.

Field descriptions

Field	Subfield	Entry	Explanation and action
			Enter TRTORLS for backward release signal FRLS to be sent to the incoming CAS trunk after treatment time-out. This option is only valid on FDCP trunks. Refer to OPTION=TRTORLS for additional information. Enter TXICD for the Transmit Inhibit Call Diversion feature. Refer to OPTION=TXICD for additional information.

OPTINFO datafill

The tables that follow contain the OPTINFO datafill for each option listed under OPTKEY.

OPTION=ANI

If the option entry in the key is ANI, datafill subfield OPTION as described in the following table.

Field descriptions OPTION=ANI

Field	Subfield	Entry	Explanation and action
OPTINFO	OPTION	ANI	Enter ANI to specify the name of the option assigned to the CLLI specified in subfield CLLI.

Datafill examples The following example shows sample datafill for table TRKOPTS.

MAP display example for table TRKOPTS, option ANI

```
 CLLI     OPTKEY      OPTINFO
-------------------------------------------------------------
TRISUPIC  ANI         ANICLI10
```

TRKOPTS (continued)

OPTION = AOC

If the option entry in the key is AOC, datafill subfield OPTION and refinements as described in the following table

Note: Option AOC is not available in North American loads.

Field descriptions for OPTION=AOC

Field	Subfield	Entry	Explanation and action
OPTINFO	OPTION	AOC	Option entry AOC specifies the Advice of Charge option. With AOC datafilled, the refinements described below must also be datafilled.
	AOCCHGOV	Y or N	*Advice of Charge Changeover* This field enables or disables a tariff or discount changeover during a call.
	AOCD	Y or N	*Advice of Charge During call* This field switches the charge unit count on or off during a call.
	AOCE	Y or N	*Advice of Charge End of call* This field switches the final charge unit count on or off at the end of a call.
	AOCREL	Y or N	*Advice of Charge Release* This field enables or disables the release of a call if there is a failure to provide AOC (incomplete metering table datafill).
	AOCS	Y or N	*Advice of Charge at call Setup* This field enables or disables the charging rate that is sent to the user at call setup before CONNECT.
	DSCNT	1 to 511, or NONE	*Originating discount index* This field contains the discount class number for the customer.
	PROTOCOL	FUNCTIONAL or KEYPAD	*Advice of Charge Protocol* This field specifies which protocol is used to transmit AOC information to the end user.

Field descriptions for OPTION=AOC

Field	Subfield	Entry	Explanation and action
	REQUEST	Y or N	*Advice of Charge Request* This field provides AOC on the user's request. If this field is set to Y, the user only receives AOC information if it is requested in the setup message.
	UNITS	CHARGING or CURRENCY	*Advice of Charge Units* This field provides AOC information in currency or charging units used.

OPTION=BCMAP

If the option entry in the key is BCMAP, datafill subfield OPTION and refinements as described in the following table.

Field descriptions OPTION=BCMAP

Field	Subfield	Entry	Explanation and action
OPTINFO	OPTION	BCMAP	Enter BCMAP to set the connection type for outgoing setup messages over BTUP, DASS2, and ETSI ISUP trunks. This option consists of subfields ACCESS_ISDN, ACCESS_NO_ISDN, and ALL.
	ACCESS_ISDN, ACCESS_NON_ISDN, ALL	FORCE_ALL or MAP_VOICE	Enter ACCESS_ISDN to specify that the option applies to ISDN calls incoming over ETSI ISUP, PRI, or BRI. Enter ACCESS_NO_ISDN to specify that the option applies to calls not specified by the ACCESS_ISDN option. • Enter ALL to specify that the option applies to all calls over the trunk.

TRKOPTS (continued)

Field descriptions OPTION=BCMAP

Field	Subfield	Entry	Explanation and action
			If FORCE_ALL has the value: • SPEECH, all outbound calls have a TMR of SPEECH regardless of the received TMR • 3_1KHZ, all outbound calls have a TMR of 3.1KHZ AUDIO regardless of the received TMR If MAP_VOICE has the value: • SPEECH, all outbound calls have a TMR of 3_1KHZ AUDIO if the received TMR has the value SPEECH • 3_1KHZ, all outbound calls have a TMR of SPEECH if the received TMR has the value 3_1KHZ AUDIO

Datafill example

The following example shows sample datafill for table TRKOPTS.

MAP display example for table TRKOPTS, option BCMAP

```
          OPTKEY                    OPTINFO
_____________________________________________________

KNGA 1020EIBWE BCMAP BCMAP ACCESS_NON_ISDN FORCE_ALL SPEECH
KNGA 1021EIWBE BCMAP BCMAP ALL         MAP_VOICE 3.1KHZ
```

OPTION=BLOCKLNP

If the option entry in the key is BLOCKLNP, datafill subfield OPTION and refinements as described in the following table.

Field descriptions OPTION=BLOCKLNP

Field	Subfield	Entry	Explanation and action
OPTINFO	OPTION	BLOCKLNP	Enter BLOCKLNP to send the call to treatment or default routing. This option consists of subfield BLOCK_CHOICE. ***Note:*** The following ISUP trunk types support BLOCKLNP: T1, IT, T2, and ATC.
	BLOCK_ CHOICE	TREAT or DFLTRT	Enter BLOCK_CHOICE to specify where to send the call. The subfield consists of entries TREAT and DFLTRT. ***Note:*** The operating company decides the type of block for each trunk group. Enter TREAT to send the call to treatment. Enter DFLTRT to send the call to default routing.

Datafill example

The following example shows sample datafill for table TRKOPTS.

MAP display example for table TRKOPTS, option BLOCKLNP

```
          OPTKEY                    OPTINFO
-------------------------------------------------------
ISUPITIC  BLOCKLNP          BLOCKLNP  TREAT
```

TRKOPTS (continued)

OPTION=BWRLSIND

If the option entry in the key is BWRLSIND, datafill subfield OPTION as described in the following table.

Field descriptions OPTION=BWRLSIND

Field	Subfield	Entry	Explanation and action
OPTINFO	OPTION	BWRLSIND	Enter BWRLSIND for a congestion tone with clear back (CLB) release indication to be applied to the outgoing CAS trunk.

Datafill example

The following example shows sample datafill for table TRKOPTS.

MAP display example for table TRKOPTS, option BWRLSIND

```
          OPTKEY                    OPTINFO
-------------------------------------------------
CAS1      BWRLSIND                  BWRLSIND
```

OPTION=CALLREF

If the option entry in the key is CALLREF, datafill subfield OPTION as described in the following table.

Field descriptions OPTION=CALLREF

Field	Subfield	Entry	Explanation and action
OPTINFO	OPTION	CALLREF	Enter CALLREF on an incoming trunk to indicate that the trunk can expect to receive a Call Reference parameter in the IAM message. The parameter could either be transitted unchanged or modified depending on the value in CALL_REF. For an outgoing trunks this works in conjunction with the CALL_REF value of DELETE.
	CALL_REF	ADD_OVERWRITE	Datafill subfield ADD_OVERWRITE on an incoming trunk to indicate that the Call Reference parameter in the outgoing IAM should contain the Call identity and Point code pertaining to this switch. If there is a Call Reference parameter in the incoming IAM it will be overwritten.
		DELETE	Datafill subfield DELETE on an outgoing trunk to indicate that no Call Reference parameter should be sent in the outgoing IAM.

Note:

This option is only valid on ETSI ISUP V2 trunks. Both the originating trunk and terminating trunk must be ETSI ISUP V2.

The option CALLREF without any subfields (to indicate a transit situation) cannot be datafilled against an outgoing trunk.

The subfield ADD_OVERWRITE cannot be datafilled against an outgoing trunk.

The subfield DELETE cannot be assigned to an incoming trunk.

Datafill examples The following examples show sample datafill for table TRKOPTS.

MAP display example for table TRKOPTS, option CALLREF

```
OPTKEY OPTINFO
--------------
ETSIISUPLPB CALLREF CALLREF $
ETSIISUPLPB CALLREF CALLREF (ADD_OVERWRITE ) $
ETSIISUPLPA CALLREF CALLREF (DELETE ) $
```

OPTION=CCNTLIDX

If the option entry in the key is CCNTLIDX, datafill subfield OPTION as described in the following table.

Field descriptions OPTION=CCNTLIDX

Field	Subfield	Entry	Explanation and action
OPTINFO	OPTION	CCNTLIDX	Enter CCNTLIDX to allow control of call processing functionality by the operator.
	CCNTLIDX	Alphanumeric (1 to 32 characters)	SCRN_INDX. Only indices that already exist in table CALLCNTL or table CCNTLGRP can be datafilled in TRKOPTS. This enables a SCRN_INDX to be associated with an incoming trunk group.

Datafill example

The following example shows sample datafill for table TRKOPTS.

TRKOPTS (continued)

MAP display example for table TRKOPTS, option CCNTLIDX

```
          OPTKEY                  OPTINFO
_____________________________________________________
KNGA1020EIBWE CCNTLIDX      CCNTLIDX SCRN_CDPN_SET_NCOS
```

OPTION=CFR

If the option entry in the key is CFR datafill subfield OPTION as described in the following table.

Field descriptions OPTION=CFR

Field	Subfield	Entry	Explanation and action
OPTINFO	OPTION	CFR	Enter CFR to activate the restrictions on forwarded calls coming from ETSI ISUP or IBN7 ISUP trunk.

Datafill example

The following example shows sample datafill for table TRKOPTS.

MAP display example for table TRKOPTS, option CFR

```
                OPTKEY                          OPTINFO
_____________________________________________________________________

MMP_E2ISUP1 CFR CFR
```

OPTION=CFWOPT

If the option entry in the key is CFWOPT, datafill subfield OPTION as described in the following table.

Field descriptions OPTION=CFWOPT

Field	Subfield	Entry	Explanation and action
OPTINFO	OPTION	CFWOPT	Enter CFWOPT to make the system substitute the original calling number with the DN that activates the Call Forward feature.

Note: See Supplementary information for CFWOPT-specific error messages.

Datafill example

The following example shows sample datafill for table TRKOPTS.

MAP display example for table TRKOPTS, option CFWOPT

```
                OPTKEY                  OPTINFO
-------------------------------------------------------
OGR216A         CFWOPT                  CFWOPT
```

OPTION=CGNBD_IN

If the option entry in the key is CGNBD_IN, datafill subfield OPTION as described in the following table.

Field descriptions OPTION=CFWOPT

Field	Subfield	Entry	Explanation and action
OPTINFO	OPTION	CGNBD_IN	Controls whether to perform PI mapping on an incoming agent that is set with an IN (Intelligent Network) trigger. It provides the index to the screening tables. The datafill of option CGNBD_IN is restricted to GSP CR11 and CR12 trunks.

Datafill example

The following example shows sample datafill for table TRKOPTS.

MAP display example for table TRKOPTS, option CGNBD_IN

```
                OPTKEY                                  OPTINFO
-------------------------------------------------------------
 CR11TEST CGNBD_IN CGNBD_IN SCRN_IC_IDA
```

TRKOPTS (continued)

OPTION=CGPNBLDR

If the option entry in the key is CGPNBLDR, datafill subfield OPTION as described in the following table.

Field descriptions OPTION=CFWOPT

Field	Subfield	Entry	Explanation and action
OPTINFO	OPTION	CGPNBLDR	Provides an index into table CGPNBLDR.

Datafill example

The following example shows sample datafill for table TRKOPTS.

MAP display example for table TRKOPTS, option CGNBLDR

```
                OPTKEY                                  OPTINFO
-------------------------------------------------------------
 ANSIPRITEST CGPNBLDR CGPNBLDR SCRN_IC_ADDR
```

OPTION=CITYCODE

If the option entry in the key is CITYCODE, datafill subfield OPTION as described below.

Field descriptions OPTION=CITYCODE

Field	Subfield	Entry	Explanation and action
OPTINFO	OPTION	CITYCODE	Enter CITYCODE to prefix the outgoing calling number for Brazilian calls with a subscriber incoming nature-of-address (NOA).
		00 to 99	Enter two-digit datafill for Brazilian variants only.

Datafill example

The following example shows sample datafill for table TRKOPTS.

MAP display example for table TRKOPTS, option CITYCODE

```
          OPTKEY                  OPTINFO
_____________________________________________________

> BZISUPIE102D CITYCODE CITYCODE 55
```

OPTION=CLGDMI

If the option entry in the key is CLGDMI, datafill subfield OPTION as described below.

Field descriptions OPTION=CLGDMI

Field	Subfield	Entry	Explanation and action
OPTINFO	OPTION	CLGDMI	Enter CLGDMI to allow manipulation of the CLI over the terminating trunk. This option has one parameter which is an index to table DIGMAN. ***Note:*** It is recommended to datafill the DIGMAN tuple before datafilling the CLGDMI option.
		1 to 32767	Enter a value between1 and 32767.

Datafill example

The following example shows sample datafill for table TRKOPTS.

MAP display example for table TRKOPTS, option CLGDMI

```
          OPTKEY                  OPTINFO
_____________________________________________________

KNGA222DPBWO CLGDMI              CLGDMI 1
KNGA200BTBWE CLGDMI              CLGDMI 454
```

TRKOPTS (continued)

OPTION=CLICNTL

If the option entry in the key is CLICNTL, datafill subfield OPTION as described below.

Field descriptions OPTION=CLICNTL

Field	Subfield	Entry	Explanation and action
OPTINFO	OPTION	CLICNTL	Enter CLICNTL to allow control over the address which is screened, billed, and outpulsed.

Datafill example

The following example shows sample datafill for table TRKOPTS.

MAP display example for table TRKOPTS, option CLICNTL

```
          OPTKEY                    OPTINFO
_____________________________________________________

KNGA1020EIBWE     CLICNTL CLICNTL
```

OPTION=CLIDELV

If the option entry in the key is CLIDELV, datafill subfield OPTION as described below.

Field descriptions OPTION=CLIDELV

Field	Subfield	Entry	Explanation and action
OPTINFO	OPTION	CLIDELV	Enter CLIDELV to control delivery of the CLI over the terminating trunk.
		Y, N, or SCRN_PI	Enter a Y to always deliver CLI to the terminator. Enter an N to never deliver CLI to the terminator. Enter SCRN_PI to screen the Presentation Indicator to determine whether or not to deliver CLI to the terminator.

Datafill example

The following example shows sample datafill for table TRKOPTS.

MAP display example for table TRKOPTS, option CLIDELV

```
        OPTKEY                  OPTINFO
_____________________________________________________

KNGA222DPBWO CLIDELV CLIDELV Y

KNGA200BTBWE CLIDELV CLIDELV N

PUBLONMDHBWO CLIDELV CLIDELV SCRN_PI
```

OPTION=CLIDLVPI

If the option entry in the key is CLIDLVPI, datafill subfield OPTION as described in the following table.

Field descriptions OPTION=CFWOPT

Field	Subfield	Entry	Explanation and action
OPTINFO	OPTION	CLIDLVPI	Datafill CLIDLVPI to enable the CLI delivery enhancement. The datafill of this option is restricted to GSP ISUP trunks.

Datafill example

The following example shows sample datafill for table TRKOPTS.

MAP display example for table TRKOPTS, option CLIDLVPI

```
                OPTKEY                                  OPTINFO
-------------------------------------------------------------

 ANSIPRITEST CLIDLVPI CLIDLVPI
```

TRKOPTS (continued)

OPTION=CLIOUTP

If the option entry in the key is CLIOUTP, datafill subfield OPTION as described below.

Field descriptions OPTION=CLIOUTP

Field	Subfield	Entry	Explanation and action
OPTINFO	OPTION	CLIOUTP	Enter CLIOUTP to provide control over the selection of the address that is sent as CLI over the terminating trunk. This option can index only tuples for the 'OG' direction field of table CLICNTL.
		An alphanumeric key, CLICNTLKEY	***Note 1:*** Care should be taken to first datafill the tuple in table CLICNTL, under the 'OG' direction with the address to be outpulsed within the CgPN parameter, before referencing it from the CLIOUTP option. ***Note 2:*** A tuple in table CLICNTL referenced by the CLIOUTP option cannot be deleted.

Datafill example

The following example shows sample datafill for table TRKOPTS.

MAP display example for table TRKOPTS, option CLIOUTP

```
          OPTKEY                  OPTINFO
_____________________________________________________

KNGA222DPBWO CLIOUTP CLIOUTP OP_RDN_THN_CLI

PUBLONMDHBWO CLIOUTP CLIOUTP OP_CHG_THN_RDN
```

OPTION=CNAMINGN

If the option entry in the key is CNAMINGN, datafill subfield OPTION as described below.

Field descriptions OPTION=CNAMINGN

Field	Subfield	Entry	Explanation and action
OPTINFO	OPTION	CNAMINGN	Enter CNAMINGN to allow the switch to send the calling name in the GN parameter of ISUP IAM.

Note: See Supplementary information for CNA-specific error messages.

OPTION=COS

The trunk option COS (Class of Service) is used to specify a Class of Service Group (COSGRP) and a Class of Service Index (COSIDX) on a per trunk basis.

If the option entry in the key is COS, datafill subfield OPTION as described in the following table.

Field descriptions OPTION=COS

Field	Subfield	Entry	Explanation and action
OPTINFO	OPTION	COS	Enter the Class of Service for trunk originated calls to enable the operator to associate a Class Of Service (COS) value with a trunk group. This field uses two subfields to represent the Class of Service: Class of Service Group (COSGRP) and Class of Service Index (COSIDX).
	COS	COSGRP	Enter a Class of Service Group for trunk originated calls. This string, upto a maximum of 16 characters, is first datafilled in table COSENG.
		COSIDX	Enter a Class of Service Index for the trunk originated call. It is an integer in the range 0-1023.

Datafill example The figure that follow show sample datafill for table TRKOPTS, where COSGRP = CUSTA_ENGLISH and COSIDX = 999.

MAP display example for table TRKOPTS, option COS

```
OPTKEY              OPTINFO
_____________________________________________________

 KNGA222DPBWO COS COS  CUSTA_ENGLISH  999
```

TRKOPTS (continued)

OPTION=CPT

If the option entry in the key is CPT, datafill subfield OPTION as described in the following table.

Field descriptions OPTION=CPT

Field	Subfield	Entry	Explanation and action
OPTINFO	OPTION	CPT	Enter CPT to activate the Call Progress Tone feature. Datafill subfields ON_TONE, ON_TIME, OFF_TIME, and PATTERN.
	ON_TONE	AUDRING_TONE, DIAL_TONE, HI, LO	On tone. This subfield specifies the type of tone that the user receives when the CPT feature is active. • Enter AUDRING_TONE to apply the same tone that the switch uses for audible ringback. • Enter DIAL_TONE to apply the same tone that the switch uses for normal dial tone. • Enter HI to apply the HI tone defined in the market-specific tone set. • Enter LO to apply the LO tone defined in the market-specific tone set.
	ON_TIME	1 to 100	ON_TIME. This subfield specifies the time, in 10 ms units, that the system applies one pulse of the CPT. Enter a value between 1 and 100.
	OFF_TIME	1 to 100	OFF_TIME. This subfield specifies the time, in 10 ms units, between CPT pulses. Enter a value between 1 and 100.
	PATTERN	up to 8 digits of 0's and 1's	PATTERN. This subfield specifies the bit pattern that represents the tone characteristics. 1's indicate the time the system applies the value in subfield ON_TIME. 0's indicate how long the system applies the value in subfield OFF_TIME.

Note: See Supplementary information for CPT-specific error messages.

Datafill example

The following example shows sample datafill for table TRKOPTS.

MAP display example for table TRKOPTS, option CPT

```
                OPTKEY                  OPTINFO
-------------------------------------------------------------
OGR216A         CPT                     CPT LO 5 5 0101
```

OPTION=CSSCRN

If the option entry in the key is CSSCRN, datafill subfield OPTION as described in the following table.

Field descriptions OPTION=CSSCRN

Field	Subfield	Entry	Explanation and action
OPTINFO	OPTION	CSSCRN	Enter CSSCRN to assign Carrier Selection screening to the trunk CLLI specified in subfield CLLI.
	SCRNTYPE	WHITELIST or BLACKLIST	SCRNTYPE specifies the screening method to be used. Enter WHITELIST to enable whitelist screening (the call is allowed to continue if the CLI lookup in table DNSCRN is successful). Enter BLACKLIST to enable blacklist screening (the call is blocked if the CLI lookup in table DNSCRN is successful).
	ATTRCHK	N, CS, or CIC	ATTRCHK specifies the type of attribute check in table DNSCRN. Enter N to specify no attribute checking applies. In this instance, only the CLI needs to exist in DNSCRN for the screening to apply. Enter CS to ensure the CS attribute in table DNSCRN exists before CLI screening applies. Enter CIC to ensure the Carrier Identification Code (CIC) received in the CSP (or provided with field trunk option PRESEL) matches a CIC in table DNSCRN with the CS attribute.

TRKOPTS (continued)

Field descriptions OPTION=CSSCRN

Field	Subfield	Entry	Explanation and action
	MATCH	PARTIAL or EXACT	MATCH specifies the lookup method in table DNSCRN. Enter PARTIAL to enable partial CLI matching. Only the starting digits of a CLI need to match an entry in table DNSCRN. Enter EXACT to enable exact CLI matching. A CLI has to match an entry in table DNSCRN exactly.
	TRIGGER	CSP or ALL	TRIGGER determines when CSP screening occurs. Enter CSP to screen calls only when a CSP is received. Enter ALL to screen all calls. This can be overridden when a CSP is received.

OPTION=CTC

If the option entry in the key is CTC, datafill as described in the following table.

Field descriptions OPTION=CTC

Field	Subfield	Entry	Explanation and action
CTC	TRIGGER_INDEX	Y or N	The Trigger Index field. Y = Trigger Index sent in Info_Analyze message. N = Trigger Index not sent in Info_Analyze message.
	INDEX	0 to 255	Enter the trigger value sent in the Info_Analyze message when TRIGGER_INDEX = Y.

Datafill example

The following example shows sample datafill for table TRKOPTS.

MAP display example for table TRKOPTS

```
                OPTKEY                                  OPTINFO
-------------------------------------------------------------
IP3IMT744C7DR09 CTC CTC N $
IPEAN836C7DR07 CTC CTC Y 72 $
```

OPTION=CUSTOM_CPC

If the option entry in the key is CUSTOM_CPC, datafill as described in the following table.

Field descriptions OPTION=CUSTOM_CPC

Field	Subfield	Entry	Explanation and action
	CUSTOM_CPC	Australia	Enter Australia in CUSTOM_CPC on the outgoing trunk to execute the mapping of the CPC parameters INHIBIT_CALL_DIVERSION (239 [base 10]) and MOBILE_CUSTOMER (247 [base 10]) on the ETSI ISUP V2.

Datafill example

The following example shows sample datafill for table TRKOPTS.

MAP display example for table TRKOPTS

```
          OPTKEY                  OPTINFO
_____________________________________________________

KNGA280EIBWE CPC_CUSTOM CPC_CUSTOM (Australia) $
```

OPTION=DCF

The DCF option applies to incoming calls that have been forwarded to PRI. The option operates within a node or network-wide for incoming ANSI ISUP or ETSI ISUP calls that terminate on the DMS switch.

Calls can be forwarded from IBN lines, P-phone lines, V5.2 POTS lines, CAS MUX lines, or BRI lines. The DCF option can apply to PRI.

Calls received from ISUP variants that cannot send a redirection indicator cannot be denied. This restriction pertains to ETSI ISUP V1 and BTUP (IUP) protocols.

Calls received by the PRI feature “PRI Partial Reroute” are not intercepted by the DCF option.

TRKOPTS (continued)

If the option entry in the key is DCF, datafill subfield OPTION as described in the following table.

Field descriptions OPTION=DCF

Field	Subfield	Entry	Explanation and action
OPTINFO	OPTION	DCF	Enter DCF if the trunk is to reject call-forwarded calls. Calls that are rejected receive Denied Termination treatment.

Datafill example

The following example shows sample datafill for table TRKOPTS.

MAP display example for table TRKOPTS, option DCF

```
                OPTKEY                  OPTINFO
-------------------------------------------------------
TG1R35AA        DCF                     DCF
```

OPTION=DEFNUM

If the option entry in the key is DLYFWDXMT, datafill subfield OPTION as described in the following table.

Field descriptions OPTION=DEFNUM

Field	Subfield	Entry	Explanation and action
OPTINFO	OPTION	DEFNUM	Enter DEFNUM to trigger Calling Line Identity Line (CLI) default number functionality.
	DEFOPT	NOCLI, NOCHG, NOCON, OVERI, NOINFO , NODEF	Enter the default number option. ***Note:*** DEFOPT allows the user to datafill the options corresponding to CLI or contractor number only if the incoming trunk supports the respective number.
		NOCLI	The default number is utilized only if the CLI is not available in the incoming message.
		NOCHG	The default number is applied when there is no charge number in the incoming message.
		NOCON	The default number is applied when there is no contractor number in the incoming message.

Field descriptions OPTION=DEFNUM

Field	Subfield	Entry	Explanation and action
		OVERI	The default number overrides the CLI, charge number, or contractor number available in the incoming message.
		NOINFO	The default number is applied when the CLI or Charge number or Contractor number parameter is received with no digits.
		NODEF	If datafilled, an error message 'NODEF is an invalid value' will be displayed.
	DEFIDX	1 to 255	Enter DEFIDX the default index which points into table DEFNUM where the default CLI, charge number and contractor number are defined.

Datafill example

The following example shows sample datafill for table TRKOPTS.

MAP display example for table TRKOPTS, option DEFNUM

```
TABLE: TRKOPTS
OPTKEY                  OPTINFO
_____________________   _____________________________

KNGA211ISWBE DEFNUM DEFNUM NOCLI 1

KNGA221DPWBE DEFNUM DEFNUM NOINFO 2
```

TRKOPTS (continued)

OPTION=DLYFWDXMT

If the option entry in the key is DLYFWDXMT, datafill subfield OPTION as described in the following table.

Field descriptions OPTION=DLYFWDXMT

Field	Subfield	Entry	Explanation and action
OPTINFO	OPTION	DLYFWDXMT	Enter DLYFWDXMT to activate delay of forward transmission.
	TIMEOUT	0,1, 2, 3, 4, or 5	TIMEOUT specifies the maximum time the system will wait for an answer supervision signal before the call is taken down. Entering a timeout value of 0 will prevent the starting of the timeout timer. The forward speech path will be blocked until an answer supervision signal is received or until one of the parties goes onhook. Time is in minutes.

Datafill example

The following example shows sample datafill for table TRKOPTS.

MAP display example for table TRKOPTS, option DLYFWDXMT

```
            OPTKEY                  OPTINFO
_____________________________________________________

PX_MONTREAL    DLYFWDXMT                DLYFWDXMT 1

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:
PX_MONTREAL DLYFWDXMT DLYFWDXMT 1
ENTER Y TO CONFIRM, N TO REJECT OR E TO EDIT
Y
TUPLE CHANGED
JOURNAL FILE INACTIVE
```

Note: This feature is only supported on trunk types PX, P2, PO, IBN2, IBN0, and PRA. All trunk members must terminate to a LTC or DTC. The exec line-up datafilled in table LTCINV must be DTCEX, DTCFX,

FXODTC. For SPM, the exec line-up datafilled in table MNNODE must be SPMEX, SPMFX, FXOSPM.

OPTION=DYNAMIC

If the option entry in the key is DYNAMIC, datafill subfield OPTION as described in the following table.

Field descriptions OPTION=DYNAMIC

Field	Subfield	Entry	Explanation and action
OPTINFO	OPTION	DYNAMIC	The OPTION subfield indicates the name of the option. The DYNAMIC option is used by the TOPS IP feature for dynamic trunks.
	SIGNALING	ISUP, ISUPPLUS, or SIPT See subfields	The method used by the switch to signal to the voice packetizing gateway. ISUP has no subfields SIPT consists of a vector of 3 sub-fields: • DEST_MGCNAME • TPROFILE • ALT_HOST_MGCNAME ISUPPLUS consists of the sub-field CAPABILITY_SET.
	DEST_ MGCNAME	Up to 16 characters	Enter the Media Gateway Controller (MGC) name from table MGCINV.
	TPROFILE	Up to 16 characters	Enter the telephony profile name from table TELEPROF.
	ALT_HOST_ MGCNAME	Up to 16 characters	Enter an alternative Media Gateway Controller (MGC) name.
	CAPABILITY_ SET	1 or 2	For ISUPPLUS, this represents the BICC capability set (CS). If the other switch (other side of the DPT trunk) is unable to support CS2 then datafill CAPABILITY_SET as 1. If the other switch can support CS2 then datafill CAPABILITY_SET as 2.
	SIGNALING_ NETWORK	IP, SS7, or STRK	The network used for call control signaling.

TRKOPTS (continued)

Field descriptions OPTION=DYNAMIC

Field	Subfield	Entry	Explanation and action
	BEARER_ NETWORK	IP, ATM, or STRK	The network used for the bearer (the voice).
	APPLICATION	OC, POS, DPT, RAS, SIPBCPT, or STRK	The dynamic trunking application name.

Note: See Supplementary information for DYNAMIC-specific error messages.

The following are comments for the POS application.

- Datafill the trunk group in the following tables before table TRKOPTS: CLLI, TRKGRP, and TRKSGRP.
- Datafill the trunk group in the following tables after table TRKOPTS: IPINV, TOPSPOS, and TOPSTOPT.
- To remove the POS datafill from a trunk group in table TRKOPTS, all tuples containing the trunk group CLLI must be deleted from tables IPINV, TOPSPOS, and TOPSTOPT.
- A trunk cannot be marked as POS unless it is outgoing (OG) in table TRKGRP. Other restrictions apply, as indicated in NTP 297-8403-906, the TOPS-IP User's Guide.

Datafill examples The following examples show sample datafill for table TRKOPTS.

MAP display example for table TRKOPTS, option DYNAMIC with ISUP signaling

```
                OPTKEY
                                                                  OPTINFO
-------------------------------------------------------------------------
    OFC1VL      DYNAMIC
                                  DYNAMIC ISUP  IP  IP   OC
```

An example of TRKOPTS tuples, with BICC CS1 and BICC CS2, are shown below. BICC1 is a BICC trunk group with CS1 and BICC2 is a BICC trunk group with CS2.

MAP display example for table TRKOPTS, option DYNAMIC with ISUPPLUS (BICC) signaling

```
               OPTKEY
                                                                  OPTINFO
-------------------------------------------------------------------------
    BICC1      DYNAMIC
                                  DYNAMIC ISUPPLUS  SS7  ATM     DPT 1
    BICC2      DYNAMIC
                                  DYNAMIC ISUPPLUS  SS7  ATM     DPT 2
```

OPTION=FCI

If the option entry in the key is FCI, datafill subfield OPTION as described in the following table.

Field descriptions OPTION=FCI

Field	Subfield	Entry	Explanation and action
OPTINFO	OPTION	FCI	Enter FCI if the National/International call indicator in the outgoing FCI (in IAM message) is to be set according to this datafill.
		NATL	This indicates that the National/International call indicator in the outgoing FCI (in IAM message) must be set to ‘call to be treated as a national call’.
		INTL	This indicates that the National/International call indicator in the outgoing FCI (in IAM message) must be set to ‘call to be treated as an international call’.

Datafill example

The following example shows sample datafill for table TRKOPTS.

MAP display example for table TRKOPTS, option FCI

```
OPTKEY   OPTINFO
_____________________________________________

ANSI7LPB FCI FCI NATL
ANSI7LPA FCI FCI INTL
```

TRKOPTS (continued)

OPTION=FGD

If the option entry in the key is FGD, datafill subfield OPTION as described in the following table.

Field descriptions OPTION=FGD

Field	Subfield	Entry	Explanation and action
OPTINFO	OPTION	FGD	Enter FGD for an ISUP FGD trunk.
		IXC	This indicates that the ISUP FGD trunk is the IXC end.

Datafill example

The following example shows sample datafill for table TRKOPTS.

MAP display example for table TRKOPTS, option FGD

```
OPTKEY   OPTINFO
_____________________________________________
ANSI7LPB FGD FGD IXC
```

OPTION=FWRLSIND

If the option entry in the key is FWRLSIND, datafill subfield OPTION as described in the following table.

Field descriptions OPTION=FWRLSIND

Field	Subfield	Entry	Explanation and action
OPTINFO	OPTION	FWRLSIND	Enter FWRLSIND for a congestion tone with clear forward (CLF) release indication to be applied to the outgoing CAS trunk.

Datafill example

The following example shows sample datafill for table TRKOPTS.

MAP display example for table TRKOPTS, option FWRLSIND

```
          OPTKEY                    OPTINFO
_____________________________________________
CAS1      FWRLSIND                  FWRLSIND
```

OPTION=HPCTQ or HPCNOTQ

If the option entry in the key is HPCTQ or HPCNOTQ, datafill subfield OPTION as described in the following table.

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

Office of the Manager
National Communications System
Attn: GETS Program Office
701 South Courthouse Rd.
Arlington, VA 22204-219
email: gets@ncs.gov

Field descriptions OPTION=HPCTQ or HPCNOTQ

Field	Subfield	Entry	Explanation and action
OPTINFO	OPTION	HPCTQ or HPCNOTQ	The OPTION subfield indicates the name of the option. The HPCTQ option is used to enable HPC trunk queuing. The HPCNOTQ option is used to deny HPC trunk queuing on specific egress trunk groups when the HPC egress queuing feature is enabled on an office-wide basis through office parameter HPC_EGRESS_QUEUING. ***Note:*** The HPCNOTQ option can only be assigned to egress trunk group types P2, PX, or PRA. When an attempt is made to assigned the HPCNOTQ option to a trunk group other than P2, PX, or PRA, an error message is displayed.
	TIMEOUT	1 to 90 seconds	The TIMEOUT subfield indicates the maximum duration a call will be held in the queue.
	MAXCALLS	1 to 256	The MAXCALLS subfield indicates the maximum number of calls that can be queued on the trunk group.
	PLAYANN	Y or N	PLAYANN is the Play Announcement subfield. Y = play announcement when a call is in the queue. N = do not play announcement when calls are in the queue.
	ANNC	1 to 16 alphanumeric characters	ANNC is the CLLI code of the announcement played when PLAYANN=Y.

TRKOPTS (continued)

Note: See Supplementary information for HPCTQ-specific and HPCNOTQ-specific error messages.

Datafill example

The following example shows sample datafill for table TRKOPTS.

MAP display example for table TRKOPTS, option GETS HPC

```
          OPTKEY                    OPTINFO
_____________________________________________________

ISUP_MTL     HPCTQ            HPCTQ 5 100 Y ANNC1
ISUP_MTL2    HPCTQ                HPCTQ 5 100 N
ISUP_001     PRESEL           PRESEL   33    Y
ISUP_002     OFFNET_CARRID      OFFNET_CARRID  22
PRATRKGP     HPCNOTQ          HPCNOTQ
```

OPTION=ICDS

If the option entry in the key is ICDS, datafill subfield OPTION as described in the following table.

Field descriptions OPTION=ICDS

Field	Subfield	Entry	Explanation and action
OPTINFO	OPTION	ICDS	Enter ICDS and datafill on all outgoing point of interconnect (POI) trunks. Add this option to all incoming I-ISUP and AISUP POI trunks. Option ICDS is valid for outgoing calls on ATUP, AISUP, and I-ISUP trunks to inhibit call diversion. Option ICDS identifies a trunk as a POI trunk.

Note: See Supplementary information for ICDS-specific error messages.

Datafill example

The following example shows sample datafill for table TRKOPTS.

MAP display example for table TRKOPTS, option ICDS

```
          OPTKEY                    OPTINFO
_____________________________________________________

NWMSC        ICDS                      ICDS
```

OPTION=ICMOG or OGMOG

If the option entry in the key is ICMOG or OGMOG, datafill subfield OPTION as described in the following table.

Field descriptions OPTION=ICMOG or OGMOG

Field	Subfield	Entry	Explanation and action
OPTINFO	OPTION	ICMOG	If OPTKEY = ICMOG, enter ICMOG to specify the MOGID on an incoming trunk. Then enter data in the MOGID field.
OPTINFO	OPTION	OGMOG	If OPTKEY = OGMOG, enter OGMOG to specify the MOGID on an outgoing trunk. Then enter data in the MOGID field.
OPTINFO	OPTION	MOGID	Alphanumeric (maximum 16 characters) Metered Originator Group Identifier. Enter the required value. ***Note:*** The MOGID is defined in table MTRMOGS.

Note: The options ICMOG/OGMOG and LMG cannot be provisioned on the same trunk.

Datafill example The following example shows sample datafill for table TRKOPTS.

MAP display example for table TRKOPTS, options ICMOG and OGMOG

```
          OPTKEY                    OPTINFO
-------------------------------------------------
ICPRIBA   ICMOG                   ICMOG   MOG2
OCPRIBA   OGMOG                     OGMOG   MOG1
```

OPTION=INTMTR

If the option entry in the key is INTMTR, datafill subfield OPTION as described in the following table.

Field descriptions OPTION=INTMTR

Field	Subfield	Entry	Explanation and action
OPTINFO	OPTION	INTMTR	Enter INTMTR to send a BCM message during an outbound call setup. The INTMTR trunk option may be defined only for ISUP trunks.

TRKOPTS (continued)

Datafill example

The following example shows sample datafill for table TRKOPTS option INTMTR.

MAP display example for table TRKOPTS, option INTMTR

```
OPTKEY                      OPTINFO
-----------------------------------------
 ISUPTRUNK  INTMTR     INTMTR
```

OPTION=INTRACSE

If the option entry in the key is INTRACSE, datafill subfield OPTION as described in the following table.

Field descriptions OPTION=INTRACSE

Field	Subfield	Entry	Explanation and action
OPTINFO	OPTION	INTRA CSE	Enter INTRACSE to enable route advance capabilities for CAUSE values 42, 47 and 51 and disable route advance capability of CAUSE value 34. INTRACSE can only be assigned to INTRA IMT IC or 2W trunks.
	RTE_ADV_CHOICE	Y/N	Enter Y to subfield RTE_ADV_CHOICE to enable INTRA IMT route advance for CAUSE values 42, 47 and 51 and disable route advance capability of CAUSE 34. When datafilled to N, CAUSE values 34, 42, 47 and 51 go to their respective default treatments. Note: CAUSE 34 can be enabled to route advance using INTRACSE if OFCVAR RTE_ADVANCE_FOR_INTRA_IMT_NCRT is set to Y.

Datafill example

The following example shows sample datafill for table TRKOPTS option INTRACSE.

MAP display example for table TRKOPTS, option INTRACSE

```
OPTKEY                    OPTINFO
-------------------------------------------------------------------------------
TRKCLLI   INTRACSE   INTRACSE  RTE_ADV_CHOICE  Y
```

OPTION=ISPARM

If the option entry in the key is ISPARM, datafill subfield OPTION as described in the following table.

Field descriptions OPTION=ISPARM

Field	Subfield	Entry	Explanation and action
OPTINFO	OPTION	ISPARM	Enter option ISPARM to enter a character string that points to table ISPARM to handle specified ISUP IAM parameters in different ways.
		string	Any character string defined in table ISPARM.

Datafill example

The following example shows sample datafill for table TRKOPTS option ISPARM.

MAP display example for table TRKOPTS, option ISPARM

```
          OPTKEY              OPTINFO
_____________________________________________

EISUPTRK ISPARM               ISPARM NO_OFCI
```

TRKOPTS (continued)

OPTION=ISUPSVC

If the option entry in the key is ISUPSVC, datafill subfield OPTION as described in the following table.

Field descriptions OPTION=ISUPSVC

Field	Subfield	Entry	Explanation and action
OPTINFO	OPTION	ISUPSVC	Enter ISUPSVC option to specify a service name defined in the table ISUPSVC. Table ISUPSVC holds tuples with services intended to be switched on and off by datafill.

Datafill example

The following example shows sample datafill for table TRKOPTS option ISUPSVC.

MAP display example for table TRKOPTS, option ISUPSVC

```
          OPTKEY                OPTINFO
_____________________________________________

EISPTRKA ISUPSVC ISUPSVC INR_INF_CGN
EISPTRKB ISUPSVC ISUPSVC IDR_IRS_RECEIVE
```

OPTION=LDA

If the option entry in the key is LDA, datafill subfield OPTION as described in the following table.

Field descriptions OPTION=LDA

Field	Subfield	Entry	Explanation and action
OPTINFO	OPTION	LDA	LDA (Long Distance Alerting) defines the trunk as a dedicated toll trunk. With LDA active, the switch alerts the subscriber to incoming toll calls by distinctive ringing or distinctive call waiting tones. This option is limited to incoming IBN toll trunks.

Datafill example

The following example shows datafill for defining trunk IC_MAL_R2 as a dedicated toll trunk.

MAP display example for table TRKOPTS, option LDA

```
          OPTKEY                    OPTINFO
-------------------------------------------------------
IC_MAL_R2       LDA     LDA
```

OPTION=LMG

If the option entry in the key is LMG, datafill subfield OPTION as described in the following table.

Field descriptions OPTION=LMG

Field	Subfield	Entry	Explanation and action
OPTINFO	OPTION	LMG	Enter LMG to specify a logical meter group. Then enter data in the LMG_NO field. ***Note:*** The options ICMOG/OGMOG and LMG cannot be provisioned on the same trunk.
	LMG_NO		LMG number. Enter the required numeric value (maximum 12 digits)

Datafill example

The following example shows datafill for option LMG.

MAP display example for table TRKOPTS, option LMG

```
          OPTKEY              OPTINFO
-------------------------------------------------
TURKPRI01 LMG                 LMG 4711
TURKISUPV2A LMG                 LMG 47121314
```

TRKOPTS (continued)

OPTION=LOOPBACK

If the option entry in the key is LOOPBACK, datafill subfield OPTION as described in the following table.

Field descriptions OPTION=LOOPBACK

Field	Subfield	Entry	Explanation and action
OPTINFO	OPTION	LOOPBACK	Enter LOOPBACK to enable operators to prevent trunk looping, that is, to prevent routing of calls back to the trunk on which they were received.
		N	Enter N to prevent calls from looping back on the trunk group against which the loopback option is assigned.
		0 to 9999	Enter the loopback group number. The loopback group number enables trunk groups to be associated with one another for a particular carrier.

Datafill example

The following example shows sample datafill for table TRKOPTS.

MAP display example for table TRKOPTS, option LOOPBACK

```
OPTKEY      OPTINFO
_____________________________________________________

 KNGA222DPBWO LOOPBACK LOOPBACK 9999

 QNSY201BTBWE LOOPBACK LOOPBACK N
```

OPTION=LRNOPT

If the option entry in the key is LRNOPT, datafill subfield OPTION as described in the following table.

Field descriptions OPTION=LRNOPT

Field	Subfield	Entry	Explanation and action
OPTINFO	OPTION	LRNOPT	Enter LRNOPT to derive the Routing Number for PBX ported-in number originated calls.

Field descriptions OPTION=LRNOPT

Field	Subfield	Entry	Explanation and action
	OVLYLRN	Hexadecimal value of 23 decimal digits	Enter OVLYLRN to specify the Overlay digits.
	OVLYCNT	0 to 23	Enter OVLYCNT to specify the number of first digits to be overlaid.

Datafill example

The following example shows sample datafill for table TRKOPTS.

MAP display example for table TRKOPTS, option LRNOPT

```
OPTKEY       OPTINFO
_____________________________________________________

 KNGA280EIBWE LRNOPT LRNOPT 7700091 3 $
```

OPTION=LSPAO

If the option entry in the key is LSPAO, datafill subfield OPTION as described in the following table.

CAUTION

Possibility of incorrect billing records

Once you datafill the LSPAO option, the switch considers all calls that traverse the datafilled trunk group as originating from a DN with that LSPAO option. The LSPAO option identifies the local service provider (LSP) account owner. Provision the LSPAO option only on trunk groups that you intend to dedicate to the traffic from a specific LSP and context. Otherwise, this data can result in incorrect billing records.

TRKOPTS (continued)

Field descriptions OPTION=LSPAO

Field	Subfield	Entry	Explanation and action
OPTINFO	OPTION	LSPAO	Enter LSPAO to provision information about the local service provider account owner. See the preceding cautionary box. The switch uses this information to generate billing records.
	PROVIDER	16 character alphanumeric	Enter a local service provider name already provisioned in table LSPINFO.
	CONTEXT	R, U, or N	Enter R for resold, U for unbundled, or N for native. Context refers to the leasing arrangement between the account owner and switch owner.

Datafill example

The following example shows sample datafill for table TRKOPTS.

MAP display example for table TRKOPTS, option LSPAO

```
OPTKEY      OPTINFO
-------------------------------------------------
LSPAO       LSPAO LECNAME1 R
```

OPTION=LSPFE

If the option entry in the key is LSPFE, enter data in the OPTION subfield as described in the table that follows.

Field descriptions OPTION=LSPFE

Field	Subfield	Entry	Explanation and action
OPTINFO	OPTION	LSPFE	Enter LSPFE to indicate the name of the switch owner on the far end of the trunk. Provision LSPFE when the far-end owner of the switch has a different SO value from the provisioned switch.

Field descriptions OPTION=LSPFE

Field	Subfield	Entry	Explanation and action
	PROVIDER	16 character alphanumeric	Enter a local service provider name already provisioned in table LSPINFO.
	SIGNAL_CONTROL	Y or N	Enter a Y to signal LSPFE forward as the LSPSO where LSPFE represents the switch owner of the originating subscriber. The switch uses this information in the Initial Address Message (IAM) when the LSPSO information is not available. Enter an N to prevent the switch from signaling the LSPFE parameter forward as the LSPSO.

Datafill example

The following example shows sample datafill for table TRKOPTS.

MAP display example for table TRKOPTS, option LSPFE

```
OPTKEY      OPTINFO
-------------------------------------------
LSPFE       LSPFE CLEC1 Y
```

OPTION=MCID

If the option entry in the key is MCID, datafill subfield OPTION as described in the following table.

Field descriptions OPTION=MCID

Field	Subfield	Entry	Explanation and action
OPTINFO	OPTION	MCID	Enter MCID for malicious call identification to allow a terminating user to request a log of the CLI for received calls from the network.

Note: See Supplementary information for MCID-specific error messages.

Datafill example

The following example shows sample datafill for table TRKOPTS.

TRKOPTS (continued)

MAP display example for table TRKOPTS, option MCID

```
          OPTKEY                    OPTINFO
-------------------------------------------------
CAS1      MCID                      MCID
```

OPTION=METER

If the option entry in the key is METER, datafill subfield OPTION as described in the following table.

Field descriptions OPTION=METER

Field	Subfield	Entry	Explanation and action
OPTINFO	OPTION	METER	Enter METER to indicate the Poland R2 metering variant on the trunk. This option is available for all incoming or 2-way FDCP trunks.

Datafill example

The following example shows sample datafill for table TRKOPTS.

MAP display example for table TRKOPTS, option METER

```
          OPTKEY                    OPTINFO
-------------------------------------------------
POLR2LPB  METER                     METER
```

OPTION=MPM

If the option entry in the key is MPM, datafill subfield OPTION as described in the following table.

Field descriptions OPTION=MPM

Field	Subfield	Entry	Explanation and action
OPTINFO	OPTION	MPM	Enter MPM for incoming or 2-way CTUP trunks to allow that trunk to generate MPM messages. MPM is a China specific metering message.

OPTION=MWI

If the option entry in the key is MWI, datafill subfield OPTION as described in the following table.

Field descriptions OPTION=MWI

Field	Subfield	Entry	Explanation and action
OPTINFO	OPTION	MWI	Enter MWI option to register specified PRI trunks for Message Waiting Indication as controlling and/or receiving users.

Datafill example

The following example shows sample datafill for table TRKOPTS. In the example the MWI is provisioned against the common language location identifiers (CLLI) STEP05PRIN, STEP06PRIN, and STEP07PRIN.

MAP display example for table TRKOPTS, option MWI

```
      OPTKEY              OPTINFO
-------------------------------------------
STEP05PRIN  MWI           MWI control
STEP06PRIN  MWI           MWI receive
STEP05PRIN  MWI           MWI control_and_receive
```

OPTION=NATL_CPC

If the option entry is NATL_CPC, enter data in the subfield OPTION as described in the following table.

Field descriptions OPTION=NATL_CPC

Field	Subfield	Entry	Explanation and action
OPTINFO	OPTION	NATL _CPC	Enter NATL_CPC to use Saudi national CPC values on Saudi trunks. If the CLI is not present in the original setup messaging CLF, assign a different MCID option to the terminating line. The new MCID option starts the INF/INR mapping of the CLI between SAUDI ISUP and the line.

Datafill example

The following example shows sample datafill for the TRKOPTS table.

TRKOPTS (continued)

MAP display example for table TRKOPTS, option NATL_CPC

```
          OPTKEY                    OPTINFO
-------------------------------------------------------
CAS1   NATL_CPC                  NATL_CPC
```

OPTION=NETOPTS

If the entry in the key is NETOPTS, enter data in the OPTION subfield as described in the following table.

Field descriptions OPTION=NETOPTS

Field	Subfield	Entry	Explanation and action
OPTINFO	OPTION	NETOPTS	Enter NETOPTS to assign the network options for each trunk. Operating company personnel can enter data for all options on a trunk group. A trunk group can have a maximum of four subgroups. A tuple cannot have the same suboption more than one time.
	INTLOPCLI	maximum of 11 digits	Enter a ten-digit calling line identity (CLI). The DMS-100 switch uses this CLI for outgoing calls on I-ISUP or Ie-ISUP trunks on which operating company personnel entered data. The DMS-100 switch uses this CLI when a CLI is not available in the incoming ISUP initial address message (IAM) and the calling party category (CPC) in the IAM has a value of ‘Operator’.
	INTLSUBCLI	maximum of 11 digits	Enter a ten-digit CLI. The DMS-100 switch uses this CLI for outgoing calls on I-ISUP or Ie-ISUP trunks on which operating company personnel entered data. The DMS-100 switch uses this CLI when a CLI is not available in the incoming ISUP IAM and the IAM does not have a value of ‘Operator’. For example, the CPC can have a value of ‘Subscriber’.
	FORCEINTL	NETOPTS_NIL_OPT_AREA	Enter data for this option to allow national calls to behave as international calls. These calls must terminate to I-ISUP or Ie-ISUP trunks for which operating company personnel have entered data for this option.

Field descriptions OPTION=NETOPTS

Field	Subfield	Entry	Explanation and action
	MAXCDPN	0 to 30	Enter data for this option to provide a count of a maximum of 30 digits. The DMS-100 switch uses this value to determine the maximum number of digits to use for the called party number (CDPN) parameter. The DMS-100 switch uses the CDPN parameter for outgoing calls on the I-ISUP or Ie-ISUP trunk which has datafill for this option.
	POINONNIIF	POINONNIIF	Enter data for the POINONNIIF option to allow the non-NIIF parameters, messages and procedures over the POI trunk. This data controls the generation of unsupported parameters in Address Complete Message (ACM), Call Progress Message (CPG), and Answer Message (ANM) during Call Forward.
	MOLIREQD	MOLIREQD	Enter data for the MOLIREQD option to activate the mechanism of carrying mobile location information on Ie-ISUP.

Note: See Supplementary information for NETOPTS-specific error messages.

Datafill example

The following example shows sample datafill for table TRKOPTS.

MAP display example for table TRKOPTS, option NETOPTS

```
OPTKEY                    OPTINFO
_____________________________________________________

PUBL214IIBWE NETOPTS NETOPTS (INTLOPCLI 2349898)
(FORCEINTL)$
```

TRKOPTS (continued)

OPTION=NOANSWER

If the option entry in the key is NOANSWER, datafill subfield OPTION as described in the following table.

Field descriptions OPTION=OSNC

Field	Subfield	Entry	Explanation and action
OPTINFO	NOANSWER	{MONA, DISA, CALLING_CARD, RSA}	Enter NOANSWER for the new option to be made available against a particular trunk for one or more of the following services - MONA, DISA, RSA, CALLING_CARD.

Datafill example

The following example shows sample datafill for table TRKOPTS.

MAP display example for table TRKOPTS, option NOANSWER

```
OPTKEY                          OPTINFO
_____________________________________________________

KNGA280EIBWE NOANSWER NOANSWER (MONA) (DISA) $
```

OPTION=OFFNET_CARRID

If the option entry in the key is OFFNET_CARRID, datafill subfield OPTION as described in the following table.

Field descriptions OPTION=OFFNET_CARRID

Field	Subfield	Entry	Explanation and action
OPTINFO	OPTION	OFFNET_CARRID	Enter OFFNET_CARRID to assign the Carrier ID of the connected network.
	CARRID	10 to 99, 000 to 099, or 1000 to 9999	CARRID is carrier identification, the two-, three-, or four-digit number representing the operating company. ***Note:*** Values 10 to 99, and 000 to 099 are assigned for the German market.

MAP display examples for table TRKOPTS, option OFFNET_CARRID

```
OPTKEY                  OPTINFO
_____________________________________________________

RUA14ISUPV2LP OFFNET_CARRID   OFFNET_CARRID 88
RUA14ISUPV2LP OFFNET_CARRID   OFFNET_CARRID 099
```

```
OPTKEY                  OPTINFO
_____________________________________________________

AUSTRK03 OFFNET_CARRID    OFFNET_CARRID 1440
AUSTRK04 OFFNET_CARRID    OFFNET_CARRID 1475
```

OPTION=OSNC

If the option entry in the key is OSNC, datafill subfield OPTION as described in the following table.

Field descriptions OPTION=OSNC

Field	Subfield	Entry	Explanation and action
OPTINFO	OPTION	OSNC	Enter OSNC to allow OSNC type calls on the outgoing or two-way ISUP Access to Carrier or ISUP Intertoll trunks.

Datafill example

The following example shows sample datafill for table TRKOPTS.

TRKOPTS (continued)

MAP display example for table TRKOPTS, option OSNC

```
 OPTKEY                          OPTINFO
_____________________________________________________

ISUP2WITEA  OSNC                OSNC
```

OPTION=POECNAME

If the option entry in the key is POECNAME, datafill subfield OPTION as described in the following table.

Field descriptions OPTION=POECNAME

Field	Subfield	Entry	Explanation and action
OPTINFO	OPTION	POECNAME	Enter POECNAME to enable the user to set the path of entry for trunk-originated calls.
	POECGRP	alphanumeric (1 to 32 characters)	Path of entry group. The path of entry group for trunk-originated calls, datafilled in the POECGRP subfield in table POECNM.
	POECIDX	0 to 255	Path of entry control index. Enter the path of entry control index for the call, which indicates the type of call.

Datafill example

The following example shows sample datafill for table TRKOPTS.

MAP display example for table TRKOPTS, option POECNAME

```
 OPTKEY                          OPTINFO
_____________________________________________________

KNGA200BTBWE        POECNAME POECNAME AMERICA 10
```

OPTION=PRESEL

If the option entry in the key is PRESEL, datafill subfield OPTION as described in the following table.

Field descriptions OPTION=PRESEL

Field	Subfield	Entry	Explanation and action
OPTINFO	OPTION	PRESEL	Enter PRESEL to assign the Preselected Carrier ID to the trunk CLLI specified in subfield CLLI.
	CARRID	up to a six-digit hexadecimal number for calltype subscriptions	CARRID is a six-digit hexadecimal number representing a calltype subscription as datafilled in table CPSNAME. Up to eight calltype subscriptions are supported. ***Note:*** Values 10 to 99, and 000 to 099 are assigned for the German market.
	OVERRIDE	Y or N	Y enables the use of override numbers. N denies the use of override numbers.

Datafill example

The following example shows sample datafill for table TRKOPTS.

MAP display example for table TRKOPTS, option PRESEL

```
TABLE: TRKOPTS
OPTKEY              OPTINFO
-------------------------------------------------------------
KNGA230PRNWE PRESEL   PRESEL (ALL 123456) (NATL 1345) $ Y
PUBLONMDHBWE PRESEL   PRESEL (ALL B345) (NATL 1345DE) $ Y
```

TRKOPTS (continued)

OPTION=Q118OPT

If the option entry in the key is Q118OPT, datafill subfield OPTION as described in the following table.

Field descriptions OPTION=Q118OPT

Field	Subfield	Entry	Explanation and action
OPTINFO	OPTION	Q118OPT	Enter Q118OPT for outgoing US CAS trunks only.
	PREANSWER	1 to 255	PREANSWER is the pre-answer timer value.
	REANS_SUP	Y or N	Y enables mapping to the backward signal after the timer expires.

Datafill example

The following example shows sample datafill for table TRKOPTS.

MAP display example for table TRKOPTS, option Q118OPT

```
TABLE: TRKOPTS
OPTKEY              OPTINFO
------------------------------------------------------------
USCASLPA Q118OPT    Q118OPT 180 Y
```

OPTION=RCI

If the option entry in the key is RCI, datafill subfield OPTION as described in the following table.

Field descriptions OPTION=RCI

Field	Subfield	Entry	Explanation and action
OPT	OPTINFO	RCI	Routing control indicator option for incoming, outgoing, and two-way UK ISUP trunks.
	RCI_TYPE	NO_RCI	Enter NO_RCI to discard the RCI received in the incoming UK ISUP trunk. The outgoing UK ISUP initial address message (IAM) does not include the RCI.
		ALTRTE	Enter ALTRTE to override the alternative routing value in the RCI on incoming, outgoing, and two-way UK ISUP trunks.

OPTION=REANSTMR

If the option entry in the key is REANSTMR, datafill subfield OPTION as described in the following table.

Field descriptions OPTION=RINGBACK

Field	Subfield	Entry	Explanation and action
OPTINFO	OPTION	REANSTMR	Enter REANSTMR to provide a datafillable reanswer timer in the case of Korea R2 to ANSI ISUP calls. The value can be datafilled from 0 up to 255. This timer is datafilled against the outgoing ANSI ISUP trunk.

Datafill example

The following example shows sample datafill for table TRKOPTS.

MAP display example for table TRKOPTS, option REANSTMR for 2-w and og trunks

```
          OPTKEY                    OPTINFO
-------------------------------------------------
KNGA210ISBWE REANSTMR                REANSTMR 30
```

OPTION=RINGBACK

If the option entry in the key is RINGBACK, datafill subfield OPTION as described in the following table.

Field descriptions OPTION=RINGBACK

Field	Subfield	Entry	Explanation and action
OPTINFO	OPTION	RINGBACK	Enter RINGBACK for the backwards audible ring tone to be fed upstream (incoming trunk), by the DMS, upon reception of progress message from an outgoing CAS trunk. This option is only valid on FDCP trunks.

Datafill example

The following example shows sample datafill for table TRKOPTS.

TRKOPTS (continued)

MAP display example for table TRKOPTS, option RINGBACK

```
          OPTKEY                    OPTINFO
-------------------------------------------------
CAS1      RINGBACK                  RINGBACK
```

OPTION=RLT

If the option entry in the key is RLT, datafill subfield OPTION as described in the following table.

Field descriptions OPTION=RLT

Field	Subfield	Entry	Explanation and action
OPTINFO	OPTION	RLT	Release Link Trunk. Enter RLT to assign this option to integrated services digital network user part (ISUP) intertoll (IT) trunks only. The Equal-access End Office (EAEO) receives an ISUP REL message with a service parameter (SAP) of RLT_REQUEST_MSG. If an ISUP IT trunk without option RLT receives the RLT request, the call routes to feature not allowed (FNAL). The EAEO's host computer generates log report DFIL324. If the ISUP IT trunks have option RLT, then the routed RLT call uses reverse translations simplification (RLT2DIAL) to derive the dialing number.

Datafill example The following example shows sample datafill for table TRKOPTS.

MAP display example for table TRKOPTS, option RLT

```
          OPTKEY                    OPTINFO
-------------------------------------------------
          ISUP2WIT                  RLT RLT
```

OPTION=SCC

If the option entry in the key is SCC, datafill subfield OPTION as described in the following table.

Field descriptions OPTION=SCC

Field	Subfield	Entry	Explanation and action
OPTINFO	OPTION	SCC	Enter SCC to allow the DMS-MMP to convert the incoming Calling Party Number (CgPN) into the international format by prefixing it with Serving Country Code (SCC) when a call is between subscribers in two different countries (International call). Enter a 1 to 4 digit number, with the value of each digit in the range 0 to 9. This option is only valid on IBN7, ETSI ISUP V1, V2, V3 and all their national variants, Japan ISUP and its variants, Australian ISUP, Malaysia ISUP, Philippines TUP, Brazilian TUP, ETSI PRI and its national variants, French PRI, INS 1500 PRI, TS14 PRI, QSIG, Red Book TUP, BTUP and FTUP trunks.

Datafill example

The following example shows sample datafill for table TRKOPTS.

MAP display example for table TRKOPTS, option SCC

```
OPTKEY                  OPTINFO
_____________________________________
KNGA280EIBWE SCC        SCC 1234
KNGA200BTBWE SCC        SCC 45
```

TRKOPTS (continued)

OPTION=SLOWREL

If the option entry in the key is SLOWREL, datafill subfield OPTION as described in the following table.

Field descriptions OPTION=SLOWREL

Field	Subfield	Entry	Explanation and action
OPTINFO	OPTION	SLOWREL	Enter SLOWREL for slow release of the CAS trunk to ensure that it is not deallocated before RLG is received. A CAS trunk can take up to 30 seconds to send RLG. Use trunks that take more than 1.5 seconds to release. This option is only valid on IBN 2-way (IBNT2) and IBN outgoing (IBNTO), FDCP protocol, FST trunks.

Datafill example

The following example shows sample datafill for table TRKOPTS.

MAP display example for table TRKOPTS, option SLOWREL

```
          OPTKEY                    OPTINFO
-------------------------------------------------
CAS1      SLOWREL                   SLOWREL
```

OPTION=SSUTR2_TAX_GEN

If the option entry in the key is SSUTR2_TAX_GEN, datafill subfield OPTION as described in the following table.

Field descriptions OPTION=SSUTR2_TAX_GEN

Field	Subfield	Entry	Explanation and action
OPTINFO	OPTION	SSUTR2_ TAX_GEN	Enter SSUTR2_TAX_GEN to send a TAX message backward on the incoming SSUTR2 trunk just before the ACF. The TAX message is sent only if the Nature of Address field in the incoming MIF message indicates “International”. This option can be datafilled only against incoming and both-way SSUTR2 trunks. SSUTR2 trunks off SPM peripherals cannot be assigned this option.

Datafill example

The following example shows sample datafill for table TRKOPTS.

MAP display example for table TRKOPTS, option SSUTR2_TAX_GEN

```
          OPTKEY                    OPTINFO
_____________________________________________________
ETSIISUPLPB  SSUTR2_TAX_GEN         SSUTR2_TAX_GEN
```

OPTION=SUBCOM

If the option entry in the key is SUBCOM, datafill subfield OPTION as described in the following table.

Field descriptions OPTION=SUPVOPT

Field	Subfield	Entry	Explanation and action
OPTINFO	OPTION	SUBCOM	Enter SUBCOM for the sub-community or zone of the incoming caller.
		ZONE	The zone or sub-community of the incoming call.

Datafill example

The following example shows sample datafill for table TRKOPTS.

MAP display example for table TRKOPTS, option SUBCOM

```
TABLE: TRKOPTS
OPTKEY            OPTINFO
-------------------------------------------------------------
ETSIPRIA1 SUBCOM   SUBCOM BRUSSELS16
```

Specific datafill examples The following examples show adding, changing and deleting sample datafill for table TRKOPTS.

TRKOPTS (continued)

Datafill example for table TRKOPTS - adding the option SUBCOM

```
>ADD
MACHINES NOT IN SYNC - DMOS NOT ALLOWED
JOURNAL FILE UNAVAILABLE - DMOS NOT ALLOWED
ENTER Y TO CONTINUE PROCESSING OR N TO QUIT
>y
OPTKEY:
>ETSIPRIA1 SUBCOM
OPTION:
>SUBCOM
ZONE:
>BRUSSELS16
>$
TUPLE TO BE ADDED:
    ETSIPRIA1 SUBCOM SUBCOM BRUSSELS16 $
ENTER Y TO CONFIRM, N TO REJECT OR E TO EDIT.
>y
TUPLE ADDED
JOURNAL FILE INACTIVE
```

Datafill example for table TRKOPTS - changing the option SUBCOM

```
>CHA
MACHINES NOT IN SYNC - DMOS NOT ALLOWED
JOURNAL FILE UNAVAILABLE - DMOS NOT ALLOWED
ENTER Y TO CONTINUE PROCESSING OR N TO QUIT
>y
OPTKEY: ETSIPRIA1 SUBCOM
>
OPTION: SUBCOM
>
ZONE: BRUSSELS16
>BRUSSELS15
>$
TUPLE TO BE CHANGED:
    ETSIPRIA1 SUBCOM SUBCOM BRUSSELS15 $
ENTER Y TO CONFIRM, N TO REJECT OR E TO EDIT.
>y
TUPLE CHANGED
JOURNAL FILE INACTIVE
```

Datafill example for table TRKOPTS - deleting the option SUBCOM

```
>table trkopts
MACHINES NOT IN SYNC - DMOS NOT ALLOWED
JOURNAL FILE UNAVAILABLE - DMOS NOT ALLOWED
TABLE: TRKOPTS
>POS ETSIPRIA1 SUBCOM
ETSIPRIA1 SUBCOM SUBCOM BRUSSELS15
>DEL
MACHINES NOT IN SYNC - DMOS NOT ALLOWED
JOURNAL FILE UNAVAILABLE - DMOS NOT ALLOWED
ENTER Y TO CONTINUE PROCESSING OR N TO QUIT
>y
TUPLE TO BE DELETED:
ETSIPRIA1 SUBCOM SUBCOM BRUSSELS15 $
ENTER Y TO CONFIRM, N TO REJECT OR E TO EDIT.
>y
TUPLE DELETED
JOURNAL FILE INACTIVE
>POS ETSIPRIA1 SUBCOM
TUPLE NOT FOUND
```

OPTION=SUPVOPT

If the option entry in the key is SUPVOPT, datafill subfield OPTION as described in the following table.

Field descriptions OPTION=SUPVOPT

Field	Subfield	Entry	Explanation and action
OPTINFO	OPTION	SUPVOPT	Enter SUPVOPT for incoming US CAS trunks only.

Datafill example

The following example shows sample datafill for table TRKOPTS.

MAP display example for table TRKOPTS, option SUPVOPT

```
TABLE: TRKOPTS
OPTKEY              OPTINFO
-------------------------------------------------------------
USCASLPB SUPVOPT   SUPVOPT
```

TRKOPTS (continued)

OPTION=TREATONE

If the option entry in the key is TREATONE, datafill subfield OPTION as described in the following table.

Field descriptions OPTION=TREATONE

Field	Subfield	Entry	Explanation and action
OPTINFO	OPTION	TREATONE	Enter the TREATONE datafill options for the tone values. This option is available for all incoming and 2-way FDCP trunks. This option must be used in the multiple with the subfields below.
	TONE_ON	Numeric	Enter the ON tone value in bytes.
	TONE_OFF	Numeric	Enter the OFF tone value in bytes.
	ONTIME	Numeric	Enter the time duration in bytes for which the tone remains on.
	OFFTIME	Numeric	Enter the time duration in bytes for which the tone remains off.
	LENGTH	Numeric	Enter the tone length in bytes.
	PATTERN1	Numeric	Enter the ON tone pattern in bytes.
	PATTERN2	Numeric	Enter OFF tone pattern in bytes.

Datafill example

The following example shows sample datafill for table TRKOPTS.

MAP display example for table TRKOPTS, option TREATONE

```
        OPTKEY    OPTINFO
_____________________________________________________
POLR2LPB    TREATONE TREATONE 06 10 32 32 0F 55 55
```

OPTION=TRTORLS

If the option entry in the key is TRTORLS, datafill subfield OPTION as described in the following table.

Field descriptions OPTION=TRTORLS

Field	Subfield	Entry	Explanation and action
OPTINFO	OPTION	TRTORLS	Enter TRTORLS for FRLS after a treatment timeout to be sent to the incoming CAS. This option is only valid on FDCP trunks.

Datafill example

The following example shows sample datafill for table TRKOPTS.

MAP display example for table TRKOPTS, option TRTORLS

```
          OPTKEY                    OPTINFO
-------------------------------------------------
CAS1      TRTORLS                   TRTORLS
```

OPTION=TXICD

If the option entry in the key is TXICD, datafill subfield OPTION as described in the following table.

Field descriptions OPTION=TXICD

Field	Subfield	Entry	Explanation and action
OPTINFO	OPTION	TXICD	Enter TXICD and datafill all outgoing ANSI ISUP trunks that transport the Inhibit Call Diversion calling party category (CPC). Option TXICD allows the transmission of Inhibit Call Diversion across ANSI7+ trunks. Datafill this option only on IBNTO and IBNT2 trunk groups containing ANSI ISUP trunks.

Note: See Supplementary information for TXICD-specific error messages.

Datafill example

The following example shows sample datafill for table TRKOPTS.

TRKOPTS (continued)

MAP display example for table TRKOPTS, option TXICD

```
          OPTKEY                    OPTINFO
-------------------------------------------------
NWMSC     TXICD                     TXICD
```

Supplementary information

This section contains information on Dump and Restore and Error messages.

Dump and Restore

In a software upgrade from pre-SN06 to SN06, existing BICC trunk groups are restored with the capability set of 1 in table TRKOPTS. In a software upgrade from SN06 (dump side) to SN06 (restore side), the capability set of BICC trunk groups retains the value transferred from the dump side.

Error messages

When datafilling table TRKOPTS, the switch can display the following CFWOPT-specific error messages in addition to the DMS table control error messages.

CFWOPT-specific error messages for table TRKOPTS

Message	Description
***WARNING: This option will enable B-party CLI delivery on Call Forwarding features for MISUP and MR2 trunk. It allows CFWOPT option being datafilled against IBNT2 and IBNTO types of trunks. The feature is only available to MISUP and MR2.	This message appears when operating company personnel attempt to change or add a tuple with option CFWOPT. This is a warning message. Verify the trunk is a Malaysia ISDN user part (MISUP) or Malaysia R2 (MR2) trunk.

CFWOPT-specific error messages for table TRKOPTS

Message	Description
`Must be 2W or OUTGOING trunk in table TRKGRP. Error reported by option CFWOPT.`	This message appears when operating company personnel attempt to add option CFWOPT to an incoming trunk. Add option CFWOPT only to a two-way or an outgoing trunk.
`CFWOPT is only supported for the following trunk group types: IBNT2, IBNTO. Error reported by option CFWOPT.`	This message appears when operating company personnel attempt to add option CFWOPT to trunk types other than IBNT2 and IBNTO. Add option CFWOPT only to IBNT2 and IBNTO trunk types.

When datafilling table TRKOPTS, the switch can display the following CNAMINGN-specific error messages in addition to the DMS table control error messages.

CNAMINGN-specific error messages for table TRKOPTS

Message	Description
`ERROR - CNAMINGN option can only be assigned to C7UP signaling types.`	Displayed when operating company personnel attempt to add the CNAMINGN option to a non-ISUP trunk.
`ERROR - Must be 2W or OUTGOING trunk.`	Displayed when operating company personnel attempt to add the CNAMINGN option to an incoming ISUP trunk.
`ERROR - CNAMINGN option datafilled for this TRKGRP in table TRKOPTS.`	This message appears when the tuple for a particular trunk group is present in the TRKOPTS table and the operating company personnel tries to delete a corresponding tuple in the TRKGRP table.
`ERROR - Incoming trunk not supported by CNAMINGN option in table TRKOPTS.`	This message appears when the tuple for a particular trunk group is present in the TRKOPTS table and the operating company personnel tries to change the direction of the incoming trunk group in the TRKGRP table.

TRKOPTS (continued)

When datafilling table TRKOPTS, the switch can display the following CPT-specific error messages in addition to the DMS table control error messages.

CPT-specific error messages for table TRKOPTS

Message	Description
***ERROR - Cannot datafill zero length tone pattern	Displayed if operating company personnel entered a `$' in field PATTERN. A pattern must be entered.
*** WARNING - This will affect existing R2 calls over this TRKGRP receiving call progress tone	Displayed if operating company personnel attempt to delete a tuple with option CPT in table TRKOPTS. Deletion of this tuple affects all calls that are routed over this TRKGRP.
*** ERROR - Must be 2W or OUTGOING Trunk in table TRKGRP	Displayed when operating company personnel attempt to datafill an incoming trunk with option CPT in table TRKOPTS.
*** ERROR - CPT option is only allowed for FST trunks	Displayed when operating company personnel attempt to datafill a trunk that is not FST with option CPT in table TRKOPTS.
*** ERROR - CPT option is only allowed for R2 trunks	Displayed when operating company personnel attempt to datafill a trunk that is not R2 with option CPT in table TRKOPTS.
*** ERROR - CPT option can only be assigned to IBNT2 and IBNTO trunks	Displayed when operating company personnel attempt to datafill a trunk that is not an IBN trunk with option CPT in table TRKOPTS.
*** ERROR - Trunk not datafilled in Table TRKSGRP. Datafill Table TRKSGRP with the CLLI first	Displayed when operating company personnel attempt to datafill a tuple in table TRKOPTS and the trunk CLLI is not datafilled in table TRKSGRP.

CPT-specific error messages for table TRKOPTS

Message	Description
*** ERROR - Cannot change to a Non-IBN / IBNTI Trunk since tuple exists with the CPT option in Table TRKOPTS. Delete Tuple from Table TRKOPTS first.	Displayed when operating company personnel attempt to change a tuple in table TRKGRP from an IBN trunk to a trunk that is not IBN and the trunk exists with option CPT in table TRKOPTS. Delete the tuple in table TRKOPTS with option CPT before you change the corresponding tuple in table TRKGRP.
CLLI is not in Table TRKGRP	Displayed when operating company personnel attempt to datafill table TRKOPTS with a CLLI that is not present in table TRKGRP.
*** ERROR - Cannot change to an Incoming trunk since tuple exists with the CPT option in Table TRKOPTS. Delete Tuple from Table TRKOPTS first.	Displayed when operating company personnel attempt to change a tuple in table TRKSGRP from outgoing or two-way trunk to an incoming trunk and the trunk is datafilled with option CPT in table TRKOPTS. Delete the tuple in table TRKOPTS with option CPT before you change the corresponding tuple in table TRKSGRP.
*** ERROR - Cannot change to a Non-R2 trunk since tuple exists with the CPT option in Table TRKOPTS. Delete Tuple from Table TRKOPTS first.	Displayed when operating company personnel attempt to change the datafill of a tuple in table TRKSGRP from an R2 trunk to a trunk that is not R2 and the trunk exists with option CPT in table TRKOPTS. Delete the tuple in table TRKOPTS with option CPT before you change the corresponding tuple in table TRKSGRP.

TRKOPTS (continued)

When datafilling table TRKOPTS, the switch can display the following DYNAMIC-specific error messages in addition to the DMS table control error messages.

DYNAMIC-specific warning and error messages for table TRKOPTS

Message	Description
That dynamic trunking application is not available.	This error message appears when attempting to add a dynamic trunking application whose code is not present in the load. Add an appropriate dynamic trunking application.
Only trunk subgroup 0 can be used in Table TRKSGRP.	The user has added trunk subgroup 1 in Table TRKSGRP. Delete trunk subgroup 1.
Table TRKSGRP does not contain any info for this trunk.	The TRKOPTS DYNAMIC option cannot be assigned until table TRKSGRP is datafilled for the trunk group. Datafill Table TRKSGRP.
The DYNAMIC option is only compatible with a TRKSGRP SGRPVAR of C7UP.	The TRKOPTS DYNAMIC option cannot be assigned to trunk subgroups that have a SGRPVAR other than C7UP in Table TRKSGRP. Select another trunk group with the proper SGRPVAR.
The DYNAMIC option is only compatible with a TRKSGRP PROTOCOL of Q764.	The TRKOPTS DYNAMIC option cannot be assigned to trunk subgroups that have a PROTOCOL other than Q764 in Table TRKSGRP. Select another trunk group with the proper PROTOCOL.
The DYNAMIC option is only compatible with a TRKSGRP COTREQ of 0.	The TRKOPTS DYNAMIC option cannot be assigned to trunk subgroups that have a COTREQ other than 0 in Table TRKSGRP. Select another trunk group with the proper COTREQ.
CLLI cannot be datafilled in Table TRKMEM when assigning the DYNAMIC option.	The TRKMEM cannot have any tuples for a CLLI being datafilled in TRKOPTS with the DYNAMIC option. Select another trunk group CLLI that does not already have TRKMEM tuples datafilled.
For OC-IP, the SIGNALING attribute must be ISUP.	The signaling attribute of the DYNAMIC option must be ISUP. Select ISUP as the signaling attribute when datafilling table TRKOPTS.
For OC-IP, the SIGNALING_NETWORK attribute must be IP.	The signaling network attribute of the DYNAMIC option must be IP. Select IP as the signaling network attribute when datafilling table TRKOPTS.

TRKOPTS (continued)

DYNAMIC-specific warning and error messages for table TRKOPTS

Message	Description
For OC-IP, the BEARER_NETWORK attribute must be IP.	The bearer network attribute of the DYNAMIC option must be IP. Select IP as the bearer network attribute when datafilling Table TRKOPTS.
For OC-IP, the APPLICATION attribute must be OC.	The application attribute of the DYNAMIC option must be OC. Select OC as the application attribute when datafilling Table TRKOPTS.
For OC-IP, the DYNAMIC option can only be assigned to an IT trunk group.	For the OC-IP application, the TRKOPTS DYNAMIC option can only be assigned to trunk groups that have a GRPTYP of IT. Select another trunk group with a GRPTYP of IT.
For OC-IP, the DYNAMIC option can only be assigned to an IC or OG trunk group.	For the OC-IP application, the TRKOPTS DYNAMIC option can only be assigned to trunk groups that have a direction of IC or OG. Select another trunk group with a direction of IC or OG.
For OC-IP, no options can be assigned in Table TRKGRP.	For the OC-IP application, the TRKOPTS DYNAMIC option cannot be assigned to trunk groups that have any other options assigned in table TRKGRP. Select another trunk group without any TRKGRP options.
For OC-IP, no options can be assigned in Table TRKSGRP.	For the OC-IP application, the TRKOPTS DYNAMIC option cannot be assigned to trunk groups that have any other options assigned in table TRKSGRP. Select another trunk group without any TRKSGRP options.
For OC-IP, Table ISUPDEST must not contain datafill for this trunk.	For the OC-IP application, no datafill for the trunk is allowed to be in ISUPDEST. Select another trunk group CLLI that does not have any tuple in ISUPDEST.

TRKOPTS (continued)

DYNAMIC-specific warning and error messages for table TRKOPTS

Message	Description
For OC-IP, associated tuples in Table IPINV need to be deleted first.	When trying to delete an OC-IP tuple from Table TRKOPTS with the DYNAMIC option, you must first remove tuple(s) from IPINV associated with that CLLI. Remove tuple(s) from IPINV associated with the CLLI to be removed from TRKOPTS.
For OC-IP, changes are disallowed; must delete and re-add.	The attributes of an OC-IP DYNAMIC tuple in Table TRKOPTS cannot be changed, nor can an existing DYNAMIC tuple for another application be changed to the OC-IP application. Delete and re-add the desired tuple(s) in Table TRKOPTS.

When datafilling table TRKOPTS, the switch can display the following GETS HPC-specific error messages and warning messages in addition to the DMS table control error messages.

HPC-specific error messages for table TRKOPTS

Message	Description
`The HPCTQ option can only be assigned to TO, T2, IT, ATC, and CELL trunk types.`	An attempt was made to assign option HPCTQ to an unsupported trunk group.
`Must be 2W or OUTGOING trunk.`	An attempt was made to assign option HPCTQ to an incoming trunk.
`The HPCNOTQ option can only be assigned to P2, PX, and PRA trunk types.`	An attempt was made to assign option HPCNOTQ to a trunk group type other than P2, PX, or PRA.
`Must be 2W or OUTGOING trunk.`	An attempt was made to assign option HPCNOTQ to an incoming PX trunk group.

HPC-specific warning messages for table TRKOPTS

Message	Description
The announcement will not be played when the incoming agent is an IT trunk during Call Processing Time.	The HPCTQ option is assigned to an ATC trunk group, and an announcement is specified.
The announcement will not be played. Only STND announcement type will be played.	The HPCTQ option is assigned to a trunk group and the CLLI provided in the announcement subfield is not a standard announcement.

When datafilling table TRKOPTS, the switch can display the following ICDS-specific error messages in addition to the DMS table control error messages.

ICDS-specific error messages for table TRKOPTS

Message	Description
***ERROR - The ICDS option can only be added to ATUP, I-ISUP or AISUP trunks.	Displayed if operating company personnel attempt to add the ICDS option to an IBNTI, IBNT2, or IBNTO trunk that is not an AISUP, I-ISUP, or ATUP trunk.
*** ERROR - The ICDS option can only be assigned to IBNT2, IBNTI and IBNTO trunk types.	Displayed if operating company personnel attempt to add the ICDS option to a non-IBNT2, IBNTI, or IBNTO trunk.
OPTIONS are not the same in key and optinfo fields.	Displayed when the OPTION and OPTINFO fields do not match.

When datafilling table TRKOPTS, the switch can display the following MCID-specific error message may be in addition to the DMS table control error messages.

MCID-specific error message for table TRKOPTS

Message	Description
ERROR - MCID option can only be assigned to IBNTO and IBNT2 trunks.	Displayed if operating company personnel attempt to add the MCID option to a non-IBNT2, or non-IBNTO trunk.

TRKOPTS (continued)

When datafilling table TRKOPTS, the switch can display the following NETOPTS-specific error messages in addition to the DMS table control error messages.

NETOPTS-specific error messages for table TRKOPTS

Message	Description
***WARNING: Option POINONNIIF is only valid for Ie-ISUP and I-ISUP	This message appears if the operating company personnel enter datafill in the POINONNIIF subfield. This warning indicates that option POINONNIIF is only valid for Ie-ISUP and I-ISUP trunks.
***WARNING: Option MOLIREQD is only valid for Ie-ISUP and I-ISUP	This message appears if the operating company personnel enter datafill in the MOLIREQD subfield. This warning indicates that option MOLIREQD is only valid for Ie-ISUP and I-ISUP trunks.

When datafilling table TRKOPTS, the following RLT-specific error messages can be displayed in addition to the DMS table control error messages.

RLT-specific error messages for table TRKOPTS

Message	Description
***Cannot Specify RLT2DIAL - Reserved for Release Link Trunking.	Displayed when the end user attempts to datafill RLT2DIAL in Table CUSTHEAD or Table CUSTNTWK.

When datafilling table TRKOPTS, the following TXICD specific error messages can be displayed in addition to the DMS table control error messages.

TXICD-specific error messages for table TRKOPTS

Message	Description
***ERROR - The TXICD option may only be added to Q764 trunks.	Displayed if operating company personnel attempt to add the TXICD option to an IBNT2 or IBNTO trunk that is not a Q764 trunk.
*** ERROR - TXICD option can only be assigned to IBNT2, and IBNTO trunk types.	Displayed if operating company personnel attempt to add the TXICD option to a non-IBNT2, or non-IBNTO trunk.

Restrictions

The following conditions and restrictions apply:

- If OVERI option is datafilled it overrides the incoming CLI.
- Provision the LSPFE option on OP, IT, and DA trunk group types only.
- Provision the LSPAO option on the IT trunk group type only.
- If you set subfield SIGNAL_CONTROL to Y, you must enter a corresponding value for LSPFE.
- If you use STD signaling in TRKSGRP, the PULSTYP field in TRKSGRP must be MF.
- You cannot provision the CELL option for the IT trunk group type in table TRKGRP.
- Provision the LSPAO option only on IC/2W direction trunk groups.
- SLOWREL is supported in IBN 2-way (IBNT2) and IBN outgoing (IBNTO) trunks.
- SLOWREL is datafilled in table TRKOPTS and is supported only for FDCP protocol and FST trunks.
- FWRLSIND is supported in IBN two-way (IBNT2) and IBN outgoing (IBNTO) trunks.
- FWRLSIND is datafilled in table TRKOPTS and is supported only for FDCP protocol and FST trunks.
- BWRLSIND is supported in IBN two-way (IBNT2) and IBN outgoing (IBNTO) trunks.

TRKOPTS (continued)

- BWRLSIND is datafilled in table TRKOPTS and is supported only for FDCP protocol and FST trunks.
- RINGBACK is supported in IBN two-way (IBNT2) and IBN outgoing (IBNTO) trunks.
- RINGBACK is datafilled in table TRKOPTS and is supported only for FDCP protocol and FST trunks.
- TRTORLS is supported in IBN two-way (IBNT2) and IBN outgoing (IBNTO) trunks.
- TRTORLS is datafilled in table TRKOPTS and is supported only for FDCP protocol and FST trunks.
- MCID is supported in IBN two-way (IBNT2) and IBN outgoing (IBNTO) trunks.
- MCID is datafilled in table TRKOPTS and is supported only for FDCP protocol and FST trunks.
- Q118OPT is datafilled in table TRKOPTS and is supported only for outgoing US CAS trunks.
- SUPVOPT is datafilled in table TRKOPTS and is supported only for incoming US CAS trunks.

Table history

SN07 (DMS)

Added INTRACSE containing subfield RTE_ADV_CHOICE to field OPTION for activity A00003789.

SN06 (DMS)

Added MPM to field OPTION for activity 89008378.

Added BICC (ISUPPLUS) capability set CS2 for activity 89007299.

CSP18/SN05

Added option CFR for activity 59040509.

Added option CTC for activity 19011951.

SN05 (DMS)

Added option CGNBD_IN for activity 59039152.

Added options CGPNBLDR and CLIDLVPI for activity 59040499.

NA017

Added options FCI and FGD for activity 59036475.

Added option NOANSWER for activity 59036130.

Added option INTMTR for activity 59034453.

Added option CUSTOM_CPC for activity 59034236.

Added option LRNOPT for activity 59034058.

Added options Q118OPT and SUPVOPT for activity 59034028.

MMP16

The COS option was modified using subfields COSGRP and COSIDX (59028846).

Added option DEFNUM for activity 59028834.

Added option POECNAME for activity 59028840.

Added option CCNTLIDX for activity 59028780.

Added option ISPARM for activity 59028040.

Added option REANSTMR for activity 59027487.

Added AOC provisioning option for PRI and QSIG subscribers that was previously in table LTDATA.

MMP15

Added option ANI for activity AF7790.

Added option ISUPSVC for activity 59023814.

Added option SSUTR2_TAX_GEN for activity 59022808.

Added options COS and LOOPBACK for activity 59023338.

Added options METER and TREATONE for activity 59024041.

Added option CLICNTL for activity 59023556.

Added option SCC for activity 59023331.

TRKOPTS (continued)

Added options CLGDMI, CLIDELV, and CLIOUTP for activity 59023300.

Added option CALLREF for activity 59023264.

NA015

For the DYNAMIC option, field APPLICATION value VIPER is changed to POS by activity 59022293.

Added option RLT for ISUP IT trunks and added RLT2DIAL error message for Table CUSTHEAD and Table CUSTNTWK under activity 59026486.

MMP14

Added option MWI for activity 59017275.

Added options ICMOG and OGMOG for activity 59017822 (ETSI PRI Trunk Metering Provisioning) to allow metering requests for trunk agents.

Added option LMG for activity 59018339 (PRI Trunk Group Billing with DN) to allow the assignment of logical meter groups.

Added option SUBCOM for activity 59018251.

NA013

Added option CNAMINGN for activity 59013088.

Added option DYNAMIC for activity 59007550.

MMP13

Added enhancement to OPTINFO PRESEL option to support eight calltype subscriptions for activity 59012694.

Added field RCI and subfields.

Added options PRESEL and REQCLI for field OPTION for activity 59013577.

Added option DCF to field OPTION for activity 59011983.

Added subfields POINONNIIF and MOLIREQD under option NETOPTS for activity 59013668.

Added option CITYCODE to support activities 59014004 and 60007168.

Added option DFLTPI to support activity 59013159.

MMP12

Added option NATL_CPC for activity 59010190.

Added option NETOPTS for activity 59008417. Added option BCMAP for activity 59008005.

EUR010

Added option INTL for activity AU3275.

Added options TELETAXE and TELETAXE_NOSIG for activity AU3283.

APC010

Added option LDA to subfield OPTION.

EUR009

Added the following options to subfield OPTION:

- CSSCRN
- SLOWREL
- FWRLSIND
- BWRLSIND
- RINGBACK
- TRTORLS
- MCID

For the CSSCRN option, the following subfields are added:

- SCRNTYPE
- ATTRCHK
- MATCH
- TRIGGER

NA011

Added subfield SIGNAL_CONTROL to the OPTINFO field.

NA010

Added the following options to subfield OPTION:

- LSPAO
- LSPFE
- BLOCKLNP

TRKOPTS (end)

APC009

Added the following options to subfield OPTION:

- CPT
- CFWOPT
- ICDS
- TXICD

EUR008

Adds option PRESEL and OFFNET_CARRID to subfield OPTIONS for IBNT2, IBNTI, IBNTO, and PRA trunks. The OFFNET_CARRID option is not applicable to PRA trunks.

NA008

Introduced table TRKOPTS.

TRKRCSEL

Table name

Trunk Routing Characteristics Selector

Functional description

Table TRKRCSEL allows end users to optionally turn on and off particular types of ISDN information elements (IE). The IEs can be turned on or off on an individual trunk group basis, although only PRI trunks are supported.

To maintain network integrity, PRI trunks that are partially compliant to the ISDN numbering protocol are allowed to selectively turn off any IEs that are not compliant to the protocol. If a particular IE is turned off in table TRKRCSEL, the information associated with that particular IE is treated as key pad information rather than intelligent information. (For example, the calltype associated with that particular IE is treated as unknown before the call is sent to translation.)

This table only supports PRI trunks. If the trunk speci ed is not an incoming trunk or two-way trunk, the following error message appears:

```
***ERROR - Must be 2W or INCOMING Trunk
```

If a lter w as de ned for non-PRI trunks, the follo wing message appears:

```
This table only supports PRI trunks
```

If this table is not data lled for a particular trunk, only Bearer Capability (BC) is defaulted to be ON. Other IEs (for example, DCN, TNS, OSA), even if they exist in the SETUP message, are not used for determining the routing characteristics. If a lter is partially speci ed for a gi ven trunk, default lter values are assigned.

Data ll sequence and implications

The following tables must be data lled before table TRKRCSEL.

- TRKGRP
- TRKSGRP

Table size

0 to 8192 tuples

Data ll

The following table lists data ll for table TRKRCSEL.

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
GRPKEY		alphanumeric	*Group key* Enter the name of the trunk group defined in table CLLI.
RCFLTER		see subfields	*Routing characteristics filter* This field consists of subfields RCSELR and RCSEL. The maximum number of multiples available for this field is the same as the number of different routing characteristics available in the switch.
	RCSELR	BC, OSA, CDB, TNS, SR, PI	*Routing characteristic selector* Enter the particular routing characteristic the end user wants to turn on or off.
	RCSEL (see note)	ON, OFF	*Routing characteristic selector* Enter ON to turn on the routing characteristic specified in field RCSELR. When ON is specified, that particular routing characteristic is used for translation. Enter OFF to turn off the routing characteristic specific in field RCSELR.
Note: BC is defaulted on. All others are defaulted off. The default value is applicable to those routing characteristics that are not specified.			

Data ll e xample

The following example shows sample data ll for table TRKRCSEL.

MAP display example for table TRKRCSEL

```
GRPKEY              RCFILTER
_____________________________________________________________
PRITRK             (BC ON)  (CDN OFF)  (TNS OFF)  (OSA OFF)  $
```

TRKRCSEL (end)

Table history

NA08

Removed warning on NIPRI trunks (AF6862).

Table history

NA04

Table was added in NA04.

TRKSGRP

Table name

Trunk Subgroup

Functional description

Table TRKSGRP lists the supplementary information for each subgroup that is assigned to one of the trunk groups listed in table TRKGRP.

Input data must be specified for at least one subgroup for each trunk group listed in table TRKGRP, excluding trunk groups that are defined in table TRKSGRP as maintenance (MAINT) group type. No data is required in table TRKSGRP for the MAINT trunk group type.

For TRKGRP type GTRK (global trunks), table TRKSGRP is replaced by table TRKSIGPF.

The following table lists the signaling systems available in DMS switches. For the description of datafill for each system, refer to the appropriate section of table TRKSGRP in this document.

DMS signaling systems

Signaling system	See subtable
C7UP	TRKSGRP type C7UP
CCITT6	TRKSGRP type CCITT6
DPNSS	TRKSGRP type DPNSS
DS0TL	TRKSGRP type DS0TL
FST	TRKSGRP type FST
G1TR7	TRKSGRP type G1TR7
ISDN	TRKSGRP type ISDN
JSTD	TRKSGRP type JSTD
MAINT	not required
N5	TRKSGRP type N5
NOSIG	TRKSGRP type NOSIG
R1 or R1N5	TRKSGRP type R1/R1N5
R2	TRKSGRP type R2

TRKSGRP (continued)

DMS signaling systems

Signaling system	See subtable
SIGSYS	TRKSGRP type SIGSYS
STD	TRKSGRP type STD
STDTL or CCIS6	TRKSGRP type STDTL/CCIS6
TUP	TRKSGRP type TUP
UKSTD	TRKSGRP type UKSTD
X.25	TRKSGRP type X25
X.75	TRKSGRP type X75

The defined order is SIGNALLING_DATA_SELECTOR {STD, DS0TL, STDTL, C7UP, ISDN, X75, NOSIG, X25}.

Office parameters for timing on trunks

A list of standard office parameters in table OFCOPT that define timing (wink or delay dial) on trunks includes:

- DPREC_INTER_DGT_TIMING
- EA_REC_MAX_WK_TIME
- EA_REC_SUB_PRE_WK_TIME
- EA_REC_1ST_PRE_WK_TIME
- EAEO_REC_1ST_PRE_WK_TIME
- EAEO_REC_2ND_PRE_WK_TIME
- IMMED_PRE_DIAL_DELAY
- MF_ID_TIME
- MIN_REC_DP_PULSE_WD
- MK_BRK_DP_OUTPULSING
- PRE_ANI_SPILL_DELAY
- PRE_SND_WK_DD_TIME
- REC_MAX_DD_TIME
- REC_MAX_WK_TIME
- REC_MIN_DD_TIME
- REC_MIN_WK_TIME

- REC_PRE_DD_TIME
- REC_PRE_WK_TIME
- RP_INTER_SELECTION_TIMER
- RP_INTRA_SELECTION_TIMER
- RP_OVERALL_TIMER
- SND_DD_TIME
- SND_DP_WK_TIME
- SND_MF_WK_TIME
- SWHK_FLTR_TIME_400MS_ENABLED
- SWHK_FLTR_TIME_640MS_ENABLED
- WK_DD_PRE_DIAL_DELAY

Trunk selection and compatibility

DANGER
Call failure
If the setup method is used for the Calling Name Delivery features, the calling name information is sent in an optional field of the initial address message (IAM). If a trunk group to a GTD5 office is datafilled with an adjacent node type value of DMS in table ADJNODE, calls over that trunk group fail because the other node does not recognize the IAM.

Restricting access to table TRKSGRP

Access to table TRKSGRP can be restricted by datafilling table CUSTPROT. For United Kingdom operating companies, access to table TRKSGRP must be restricted by datafilling table CUSTPROT. Because the signaling parameters are defined in table CUSTPROT, any alterations affect the integrity of United Kingdom operating companies' networks.

Data restrictions for utility telemetry trunks

Utility telemetry (UT) trunks connect a Central Office Service Unit (COSU) to a DMS switch. When connected by UT trunks, the COSU can initiate and control telemetry calls to subscriber lines through the DMS switch, which attempts to establish the connections.

TRKSGRP (continued)

For subgroups associated with UT trunk groups, no changes have been made to table TRKSGRP. However, certain restrictions are imposed on the UT data specified in table TRKSGRP. These restrictions are shown in the following table.

Restricted fields for UT trunk subgroups

Field name	Permissible value
DIR	IC
IPULSTYP	MF
ISTARTSG	WK
OVLP	N
CCONT	NO
RNGBCK	NO
ESUPR	N
SAT	N
REMBSY	N
DIALMODE	M
ECSTAT	UNEQ

Default tuple added to table TRKSGRP for trunk group DTU

The following table shows the default values that are added to table TRKSGRP, after table TRKGRP is datafilled for trunk group type DTU.

Default values for DTU trunk group

Field name	Value
SGRPKEY	DTU 1
CARDCODE	4X23AA
SCRPVAR	NOSIG
SIGDATA	STD
DIR	OG
OPULSTYP	NP

Default values for DTU trunk group

Field name	Value
OSTARTSG	WK
IDIGTIME	0
NUMSTOPS	0
CCONT	NO
RNGBCK	NO
ESUPR	N
SAT	N
REMBSY	N
TRKGRDTM	17

ISUP integrated business network trunk datafill

ISUP integrated business network (IBN) trunks are datafilled in much the same manner as basic IBN trunks. Table CLLI is datafilled first, then table TRKGRP is datafilled with a trunk group type of IBNTO (outgoing), IBNTI (incoming), or IBNT2 (two way). After datafilling table TRKGRP, datafill table TRKSGRP to identify an IBN trunk group as an ISUP trunk group by setting field SIGDATA to C7UP.

After table TRKSGRP is datafilled, table ISUPDEST must be datafilled to identify the routeset associated with the ISUP IBN trunk subgroup. After table ISUPDEST is datafilled, trunks can be added to table TRKMEM as normal. Table C7TRKMEM must be datafilled to associate the ISUP IBN trunks with a circuit identification code.

Note 1: The DMS switch rejects the table TRKSGRP tuple for those ISUP IBN trunks that do not have appropriate datafill in table TRKGRP. After you enter information in table TRKSGRP, the system generates an information message to indicate any datafill errors.

Note 2: It is not possible to have one trunk subgroup datafilled with C7UP signaling and another datafilled with non-C7UP signaling within the same trunk group type.

Note 3: Table TKCVDATA provides a mechanism to convert existing per-trunk signaling (PTS) trunks to ISUP trunks.

TRKSGRP (continued)

CCITT7 ISUP trunk datafill for DMS-300

DMS-300 CCITT No. 7 signaling ISUP trunks have a signaling selector type of C7UP, a pulse type of SS7 with an external protocol of CCITT.

After table TRKSGRP is datafilled, table ISUPDEST must be datafilled to identify the routeset associated with the ISUP IBN trunk subgroup. After table ISUPDEST is datafilled, trunks are added to table TRKMEM in the normal manner. Table C7TRKMEM must be datafilled to associate the CCITT No. 7 signaling ISUP trunks with a circuit identification code.

Country Code CLI Prefix

The Calling Line Identity (CLI) is converted to an international format, or the CLI completely removed on outgoing international IBN7 or European Telecommunications Standards Institute Integrated Services Digital Network User Part (ETSI ISUP) routes. The CLI is controlled by datafill on a TRKSGRP basis.

CLI refers to both the originating line identity (OLI) and default CLIs.

The EDITCLI option triggers modification or removal of the CLI. The option is only allowed on outgoing or two-way trunk types, and is rejected on incoming trunks.

Modification of the CLI results in the modification of the Calling Party Number (CGPN) parameter in the Initial Address Message (IAM). If the CLI is to be converted to an international format, the country code of the country where the switch is located (set by parameter NATIONAL_COUNTRY_CODE in table OFCENG), is prefixed to the CLI and the Nature Of Address (NOA) is set to international (INTL). Because only one datafilled country code is supported, modification of the CLI to an international format is not supported when one switch terminates lines from multiple countries. To modify the CLI, the NOA field of the CGPN parameter must be set to National Significant Number (NSN), and the Numbering Plan Indicator (NPI) must be set to ISDN (Telephony) numbering plan (E164).

Removal of the CLI results in the CGPN parameter not being included in the IAM, because it is an optional parameter. The CLI is removed regardless of the NOA or NPI settings of the CGPN parameter.

PRI: Location Indicators

The PRI: Location Indicators feature provides the actual location, the CAUSE location, for which the DMS-100 switch generates a CAUSE value. The CAUSE value is the reason for the call failure. The CAUSE location is the location at which the call failure occurs.

Feature AF7875 maps the CAUSE location values and provisions for primary rate interface (PRI) NTNA and NTNI protocol variants.

Feature AF7585 provides the following functionalities, beginning with NA011:

- a location option, LOC_MAP, in table TRKSGRP
- a location mapping algorithm

The CAUSE location option, LOC_MAP, in the LOCATION field in table TRKSGRP is introduced, and provides the location mapping capability for the:

- CAUSE location indicator for Northern Telecom North America PRI (NTNA)
- Northern Telecom National ISDN (NTNI) protocol variants

The location option, LOC_MAP, is the default value for PRI NTNI protocol variants. For PRI NTNA, the location option needs to be provisioned.

Note: The value LOC_MAP applies to the network side of the customer premises equipment (CPE) to DMS-100 interface when the datafill for subfield IFCLASS in table TRKSGRP is NETWORK.

To activate this function, the datafill for the subfield LOCATION is LOC_MAP.

The CAUSE location is part of the CAUSE information element (IE) and is set based on where the CAUSE value occurs. The CAUSE IE is the mechanism that reports CAUSE values and location indicators are sent within certain PRI messages to report diagnostic information to and from the CPE. These PRI messages include disconnect, progress, release, release complete, and status messages. The following table list the messages.

Error messages that contain CAUSE IE

Call establishment message	Description
PROGRESS	indicates interworking with non-ISDN or in-band information as available
Call clearing messages	
DISCONNECT	call clearing request
RELEASE	indicates the channel was disconnected and requests the channel release and call reference release

TRKSGRP (continued)

Error messages that contain CAUSE IE

Call establishment message	Description
Call clearing messages	
RELEASE COMPLETE	indicates that the channels and call reference are released
Miscellaneous message	
STATUS	response to a status inquiry

Information specific to PRI with Semipermanent Packet

The PRI with Semipermanent Packet feature provides X.25 primary rate B-channel packet services to meet National ISDN-2 requirements. This feature allows operating company personnel to assign a B-channel on the PRI T1 link from the customer premises equipment (CPE) to the packet handler. The existing X.25 services on BRI are available on PRI.

The SGRPVAR field can be datafilled with signaling type X.25. Signaling type X.25 distinguishes PRI with Semipermanent Packet on PRI CLLI from other types of CLLIs.

Information specific to Spectrum peripheral module (SPM)

Table TRKSGRP provides an integer index to table SPMECAN. Thus, each trunk in table TRKSGRP can be associated to a tuple in table SPMECAN. This is done by providing an option called SPMECIDX for SS7 trunks in table TRKSGRP. The SPMECIDX option is used to reference an existing tuple in table SPMECAN and associate it with a PTS trunk subgroup.

This allows a trunk to be spread across a digital trunk controller (DTC) and an SPM. That is, some members in the trunk group are on a DTC, while other members of the same trunk group are on an SPM. The members of a trunk group provisioned on an SPM use the SPMECIDX option, while members on the DTC use the ECSTAT field.

Note: The existing functionality in table TRKSGRP that supports external and internal echo cancellers remains unchanged.

The following rules apply to table control for table TRKSGRP:

- SPM PTS trunks datafilled in table TRKMEM cannot have an associated IPULSTYP = nil_pulse_type.
- If the IPULSTYP associated with an SPM PTS trunk = MF, there must be at least one MF resource provisioned in table MNCKTPAK on the given SPM node.
- If the IPULSTYP associated with a SPM PTS trunk = DT, there must be at least one DTMF resource provisioned in table MNCKTPAK on the given SPM node.

Beginning with SP13, echo cancellation (ECAN) functionality is available for NA100 applications. ECAN functionality is supported for the following ISUP trunks in the NA100 market:

- ATC
- IBNTI
- IBNTO
- IBNT2
- IT
- TI
- TO
- T2

ECAN functionality is not supported for PTS and PRI trunks in the NA100 market. Datafilling only supported trunks is enforced when trying to datafill SPMECDIX option in table TRKSGRP. An attempt to datafill the SPMECDIX option for an unsupported trunk results in an error message that SPMECDIX is not allowed.

Datafill sequence and meaning

The following tables must be datafilled before table TRKSGRP:

- ACTTRTMT
- ADJNODE (before datafilling G1TR7 signaling in table TRKSGRP)
- ATPIES
- C7UPTMR
- DCMEINV (if the DCME option for C7UP trunks is used)
- ISDNPARM

TRKSGRP (continued)

- LNSIGSYS (before datafilling digital N5 signaling in table TRKSGRP)
- RGSIGSYS
- R2PROT
- TKSIGSYS (before datafilling JSTD signaling in table TRKSGRP)
- TRKGRP
- TRTMTACT

The following universal translations route tables must be datafilled after table TRKSGRP:

- PXRTE
- FARTE
- OFCRTE
- CTRTE
- ACRTE
- FTRTE

If a tuple exists with the option ATPINDEX selected, the ATPIDX selected for that option is found in table ATPIES.

Fields CONTCHK and COTREQ must be datafilled on the BCS+1 side. To transfer the data to the peripheral, busy (BSY) and return to service (RTS) the pulse code modulation (PCM) 30 digital trunk controller (PDTC).

The enhanced digital carrier module (DCME) option for C7UP trunks are only added or removed if there are no trunk members datafilled in the trunk group. The trunk members can be datafilled after this option is set, and after table DCMEINV is datafilled.

In table TRKMEM, the following checks are present:

- The trunk is on a carrier to a DCME.
- The trunk is on the same DCME as previous members.
- Not more than 16 trunk groups are datafilled on a DCME.

Datafill sequence and meaning for PRI with Semipermanent Packet

Datafill tables in the following order:

- CLLI
- TRKGRP
- TRKSGRP

Datafill sequence and meaning for SPM

Datafill tables in the following order:

- MNPRTGRP
- MNNODE
- MNSHELF
- MNCKTPAK
- MNLINK
- MNHSCARR
- SPMECAN
- TRKSGRP
- TRKMEM

Table size

The maximum number of trunk groups possible for each office is 8 191.

The number of trunk subgroups is equal to two times the number of trunk groups. The maximum number of trunk subgroups that can be assigned is 16 382.

Table TRKSGRP can have up to two tuples in each tuple in table TRKGRP.

If the number of trunk subgroups is not equal to two times the number of trunk groups, the quantity is automatically adjusted by table control.

Memory for the number of trunk subgroups is set in field SIZE in table DATASIZE. Field DATSKEY in table DATASIZE must be set to TRKSGRP.

TRKSGRP (continued)

Datafill

The following table lists datafill for table TRKSGRP.

Datafilling table TRKSGRP

Field	Subfield	Entry	Explanation and action
SGRPKEY		see subfields	*Subgroup key* This field consists of subfields CLLI and SGRP.
	CLLI	alphanumeric (1 to 16 characters)	*Common language location identifier* Enter the common language location identifier (CLLI) code that is assigned in table CLLI to the trunk group to which the subgroup belongs.
	SGRP	numeric (0 or 1)	*Subgroup number* Enter the number assigned to the trunk subgroup.
CARDCODE		alphanumeric	*Card code* Enter a card code from the list of available entries.
SGRPVAR		alphanumeric	*Signaling data selector* Enter a selector from the list of available entries.
SGRPVAR		see subfield	*Variable subgroup data* This field consists of subfields SIGDATA and DIR, and subfields specific to the value in subfield DIR.
	SIGDATA		*Signaling data* Enter one of the entries as detailed in the refinements.
	DIR		*Direction* Enter IC, OG, or 2W.
SGRPVAR		see subfields	Variable subgroup data. This field contains the area refinements for trunk subgroup variables. Only the subfields that apply to SPM nodes are described below.
	ESUPR	F, H, or N	Echo suppressor. Enter N (no) if the trunk subgroup is part of an SPM PTS trunk group. ***Note:*** Echo suppressor is not available for NA100 applications.

Datafilling table TRKSGRP

Field	Subfield	Entry	Explanation and action
	OPTION	SPMECIDX	Option. If this field contains the value SPMECIDX (SPM echo canceller index), enter data to subfield EC_IDX.
	EC_IDX	0 to 255	Echo canceller index. Enter the value created for this trunk subgroup in table SPMECAN. This associates the trunk subgroup with the required echo canceller in table SPMECAN. Option SPMECIDX is used by C7UP-, ISDN-, PTS-, STD- and TUP-signaled trunks, and specified ISUP trunks supervised by an SPM node. The index must exist in table SPMECAN before it is entered as datafill in table TRKSGRP.
ALL_NOA			All natures of address. This trunk subgroup member can send and receive all values of NOA, including spares.
ALL_NPI			All numbering plan indicators. This trunk subgroup member can send and receive all values of NPI, including spares.

Datafill example

The following example shows datafill for the PRI Location Indicators feature.

```
          SGRPKEY  CARDCODE
SGRPVAR
                                                                  SGRPVAR
-------------------------------------------------------------------------
64K6DT0 0 DS1SIG ISDN 20 20 87Q931 2 N STAND NETWORK PT_PT
LOC_MAP N UNEQ 255 N DEFAULT DTCI 0 10 24 64K HDLC (DTCI
0 12 24 64K HDLC) $ $
```

The following example shows datafill for PRI with Semipermanent Packet.

```
          SGRPKEY  CARDCODE
SGRPVAR
                                                                  SGRPVAR
-------------------------------------------------------------------------

          PKTPRI01 0 DS1SIG
X25
```

TRKSGRP (continued)

The following example shows datafill for SPM using PRI trunking.

```
          SGRPKEY  CARDCODE
SGRPVAR
                                                                  SGRPVAR
------------------------------------------------------------------------
      SPM20IMT7 0    DS1SIG
   C7UP
2W N N UNEQ NONE MCI THRH 0 DMS (SPMECIDX 1) $ NIL CIC
```

Table activation

Table TRKSGRP no longer requires a restart after datafill changes. Activation is immediate.

Table history

SN06

Feature A89007299 changes datafill due to BICC IT trunks. Refer to Supplementary information.

Customer Request Q00497427

Added supplementary information for fields ECSTAT, CONTCHK and COTREQ for customer request Q00497427.

MMP15

Added support for Czech ISUP in TRKSGRP (refer to TRKSGRP type C7UP for details).

Added support for Hungarian ISUP in TRKSGRP (refer to TRKSGRP type C7UP for details).

Added NETINFO2 suboption for OPTION MBG to support activity 59024957, NETINFO VPN Enhancements (refer to TRKSGRP type C7UP for details).

MMP14

Added support for the SPMECIDX option for TRKSGRP type TUP.

Added support for protocol Japan Interconnect ISUP for TRKSGRP type C7UP (refer to TRKSGRP type C7UP for details).

SP13

Added information supporting SPM ECAN for the NA100 market.

MMP13

The following changes were made:

- Added option SSUTR2 to field VARIANT for protocol RBTUP (SGRPVAR = C7UP).
- Updated the DMS signaling systems list to match MMP13 software.
- Added the SPMECIDX option for TRKSGRP type TUP. This option applies to two-way trunks, incoming trunks, and outgoing trunks.

Note: The MMP13 release does not support the SPMECIDX option.

APC011

Added options ALL_NOA and ALL_NPI.

NA011

The following changes were made:

- Added information about the PRI: Location Indicators feature.
- Added option LOC_MAP to the LOCATION subfield.
- Added supplementary information about two error messages and one warning message that occur for feature PRI: Location Indicators.
- Added entry X25.
- Added signaling system type X.25 to the DMS signaling system table for AF7585, PRI with Semipermanent Packet.
- Added datafill sequence and implication information for AF7585, PRI with Semipermanent Packet.

NA010

Added supplementary information about error messages that can occur when enabling B-channel negotiation.

CSP08

SPM was introduced, which caused the following changes to this table:

- Added information about SPM to “Functional description”.
- Added “Datafill sequence and meaning for SPM” to show datafill needs of SPM.
- Added “Supplementary information about SPM” and SPM-related error messages to “Supplementary information.”

EUR008

Added Country Code CLI Prefix functionality.

TRKSGRP (continued)

NA008

Added warning when datafilling backup D-channels for PRI NA008 maintenance feature.

EUR006

For C7UP signaling, added 100_WHITE to the range in subfield VERSION when field PROTOCOL is datafilled as Q767.

For C7UP, added caution that if PROTOCOL is Q767 and VERSION is datafilled as 100-WHITE, then field PRODUCT in the appropriate tuple in table ADJNODE must be datafilled as either NIL or OTHERNODE.

GL03.1

Added the NOSIG DMS signaling system.

CSP03

Table activation is now immediate.

NA002

Added data restrictions for UT trunks.

BCS36

The following changes were made:

- for STD signaling data, clarified field datafill information for IBNT2 trunks
- from ISDN signaling data refinements, removed field ADJNODE
- for C7UP signaling data, added NIL to the range of field ADJNODE, added options DEFITC, CCTOBDY and refinements, added refinement VERSION for field PROTOCOL, value NCCI
- for TUP signaling data, changed the description and applicability of field ALTRTE
- added note that trunk groups to a GTD5 fail if adjacent node type is DMS in table ADJNODE

BCS35

The following changes were made:

- added value G1TR7 to SIGDATA and refinements
- for N5 signaling data, added options Q33SUP and OVLDCNTL
- for C7UP signaling data, added option Q33SUP

Supplementary information

This section provides information on dump and restore procedures for table TRKSGRP and feature package error messages that relate to table TRKSGRP.

Enabling B-channel negotiation of an existing tuple

Operating company personnel cannot enable the B-channel negotiation field of a tuple in table TRKSGRP if:

- the trunk group maps to a logical terminal in table LTMAP
- table AINPRI references the same logical terminal

The following error message is displayed:

```
*** Delete the AINPRI entry before enabling B-channel
negotiation ***
```

In this case, operating company personnel must manually delete the tuple from table AINPRI before changing the tuple in table TRKSGRP.

Dump and restore

If the signaling data is SIGSYS (the entry in subfield SIGDATA is SIGSYS), the entry in field OVLP must be N for dump and restore procedures.

Feature package error messages

Error messages specific to feature packages and options follow.

D-channel backup

If the feature package does not include the D-channel backup feature, the datafill to backup the D-channel field is rejected and the following error message is displayed:

```
BACKUP D CHANNEL IS NOT SUPPORTED
```

Note: This restriction did not apply to BCSs prior to BCS31. All secondary D-channel data must be removed for BCSs prior to BCS31 if the backup D-channel is not available.

D-channel backup provisioning, NA008 PRI maintenance

Primary and backup D-channels on PRI trunks must have the same parameters. Feature PRI NA008 MTC allows independent provisioning of the backup D-channel on ISDN PRI trunks. If any SGRPVAR variables on the backup

TRKSGRP (continued)

D-channel are datafilled incorrectly with respect to the primary D-channel, the following error message can be displayed and static data is not loaded.

```
ONLY BACKUP D-CHANNEL DATAFILL ALLOWED. TO CHANGE OTHER DATA
D-CHANNEL MUST BE INB.
```

Q33SUP

The Q33SUP option (feature NC0321) for C7UP and N5 trunks can be changed only if there are no trunk members datafilled in table TRKMEM against the trunk subgroup. Otherwise, the following error message is displayed:

```
CANNOT CHANGE Q33 OPTION WITH TRUNKS DATAFILLED IN TABLE TKRMEM
```

The Q33 timer must be datafilled in table LNSIGSYS before the Q33SUP option is datafilled in table TRKSGRP. Otherwise the following error message is displayed:

```
Q33 TIMER NOT DATAFILLED IN TABLE LNSIGSYS
```

Error messages and warning message specific to PRI: Location Indicators

For the PRI: Location Indicators feature, the following messages appears on the MAP (maintenance and administration position) display if the following scenarios occur:

- When the DMS switch attempts to datafill a PRI non-NTNA or non-NTNI to a PRI trunk with the LOC_MAP location value in tables TRKSGRP and LTMAP, the following error message displays:

  ```
  LOCATION LOC_MAP is only supported for NTNA and NTNI protocol
  variants. Change protocol variants in table LTDEF.
  ```

- When the DMS switch attempts to datafill IFCLASS field as USER to a PRI trunk with the LOC_MAP location value in table TRKSGRP, the following error message displays:

  ```
  User IFCLASS is not supported with Location LOC_MAP.
  ```

- When the operating company personnel attempt to turn on option LOC_MAP in field LOCATION in table TRKSGR on a PRI non-NTNA or non-NTNI, the following warning message displays:

  ```
  WARNING: LOCATION LOC_MAP is only supported for NTNA and NTNI
  protocol variants.
  ```

Error messages and information messages specific to PRI with Semipermanent Packet

For the PRI with Semipermanent Packet feature, the following messages appears on the MAP (maintenance and administration position) display if the following scenarios occur:

Reason: For PRI Semipermanent Packet, use signaling type X25 for both subgroups 0 and 1. The following error message displays under the following conditions:

- The trunk group type is primary rate access (PRA) and the signaling type is X25 for subgroup 0. During datafill in table TRKSGRP, if the signaling type ISDN datafills subgroup 1, then the error message displays. The error message displays because this feature uses both subgroups 0 and 1 for the X25 signaling types.
- The trunk group type is PRA and the signaling type is ISDN for subgroup 0. During datafill in table TRKSGRP, if the signaling type X25 datafills subgroup 1, then the error message displays. The error message displays because this feature uses both subgroups 0 and 1 for the X25 signaling types.

```
Cannot mix signaling types in subgroups if ISDN is involved.
```

Action: For X25 signaling type, use both subgroups 0 and 1. Use a tuple in the TRKSGRP table with signaling type X25 for the same CLLI and for the other subgroup, provided the first subgroup has X25 signaling.

Reason: The following error message displays when table TRKSGRP datafills for PRI with Semipermanent Packet and for X75 trunks. In table TRKGRP, the datafill for CLLI contains a wrong entry for SELSEQ. For this feature, the SELSEQ for CLLI is CWCTH or CCWCTH because the functionality is similar to X75 trunks.

```
SELSEQ must be CWCTH or CCWCTH for X75 trunks.
```

Action: Go to table TRKGRP and delete the tuple with key as PRI with Semipermanent Packet LTID CLLI. Add an entry in table TRKGRP with CLLI for this feature and with SELSEQ as either CWCTH or CCWCTH. Then datafill table TRKSGRP.

Reason: The following error message displays if the card-code value in table TRKSGRP is not DS1SIG for PRI with Semipermanent Packet on PRI trunks.

```
Cardcode must be DS1SIG on Packet PRI trunks.
```

TRKSGRP (continued)

Action: For PRI with Semipermanent Packet on PRI trunks, use card-code DS1SIG with signaling type X25.

Supplementary information about SPM

An integer index in table TRKSGRP references tuples in table SPMECAN for PTS, SS7, PRI, and TUP trunks. Integer indexes are implemented in the form of options, called SPMECIDX.

Note: Multiple SPMECIDX options can be added to a tuple, but only the first SPMECIDX entry is assigned to the trunk.

SPMECIDX options are supported over the following access trunks:

- PTS FGD
- FGA
- FGB
- FGC
- DAL
- DALTIE
- PTS IMT
- CAMA

For NA100 applications only, SPMECIDX options are supported for the following ISUP trunks:

- ATC
- IBNTI
- IBNTO
- IBNT2
- IT
- TI
- TO
- T2

The numeric value entered for SPMECIDX must be identical to the numeric key for the existing tuple in table SPMECAN. If an index is used by a trunk in table TRKSGRP, it cannot be deleted from table SPMECAN.

Multiple trunks are allowed to use identical SPMECIDXs.

Error messages specific to SPM

The following error messages are specific to SPM.

Nil incoming pulse type

If the IPULSTYP field changes to NP (nil_pulse_type), but there are SPM PTS trunks in table TRKMEM that belong to this subgroup, the following message is displayed:

```
ERROR: Cannot change the IPULSTYP to mil_pulse_type, as there
are SPM PTS trunks in table TRKMEM that belong to this subgroup.
SPM trunks cannot have a nil incoming pulse type.
```

No MF resources provisioned in table MNCKTPAK

An attempt is made to change the IPULSTYP field to MF. If there are SPM PTS trunks in table TRKMEM that belong to this subgroup, but there are no MF resources provisioned in table MNCKTPAK, the following message is displayed:

```
ERROR: Cannot change the IPULSTYP to MF, as there are SPM PTS
trunks in table TRKMEM that belong to this subgroup, and there
are no MF resources provisioned in table MNCKTPAK.
```

No DTMF resources provisioned in table MNCKTPAK

An attempt is made to change the IPULSTYP field to DT. If there are SPM PTS trunks in table TRKMEM that belong to this subgroup, but there are no DTMF resources provisioned in table MNCKTPAK, the following message is displayed:

```
ERROR: Cannot change the IPULSTYP to DT, as there are SPM PTS
trunks in table TRKMEM that belong to this subgroup, and there
are no DTMF resources provisioned in table MNCKTPAK.
```

No echo canceller index provisioned in table SPMECAN

An attempt is made to enter the option SPMECIDX to a tuple in table TRKSGRP where the SPMECAN tuple identified does not exist. The following message is displayed:

```
ERROR: SPMECIDX MUST FIRST BE DATAFILLED IN TABLE SPMECAN.TUPLE
TO BE CHANGED:
<sgrpkey> <cardcode> <sgrpvar>... (SPMECIDX <ec_idx>) $
```

Supplementary information about fields ECSTAT, CONTCHK and COTREQ

When datafilling fields ECSTAT, CONTCHK and COTREQ, changes to in-service trunk members (circuits) should be Busied (BSY) and Returned To Service (RTS) in order for the changes to be effective.

TRKSGRP (end)

In SN06, BICC IT trunks may datafill the ECSTAT field to INTERNAL. This indicates that ECAN should be requested when interworking with IW SPMs that support ECAN. Note that this does not apply to the AAL2 IXC (BICC on the GWC) solution.

TRKSGRP type C7UP

CCS7 User Part

If the type of pulsing is Common Channel Signaling 7 (CCS7), data ll table TRKSGRP as described in the following data ll table. This data ll also applies to DMS-300 CCITT No. 7 ISDN user part signaling (ISUP), the United Kingdom variant of national user part (BTUP), telephone user part (TUP), and telephone user part plus (TUPPLUS or TUP+) trunk groups.

Note: TUPE is renamed TUP_BLUE and C7TUP is renamed TUP_RED.

Data ll

The following table lists the data ll for table TRKSGRP type C7UP .

Field descriptions for conditional data ll (Sheet 1 of 7)

Field	Subfield	Entry	Explanation and action
SGRPKEY		see subfields	*Subgroup key* This field consists of subfields CLLI and SGRP.
	CLLI	alphanumeric (1 to 16 characters)	*Common language location identifier* Enter the common language location identifier (CLLI) code that is assigned in table CLLI to the trunk group to which the subgroup belongs.
	SGRP	numeric (0 or 1)	*Subgroup number* Enter the number assigned to the trunk subgroup.
CARDCODE		DS1SIG	*Card code* Enter DS1SIG.
SGRPVAR		see subfield	*Variable subgroup data* This field consists of subfields SIGDATA and DIR, and subfields specific to the value in subfield DIR.
	SIGDATA	C7UP	*Signaling data* Enter C7UP.

Field descriptions for conditional data II (Sheet 2 of 7)

Field	Subfield	Entry	Explanation and action
	DIR	IC, OG, or 2W	*Direction* Enter the trunk group direction: 2W (two-way), IC (incoming), or OG (outgoing). If the entry in field DIR is 2W, datafill subfields ESUPR, SAT, ECSELECT, ABCNTL, PROTOCOL, OPTIONS, TMRNAME, and GLAREVAR. If the entry in field DIR is IC, datafill subfields ESUPR, SAT, ECSELECT, ABCNTL, PROTOCOL, OPTIONS, and TMRNAME. If the entry in field DIR is OG, datafill subfields ESUPR, SAT, ECSELECT, ABCNTL, PROTOCOL, OPTIONS, and TMRNAME.
	ESUPR	F, H, or N	*Echo suppressor* Enter F (full) if a full echo suppressor is located at the near end of the trunk group. The switch takes no action and is used for administrative purposes only. No echo suppressor is inserted in the connection. Enter H (half) if the trunk group has echo suppressors and a half echo suppressor is located at the near end of the trunk group. Enter N (no) if the trunk group has no echo suppressors located at the near end of the trunk group. Enter N if trunk group type is NFA. Enter N for DMS-300 CCITT No. 7 Signaling ISDN user part (ISUP) trunks and Austrian user part (ATUP) on DMS switches, because no echo suppressors are present.
	SAT	Y or N	*Satellite* Enter Y (yes) if trunk subgroup is configured to switch through satellite. Otherwise, enter N (no).
	ECSELECT	see subfield	*Echo canceler selector* This field consists of subfield ECSTAT.

TRKSGRP type C7UP (continued)

Field descriptions for conditional data II (Sheet 3 of 7)

Field	Subfield	Entry	Explanation and action
	ECSTAT	EXTERNAL, INNOTONE, INTERNAL, or UNEQ	*Echo canceler status* This field indicates the status of the echo canceler on the trunk subgroup. Enter EXTERNAL if echo cancellations on this trunk subgroup are performed by external echo canceler status equipment, and no call processing control is involved. Field ABCNTL must be checked. Enter INNOTONE if internal echo canceler status is used for the trunk subgroup, but the use of 2100-Hz tone disabling is turned off. This value is not allowed if the echo suppressor is instrumented on the trunk subgroup. Datafill subfield NSMATCH. Enter INTERNAL if the echo canceler status on this trunk subgroup is equipped on the NT6X50EC card in the digital trunk controller (DTC) frame, and is enabled by call processing if the call is not a data call. This value is not allowed if echo suppressor is instrumented on the trunk subgroup. Datafill subfields NSMATCH and AUTOON. Enter UNEQ (unequipped) if echo canceler status is not equipped on this trunk subgroup. Enter UNEQ if the echo canceler status remains OFF. Enter UNEQ for DMS-300 CCITT No. 7 Signaling ISUP trunks, because no echo suppressors are present.
	NSMATCH	Y or N	*Noise match control* If the entry in subfield ECSTAT is INNOTONE or INTERNAL, datafill this field. Enter Y to show that noise matching is ON, indicating that background noise levels are maintained if internal echo canceler status is actively cancelling echoes. Enter N to indicate that background noise is not maintained if internal echo canceler status is actively cancelling echoes. The default is N.

Field descriptions for conditional data II (Sheet 4 of 7)

Field	Subfield	Entry	Explanation and action
	AUTOON	Y or N	*Auto re-enable control* If the entry in subfield ECSTAT is INTERNAL, datafill this field. Enter Y to show that auto re-enable is ON. The echo canceler status is automatically turned on after the 2100-Hz tone is removed upon absence of energy. Enter N to indicate that the echo canceler status is not automatically turned on after the 2100-Hz tone control is removed. This option is similar to the END OF CALL option for tone disablers in external echo canceler status. The default is Y.
	ABCNTL	ACTIVEA or NONE	*A-bit control* Enter ACTIVEA if A-bit signaling as set by office parameters takes place. The office parameters are ECHO_CANCELER STATUS_CONTROL_FORWARD and ECHO_CANCELER STATUS_CONTROL_ BACKWARD in table OFCVAR. Enter NONE if this field is not used by call processing control software. FOR C7UP signaling selector in trunk subgroup, field ABCNTL replaces field XFERRAT. If the entry in field XFERRAT was 56 kbit/s, enter ACTIVEA in field ABCNTL. If the entry in field XFERRAT was 64 kbit/s, enter NONE in field ABCNTL. Other datafill conditions can still affect AB-bit control if this field is set to NONE. The other datafill conditions are as follows: If the value of the subfield ECSTAT is EXTERNAL, A-bit signaling takes place regardless of the value of field ABCNTL. If the value of the field PRODUCT in table ADJNODE is ESS1A, A-bits are set to an idle condition. The value of field ADJNODE is used as a key into table ADJNODE.

TRKSGRP type C7UP (continued)

Field descriptions for conditional data II (Sheet 5 of 7)

Field	Subfield	Entry	Explanation and action
Note: The following information explains C7UP data, depending on the combined datafill present in subfield ECSTAT and field ABCNTL.			
ECSTAT	ABCNTL	Comments	
UNEQ	ACTIVEA	A-bit signaling as set by office parameters	
EXTERNAL	ACTIVEA	ECHO_CANCELLER_CONTROL_FORWARD	
INTERNAL	ACTIVEA	ECHO_CANCELLER_CONTROL_BACKWARD	
INNOTONE	ACTIVEA		
INTERNAL	NONE	A-bit signaling as set by the above office parameters, regardless of the value of field ABCNTL. This applies only to the DMS-250 switch.	
UNEQ INTERNAL	NONENONE	Field ABCNTL is not used by call processing control software, and the above office parameters are not used.	
INNOTONE	NONE	Field ACNTL is not used by call processing control software, and the above office parameters are not used. The entry in table ADJNODE, field PRODUCT is ESS1A. A-bits are set to an idle condition. The value of field ADJNODE in table TRKSGRP is used as a key into table ADJNODE.	
	PROTOCOL	AISUP, ATUP, BTUP, CCITT, CTUP, GSM, GWIBN7, IBNISUP, JPNISUP, NCCI, Q764, Q767, RBTUP, TUPE, TUPPLUS, TUP_BLUE, TUP_RED, or UCP	*Signaling protocol type* Enter the required signaling protocol and datafill any applicable subfields as described in sections “DIR = IC, 2W, or OG and PROTOCOL = AISUP, CCITT, NCCI, Q764, TUPPLUS, TUP_BLUE or UCP” to section “DIR = 2W or OG, and PROTOCOL = BTUP”, then continue datafill with field OPTIONS. The applicability of subfields CONTCHK, COTREQ, ADJNODE, ACO, OVLP, VARIANT, VERSION, CBI, and ALTRTE, which depend on the value of fields DIR and PROTOCOL, is outlined prior to the datafill description for each subfield. External protocol AISUP is used by Australian switching units.

Field descriptions for conditional data II (Sheet 6 of 7)

Field	Subfield	Entry	Explanation and action
			Signaling protocol ATUP is used by Australian switching units. Signaling protocols BTUP, Q764, Q767, and TUPPLUS are used by switching units in the United Kingdom. When field PROTOCOL is datafilled Q767 (ETSI ISUP), datafill subfield VERSION with BLUE, WHITE, MTX_BLUE, MTX_WHITE, AVENTEL, GSM_BLUE, GSM_WHITE, 100_BLUE, 100_WHITE, or 100_EIV3. ***Note:*** The relevant trunk or PM must be returned to service to make this change effective. Signaling protocol CCITT is used by international switching units. CTUP is not a valid entry from BCS33 forward. Enter TUP_RED instead. Signaling protocol CTUP is used by switching units in China. GSM (group special mobile) is based on the Q931 external protocol. External protocol GWIBN7 is used by gateway DMS-300. Signaling protocol JPNISUP is used by switching units in Japan. Protocol NCCI allows the datafill of New Common Carrier Interface No. 7 Signaling protocol trunks. Signaling protocol Q764 is used by North American and United Kingdom switching units. Signaling protocol Q767 is used by North American, United Kingdom, and Australian switching units. Signaling protocol Q767 is used by European Telecommunications Standards Institute (ETSI) integrated services digital network (ISDN) European DMS-100 switches.

TRKSGRP type C7UP (continued)

Field descriptions for conditional data II (Sheet 7 of 7)

Field	Subfield	Entry	Explanation and action
			TUPE is not a valid entry from BCS33 forward. Enter TUP_BLUE instead. Signaling protocol UCP provides ISUP connectivity between the DMS-250 switch and the MSL-100 switching units. ***Note:*** Protocols ATUP, BTUP, CCITT, IBNISUP, Q764, Q767, TUPPLUS, TUP_RED, and UCP can be used on DMS-300 switching units.

DIR = IC, 2W, or OG and PROTOCOL = AISUP, CCITT, NCCI, Q764, Q767, TUPPLUS, TUP_BLUE, or UCP

DIR = 2W and PROTOCOL = TUP_RED
DIR = OG and PROTOCOL = ATUP or TUP_RED

Data ll sub eld CONTCHK as described in the follo wing table if one of the following conditions is true:

- The entry in eld DIR is IC and the entry in eld PR OTOCOL is AISUP, CCITT, NCCI, Q764, Q767, TUPPLUS, TUP_BLUE, or UCP.
- The entry in eld DIR is 2W and the entry in eld PROTOCOL is AISUP, CCITT, NCCI, Q764, Q767, TUPPLUS, TUP_BLUE, TUP_RED, or UCP.
- The entry in eld DIR is OG and the entry in eld PROTOCOL is AISUP, ATUP, CCITT, NCCI, Q764, Q767, TUPPLUS, TUP_BLUE, TUP_RED, or UCP.

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

Field	Subfield	Entry	Explanation and action
	CONTCHK	LOOPAROUND, THRH, THRL, TLRH, or 2W2W	*Continuity check* Datafill this field to specify the type of continuity test to be performed if such a test is requested. Enter one of the following values: • LOOPAROUND • THRH - transmit high and receive high • THRL - transmit high and receive low • TLRH - transmit low and receive high • 2W2W - two-wire-two-way If the entry in field PROTOCOL is ATUP or Q764, Q767, it is possible to datafill this field using the 2W2W entry. Because the signaling path is not the same as the voice path, the quality of the voice path on analog trunks must be checked. The voice path on a digital trunk is not a problem due to the internal carrier maintenance. The continuity check is done by connecting a tone and a receiver to the originating end and causing the tone to be looped back at the terminating end. The originating end checks the validity of the tone and, if the tone passes, the voice path is connected. If not, another attempt on another trunk is made.

TRKSGRP type C7UP (continued)

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

Field	Subfield	Entry	Explanation and action
			The default value for this field is THRH. The tone frequencies are as follows: High tone = 2000 Hz, Low tone = 1780 HZ ***Note:*** Continuity checking on ISDN user part (ISUP) trunks causes longer call setup times. The following types of continuity checks are available: LOOPAROUND - This test is used for an incoming four-wire continuity check, and is only acceptable for incoming trunks. Use this test only if the far end switching unit is four-wire. This entry indicates that the trunks are looped instead of each transmitting its own tone. THRH - Transmit high tone, receive high tone. This test is used for an outgoing four-wire continuity check only, and is only acceptable for outgoing and two-way trunks. It can be used if the far end switching unit is four-wire. If datafilled for a two-way trunk on which an incoming continuity test is being performed, the trunk loops the tone. Use this test if connected to a four-wire switching unit.

TRKSGRP type C7UP (continued)

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

Field	Subfield	Entry	Explanation and action
			THRL - Transmit high tone, receive low tone. This test is used for an outgoing continuity check only, and is only acceptable for outgoing or two-way trunks. It can be used only if the far end switching unit is two-wire. This option is not allowable for a Bellcore switching unit but can still be datafilled. If this option is datafilled on a two-way trunk group, and an incoming continuity test is being performed, the trunk monitors for the reception of the low tone before transmitting the high tone. TLRH - Transmit low tone, receive high tone. This test is used for an outgoing continuity check only, and is acceptable only for outgoing or two-way trunks. Use this test only if the far end switching unit is two-wire. If this option is datafilled on a two-way trunk group, and an incoming continuity test is being performed, the trunk monitors for the reception of the high tone before transmitting the low tone. 2W2W - Two-wire-two-way. This test is allowed only on a two-way trunk subgroup. If this value is datafilled for a two-way trunk subgroup, the DMS switch performs a continuity test on the two-way trunk subgroup as if the DMS were a two-wire machine. If this value is specified for non two-way trunk subgroup, an error message is displayed. ***Note:*** The 2W2W entry is supported only for Bellcore ISUP (datafilled as ATUP or Q764, Q767, in field PROTOCOL).

TRKSGRP type C7UP (continued)

DIR = 2W or OG, and PROTOCOL = AISUP, CCITT, NCCI, Q764, Q767, TUPPLUS, TUP_BLUE, TUP_RED, or UCP
DIR = OG and PROTOCOL = ATUP

Data ll sub eld CO TREQ as described in the following table if one of the following conditions is true:

- The entry in eld DIR is 2W and the entry in eld PROTOCOL is AISUP, CCITT, NCCI, Q764, Q767, TUPPLUS, TUP_BLUE, TUP_RED, or UCP.
- The entry in eld DIR is OG and the entry in eld PROTOCOL is AISUP, ATUP, CCITT, NCCI, Q764, Q767, TUPPLUS, TUP_BLUE, TUP_RED, or UCP.

Field descriptions for conditional data ll

Field	Subfield	Entry	Explanation and action
	COTREQ	numeric (0 to 100) or blank	*Continuity test required* The continuity check indicator is determined by datafill in table TRKSGRP. Because continuity is not supported for AISUP trunks, a value other than 0 (zero) is not allowed if datafilling field COTREQ for AISUP trunks. If the trunk direction is outgoing or two-way, enter the percentage of calls on each trunk in this subgroup that requests a continuity test be performed during call setup. If the trunk direction is incoming, leave this field blank. If a continuity test is performed during a call, a significant time delay is made on the ISUP call (60 ms to 3 s). This is caused by the delay encountered at the near end waiting for the continuity to pass and the delay at the far end awaiting the reception of the continuity message. These tests are mainly used for commissioning and thereafter are used on a small sampling of the trunks.

DIR = IC, 2W, or OG, and PROTOCOL = AISUP, CCITT, NCCI, Q764, Q767, TUPPLUS, TUP_BLUE, or UCP

DIR = 2W and PROTOCOL = TUP_RED
DIR = OG and PROTOCOL = ATUP or TUP_RED

Data ll sub eld ADJNODE as described in the follo wing table if one of the following conditions is true:

- The entry in eld DIR is IC and the entry in eld PR OTOCOL is AISUP, CCITT, NCCI, Q764, Q767, TUPPLUS, TUP_BLUE, or UCP.
- The entry in eld DIR is 2W and the entry in eld PROTOCOL is AISUP, ATUP, NCCI, CCITT, Q764, Q767, TUPPLUS, TUP_BLUE, TUP_RED, or UCP.
- The entry in eld DIR is OG and the entry in eld PROTOCOL is AISUP, ATUP, CCITT, NCCI, Q764, Q767, TUPPLUS, TUP_BLUE, or UCP.

CAUTION
Risk of service interruption
If DIR = IC, 2W, or OG, PROTOCOL = Q767 and VERSION = 100_WHITE, data ll eld PR ODUCT in table ADJNODE as OTHER.

CAUTION
Risk of service interruption
For MMP13, if DIR = IC, 2W, or OG and PROTOCOL = Q767, data ll eld PR ODUCT in table ADJNODE as DMS_ETSIISUP.

Q767 trunks must reference a separate table ADJNODE entry to Q764 trunks.

TRKSGRP type C7UP (continued)

Field descriptions for conditional data ll

Field	Subfield	Entry	Explanation and action
	ADJNODE	alphanumeric (1 to 12 characters) or NIL	*Adjacent node* Enter the 1- to 12-character name, previously datafilled as the key in table ADJNODE. Table ADJNODE also contains the adjacent node data used for this trunk subgroup. If the reference to table ADJNODE does not apply, enter NIL. ***Note:*** All 2W, IC, and OG CCITT ISUP, blue book TUP, and TUPPLUS trunks must reference a tuple in table ADJNODE to determine whether group unblocking messages can be sent to the far-end office.

DIR = IC, 2W, or OG, and PROTOCOL = AISUP

Data ll sub eld VERSION as described in the follo wing table if the entry in eld DIR is IC, 2W , or OG, and the entry in eld PR OTOCOL is AISUP.

Field descriptions for conditional data ll

Field	Subfield	Entry	Explanation and action
	VERSION	AUST, INTRCONN, PTUP, or MISUP	*Version* This field determines the protocol version of the Australian ISUP (AISUP) signaling system. Enter AUST to specify that the signaling protocol is Australian ISUP. Enter INTRCONN to specify that the signaling protocol is Interconnect ISUP (I-ISUP). Enter PTUP to specify that the signaling protocol is Philippines telephone user part (PTUP). Enter MISUP to specify that the signaling protocol is Malaysian ISUP (MISUP).

DIR = 2W or OG, and PROTOCOL = CCITT, Q764, Q767, TUPPLUS, TUP_BLUE, or UCP

Data ll sub eld A CO as described in the following table if one of the following conditions is true:

- The entry in eld DIR is 2W and the entry in eld PROTOCOL is CCITT, Q764, Q767, TUPPLUS, TUP_BLUE, or UCP.
- The entry in eld DIR is OG and the entry in eld PROTOCOL is CCITT, Q764, Q767, TUPPLUS, TUP_BLUE, or UCP.

Field descriptions for conditional data ll

Field	Subfield	Entry	Explanation and action
	ACO	Y or N	*Answer charge* This field determines if an answer charge is applied on BTUP to ISUP calls. Enter Y if the type of answer sent by the DMS switch is always chargeable. Enter N if the type of answer is not modified and is therefore mapped from the BTUP answer message (ANM).

TRKSGRP type C7UP (continued)

DIR = 2W or OG and PROTOCOL = CCITT, Q764, Q767, TUPPLUS, TUP_BLUE, TUP_RED, or UCP
DIR = OG and PROTOCOL = ATUP

Data ll sub eld O VLP as described in the following table if one of the following conditions is true:

- The entry in eld DIR is 2W and the entry in eld PROTOCOL is CCITT, Q764, Q767, TUPPLUS, TUP_BLUE, TUP_RED, or UCP.
- The entry in eld DIR is OG and the entry in eld PROTOCOL is ATUP, CCITT, Q764, Q767, TUPPLUS, TUP_BLUE, TUP_RED, or UCP.

Field descriptions for conditional data ll

Field	Subfield	Entry	Explanation and action
	OVLP	Y or N	*Overlap signaling* This field is for use with the DMS-300 switch. Enter Y if overlap signaling is permitted. Enter N if digits are outpulsed en bloc, that is, outpulsing does not begin until all digits have been received from the incoming trunk. The default is N.

DIR = IC, 2W or OG, and PROTOCOL = CCITT or Q767

Data ll sub eld V ARIANT as described in the following table if the entry in eld DIR is IC, 2W , or OG, and the entry in eld PR OTOCOL is CCITT or Q767.

CAUTION
Risk of XPM outage
VARIANT entries V15 to V20 are for future use. Do not use these entries. Use of these entries causes XPM outages.

Field descriptions for conditional data II

Field	Subfield	Entry	Explanation and action
	VARIANT	BASE, BRAZIL, CZECH, DEFAULT, DENMARK, GERMANY, FRANCE, HUNGARY, MEXICO, POLAND, PORTUGAL, PERU, SPAIN, BELGIUM, ITALY, ISRAEL, PNG, UK, CHILE, COSTA RICA, NORWAY, NEW_ZEALAND, V15, V16, V17, V18, V19, V20, SAUDI, SPIROU, SSUTR2, TURKEY, AUSTRIA, SWEDEN, EGYPT, or JPN_INTERCONN	*Variation* This field is used if the user part of ISUP is datafilled against the trunk subgroup to identify the variation of ISUP. The default is BASE. ***Note 1:*** Entries V15 to V20 are for future use. Do not use these entries. Use of these entries causes XPM outages. ***Note 2:*** The entry BRAZIL indicates Brazilian TUP.

TRKSGRP type C7UP (continued)

DIR = IC, 2W or OG, and PROTOCOL = Q767 (ETSI ISUP) or NCCI

Data ll sub eld VERSION as described in the follo wing table if the entry in eld DIR is IC, 2W , or OG, and the entry in eld PR OTOCOL is Q767 or NCCI.

Field descriptions for conditional data ll

Field	Subfield	Entry	Explanation and action
	VERSION	V1 or V2	*Version* Enter V1 to specify that the signaling protocol is NCCI No. 7 Version 1.
	VERSION	BLUE, WHITE, MTX_BLUE, MTX_WHITE, AVENTEL, GSM_BLUE, GSM_WHITE, 100_BLUE, 100_WHITE, or 100_EIV3	Enter BLUE, WHITE, MTX_BLUE, MTX_WHITE, AVENTEL, GSM_BLUE, GSM_WHITE, 100_BLUE, 100_WHITE, or 100_EIV3 for ETSI ISDN trunks. ***Note:*** If this field is datafilled as 100_WHITE, field PRODUCT in the appropriate tuple in table ADJNODE must be datafilled as OTHER.

DIR = IC, 2W or OG, and PROTOCOL = RBTUP

Data ll sub eld VERSION as described in the follo wing table if the entry in eld DIR is IC, 2W , or OG, and the entry in eld PR OTOCOL is RBTUP.

Field descriptions for conditional data ll

Field	Subfield	Entry	Explanation and action
	VERSION	DEFAULT, BRAZIL, SSUTR2	*Version* Enter DEFAULT to indicate a standard Redbook telephone user part (RTUP). Enter SSUTR2 to indicate French telephone user part (FTUP).

DIR = 2W or OG, and PROTOCOL = BTUP

If the entry in eld PROTOCOL is BTUP, data ll elds CBI and ALTRTE as described in the following table.

Field descriptions for conditional data ll

Field	Subfield	Entry	Explanation and action
	CBI	Y or N	*Cross border indicator* Enter Y if the call is traversing the boundary between two networks. Otherwise, enter N. ***Note:*** Datafilling this option has no effect on the PNTK BTUP Version 2 functionality in the European market for releases EUR003 and up. Option CBI is replaced with the blocking indicator (BI) parameter in the initial address message (IAM) and final address message (IFAM).
	ALTRTE	Y or N	*Alternate routing* Enter Y if the succeeding switching unit is to attempt to re-route calls upon encountering congestion in a national network. Otherwise, enter N.

TRKSGRP type C7UP (continued)

DIR = IC, 2W, or OG

If the entry in eld DIR is 2W , IC, or OG, data ll sub elds OPTIONS and TMRNAME as described in the following table.

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

Field	Subfield	Entry	Explanation and action
	OPTIONS	see subfield	*Options* This field consists of subfield OPTION.
	OPTION	ACO, ADMIN_CLI, ATPINDEX, BLOCK CCTOBDY, CRGDELAY, DCME, DEFITC, NO_HOP MBG, Q33SUP, RCGLI, REMDISP, VACT	*Option* Enter up to seven of the following options. If the entry in field PROTOCOL is BTUP, Q764, Q767, or TUPPLUS, enter ACO. Enter ADMIN_CLI to activate the request calling line identification (CLI) functionality in the European market. The ADMIN_CLI option allows the RCGLI option to override the BI parameter. For the ISUP access transport parameter information elements table index, enter ATPINDEX and datafill subfield ATPIDX. Enter BLOCK to block ISUP traffic rather than re-route during SS7 congestion. For the call completion trunk optimization (CCTO) boundary option, enter CCTOBDY. This option, which can only be added to incoming or two-way ISUP trunks, specifies that the CCTO request from another office, in the form of an ISUP release message containing a service activation parameter, will not be passed on to the next office in the chain. Instead, the request will be processed by the current office. An incoming trunk with option CCTOBDY acts as the boundary for any backward traveling CCTO requests.

TRKSGRP type C7UP (continued)

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

Field	Subfield	Entry	Explanation and action
			If table TRKSGRP is datafilled as an NCCI No. 7 trunk, enter CRGDELAY to determine the charge message delay and datafill subfield INTERVAL. If the entry in field DIR is 2W or OG, enter DCME to indicate that all members of this trunk subgroup must terminate on a single enhanced digital carrier module (DCME). DCME can only be added or removed if there are no trunk members datafilled against the trunk group. To specify the default information transfer capability option for ISUP trunks, enter DEFITC and datafill subfield INFO_TRANSFER_CAPABILITY. Enter the NO_HOP option to indicate that for this trunk subgroup, the hop counter (HC) parameter is not included in IAMs originating from this switch (outgoing direction). The HC value of an incoming IAM is not decremented if the IAM is being tandemed using an outgoing trunk subgroup with the NO_HOP option datafilled (the HC parameter is passed transparently). When the HC functionality is activated (by using a SOC keycode), it is activated for the entire exchange. It can be suppressed per trunk subgroup basis by adding the keyword NO_HOP to the corresponding trunk subgroup. This option is only valid for Q764, Q767 trunks in conjunction with a two-way (2W) or outgoing (OG) configuration. For Q767, the version must be 100_WHITE to support ETSI ISUP V2 trunks. If the entry in field PROTOCOL is CCITT, ISUP, BTUP, TUPPLUS, or TUP_BLUE, enter Q33SUP to show Q33 failures on a trunk-by-trunk basis. This option indicates that circuit supervision is supported on all members of the trunk group.

TRKSGRP type C7UP (continued)

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

Field	Subfield	Entry	Explanation and action

			For multi-location business groups, enter MBG and datafill subfield MBG_PARAMETER.
			
			Note: North America does not support the MBG option.
			
			The Q33SUP option can be changed only if there are no trunk members datafilled in table TRKMEM against the trunk subgroup. Otherwise, the following error message displays:
			
			`CANNOT CHANGE Q33 OPTION WITH TRUNKS DATAFILLED IN TABLE TRKMEM`
			
			The Q33 timer must be datafilled in table LNSIGSYS before the Q33SUP option is datafilled in table TRKSGRP; otherwise, the following error message displays:
			
			`Q33 TIMER NOT DATAFILLED IN TABLE LNSIGSYS`
			
			Enter RCGLI to initiate a CLI request for BTUP-to-ISUP calls in the European market. Datafilling the RCGLI option requests a CLI only if the blocking indicator (BI) parameter in the initial address message (IAM)-initial and final address message (IFAM) is set to allow CLI requests. For calls that terminate to a Networked automatic call distribution (NACD) group, the CLI is requested regardless of the datafill in option RCGLI.
			
			If the trunk group is IBN or AUTOVON ISUP with signaling type C7UP datafilled in table TRKSGRP, enter REMDISP. This option provides IBN and AUTOVON ISUP trunks with the ability to include network CLLIDs in the initial address message (IAM) on calls originating from these trunks. The network CLLI ID (NETCLLID) ensures that unique CLLIs will exist across the network by mapping a local CLLI ID to a network CLLI ID. The NETCLLID will be added only to the IAM when the originator is a trunk and table NTWKCLLI is datafilled for the originator's trunk group CLLI.
			
			For vacant treatment, enter VACT and datafill subfield HANDLING.

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

Field	Subfield	Entry	Explanation and action
	ATPIDX	numeric (0 to 15)	*ISUP access transport parameter information elements table index* If the option in field OPTION is ATPINDEX, datafill this field. Enter a number to index table ATPIES. Table ATPIES indicates which information elements are discarded in the received access transport parameter.
	INTERVAL	numeric (0 to 100)	*Delay interval* If the entry in field OPTION is CRGDELAY, datafill this field. Enter the value that represents the number of 10 ms increments. The time delay is the interval after transmitting the NCCI No. 7 CRG message before the next NCCI No. 7 message is transmitted if the call routes to treatment on NCCI No. 7 IAM receipt. The range of the delay interval following the CRG message is from 0 to 1. Enter 0 (zero) for no delay. The default is 50 for a time delay interval of 500 ms.
	INFO_ TRANSFER_ CAPABILITY	SPEECH or 3_1KHZ	*Handling* If the entry in field OPTION is DEFITC, datafill this field to specify a value that will override the value of office parameter DEFAULT_BEARER_CAPABILITY in table OFCENG. This option can be assigned only to outgoing or two-way ISUP trunks.
	HANDLING	GIVETRMT, RLSANDLG, or SENDRLS	*Handling* If the entry in field OPTION is VACT, datafill this field.

TRKSGRP type C7UP (continued)

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

Field	Subfield	Entry	Explanation and action
	MBG_ PARAMETER	NONE NETINFO NETINFO2	*MBG parameter* If the value in field OPTION is MBG, datafill this field. If a NETINFO parameter needs to be generated on an outgoing IBN trunk, enter NETINFO. Otherwise, enter NONE. If the latest values of CUSTGRP and NCOS need to be generated, enter NETINFO2. If the NETINFO2 entry is not datafilled, the last redirecting line values of CUSTGRP and NCOS are sent in the IAM in the forward direction
	TMRNAME	alphanumeric (1 to 16 characters) or NIL	*Timer name* Enter the timer name previously datafilled in table C7UPTMR, which is the key to the tuple where the call processing and trunk maintenance timers for the trunk group are found. For each entry in table TRKSGRP, field TMRNAME must be a corresponding tuple with the same TMRKEY in table C7UPTMR. Enter NIL if the call processing and trunk maintenance datafillable timers are hard coded.

DIR = 2W

If the entry in eld DIR is 2W , data ll sub eld GLARE as described in the following table.

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

Field	Subfield	Entry	Explanation and action
	GLAREVAR	see subfield	*Variable glare control data* If the entry in field DIR is 2W, datafill this field. This field consists of subfield GLARETYP.
	GLARETYP	CIC or SGRPYLD	*Glare type* If the entry in field DIR is 2W, datafill this subfield. Enter CIC (circuit identification code) if glare is resolved using CICs. For example, given two switching units connected with two-way trunks, if glare occurs, the switching unit with the higher originating point code is granted control of all the trunks with even-numbered CICs. This other switching unit, with the lower originating point code, is granted control of all the trunks with odd-numbered CICs. Enter SGRPYLD (subgroup yield) if glare is resolved on a trunk subgroup basis. For example, the switching unit administrators agree among themselves which trunk subgroups they are going to control and which they are going to yield. This is done on a trunk subgroup basis. The subgroup glare resolution method is available only if office parameter ISUP_SUBGRP_GLARE_AVAILABLE in table OFCOPT is set to Y.

TRKSGRP type C7UP (continued)

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

Field	Subfield	Entry	Explanation and action
			Note: If subfield GLARETYP is new, CIC is the default value since it retains the same glare yield method that was in effect before this field was added.
	GLAREYLD	Y or N	*Glare yield* If the entry in subfield GLARETYP is SGRPYLD, datafill this field. If the switching unit is to yield control of the trunks in this subgroup in a glare condition, enter Y. Otherwise, enter N. The far end office must enter N for this subfield correspondingly.

Data ll e xample

The following example shows sample data ll for table TRKSGRP type C7UP.

MAP display example for table TRKSGRP type C7UP

```
           SGRPKEY  CARDCODE
SGRPVAR
                                                  SGRPVAR
-------------------------------------------------------------
           BTUPIC 0 DS1SIG
C7UP
 IC N N UNEQ NONE BTUP     BTIC SGRPYLD N

           BTUP2W 0 DS2SIG
C7UP
 2W N N UNEQ NONE BTUP          SGRPYLD N Y Y

           BTUPOG 0 DS1SIG
C7UP
 OG N N UNEQ NONE BTUP          SGRPYLD N Y Y
```

The following example shows sample data ll for the AISUP protocol with option INTRCONN.

MAP display example for table TRKSGRP type C7UP

```
          SGRPKEY  CARDCODE
SGRPVAR
                                                  SGRPVAR
-------------------------------------------------------------
         IISUPIBNA1 0 DS1SIG
C7UP
 2W N N UNEQ NONE AISUP THRH 0 OTHERNODE INTRCONN $ NIL
CIC
```

The following example shows sample data ll for a BTUP trunk using overlap signaling.

MAP display example for table TRKSGRP type C7UP

```
          SGRPKEY  CARDCODE
SGRPVAR
                                                  SGRPVAR
-------------------------------------------------------------
         BTUP2W 0 DS1SIG
C7UP
 2W N N UNEQ NONE BTUP     BT2W $ Y  Y N N
```

The following example shows sample data ll for BTUP protocol with option DCME.

MAP display example for table TRKSGRP type C7UP

```
          SGRPKEY  CARDCODE
SGRPVAR
                                                  SGRPVAR
-------------------------------------------------------------
         ISSU12W 0 DS1SIG
C7UP
 2W N N UNEQ NONE BTUP N N N N BT2W DCME
```

The following example shows sample data ll for a DMS-300 CCITT No. 7 Signaling ISUP trunk subgroup.

TRKSGRP type C7UP (continued)

```
          SGRPKEY  CARDCODE
SGRPVAR
                                                    SGRPVAR
------------------------------------------------------------
         CCITT2W 0 DS1SIG
ISUP
 2W N N UNEQ NONE CCITT THRH 0 C72W DMSNODE SGRPYLD
 Y

         CCITTIC 0 DS1SIG
ISUP
 IC N N UNEQ NONE CCITT THRH   C71C DMSNODE

         CCITTOG 0 DS1SIG
ISUP
 OG N N UNEQ NONE CCITT THRH 0 C70G DMSNODE
```

The following example shows CCITT No. 7 signaling ISUP sample data ll for DMS-300.

```
          SGRPKEY  CARDCODE
SGRPVAR
                                                    SGRPVAR
------------------------------------------------------------
         CCITT2W 0 DS1SIG
C7UP
 2W N N UNEQ NONE CCITT THRH 0 DMSNODE C72W

         CCITTIC 0 DS1SIG
C7UP
 IC N N UNEQ NONE CCITT THRH   DMSNODE C7IC

         CCITTOG 0 DS1SIG
C7UP
 OG N N UNEQ NONE CCITT THRH 0 DMSNODE C7OG
```

The following example shows sample data ll for CCITT protocol, with eld VARIANT.

```
          SGRPKEY  CARDCODE
SGRPVAR
                                                    SGRPVAR
-------------------------------------------------------------
          ISUP12WN7 0 DS1SIG
C7UP
 2W N Y UNEQ NONE CCITT THRH N V1 N $
```

The following example shows sample data ll for GSM protocol.

```
           SGRPKEY  CARDCODE
SGRPVAR
                                                    SGRPVAR
-------------------------------------------------------------
          NCCIIBN1 0 DS1SIG
C7UP
 2W N N UNEQ NONE GSM     NIL Q33SUP CIC
```

The following example shows sample data ll for NCCI protocol.

```
           SGRPKEY  CARDCODE
SGRPVAR
                                                    SGRPVAR
-------------------------------------------------------------
          NCCIIBN1 0 DS1SIG
C7UP
 2W N N UNEQ NONE NCCI THRH 0 OTHERNODE NCC2W CIC
```

The following example shows sample data ll for Q767 protocol.

```
           SGRPKEY  CARDCODE
SGRPVAR
                                                    SGRPVAR
-------------------------------------------------------------
         KNGA280EIBWE 0 DS1SIG
C7UP
 2W N N UNEQ NONE Q767 THRL 0 DMSNODE N N V1
```

The following example shows sample data ll for Q767 protocol.

TRKSGRP type C7UP (continued)

```
          SGRPKEY  CARDCODE
SGRPVAR
                                                  SGRPVAR
------------------------------------------------------------
        KNGA280EIBWE 0 DS1SIG
C7UP
 2W N N UNEQ NONE Q767 THRL 0 NIL N Y GERMANY 100_WHITE
(NO_HOP) $ ISUP2W CIC
```

The following example shows sample data ll for NCCI protocol with a time delay interval of 700 ms.

```
          SGRPKEY  CARDCODE
SGRPVAR
                                                  SGRPVAR
------------------------------------------------------------
         NCCIIBN1 0 DS1SIG
C7UP
 2W N N UNEQ NONE NCCI THRH 0 OTHERNODE  CIC
 CRGDELAY 70
```

The following example shows sample data ll for TUPPLUS protocol.

```
          SGRPKEY  CARDCODE
SGRPVAR
                                                    SGRPVAR
------------------------------------------------------------
         TUPPIC 0 DS1SIG
C7UP
 IC N N UNEQ NONE TUPPLUS

         TUPP2W 0 DS1SIG
C7UP
 2W N N UNEQ NONE TUPPLUS

         TUPPOG 0 DS1SIG
C7UP
 OG N N UNEQ NONE TUPPLUS
```

The following example shows sample data ll for Q764 protocol.

```
          SGRPKEY   CARDCODE
SGRPVAR
                                                    SGRPVAR
------------------------------------------------------------
         TOROON0303T2 0 DS1SIG
C7UP
 2W N N UNEQ NONE Q764 THRH 10 TORONTO4 1 SGRPYLD Y

         TOROON0404TO 0 DS1SIG
C7UP
 IC N N UNEQ NONE Q764 THRH    TORONTO4 1

         TOROON0505T1 0 DS1SIG
C7UP
 OG N N UNEQ NONE Q764 THRH 10 TORONTO4 1
C7UP
 2W N N UNEQ NONE Q764 THRL 0 NIL (NO_HOP) $ ANSI2W CIC
```

Table history

MMP15

Added value POLAND to sub eld variant to support activity 59022250, Polish ISUP.

Added value CZECH to sub eld V ARIANT to support activity 59022257, Czech ISUP.

Added value HUNGARY to sub eld VARIANT to support activity 59022264, Hungarian ISUP.

Added value PERU to sub eld VARIANT to support activity 59022123, Peru ISUP.

Added NETINFO2 suboption for OPTION MBG to support activity 59024957, NETINFO VPN Enhancements.

MMP14

Added value AUSTRIA to sub eld V ARIANT to support activity 59017057, Austrian ISUP.

Added value EGYPT to sub eld V ARIANT to support activity 59017050, Egyptian ISUP.

TRKSGRP type C7UP (continued)

Added value SWEDEN to sub eld V ARIANT to support activity 59015832, Swedish ISUP.

Added values to NO_HOP option to support activity 59016998 for ETSI ISUP trunk sub groups.

Added value JPN_INTERCONN to sub eld V ARIANT to support activity 59017299, Japan Interconnect ISUP.

MMP13

Added values DEFAULT and SSUTR2 to sub eld V ARIANT.

Added values DENMARK, MEXICO, PORTUGAL, and TURKEY to sub eld V ARIANT.

Added value SPIROU to sub eld V ARIANT to support activity 59013177. The new ETSI ISUP V3-based signaling interface uses SPIROU for interconnections in France.

Added value BRAZIL to sub eld V ARIANT for tuples with a protocol of Q767. The value was added to support activity 59014266.

Added subfield VERSION for tuples with a protocol of RBTUP. The field was added to support activity 59014254. Added variants BRAZIL and SSUTR2 for the RBTUP protocol.

Added error messages for dynamic trunks from feature 59007550.

MMP12

Added value SAUDI to subfield VARIANT to support activity 59010190, Saudi Arabian ISUP.

EUR010

Added values NEW_ZEALAND, NORWAY, and UK to subfield VARIANT to support activities as follows:

- AJ5325, New Zealand ISUP and Interworkings
- AJ5326, Norwegian ISUP
- AU3356, UK ISUP Enhancements for Interconnect Compliance

APC010

Added value AUSTRALIA to subfield VARIANT to support activity AU2928, ETSI ISUP V2.

EUR008

Added 100_EIV3 to subfield VERSION to configure ETSI ISUP V3.

Increased the number of variants in the protocol variant fields from 8 to 64, and allowed a maximum of 10 characters for each protocol variant.

Introduced new naming convention for the variant fields for ETSI ISUP trunks.

EUR006

Added caution about field PRODUCT in table ADJNODE.

XPM08

Added protocol Q.767. This feature allows 100_WHITE as an entry in subfield VERSION.

APC007

Entries AUST, INTRCONN, PTUP, and MISUP added to subfield VERSION for protocol AISUP by the following design activities:

- AJ4157, Interconnect ISUP
- AR2139, Malaysian ISUP Variant
- AR2157, Philippines: PTUP Implementation

EUR004

Added subfield CBI for design activity AG4766, Automatic Recall Enhancements.

NA005

Added option NO_HOP to deactivate the ISUP hop counter functionality.

EUR003

Options RCGLI and ADMIN_CLI added by design activity AE1542, CLI on BTUP to ISUP Call Handling. Subfield CBI disabled in European market.

TRKSGRP type C7UP (continued)

Additional information

Error and warning messages

Error and warning messages are as follows.

Noti cation, warning, and err or messages for table TRKSGRP (Sheet 1 of 2)

Message	Description
Table TRKOPTS DYNAMIC option is assigned. Only trunk subgroup 0 is allowed.	Only one subgroup can be defined for dynamic trunk groups. Use the existing subgroup or add a subgroup for a different trunk group.
Table TRKOPTS DYNAMIC option is assigned. The PROTOCOL must be Q764.	The table TRKSGRP signaling data must be C7UP and the PROTOCOL must be Q764. Do not change PROTOCOL from Q764.
Table TRKOPTS DYNAMIC option is assigned. Continuity checking is not supported; COTREQ must be 0.	Table TRKSGRP field COTREQ must be 0. The COTREQ field is available only on outgoing and two-way trunks. Do not change COTREQ from 0.
Table TRKOPTS DYNAMIC OC option is assigned. The trunk group direction must be OG or 2W.	For the OC-IP application, TRKSGRP field DIR must be IC or OG, or the TRKOPTS DYNAMIC option can not exist. Do not change DIR from IC or OG.
Table TRKOPTS DYNAMIC OC option is assigned. No options are allowed in Table TRKSGRP.	No TRKSGRP options can be entered in table TRKSGRP for a dynamic trunking subgroup. Select another trunk subgroup that does not have any options.
Table TRKOPTS DYNAMIC OC option is assigned. Tuples for this CLLI must be deleted from Table TRKOPTS.	Table TRKOPTS has tuples for the same CLLI that must be deleted before the associated tuple in table TRKSGRP can be deleted.

TRKSGRP type C7UP (end)

Noti cation, warning, and err or messages for table TRKSGRP (Sheet 2 of 2)

Message	Description
Table TRKOPTS DYNAMIC OC option is assigned. The SGRPVAR must be C7UP.	The DYNAMIC OC option in table TRKOPTS is only supported for an associated tuple in table TRKSGRP of type C7UP.
Table TRKOPTS DYNAMIC OC option is assigned. The glare method must be SGRPYLD N.	The DYNAMIC OC option in table TRKOPTS requires that the associated tuple in table TRKSGRP with field GLARETYP = SGRPYLD must have subfield GLAREYD = N.

TRKSGRP type CCITT6

CCITT No. 6 Signaling

If type of pulsing is CCITT6 (CCITT no. 6 signaling), datafill table TRKSGRP as described in the following datafill table.

Data ll

The following table lists the datafill for table TRKSGRP type CCITT6.

Field descriptions (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
SGRPKEY		see subfields	*Subgroup key* This field consists of subfields CLLI and SGRP.
	CLLI	alphanumeric (1 to 16 characters)	*Common language location identifier* Enter the common language location identifier (CLLI) code that is assigned in table CLLI to the trunk group to which the subgroup belongs.
	SGRP	numeric (0 or 1)	*Subgroup number*Enter the number assigned to the trunk subgroup.
CARDCODE		alphanumeric (up to 6 characters)	*Card code* Enter the product engineering code (PEC) of the members of the trunk group. See the *DMS-100 Provisioning Manual*.
SGRPVAR		see subfield	*Variable subgroup data* This field consists of subfield SIGDATA and refinements ESUPR, SAT, GLARECTL, RSTCKT, and RSTBND.
	SIGDATA	CCITT6	*Signaling data*Enter CCITT6.
	ESUPR	Y or N	*Echo suppressor* Enter Y (yes) if the trunk group is equipped with echo suppressors. Otherwise, enter N (no).
	SAT	Y or N	*Satellite* Enter Y if the trunk subgroup is configured to switch through satellite. Otherwise, enter N.

TRKSGRP type CCITT6 (continued)

Field descriptions (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
	GLARECTL	EVEN or ODD	*Glare control* Enter EVEN on double seizure if this office controls all even numbered circuits in a two-way trunk group (does not yield to glare). Enter ODD if this office controls all odd numbered circuits in a two-way trunk group. This indicator must be mutually agreed upon between the two end offices so only one controls the even circuits and the other controls the odd circuits.
	RSTCKT	NSUP or SUP	*Far end reset circuit support* Enter SUP (supported) if a reset circuit message is accepted and acted upon by the far end. Enter NSUP (not supported) if a reset circuit message is not sent to the far end since the far end does not accept a reset circuit message.
	RSTBND	NSUP or SUP	*Far end reset band support* Enter SUP (supported) if a reset band message is accepted and acted upon by the far end. Enter NSUP (not supported) if a reset band message is not sent to the far end since the far end does not accept a reset band message.

Data ll e xample

The following example shows sample datafill for table TRKSGRP type CCITT6.

TRKSGRP type CCITT6 (end)

MAP display example for table TRKSGRP type CCITT6

```
           SGRPKEY   CARDCODE
SGRPVAR
                                                    SGRPVAR

_____________________________________________________________

         NO6811BA 0 DS1SIG
CCITT6
 N N EVEN SUP SUP
```

Digital Private Network Signaling System No. 1

Table TRKSGRP provides the table control required to datafill DPNSS trunk subgroups. DPNSS, a UK common channeling signaling standard for interconnecting private branch exchanges (PBXs) in private networks, can also be used as a PBX access to virtual private network (VPN) services. The IBN7 must be used for interconnecting signaling when networking DPNSS features between DMS 100 switches.

To support the DASS2 protocol for connection to PBXs the DPNSS trunks that are part of the converter interface (as opposed to true DPNSS trunks) need to be identified to the switch as DASS2 access trunks. The DASS2_ACCESS field in table TRKSGRP provides that identification.

Datafill the DASS2_ACCESS field for all DPNSS trunks as follows:

- If the trunk is a DASS2 access trunk, set DASS2_ACCESS to Y (yes).
- If the trunk is a true DPNSS trunk, set DASS2_ACCESS to N (no). The default value is N.

Data II

The following table lists the datafill for table TRKSGRP type DPNSS.

Field descriptions (Sheet 1 of 2)

Field	Subfield	Entry	Explanation and action
SGRPKEY		see subfields	*Subgroup key* This field consists of subfields CLLI and SGRP.
	CLLI	alphanumeric (1 to 16 characters)	*Common language location identifier* Enter the common language location identifier (CLLI) code that is assigned in table CLLI to the trunk group to which the subgroup belongs.
	SGRP	numeric (0 or 1)	*Subgroup number* Enter the number assigned to the trunk subgroup.
CARDCODE		DS1SIG	*Card code* Enter DS1SIG.
SGRPVAR		see subfield	*Variable subgroup data* This field consists of subfield SIGDATA and subfields DIR, SAT, OGOVLP, GLAREYD, and OPTIONS.

TRKSGRP type DPNSS (continued)

Field descriptions (Sheet 2 of 2)

Field	Subfield	Entry	Explanation and action
	SIGDATA	DPNSS	*Signaling data* Enter DPNSS for trunks of group type IBNTI, IBNTO, or IBNT2 that are used in the Digital Private Network Signaling System No. 1 (DPNSS) between private branch exchanges (PBXs).
	DIR	2W, IC, or OG	*Direction* Enter the trunk direction: 2W (two-way, IC (incoming), or OG (outgoing). If the entry in field DIR is 2W, datafill subfields SAT, OGOVLP, GLAREYD, and OPTIONS as described below. If the entry in field DIR is IC, datafill subfields SAT and OPTIONS as described below. If the entry in field DIR is OG, datafill subfields SAT, OGOVLP, and OPTIONS.
	SAT	Y or N	*Satellite* Enter Y (yes) if the trunk subgroup is configured to switch through satellite. Otherwise, enter N (no). If the entry in field DIR is IC, go to field OPTIONS to complete datafill for SIGDATA = DPNSS.
	DASS2_ ACCESS	Y or N	*Digital Access Signalling System Number 2* During the development of DASS2 using a DASS2/DPNSS converter it is necessary to distinguish between a true DPNSS trunk and a DPNSS trunk which is being used for DASS2 access. The DASS2_ACCESS field has been added to table TRKSGRP for all trunk types (IC, OG and 2W). The default value is N, which indicates a true DPNSS trunk. If the trunk is to be used for DASS2 access then the value should be set to Y.

DIR = 2W or OG

If the entry in field DIR is 2W or OG, datafill subfield OGOVLP as shown in the following table.

Field descriptions for conditional data II

Field	Subfield	Entry	Explanation and action
	OGOVLP	Y or N	*Overlap working* If the entry in field DIR is 2W or OG, datafill this field. Enter Y (yes) if trunk-to-trunk overlap outpulsing is required. Overlap working or en-bloc is used. Otherwise enter N (no). Overlap working is disallowed and en-bloc is used.

DIR = 2W

If the entry in field DIR is 2W, datafill subfield GLAREYD as shown in the following table.

Field descriptions for conditional data II

Field	Subfield	Entry	Explanation and action
	GLAREYD	Y or N	*Yield to glare* If the entry in field DIR is 2W, datafill this field. Enter Y if the trunk subgroup must yield to glare. Otherwise enter N.

TRKSGRP type DPNSS (continued)

DIR = all entries

For all entries in field DIR, datafill field OPTIONS as shown in the following table.

Field descriptions

Field	Subfield	Entry	Explanation and action
OPTIONS		see subfield	*Options* This field consists of subfield OPTION.
	OPTION	EXT_EC, ENBL_CLI, REV_XLA, DFLTPI, SCREEN, or $	*Option* Enter EXT_EC if the external echo canceler status is connected to the switch. Enter ENBL_CLI to enable the transfer of CLI from a BTUP trunk to a DPNSS terminator. Activation occurs when this option is datafilled. Enter REV_XLA to trigger reverse translations for voicemail purposes. ***Note:*** Calls forwarded over IBN7 (non-DFT) then routed to DPNSS have the B party address formatted as a public number. For voicemail purposes, this must be a private number. Enter REV_XLA in the option field to make calls interworked from IBN7 to DPNSS have the B party address subjected to reverse translations. This is valid only for outgoing and two-way DPNSS trunks. Enter DFLTPI to enable CLI blocking/ unblocking. Enter subfields PI, and MODE. Enter SCREEN to enable DPNSS to convert partial, private CLIs to the public number format. Enter subfields OVLYCLI and OVLYCNT. Otherwise, enter $.

OPTION = DFLTPI

If the entry in field OPTION is DFLTPI, datafill the subfields as shown in the following table.

Field descriptions for conditional data II

Field	Subfield	Entry	Explanation and action
	PI	ALLOW or RESTRICT	Enter ALLOW or RESTRICT. ALLOW indicates that the OLI received on the DPNSS trunk can be presented to the terminator. RESTRICT indicates that the OLI received on the DPNSS trunk cannot be presented to the terminator. The Calling Line Identity Presentation (CLIP) option in table TRKGRP is used to decide the presentation or restriction of the CLI only if the DFLTPI option is NOT datafilled.
	MODE	TEMP or PERM	Enter TEMP or PERM. TEMP indicates that the presentation/restriction is active on a per-call basis. If the incoming DPNSS message has a NPR string, then presentation is restricted; otherwise, presentation is allowed. PERM indicates that the restriction or presentation is active for all calls.

OPTION = SCREEN

If the entry in field OPTION is SCREEN, datafill the subfields as shown in the following table.

Field descriptions for conditional data II

Field	Subfield	Entry	Explanation and action
	OVLYCLI	vector of up to 13 digits, with integer range of 0-9 for each digit in the vector	Enter the value for OVLYCLI.
	OVLYCNT	integer with a range of 0-13	Enter a value for OVerLaY CouNT. Values 1-13 specify the number of least significant digits from the partial CLI (incoming private CLI). This number is overlayed on top of the least significant digits of OVLYCLI to form a complete number in the public format.

TRKSGRP type DPNSS (continued)

Data ll e xample

The following example shows sample datafill for table TRKSGRP type DPNSS (for a true DPNSS).

MAP display example for table TRKSGRP type DPNSS (for true DPNSS)

```
Table TRKSGRP

SGRP_KEY  CARDCODE SGRPVAR DIR SAT OGOVLP GLAREYD DASS2_ACCESS
-------------------------------------------------------------------
DPNSS_GRP1.  DS1SIG   DPNSS  2W   N      N       N           Y
```

The following example shows sample datafill for table TRKSGRP type DPNSS for a DPNSS trunk used for DASS2 access.

MAP display example for table TRKSGRP type DPNSS (DASS2 access)

```
Table TRKSGRP

SGRP_KEY  CARDCODE SGRPVAR DIR SAT OGOVLP GLAREYD DASS2_ACCESS
-------------------------------------------------------------------
DPNSS_GRP1.  DS1SIG   DPNSS  2W   N      N       N           Y
```

The following example shows sample datafill for table TRKSGRP type DPNSS to enable the ENBL_CLI option.

MAP display example for table TRKSGRP type DPNSS to enable the ENBL_CLI option

```
Table TRKSGRP

SGRP_KEY  CARDCODE SGRPVAR DIR SAT OGOVLP GLAREYD DASS2_ACCESS
-------------------------------------------------------------------
DPNSS_GRP1.  DS1SIG   DPNSS  2W   N     N      N       N     ENBL_CLI
```

The following example shows sample datafill for table TRKSGRP type DPNSS to enable the REV_XLA option.

MAP display example for table TRKSGRP type DPNSS to enable the REV_XLA option

```
Table TRKSGRP

SGRP_KEY  CARDCODE SGRPVAR DIR SAT OGOVLP GLAREYD DASS2_ACCESS
-------------------------------------------------------------------------
DPNSS_GRP1.  DS1SIG   DPNSS  2W   N     N      N       N     (REV_XLA)
```

The following example shows sample datafill for table TRKSGRP type DPNSS to enable the SCREEN option.

MAP display example for table TRKSGRP type DPNSS to enable the SCREEN option

```
Table TRKSGRP

SGRPKEY CARDCODE SGRPVAR SGRPVAR
-----------------------------------------------------
QNSY222DPBWO 0 DS 1 SIG DPNSS 2W N Y N N (SCREEN 1628790000 4 ALLOW TEMP)
$
```

Table history

MMP13

Added option DFLTPI to enable number presentation restriction for DPNSS trunks separately from the functionality provided by the SCREEN option.

EUR009

The SCREEN option was added to enable DPNSS to convert partial, private CLIs to public number format. Support for Number Presentation Restriction for DPNSS trunks was also introduced.

EUR008

The REV_XLA option was added to enable reverse translations to occur for calls interworked from IBN7 to DPNSS.

TRKSGRP type DPNSS (end)

EUR004

The ENBL_CLI option was added to enable the transfer of a CLI from a BTUP trunk to a DPNSS terminator.

EUR003

The following changes were made:

- added introductory information detailing new field DASS2_ACCESS
- modified existing MAP display example
- added new MAP display example

UK002

The following changes were made:

- corrected title (changed from “Data Packet Network special services” to “Digital Private Network Signaling System No. 1")
- added introductory paragraph

TRKSGRP type DS0TL

DS0TL

Default datafill for digital jacks, if the JACK trunk group is datafilled in table TRKGRP, is supplied in subgroup 1. The default datafill is only provided if the optional subsystem DJACKSUB is present in the load. This default is supplied automatically.

The default data for analog jack trunks is supplied in subgroup 0.

Data ll

The following table lists the datafill for table TRKSGRP type DS0TL.

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
SGRPKEY		see subfields	*Subgroup key* This field consists of subfields CLLI and SGRP.
	CLLI	alphanumeric (1 to 16 characters)	*Common language location identifier* Enter the common language location identifier (CLLI) code that is assigned in table CLLI to the trunk group to which the subgroup belongs.
	SGRP	numeric (0 or 1)	*Subgroup number* Enter the number assigned to the trunk subgroup.
CARDCODE		DS0SIG	*Card code* Enter DS0SIG.
SGRPVAR		see subfield	*Variable subgroup data* This field consists of subfield SIGDATA.
	SIGDATA	DS0TL	*Signaling data* Enter DS0TL for the United Kingdom national variant of the Common Channel Signaling 7 (CCS7) ISDN user part (ISUP) type trunks.

Data ll e xample

An example of datafill for DS-0 transmission link signaling is shown below.

TRKSGRP type DS0TL (end)

MAP display example for table TRKSGRP type DS0TL

```
            SGRPKEY   CARDCODE
 SGRPVAR
                                                    SGRPVAR
 ___________________________________________________________


           DS0TLINK 0 DS0SIG
 DS0TL
```

An example of datafill for digital jack trunks is shown below.

MAP display example for table TRKSGRP type DS0TL

```
            SGRPKEY   CARDCODE
SGRPVAR
                                                  SGRPVAR
_____________________________________________________________


          JACK 10 DS0SIG
DS0TL
```

TRKSGRP type FST

FST

Table TRKSGRP provides the table control required to datafill flexible signaling trunk (FST) trunk subgroups. The new FST trunk subgroup supports a generic R2 signaling system on Meridian Digital Centrex (MDC) trunks. The support applies to IBNTI (incoming), IBNTO (outgoing), and IBNT2 (two-way) trunks.

Data II

The following table lists the datafill for table TRKSGRP type FST.

Field descriptions (Sheet 1 of 8)

Field	Subfield	Entry	Explanation and action
SGRPKEY		see subfields	*Subgroup key* This field consists of subfields CLLI and SGRP.
	CLLI	alphanumeric (1 to 16 characters)	*Common-language location identifier* Enter the common-language location identifier (CLLI) code that represents the trunk group in table CLLI.
	SGRP	numeric (0 or 1)	*Subgroup number* Enter the number assigned to the trunk subgroup. Enter 1 if two different signaling types are required in the trunk group. Otherwise, enter 0 (zero). The default is 0.
CARDCODE		P30CAS, UK3JOG or UK3JIC	*Card code* Enter P30CAS, UK3JOG, or UK3JIC.
SGRPVAR		see subfield	*Variable subgroup data* This field consists of subfield SIGDATA and subfields SAT, DIALSTRT, REMBSY, DIRSEL, LSSIDX, RSSIDX, A_IDLEPOL, PROTSEL, FSTSIG, RXTXSEP, and OPTIONS.
	SIGDATA	FST	*Signaling data* Enter FST

TRKSGRP type FST (continued)

Field descriptions (Sheet 2 of 8)

Field	Subfield	Entry	Explanation and action
	SAT	Y or N	*Satellite* Enter Y if the trunk subgroup is configured to switch through satellite. Otherwise, enter N.
	DIALSTRT	DELDIAL, IMMEDIATE, IMSZA, NILTYPE, or WINK	*Dial start mode* Enter the type of dial start trunk required: • DELDIAL— delay dial start trunk • IMMEDIATE — immediate dial trunk • IMSZA— immediate-seize-acknowledge dial trunk • WINK— wink start dialing trunk Enter NILTYPE if this field is not applicable. The default is NILTYPE.
	REMBSY	Y or N	*Remote make-busy* Enter Y if trunk subgroup is assigned the Remote Make-Busy (RMB) feature. Otherwise, enter N.
	DIRSEL	see subfield	*Direction selection* This field consists of subfield DIR and subfield GLAREYD (if applicable).
	DIR	IC, OG or 2W	*Direction* Enter the trunk group direction: IC (incoming), OG (outgoing) or 2W (two-way). The entry in this field must be the same as the entry in field DIR for the trunk group datafilled in table TRKGRP. If the trunk group type (field GRPTYP in table TRKGRP) is TPS101, only directions IC or OG can be entered. If the trunk group type is NFA, only 2W can be entered. If the entry in field DIR is 2W, add datafill to field GLAREYD.

TRKSGRP type FST (continued)

Field descriptions (Sheet 3 of 8)

Field	Subfield	Entry	Explanation and action
	GLAREYD	Y or N	*Yield to glare* If the entry in field DIR is 2W, add datafill to this field. Enter Y if the subgroup must yield to glare. Otherwise, enter N.
	LSSIDX	LSSN5 LSSR2 LSSR1 LSSC1 LSSCNB LSSPSB LSS_R1_01 LSS_R1_02 LSS_R1_03 LSS_R1_04 LSS_R1_09 or NIL	*Line signaling index* Enter LSSN5 if N5 line signaling is used on the trunk. Enter LSSR2 if R2 line signaling is used on the trunk. Enter LSSR1 if R1 line signaling is used on the trunk. Enter LSSC1 if C1 line signaling is used on the trunk. Enter LSSCNB for E&M continuous line signaling types. Enter LSSPSB for E&M pulsed line signaling types. Enter LSS_R1_01 if (R1) NTLS01 line signaling is used on the trunk. Enter LSS_R1_02 if (R1) NTLS02 line signaling is used on the trunk. Enter LSS_R1_03 if (R1) NTLS03 line signaling is used on the trunk. Direction field is only OG. Enter LSS_R1_04 if (R1) NTLS04 line signaling is used on the trunk. Direction field is only IC. Enter LSS_R1_09 if (R1) NTLS09 line signaling is used on the trunk. Enter NIL if this field is not applicable.

TRKSGRP type FST (continued)

Field descriptions (Sheet 4 of 8)

Field	Subfield	Entry	Explanation and action
	RSSIDX	alphanumeric (1 to 16 characters) or NIL	*Register signaling index* This field is an index into table RGSIGSYS. Enter an NTRS11 (only when FSTSIG=R2) register signaling system instance of table RGSIGSYS. Enter an MF3 register signaling system instance of table RGSIGSYS for R1 trunks.
	PROTSEL	see subfield	*Protocol selection* This field consists of subfield FSTSIG.
	FSTSIG	R1, R2, N5 or GR1	*Signaling system* Enter R1 if R1 line signaling is used on the trunk. Datafill field RXTXSEP, ANISEL, B_BIT_BLOCK and LNSIGINX. Enter R2 if R2 line signaling is used on the trunk. Add datafill to fields TANDEM, PROTIDX and TRTMTIDX. Enter N5 if N5 line signaling is used on the trunk. Datafill fields N5LNIDX, PTSNMSIG, SZTOPTS, PTSTPST, DISD, ECSTAT, and ECINCL. Enter GR1 if GR1 line signaling (Generic R1) is used on the trunk. Enter datafill for fields RXTXSEP, LNSIGIDX, ANISEL and R1OPTIONS for the GR1 protocol.
	RXTXSEP	Y or N	*Receive transmit path separate* If the entry in subfield FSTSIG is R1 or GR1, add datafill to this field. Enter Y if the four-wire trunk is allowed to separate the receive and transmit lines of the trunk. Enter N if the trunk is two-wire and is not allowed to separate the receive and transmit lines. ***Note:*** This field is used for ARTER test purposes on international R1 trunks. It is also used on trunks that have the entry in field SIGDATA in table TRKSGRP equal to SIGSYS. Continue to add datafill to field OPTIONS.

TRKSGRP type FST (continued)

Field descriptions (Sheet 5 of 8)

Field	Subfield	Entry	Explanation and action
	A_IDLEPOL	0 or 1	*A bit idle polarity.* The A_IDLEPOL field applies to FSTSIG value R1. A_IDLEPOL allows operating company personnel to define the polarity of the A bit in the ABCD IDLE signal. Operating company personnel can define the A bit as either 0 or 1.
	ANISEL	Y or N	*Automatic number identification (ANI).* If the entry in subfield FSTSIG is R1, enter data for this field. This field allows operating company personnel to define the type of ANI signaling for the trunk to use with MF3 register signaling. If the trunk uses ANI signaling, operating company personnel can define the format and the type of the ANI directory number (DN). An entry of Y in this field requires a matching entry in the TRKGRP table.
	R1OPTIONS	MCTOGRLS, MCTICRLS	The MCTOGRLS and MCTICRLS options are only valid for MCT (NTLS09 R1) trunks. These options control how trunks are held and released after MCT activation.
	MCTOGRLS	Y or N	Enter Y in the MCTOGRLS subfield to release the outgoing trunk automatically. Enter N in the MCTOGRLS subfield to release the outgoing trunk using the FRLS maintenance command.
	MCTICRLS	Y or N	Enter Y in the MCTICRLS subfield to release the incoming trunk automatically. Enter N in the MCTICRLS subfield to release the outgoing trunk using the FRLS maintenance command.
	B_BIT_BLOCK	0 or 1	*B bit block.* If the entry in subfield FSTSIG is R1, set the B bit to 0 or 1.

TRKSGRP type FST (continued)

Field descriptions (Sheet 6 of 8)

Field	Subfield	Entry	Explanation and action
	LNSIGIDX	String	*LNSIGSYS index.* If the entry in subfield FSTSIG is R1 or GR1, enter data for this field. This field allows operating company personnel to refer to the key of table LNSIGSYS. The values of this field depend on the tuples in table LNSIGSYS.
	TANDEM	EEND or LNK	*Tandeming method* If the entry in subfield FSTSIG is R2, add datafill to this field. Enter EEND if end-to-end tandeming is used, or LNK if link-by-link tandeming is used.
	PROTIDX	alphanumeric or NIL	*R2 protocol index* If the entry in subfield FSTSIG is R2, add datafill to this field. Enter the R2 register signaling index as described by the command interpreter (CI) command R2VER.
	TRTMTIDX	alphanumeric (4 characters) or NIL	*R2 treatment index* If the entry in subfield FSTSIG is R2, add datafill to this field. Enter the R2 treatment and activity mapping index in tables ACTTRTMT and TRTMTACT.
	N5LNIDX	N5DEF or NIL	*N5 line index* If the entry in subfield FSTSIG is N5, add datafill to this field. Enter N5DEF or NIL.
	PTSNMSIG	numeric (4 to 20)	*Proceed to send to receipt of numeric signal* If the entry in subfield FSTSIG is N5 and the trunk group is incoming or two-way, enter the time, in seconds, between the register seizure and the proceed to send (PTS) signal. Enter the default if the trunk group is incoming. The default is 20.

TRKSGRP type FST (continued)

Field descriptions (Sheet 7 of 8)

Field	Subfield	Entry	Explanation and action
	SZTOPTS	numeric (10 to 20)	*Register seizure to proceed to send* If the entry in subfield FSTSIG is N5 and the trunk group is outgoing or two-way, enter the time, in seconds, between the register seizure (SZ) and the PTS signal. Enter the default if the trunk group is incoming. The default is 20.
	PTSTOST	numeric (20 to 40)	*Proceed to send to signal terminal* If the entry in subfield FSTSIG is N5 and the trunk group is incoming or two-way, enter the time, in seconds, between the PTS signal and the ST signal. Enter the default if the trunk group is outgoing. The default is 20.
	DISD	Y or N	*Discrimination digit* If the entry in subfield FSTSIG is N5, add datafill to this field. Enter Y or N to indicate how the discrimination digit is used.
	ANI_FORMAT	BELL or INTL	*Automatic number identification format.* If the entry in field ANISEL is Y, enter data for the ANI_FORMAT subfield. Operating company personnel can define the format of the ANI signaling for the trunk.
	ANI_DN_SIZE	4 to 10	*Automatic number identification directory number size.* If the entry in subfield ANISEL is Y, enter data for this field. Operating company personnel can define the DN size of the ANI signaling for the trunk.

TRKSGRP type FST (continued)

Field descriptions (Sheet 8 of 8)

Field	Subfield	Entry	Explanation and action
	ECSTAT	EXTERNAL, INNOTONE, INTERNAL, or UNEQ	*Echo canceller status* This field indicates the status of the echo canceller on the trunk subgroup. Enter EXTERNAL if echo cancellations on this trunk subgroup are performed by external echo canceller status equipment, and no call processing control is involved. Enter INNOTONE if internal echo canceller status are to be used for the trunk subgroup, but the use of 2100-Hz tone disabling is turned off. This value is not allowed if the echo suppressor is instrumented on the trunk subgroup. Enter INTERNAL if the echo canceller status on this trunk subgroup are equipped on the NT6X50EC card in the DTC frame, and are enabled by call processing if the call is not a data call. This value is not allowed if echo suppressor is instrumented on the trunk subgroup. Enter UNEQ (unequipped) if echo canceller status is not equipped on this trunk subgroup.
	ECINCL	Y or N	*Echo canceller INCL* If the entry in subfield FSTSIG is N5, add datafill to this field.
	OPTIONS	see subfield	*Options* This field consists of subfield OPTION.
	OPTION	DIGCOL or NIL	*Option* Enter DIGCOL if digit collection analysis is used and add datafill to field DGNAME. Otherwise, enter NIL.
	DGNAME	alphanumeric (up to 8 characters) or NIL	*Digit analysis table index* If the entry in subfield OPTION is DIGCOL, add datafill to this field. This field is an index into table DGHEAD. Enter the detail digit collection information from table DGHEAD.

DIR = IC, 2W or OG, and PROTOCOL = CCITT or Q767

Datafill subfield VARIANT as described in the following table if the entry in field DIR is IC, 2W, or OG, and the entry in field PROTOCOL is CCITT or Q767.

CAUTION
Risk of XPM outage
VARIANT entries V15 to V20 are for future use. Do not use these entries. Use of these entries causes XPM outages.

Field descriptions for conditional data ll

Field	Subfield	Entry	Explanation and action
	VARIANT	BASE, BRAZIL, DEFAULT, DENMARK, GERMANY, FRANCE, MEXICO, PORTUGAL, SPAIN, BELGIUM, ITALY, ISRAEL, PNG, UK, CHILE, COSTA RICA, NORWAY, NEW_ZEALAND, V15, V16, V17, V18, V19, V20, SAUDI, SPIROU, or TURKEY	*Variation* This field is used if the user part of ISUP is datafilled against the trunk subgroup to identify the variation of ISUP. The default is BASE. ***Note 1:*** Entries V15 to V20 are for future use. Do not use these entries. Use of these entries causes XPM outages ***Note 2:*** BRAZIL is used to indicate a Brazilian R2 trunk. .

Data ll e xamples

An example of datafill if the entry in field DIR is incoming (IC).

TRKSGRP type FST (continued)

MAP display example for table TRKSGRP type FST

```
                SGRPKEY CARDCODE
 SGRPVAR
                                                    SGRPVAR
_____________________________________________________________
             ICR2NONEBA 0 P30CAS
 FST
  DELDIAL  Y  IC  LSSR2  R2IDX  R2  EEND  MEXR2 MEXTRT
  R2  FSTR2A
```

An example of datafill if the entry in field DIR is outgoing (OG).

MAP display example for table TRKSGRP type FST

```
                SGRPKEY  CARDCODE
SGRPVAR
                                                  SGRPVAR
_____________________________________________________________
            OCR2NONEBA 0 P30CAS
FST
 DELDIAL  Y  OG  NIL  R2IDX  EEND  MEXR2 MEXTRT
```

An example of datafill if the entry in field DIR is two-way (2W).

MAP display example for table TRKSGRP type FST

```
                SGRPKEY  CARDCODE
 SGRPVAR
                                                  SGRPVAR
_____________________________________________________________
             2WR2NONEBA 0 P30CAS
 FST
  DELDIAL  Y  2W  Y NIL R2IDX R2 EEND MEXR2 MEXTRT
  DIGCOL  FSTR2A
```

An example of datafill if the entry in field FSTSIG is GR1.

MAP display example for table TRKSGRP type FST

```
                                SGRPKEY CARDCODE

SGRPVAR
                                                                        SGRPVAR
 ____________________________________________________________________________
                              2WR2NONEBA 0 P30CAS
FST

R1INT03OG 0 P30CAS FST N NILTYPE N OG LSSR103 NIL GR1 R1NTLS03 N $ $
R1INT04IC 0 P30CAS FST N NILTYPE N IC LSSR104 R1MF3 GR1 R1INTLS04 N $ $
R1INT09OG 0 P30CAS FST N NILTYPE N OG LSSR109 R1MF3 GR1 R1INTLS09OG N (MCTOGRLS Y) $ $
R1INT09IC 0 P30CAS FST N NILTYPE N OG LSSR109 R1MF3 GR1 R1NTLS09IC N (MCTICRLS Y) $ $
```

An example of datafill for CCITT protocol with field VARIANT.

MAP display example for table TRKSGRP type FST

```
                           SGRPKEY CARDCODE
SGRPVAR                                                          SGRPVAR
 ____________________________________________________________________________
                           2WR2NONEBA 0 P30CAS
FST
  BZDR22DIGAAC 0 P30CAS FST N IMMEDIATE N 2W N LSSCNB BR2SYS R2 LNK
  BRR2PROT BRATRT N N BRAZIL (DIGCOL R2C2STP) $
  BZDR22DIGAAC 0 P30CAS FST N IMMEDIATE N 2W N LSSPSB BR2SYS R2 LNK
  BRR2PROT BRATRT N N BRAZIL (DIGCOL R2C2STP) $
```

Table history

MMP13

Added values BRAZIL and DEFAULT to subfield VARIANT to support activity 59014280.

TRKSGRP type G1TR7

G1TR7

Table TRKSGRP provides the table control required to datafill 1TR7 trunk subgroups. G1TR7 is associated with the trunk groups GERIC, GEROG, and GER2W (German incoming, outgoing, and two-way) that are required for the German Intelligent Network field trial in order to handle the requirements of 1TR7 ISUP signaling.

Data II

The following table lists the datafill for table TRKSGRP type G1TR7.

Field descriptions (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
SGRPKEY		see subfields	*Subgroup key* This field consists of subfields CLLI and SGRP.
	CLLI	alphanumeric (1 to 16 characters)	*Common language location identifier* Enter the common language location identifier (CLLI) code representing the trunk group in table CLLI.
	SGRP	numeric (0 or 1)	*Subgroup number* Enter the number assigned to the trunk subgroup. Enter 1 if two different signaling types are required in the trunk group. Otherwise, enter 0 (zero).The default is 0.
CARDCODE		DS1SIG	*Card code* Enter DS1SIG.
SGRPVAR		see subfield	*Variable subgroup data* This field consists of subfield SIGDATA and refinements ADJNODE, DIR, GLARECTL, DEFCLI_N, and DEFCLI_I.
	SIGDATA	G1TR7	*Signaling data* Enter G1TR7 to specify G1TR7 signaling.
	ADJNODE	alphanumeric (1 to 12 characters)	*Adjacent node* Enter the index into table ADJNODE. Table ADJNODE provides information regarding the connected or adjacent switch and therefore must be datafilled before table TRKSGRP. This field cannot be changed if it affects the associated PRODUCT in table ADJNODE.

Field descriptions (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
	DIR	IC, OG, or 2W	*Direction* Enter the trunk group direction: 2W (two-way), IC (incoming), or OG (outgoing). The datafill in this field must match the direction of the trunk group datafilled in table TRKGRP If the entry in field DIR is 2W, field GLARECTL must be datafilled.
	GLARECTL	Y, N, or blank	*Glare control* If the entry in field DIR is 2W, datafill this field. Enter Y (yes) to control simultaneous seizures of 2W trunks. Y indicates that circuits are under local control. Otherwise, enter N (no).
	DEFCLI_N	numeric (0 to 9)	*Default calling line identification national* Enter a default calling line identification (CLI) if no CLI is received by the service switching point (SSP). A default CLI must be datafilled.
	DEFCLI_I	numeric (0 to 9)	*Default calling line identification international* Enter a default CLI if no CLI is received by the SSP. A default CLI must be datafilled.

Data ll e xample

An example of datafill if field DIR has an entry of 2W is shown below.

MAP display example for table TRKSGRP type G1TR7

```
                SGRPKEY   CARDCODE
SGRPVAR
                                                        SGRPVAR
_____________________________________________________________
                GER2W 0 DS1SIG
G1TR7
 ISUP  2W  N  1  0
```

TRKSGRP type ISDN

ISDN

If type of pulsing is Integrated Services Digital Network (ISDN), or if the trunk group type in table TRKGRP is primary rate interface (PRI), enter the data for table TRKSGRP.

Data II

The following table lists the datafill for table TRKSGRP type ISDN.

Field descriptions (Sheet 1 of 9)

Field	Subfield	Entry	Explanation and action
SGRPKEY		see subfields	*Subgroup key* This field consists of subfields CLLI and SGRP.
	CLLI	alphanumeric (1 to 16 characters)	*Common language location identifier* Enter the code that is assigned in table CLLI to the trunk group to which the subgroup belongs. ***Note:*** With CLLI datafilled in table IPINV, there can be no changes to table TRKSGRP.
	SGRP	0	*Subgroup number* Enter the number assigned to the trunk subgroup. Only subgroup 0 (zero) is valid for ISDN signaling.
CARDCODE		DS1SIG	*Card code* Enter DS1SIG.

TRKSGRP type ISDN (continued)

Field descriptions (Sheet 2 of 9)

Field	Subfield	Entry	Explanation and action
SGRPVAR		see subfield	*Variable subgroup data* This field consists of subfield SIGDATA and subfields PSPDSEIZ, PARTDIAL, VERSION, CRLENGTH, BCHNEG, BCHGLARE, IFCLASS, CONFIG, LOCATION, SAT, ECSELECT, TRKGRDTM, L1FLAGS, PARMNAME, DCHNL, and DCHBCKUP. ***Note:*** Primary and backup D-channels on PRI trunks must have the same datafill. Feature PRI NA008 MTC (AF6860) allows independent provisioning of the backup D-channel on ISDN PRI trunks. If any SGRPVAR variables on the backup D-channel are datafilled differently than the primary D-channels, the following error message is displayed and static data will not be loaded. `ERROR: ONLY BACKUP D-CHANNEL DATAFILL ALLOWED. TO CHANGE OTHER DATA D-CHANNEL MUST BE INB.`
	SIGDATA	ISDN	*Signaling data* Enter ISDN for ISDN type trunks.
	PSPDSEIZ	numeric (2 to 30)	*Permanent signal or partial dial on seizure timing* Enter the time, in seconds, that the trunk waits for reception of the first digit.
	PARTDIAL	numeric (2 to 30)	*Partial dial timing* Enter the time, in seconds, that the trunk has to wait for reception of each digit, excluding the first digit.
	VERSION	87Q931 ANSI607 P41449 UNISPEC20 or 96ISOQSIG	*Protocol version* Enter the version of the protocol. Value for all PRI variants. Value for all QSIG variants.

TRKSGRP type ISDN (continued)

Field descriptions (Sheet 3 of 9)

Field	Subfield	Entry	Explanation and action
	CRLENGTH	numeric (1 or 2)	*Call reference length* Enter the number of octets in the call reference.
	BCHNEG	Y or N	*B-channel negotiation* Enter Y (yes) if B-channel negotiation is allowed. Otherwise, enter N (no).
	BCHGLARE	YIELD or STAND	*B-channel glare* Enter YIELD if the B-channel is used in set-up messages, simultaneously in both directions, or if the call must be taken down by this switch. Enter STAND if the switch must wait for the other switch to yield.

	IFCLASS	NETWORK or USER	*Interface class*
			Enter NETWORK if it is the network end. If the datafilled protocol in table LTDEF is INS500, then the interface class must be NETWORK.
			For the National ISDN primary rate interface (NIPRI) variant only the value NETWORK can be datafilled.
			Enter USER if the PRA link is considered the user end of the protocol.
			If the operating company personnel attempts to enter the data for the interface class as USER and the protocol in table ADJNODE is datafilled as INS1500, then the following error message is displayed:
			`USER IFCLASS IS NOT SUPPORTED ON INS1500.`
			If you enter the data for the interface class as USER, and the ECT option is selected in table LTDATA, the following error message is displayed:
			`Field IFCLASS must be set to NETWORK in table TRKSGRP or ECT must be removed from table LTDATA.`

TRKSGRP type ISDN (continued)

Field descriptions (Sheet 4 of 9)

Field	Subfield	Entry	Explanation and action
	CONFIG	PT_MLT_PT or PT_PT	*Configuration* If broadcast procedures are to be used on this interface, enter PT_MLT_PT (point-to-multipoint). Otherwise, enter PT_PT (point-to-point).
	LOCATION	LOCALEO PVTNET USER or LOC_MAP	*Location* Enter the location to be used if creating CAUSE information elements. The following CAUSE information elements are contained in release messages that map to a specific treatment: • LOCALEO - local end office (public network) location • PVTNET - private network location • USER - user location • LOC_MAP - location map
	SAT	Y or N	*Satellite* Enter Y (yes) if the trunk subgroup is configured to switch by satellite. Otherwise, enter N (no).
	ECSELECT	see subfield	*Echo canceler selector* This field consists of subfield ECSTAT.

TRKSGRP type ISDN (continued)

Field descriptions (Sheet 5 of 9)

Field	Subfield	Entry	Explanation and action
	ECSTAT	EXTERNAL INNOTONE INTERNAL or UNEQ	*Echo canceler status* This field indicates the status of the echo canceler status on the trunk subgroup. Enter EXTERNAL if echo cancellations on this trunk subgroup are performed by external echo canceler status equipment, and no call processing control is involved. Field ABCNTL must be checked. Enter INNOTONE if internal echo canceler status are used for the trunk subgroup, but the use of 2100-Hz tone disabling is turned off. This value is not allowed if the echo suppressor is instrumented on the trunk subgroup. Enter the data for refinement NSMATCH. Enter INTERNAL if the echo canceler status on this trunk subgroup are equipped on the NT6X50EC card in the digital trunk controller (DTC) frame, and are enabled by call processing if the call is not a data call. This value is not allowed if echo suppressor is instrumented on the trunk subgroup. Enter the data for subfields NSMATCH and AUTOON. Enter UNEQ (unequipped) if echo canceler status is not equipped on this trunk subgroup. Enter UNEQ if the echo canceler status remains OFF.
	NSMATCH	Y or N	*Noise match control* If the entry in subfield ECSTAT is INNOTONE or INTERNAL, enter the data for this field. Enter Y to show that noise matching is ON, indicating that background noise levels are maintained if internal echo canceler status is actively cancelling echoes. Enter N to indicate that background noise is not maintained if internal echo canceler status is actively cancelling echoes. The default is N.

TRKSGRP type ISDN (continued)

Field descriptions (Sheet 6 of 9)

Field	Subfield	Entry	Explanation and action
	AUTOON	Y or N	*Auto reenable control* If the entry in subfield ECSTAT is INTERNAL, enter the data for this field. Enter Y to show that auto reenable is ON, the echo canceler status is automatically turned on after the 2100-Hz tone is removed upon absence of energy. Enter N to indicate that the echo canceler status is not automatically turned on after the 2100-Hz tone control is removed. This option is similar to the END OF CALL option for tone disablers in external echo canceler status. The default is Y.
	TRKGRDTM	numeric (1 to 255)	*Trunk lock-out timeout* If the entry in field DIR is OG, enter the time, in 10-ms intervals, that the trunk waits to receive on-hook from the far-end before reporting lock-out on the trunk. The timer begins on sending an on-hook signal to the far-end. If a new outgoing call is attempted on a trunk before on-hook is received from the far-end, the peripheral will delay outgoing trunk seizure until on-hook is received from the far-end. If on-hook is received from the far-end before this lock-out timer expires, the new call is immediately attempted on the trunk; otherwise, the trunk reports lock-out and the call is reattempted on another trunk. If the trunks are PX/FX, the entry is a 160 ms increment.

TRKSGRP type ISDN (continued)

Field descriptions (Sheet 7 of 9)

Field	Subfield	Entry	Explanation and action
	ADJNODE	alphanumeric (1 to 12 characters)	*Adjacent node* Enter the data for this field for switch loads prior to BCS36. Enter the index into table ADJNODE. Table ADJNODE provides information regarding the connected or adjacent switch and must be datafilled before table TRKSGRP. This field cannot be changed if it affects the associated PRODUCT in table ADJNODE.
	L1FLAGS	Y or N	*Layer 1 flags* This field is used by ISDN primary rate access (PRA) trunks to indicate whether or not the ISDN DTC (DTCI) sends layer 1 flags if the D-channel is in flagfill mode. Enter Y if the connection is between DMS and a different vendor. Enter N for DMS-to-DMS PRA connections. This field is automatically set to Y if a PRA node is selected and the node is defined as SL1 in table ADJNODE.
		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.

TRKSGRP type ISDN (continued)

Field descriptions (Sheet 8 of 9)

Field	Subfield	Entry	Explanation and action
	DCHNL	see subfield	*D-channel* The entries in this field define the main D-channel to be used for this PRA interface. The D-channel that serves an interface can be changed so that the interface is served by a new D-channel. This is accomplished by changing the field DCHLOC in table TRKSGRP. If such a change is made, the B-channels that were formerly associated with the old D-channel must be reassociated with the new D-channel. This is accomplished by sending a bulk format B-channel static data tuple. The bulk tuple performs the necessary association, while removing the association that previously existed. This field consists of subfield PMTYPE.

TRKSGRP type ISDN (continued)

Field descriptions (Sheet 9 of 9)

Field	Subfield	Entry	Explanation and action
	PMTYPE	DTCI, IAC, ICP, LTC, PDTC, PRA_ADTC	*Peripheral module type* Enter the peripheral module (PM) type. *DTCI - ISDN DTC* Enter the data for subfields DTCINO, DTCICKTNO, DTCICKTTS, and fields DCHRATE and HDLCTYPE. *IAC - ISDN access controller* Enter the data for subfields IACNO, IACCKTNO, and IACCKTTS. *ICP - integrated cellular peripheral* Enter the data for subfields ICPNO, ICPCKTNO, and ICPCKTTS, and field DCHRATE. *LTC - line trunk controller* Enter the data for subfields LTCNO, LTCCKTNO, LTCCKTTS, and fields DCHRATE and HDLCTYPE. *PDTC - PCM30 digital trunk controller (DTC)* Enter the data for fields P30NO, P30CKTNO, and P30CKTTS, and fields DCHRATE, and HDLCTYPE. *PRA_ADTC - primary rate access Austrian DTC* No subfields are required for this entry type.

PMTYPE = DTCI

If the entry in subfield PMTYPE is DTCI, enter the data for subfields DTCINO, DTCICKTNO, and DTCICKTTS as described below, then go to field DCHRATE to continue datafill for SIGDATA = ISDN.

Field descriptions for conditional data II

Field	Subfield	Entry	Explanation and action
	DTCINO	numeric (0 to 511)	*ISDN digital trunk controller number* If the entry in field PMTYPE is DTCI, enter the data for this field. Enter the DTCI number of the D-channel.
	DTCICKTNO	numeric (0 to 19)	*ISDN digital trunk controller circuit number* If the entry in field PMTYPE is DTCI, enter the data for this field. Enter the DS-1 span (DS-1 circuit number) on the DTCI used for the D-channel.
	DTCICKTTS	numeric (0 to 24)	*ISDN digital trunk controller circuit time slot* If the entry in field PMTYPE is DTCI, enter the data for this field. Enter the time slot of the DS-1 span (DS-1 circuit number) used for the D-channel. Go to field DCHRATE to complete datafill for DTCI.

PMTYPE = IAC

If the entry in subfield PMTYPE is IAC, enter the data for subfields IACINO, IACICKTNO, and IACICKTTS as described below, then go to field DCHRATE to continue datafill for SIGDATA = ISDN.

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

Field	Subfield	Entry	Explanation and action
	IACNO	numeric (0 to 127)	*ISDN access controller number* If the entry in field PMTYPE is IAC, enter the data for this field. Enter the IAC number of the D-channel.

TRKSGRP type ISDN (continued)

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

Field	Subfield	Entry	Explanation and action
	IACCKTNO	numeric (0 to 19)	*ISDN access controller circuit number* If the entry in field PMTYPE is IAC, enter the data for this field. Enter the IAC DS-1 circuit number used for the D-channel.
	IACCKTTS	numeric 1 to 24)	*ISDN access controller circuit time slot* If the entry in field PMTYPE is IAC, enter the data for this field. Enter the time slot of the DS-1 circuit number used for the D-channel.

PMTYPE = ICP

If the entry in subfield PMTYPE is ICP, enter the data for subfields ICPINO, ICPICKTNO, and ICPICKTTS as described below, then go to field DCHRATE to continue datafill for SIGDATA = ISDN.

Field descriptions for conditional data II

Field	Subfield	Entry	Explanation and action
	ICPNO	numeric (0 to 511)	*Integrated cellular peripheral number* If the entry in field PMTYPE is ICP, enter the data for this field. Enter the ICP number of the D-channel.
	ICPCKTNO	numeric (0 to 19)	*Integrated cellular peripheral circuit number* If the entry in field PMTYPE is ICP, enter the data for this field. Enter the ICP DS-1 circuit number used for the D-channel.
	ICPCKTTS	numeric (1 to 24)	*Integrated cellular peripheral circuit time slot* If the entry in field PMTYPE is ICP, enter the data for this field. Enter the time slot of the DS-1 circuit number used for the D-channel. Go to field DCHRATE to complete datafill for ICP.

PMTYPE = LTC

If the entry in subfield PMTYPE is LTC, enter the data for subfields LTCNO, LTCCKTNO, and LTCCKTTS as described below, then go to field DCHRATE to continue datafill for SIGDATA = ISDN.

Field descriptions for conditional data II

Field	Subfield	Entry	Explanation and action
	LTCNO	numeric (0 to 511)	*Line trunk controller* Enter the LTCI number of the D-channel.
	LTCCKTNO	numeric (0 to 19)	*Line trunk controller circuit number* Enter the DS-1 span (DS-1 circuit number) on the LTC used for the D-channel backup.
	LTCCKTTS	numeric (1 to 24)	*Line trunk controller circuit time slot* Enter the time slot of the DS-1 circuit number used for the D-channel. Go to field DCHRATE in Field descriptions table in section "PMTYPE = all PM types" to complete datafill for LTCI.

PMTYPE = PDTC

If the entry in subfield PMTYPE is PDTC, enter the data for subfields P30NO, P30CKTNO, and P30CKTTS as described in the following table, then go to refinement DCHRATE to continue datafill for SIGDATA = ISDN.

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

Field	Subfield	Entry	Explanation and action
	P30NO	numeric (0 to 511)	*P30 number* If the entry in field PMTYPE is PDTC, enter the data for this field. Enter the PDTC number of the D-channel. The D-channel location can be on any port from 0 (zero) to 15 for a PDTC.

TRKSGRP type ISDN (continued)

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

Field	Subfield	Entry	Explanation and action
	P30CKTNO	numeric (0 to 19)	*P30 circuit number* If the entry in field PMTYPE is PDTC, enter the data for this field. Enter a number to indicate the PCM30 circuit range.
	P30CKTTS	numeric (1 to 31)	*P30 circuit time slot* If the entry in field PMTYPE is PDTC, enter the data for this field. Enter a number from 1 to 31 representing the circuit number time slot.

PMTYPE = all PM types

For all peripheral modules types, datafill refinement DCHRATE as described below.

Field descriptions

Field	Subfield	Entry	Explanation and action
DCHRATE		56K or 64K	*D-channel data rate* Enter the data rate of the D-channel, 56K or 64K. The data transmission rate of the carrier (DS-1) and of the D-channel on it must be compatible. If the carrier is datafilled to transmit at 56K, then the entry in field DCHRATE must also be 56K. If the entry in subfield PMTYPE is IAC or ICP, datafill is complete for table TRKSGRP, SIGDATA = ISDN.

PMTYPE = DTCI, LTC, PDTC

If the entry in subfield PMTYPE is DTCI, LTC, or PDTC, enter the data for refinement HDLCTYPE as described below.

Field descriptions for conditional data II

Field	Subfield	Entry	Explanation and action
	HDLCTYPE	HDLC or INVHDLC	*High level data link type* If the entry in field PMTYPE is DTCI, LTC, or PDTC, enter the data for field HDLCTYPE. This field specifies how the LTC or DTCI sends and/or receives D-channel messages. If the entry in field PMTYPE is DTCI or LTC, enter HDLC for high level data link or INVHDLC for inverted high level data link. ***Note:*** The inverted HDLC is a format in which all 0s (zeros) are changed to 1s and all 1's are changed to 0's (zeros). Some ISDN vendors use the inverted HDLC for PRA interfaces.

For all tuples

For all tuples, enter the data for the remaining fields as described in the following table.

Field descriptions (Sheet 1 of 2)

Field	Subfield	Entry	Explanation and action
DCHBCKUP		see subfield	*D-channel backup* The entries in this field define the backup D-channel used for this PRA interface. This field consists of subfield PMTYPE.

TRKSGRP type ISDN (continued)

Field descriptions (Sheet 2 of 2)

Field	Subfield	Entry	Explanation and action
	PMTYPE	DTCI, IAC, ICP, LTC, PDTC, PRA_ADTC	*Peripheral module type* Refer to field PMTYPE for a complete description of entries and fields.
OPTION		OVLOPOFF, OVLIPOFF	*Option* Enter any of the following options if required. Enter OVLOPOFF to disable overlap outpulsing on ETSI PRI trunks. When entered, all outgoing calls are sent using Enbloc. Enter OVLIPOFF to disable overlap inpulsing on ETSI PRI trunks. When entered, incoming calls are rejected if there are insufficient digits in the SETUP message to route the call.

Data ll e xample

Two examples of datafill for ISDN signaling are shown below.

MAP display example for table TRKSGRP type ISDN

```
          SGRPKEY CARDCODE
SGRPVAR
                                                  SGRPVAR
_____________________________________________________________________
         M1PRI412 0 DS1SIG
ISDN
 21 20 87Q931 2 N STAND USER PT_PT USER N UNEQ 160
 N DEFAULT PDTC 4 12 16 64K HDLC $ (OVLOPOFF) $

         M1PRI412 0 DS1SIG
ISDN
 21 20 87Q931 2 N STAND USER PT_PT USER N UNEQ 160
 N DEFAULT PDTC 4 12 16 64K HDLC $ (OVLOPOFF) (OVLIPOFF) $
```

Table history

NA012

Added the information that CLLI datafill in table IPINV blocks changes to table TRKSGRP.

TRKSGRP type ISDN (end)

MMP12

Added a warning to IFCLASS. IFCLASS must be set to NETWORK or ECT must be removed from table LTDATA.

NA011

Added LOC_MAP option to the LOCATION subfield in table TRKSGRP type ISDN (AF7769).

EUR009

Added OVLOPOFF and OVLIPOFF options to the OPTION field in table TRKSGRP type ISDN (AU2834).

NA008

Added warning to SGRPVAR when datafilling backup D-channels for PRI NA008 maintenance feature (AF6860).

EUR006

The 96ISOQSIG option was added to the range of values for subfield VERSION in table TRKSGRP type ISDN.

TRKSGRP type JSTD

Japan standard

Japan standard (JSTD) signaling is used for Japan interexchange trunk (IET) subgroups.

Note: This table contains an index into table TKSIGSYS. Datafill table TKSIGSYS before datafilling this table.

Data II

The following table lists the datafill for table TRKSGRP type JSTD.

Field descriptions (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
SGRPKEY		see subfields	*Subgroup key* This field consists of subfields CLLI and SGRP.
	CLLI	alphanumeric (1 to 16 characters)	*Common language location identifier* Enter the common language location identifier (CLLI) code representing the trunk group in table CLLI.
	SGRP	numeric(0 or 1)	*Subgroup number* Enter the number assigned to the trunk subgroup. Enter 1 if two different signaling types are required in the trunk group. Otherwise, Enter 0 (zero).
CARDCODE		DS1SIG	*Card code* Enter DS1SIG.
SGRPVAR		see subfield	*Variable subgroup data* This field consists of subfield SIGDATA and refinements DIR, IPULSTYP, ISTARTSIG, REMBSY, TKICSSI, OPULSTYP, OSTARTSIG, REMBSY, and TKOGSSI.

Field descriptions (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
	SIGDATA	JSTD	*Signaling data* Enter JSTD for Japan standard signaling.
	DIR	IC or OG	*Direction* Enter the trunk group direction: IC (incoming) or OG (outgoing). The entry in this field must be the same as the entry in field DIR in tables TRKGRP and TKSIGSYS. If the entry in field DIR is IC, datafill refinements IPULSTYP, ISTARTSIG, REMBSY, and TKICSSI as described below. If the entry in field DIR is OG, datafill refinements OPULSTYP, OSTARTSIG, REMBSY, and TKOGSSI as described below.

DIR = IC

If the entry in field DIR is IC, datafill refinements IPULSTYP, ISTARTSIG, REMBSY, and TKICSSI as described below.

Field descriptions for conditional data ll

Field	Subfield or refinement	Entry	Explanation and action
	IPULSTYP	MF	*Incoming type of pulsing* Enter MF for multifrequency.
	ISTARTSG	RA	*Incoming start dial signal* Enter RA for register attached.
	REMBSY	Y or N	*Remote make busy* Enter Y (yes) to indicate that a blocking signal must be sent on an incoming trunk if the trunk is manually made busy. Otherwise, enter N (no).
	TKICSSI	alphanumeric (1 to 16 characters)	*Incoming trunk signaling system index* Enter the index into table TKSIGSYS. The associated tuple in table TKSIGSYS must be datafilled before this subgroup tuple. Datafill for SIGDATA = JSTD is complete after datafilling this field.

TRKSGRP type JSTD (continued)

DIR = OG

If the entry in field DIR is OG, datafill refinements OPULSTYP, OSTARTSIG, REMBSY, and TKOGSSI as described below.

Field descriptions for conditional data ll

Field	Subfield or refinement	Entry	Explanation and action
	OPULSTYP	MF	*Outgoing type of pulsing* Enter MF for multifrequency.
	OSTARTSG	RA	*Outgoing start dial signal* Enter RA for register attached.
	REMBSY	Y or N	*Remote make busy* Enter Y to indicate that a blocking signal must be sent on an incoming trunk if the trunk is manually made busy. Otherwise, enter N.
	TKOGSSI	alphanumeric (1 to 16 characters)	*Outgoing trunk signaling system index* Enter the index into table TKSIGSYS. The associated tuple in table TKSIGSYS must be datafilled before this subgroup tuple. Datafill is complete for SIGDATA = JSTD after datafilling this field.

Data ll e xample

An example of datafill for an incoming trunk subgroup using Japan standard signaling is shown below.

MAP display example for table TRKSGRP type JSTD

```
           SGRPKEY   CARDCODE
SGRPVAR
                                                  SGRPVAR

_____________________________________________________________

          ICTRK01 0 DS1SIG
JSTD
 IC MF RA Y JAPANICSS
```

An example of datafill for an outgoing trunk subgroup using Japan standard signaling is shown below.

TRKSGRP type JSTD (end)

MAP display example for table TRKSGRP type JSTD

```
                SGRPKEY   CARDCODE
 SGRPVAR
                                                        SGRPVAR
_____________________________________________________________________
               NTTGRPOG 0 DS1SIG
 JSTD
  OG   MF   RA   N   NTTMFOG1
```

TRKSGRP type N5

N5

If type of pulsing is N5, datafill table TRKSGRP as described in the following datafill table.

Data II

The following table lists the datafill for table TRKSGRP type N5.

Field descriptions (Sheet 1 of 5)

Field	Subfield or refinement	Entry	Explanation and action
SGRPKEY		see subfields	*Subgroup key* This field consists of subfields CLLI and SGRP.
	CLLI	alphanumeric (1 to 16 characters)	*Common language location identifier* Enter the common language location identifier (CLLI) code, assigned to the trunk group, in table CLLI to which the subgroup belongs.
	SGRP	numeric(0 or 1)	*Subgroup number* Enter the number assigned to the trunk subgroup.
CARDCODE		alphanumeric (up to 6 characters)	*Card code* Enter the product engineering code (PEC) of the members of the trunk group. See the *DMS-100 Provisioning Manual*.
SGRPVAR		see subfield	*Variable subgroup data* This field consists of subfield SIGDATA and fields PTSNMSIG, SZTOPTS, PTSTOST, ESUPR, and SAT.
	SIGDATA	N5	*Signaling data* Enter N5.
	PTSNMSIG	numeric(4 to 20)	*Proceed to send to receipt of numeric signal* If the trunk group is incoming or two-way, enter the time, in seconds, between the register seizure and the proceed to send (PTS) signal. Enter the default if trunk group is incoming. The default is 20.

Field descriptions (Sheet 2 of 5)

Field	Subfield or refinement	Entry	Explanation and action
	SZTOPTS	numeric(10 to 20)	*Register seizure to proceed to send* If trunk group is outgoing or two-way, enter the time, in seconds, between the register seizure (SZ) and the PTS signal. Enter the default if the trunk group is incoming. The default is 20.
	PTSTOST	numeric(20 to 40)	*Proceed to send to signal terminal* If the trunk group is incoming or two-way, enter the time, in seconds, between the PTS signal and the ST signal. Enter the default if the trunk group is outgoing. The default is 20.
	ESUPR	Y or N	*Echo suppressor* Enter Y (yes) if the trunk group is equipped with echo suppressors. Otherwise, enter N (no).
	SAT	Y or N	*Satellite* Enter Y if the trunk group is connected to the distant office through satellite. Otherwise, enter N.
DELDISD		Y or N	*Delete discrimination digit* Enter Y to remove the CCITT No. 5 Signaling discrimination digit from the digit stream before translations. Otherwise, enter N. If table TRKSGRP is dumped and restored using the MOVEBCS process, the reformat process adds a value of N to field DELDISD of each tuple restored. The default is N.
N5VAR		see subfield	*N5 variable* This field consists of subfield DIGITAL and refinements.

TRKSGRP type N5 (continued)

Field descriptions (Sheet 3 of 5)

Field	Subfield or refinement	Entry	Explanation and action
	DIGITAL	Y or N	*Digital* If this field is for digital N5 trunks, enter Y and datafill refinements LNSSI, ECSTAT, and OPTIONS. For analog N5 trunks, enter N. The default is N.
	LNSSI	N5DEF	*Line signaling system selector index* If the entry in field DIGITAL is Y, datafill this field. Enter N5DEF as the index into table LNSIGSYS. This field is only required for digital N5 trunk subgroups.
	ECSTAT	EXTERNAL INNOTONE INTERNALor UNEQ	*Echo canceler status* This field indicates the status of the echo canceler status on the trunk subgroup. Enter EXTERNAL to indicate an external echo canceler status is required. Enter INNOTONE to indicate echo canceler status internal to the DMS with the 2100-Hz tone disabling function must be turned off. Enter INTERNAL to indicate echo canceler status internal to the DMS must be used. Enter UNEQ (unequipped) if no echo canceler status are required for calls involving digital N5 trunks.
	OPTIONS	see subfield	*Options* This field consists of subfield OPTION and refinements.

TRKSGRP type N5 (continued)

Field descriptions (Sheet 4 of 5)

Field	Subfield or refinement	Entry	Explanation and action
	OPTION	DCME OVLDCNTL or Q33SUP	*Option* Enter DCME to indicate that all members of this trunk subgroup must terminate on an enhanced digital carrier module (DCME). No further datafill for N5 signaling data is required. Enter OVLDCNTL to indicate that overload control is required on N5 trunks and datafill field NUMOFCLF. The OVLDCNTL option cannot be changed if trunks are datafilled in table TRKMEM, otherwise the following error message is displayed: `CANNOT CHANGE OVLDCNTL OPTION WITH TRUNKS IN TABLE TRKMEM` Enter Q33SUP to show Q33 failures on a trunk by trunk basis. No further datafill for signaling data N5 is required. The Q33SUP option indicates that circuit supervision is supported on all members of the trunk group. field DIGITAL must be set to Y and field DIR can be 2W, IC, or OG.

TRKSGRP type N5 (continued)

Field descriptions (Sheet 5 of 5)

Field	Subfield or refinement	Entry	Explanation and action

			The Q33SUP option can only be changed if there are no trunk members datafilled in table TRKMEM against the trunk subgroup, otherwise the following error message is displayed:
			
			`CANNOT CHANGE Q33 OPTION WITH TRUNKS DATAFILLED IN TABLE TRKMEM`
			
			The Q33 timer must be datafilled in table LNSIGSYS before the Q33SUP option is datafilled in table TRKSGRP, otherwise the following error message is displayed:
			
			`Q33 TIMER NOT DATAFILLED IN TABLE LNSIGSYS`

	NUMOFCLF	numeric (1 to 31)	*Number of clear forwards* If the entry in field OPTION is OVLDCNTL, datafill this field. Enter the maximum number of clear forwards permitted on the carrier the trunk subgroup is datafilled on. Field NUMOFCLF cannot be changed if trunks are datafilled in table TRKMEM, otherwise the following error message is displayed: `CANNOT CHANGE OVLDCNTL OPTION WITH TRUNKS IN TABLE TRKMEM`

Data ll e xample

Examples of possible datafill for N5 signaling are shown below.

MAP display example for table TRKSGRP type N5

```
                SGRPKEY   CARDCODE
SGRPVAR
                                                        SGRPVAR
_____________________________________________________________

              TLG03CANMTL 0 5X04AA
N5
 10   14   30   N   N
```

An example of datafill with fields DELDISD, DIGITAL and LNISSI is shown below.

MAP display example for table TRKSGRP type N5

```
                 SGRPKEY   CARDCODE
 SGRPVAR
                                                      SGRPVAR
 ___________________________________________________________

              N5INTERGW  HKG12WN5 DS1SIG
 N5
  10   20   20   Y   N   Y   Y  N5DEF
```

An example of datafill with fields DELDISD, DIGITAL and LNISSI is shown below.

MAP display example for table TRKSGRP type N5

```
                 SGRPKEY   CARDCODE
 SGRPVAR
                                                      SGRPVAR
 ___________________________________________________________

              N5INTERGW  HKG12WN5 5X04AA
 N5
  10   20   20   N   Y   N   N
```

An example of datafill with field DELDISD is shown below.

TRKSGRP type N5 (end)

MAP display example for table TRKSGRP type N5

```
              SGRPKEY   CARDCODE
SGRPVAR
                                                    SGRPVAR
_____________________________________________________________

             N5INTERGW 0 5X04AA
N5
 10  14  30  N  N  N
```

An example of datafill with field OPTION is shown below.

MAP display example for table TRKSGRP type N5

```
              SGRPKEY   CARDCODE
SGRPVAR
                                                   SGRPVAR
____________________________________________________________

             NSTWBA3 0 5X04AA
N5
 20  20  38  Y  Y  N  N   OVLDCNTL 24
```

An example of datafill with field ECSTAT is shown below.

MAP display example for table TRKSGRP type N5

```
               SGRPKEY   CARDCODE
SGRPVAR
                                                     SGRPVAR
_____________________________________________________________

             KOR12WN5D 0 DS1SIG
N5
 10  20  20  N  N  N  Y  N5DEF EXTERNAL DCME
```

TRKSGRP type R1/R1N5

R1 or R1N5

If the type of pulsing is R1 or R1N5, datafill table TRKSGRP as described in the following datafill table.

Data II

The following table lists the datafill for table TRKSGRP type R1/R1N5.

Field descriptions (Sheet 1 of 6)

Field	Subfield or refinement	Entry	Explanation and action
SGRPKEY		see subfields	*Subgroup key* This field consists of subfields CLLI and SGRP.
	CLLI	alphanumeric (1 to 16 characters)	*Common language location identifier* Enter the common language location identifier (CLLI) code that is assigned in table CLLI to the trunk group to which the subgroup belongs.
	SGRP	numeric(0 or 1)	*Subgroup number* Enter the number assigned to the trunk subgroup.
CARDCODE		alphanumeric (up to 6 characters)	*Card code* If the trunk is analog, enter the product engineering code (PEC) of the trunk card (for example, 2X82AA). See *DMS-100 Provisioning Manual*, 297-1001-450. If the trunk is digital, enter the applicable code as detailed below. • Enter DS1SIG if normal North American R1 signaling is required. The following fields must be datafilled with the values shown below: — field SIGNLBIT set to AB — field IDLEPOL set to 0 — field RMBSYBIT set to NONE — field RMBSYPOL set to 1 • Enter R1PCM if enhanced R1 signaling is required.

TRKSGRP type R1/R1N5 (continued)

Field descriptions (Sheet 2 of 6)

Field	Subfield or refinement	Entry	Explanation and action
SGRPVAR		see subfields	*Variable subgroup data* This field consists of subfield SIGDATA and refinements R1LINSIG, R1DIGSIG, IDGTIME, RSZTOKP, KPTOADG, RSZTOST, DDDURN, DDTOSD, SAT, ESUPR, OVLAP, SIGNLBIT, IDLEPOL, RMBSYBIT, and RMBPOL.
	SIGDATA	R1 or R1N5	*Signaling data* Enter R1 or R1N5.
	R1LINSIG	DDDIALTONEIMorWK	*R1 line signaling* Enter the type of R1 signal required: • DD - delay dial on-hook idle • DIALTONE - dialtone supplied • IM - immediate seize without outpulsing • WK - wink
	R1DIGSIG	DTMForN5MF	*R1 digit signaling* Enter the type of R1 digit signal required: • DT - Digitone • MF - R1 multifrequency • N5MF - R1N5 multifrequency If the entry in subfield R1LINSIG is IM, enter DT.
	IDGTIME	numeric(2 to 30)	*Interdigital timing* If the trunk group is incoming or two-way and the trunk group carries operator traffic, enter the interdigital time, in seconds, with a range of 15 to 30. If the trunk group is incoming or two-way and the trunk group carries no operator traffic, enter the interdigital time, in seconds, with a range of 3 to 8. Enter a minimum of 2 (200 ms) for dial pulse (DP) trunks. Enter the default value if the trunk group is outgoing. The default is 20.

TRKSGRP type R1/R1N5 (continued)

Field descriptions (Sheet 3 of 6)

Field	Subfield or refinement	Entry	Explanation and action
	RSZTOKP	numeric(2 to 30)	*Register seizure to key-pulse* If the trunk group is incoming or two-way and the trunk group carries operator traffic, enter the time, in seconds, between the register seizure and the key-pulse (KP) signal with a range of 15 to 30. If the trunk group is incoming or two-way and the trunk group carries no operator traffic, enter the time, in seconds, between the register seizure and the KP signal with a range of 10 to 20. Enter the default value if the trunk is outgoing. The default is 20.
	KPTOADG	numeric(2 to 30)	*Key-pulse to a digit* If the trunk group is incoming or two-way and the trunk group carries operator traffic, enter the time, in seconds, between the receipt of KP and receipt of the A digit with a range of 15 to 30. If the trunk group is incoming or two-way and the trunk group carries no operator traffic, enter the time, in seconds, between the receipt of KP and the receipt of the A digit with a range of 10 to 20. Enter the default value if the trunk group is outgoing. The default is 20.

TRKSGRP type R1/R1N5 (continued)

Field descriptions (Sheet 4 of 6)

Field	Subfield or refinement	Entry	Explanation and action
	RSZTOST	numeric(15 to 40)	*Register seizure to signaling terminal* If the trunk group is incoming or two-way and the trunk group carries operator traffic, enter the time, in seconds, between the register seizure and the signaling terminal (ST) signal with a range of 20 to 30. If the trunk group is incoming or two-way and the trunk group carries no operator traffic, enter the time, in seconds, between the register seizure and the ST signal with a range of 15 to 30. Enter the default value if the trunk group is outgoing. The default is 20.
	DDDURN	numeric(20 to 120)	*Delay dial duration* If the trunk group carries operator traffic, enter the minimum duration of the delay dial signal, in units of 10 ms. For example, an entry of 20 means the minimum duration of the delay dial signal is 200 ms. Enter the default value in other cases. The default is 20.
	DDTOSD	numeric(5 to 10)	*Delay dial to start dial* If the trunk group is outgoing or two-way, enter the time, in seconds, between the delay dial signal and the start dial signal. Enter the default value if the trunk group is incoming. The default is 10.
	SAT	Y or N	*Satellite* Enter Y if the trunk group is connected to the distant office through satellite. Otherwise, enter N.
	ESUPR	Y or N	*Echo suppressor* Enter Y (yes) if the trunk group is equipped with echo suppressors. Otherwise, enter N (no).

TRKSGRP type R1/R1N5 (continued)

Field descriptions (Sheet 5 of 6)

Field	Subfield or refinement	Entry	Explanation and action
	OVLAP	Y or N	*Overlap signaling* Enter Y if overlap signaling is required. Otherwise, enter N. This field must be datafilled for incoming, outgoing, and two-way trunk subgroups that use R1 or R1N5 protocols. Although overlap signaling exists for trunks with R1N5, it can only be datafilled N. For calls over trunks used on the incoming leg of a call, a value of Y indicates that an attempt is made to find an outgoing route before an attempt is made to route the call. Overlap signaling is only applicable on R1 trunks if the following conditions are true: • the R1 trunk has subfield SIGDATA set to R1, not R1N5 • the R1 trunk uses universal tone receivers (UTR) for digit collection not MF300 receivers • the translations for the call do not index table GWDIGMAN Field OVLAP can only be set to Y if the entry in subfield SIGDATA is R1. Otherwise, only a value of N is permitted. If any other circumstances occur the call defaults to en-bloc regardless of the value of subfield OVLAP.
	SIGNLBIT	A or AB	*Signaling bit* Enter A if the signaling information is carried on the A-bit. Enter AB if the signaling information is carried on both the A- and B-bits. Enter AB if the trunk is analog.
	IDLEPOL	numeric(0 or 1)	*Idle polarity* Enter the polarity, either 0 (zero) or 1, of the signaling bit if the trunk is in the idle state. Enter 0 (zero) if the trunk is analog.

TRKSGRP type R1/R1N5 (end)

Field descriptions (Sheet 6 of 6)

Field	Subfield or refinement	Entry	Explanation and action
	RMBSYBIT	ABABorNONE	*Remote make busy bit* Enter the bit, either A, B or AB, that carries the remote make busy (RMB) signal. Enter NONE if remote make busy (RMB) is not applicable or if the trunk is analog.
	RMBPOL	numeric(0 or 1)	*Remote make busy bit polarity* Enter the polarity, either 0 or 1, of the RMB bit effective if the RMB signal is transmitted on the B-bit. The RMB signal is a backward signal and can be transmitted in the A-bit (if the line signals are being transmitted on the A-bit), the AB-bits (if the line signals are being transmitted on the AB-bits) or the B-bit (if the line signals are being transmitted on the B-bit). If the RMB signal is transmitted on the same bit(s) as the line signals, the polarity of the RMB signal is the opposite to the idle polarity.

Data ll e xample

The following example shows sample datafill for table TRKSGRP type R1/R1N5.

MAP display example for table TRKSGRP type R1/R1N5

```
                SGRPKEY   CARDCODE
SGRPVAR
                                                        SGRPVAR
_____________________________________________________________________

             LPR17IC 0 DS1SIG
R1
 WK MF 8 15 15 25 20 10 N N N AB 0 NONE 1
```

TRKSGRP type R2

R2

If the type of pulsing is R2 and type of trunk is GW (gateway) in table TRKGRP, datafill table TRKSGRP as described in the following datafill table.

Data II

The following table lists the datafill for table TRKSGRP type R2.

Field descriptions (Sheet 1 of 5)

Field	Subfield or refinement	Entry	Explanation and action
SGRPKEY		see subfields	*Subgroup key* This field consists of subfields CLLI and SGRP.
	CLLI	alphanumeric (1 to 16 characters)	*Common language location identifier* Enter the common language location identifier (CLLI) code that is assigned in table CLLI to the group to which the subgroup belongs.
	SGRP	numeric(0 or 1)	*Subgroup number* Enter the number assigned to the trunk subgroup.
CARDCODE		DS1SIG	*Card code* Enter DS1SIG.
SGRPVAR		see subfield	*Variable subgroup data* This field consists of subfield SIGDATA and refinements SAT, ESUPR, ECSTAT, REMBSY, OVLAP, TRKGRDTM, R2LINSIG, RGSSI, and DIR.
	SIGDATA	R2	*Signaling data* Enter R2.
	SAT	Y or N	*Satellite* Enter Y if the trunk group is connected to the distant office through satellite. If the trunk group is not connected to the distant office by satellite, enter N. If the entry is Y, the link_by_link connection is done in R2 to R2 calls. This data is also sent by the trunk if required.

TRKSGRP type R2 (continued)

Field descriptions (Sheet 2 of 5)

Field	Subfield or refinement	Entry	Explanation and action
	ESUPR	YNor REQ	*Echo suppressor* The entry in this field determines which country code indicator is sent on a transit call (I_11, I_12 or I_14). Enter Y (yes) if the trunk group is equipped with echo suppressors. Otherwise, enter N (no). No internal echo suppressors are used. Enter REQ to indicate that a request is sent to the next switching unit to connect an echo suppressor on the outgoing side (signal I_11). The value REQ is not allowed if field LONGHAUL in table TRKGRP is set to Y.
	ECSTAT	EXTERNAL INNOTONE INTERNALor UNEQ	*Echo canceler status* This field indicates the status of the echo canceler status on the trunk subgroup. Enter EXTERNAL if an external echo canceler status is required. Enter INNOTONE if internal echo canceler status with 2100-Hz tone disabling is turned off. Enter INTERNAL if echo canceler status internal to the DMS must be used. Enter UNEQ (unequipped) if no echo canceler status are required for calls involving digital R2 trunks, or if the echo canceler status remains OFF.
	REMBSY	Y or N	*Remote make busy* Enter Y if an incoming trunk sends blocking or the outgoing trunk has to expect blocking. Otherwise, enter N.

TRKSGRP type R2 (continued)

Field descriptions (Sheet 3 of 5)

Field	Subfield or refinement	Entry	Explanation and action
	OVLAP	Y or N	*Overlap signaling* Enter either Y or N to indicate whether overlap signaling is permitted. This field is present for two-way, incoming, and outgoing trunk subgroups using the R2 protocol. For calls over incoming and two-way trunks used on the incoming leg of a call, a value of Y indicates that an attempt is made to find an outgoing route before all the digits have been collected. For calls over outgoing and two-way trunks used on the outgoing leg of a call, a value of Y indicates that overlap outpulsing is permitted. An attempt to overlap outpulse is made if the incoming trunk is using overlap inpulsing. A value of N for incoming and two-way trunks used on the incoming leg of a call indicates that overlap inpulsing is not permitted. All digits are collected before an attempt is made to route the call. A value of N for outgoing and two-way trunks used on the outgoing leg of a call indicates that overlap outpulsing is not permitted. All digits are outpulsed en-bloc, that is, outpulsing does not begin until all digits have been received from the incoming trunk in the call. Overlap signaling is only applicable to R2 trunks if the following conditions are true: The R2 trunk is using digital line signaling (field R2LINSIG is set to DIGR2 in table TRKSGRP).

TRKSGRP type R2 (continued)

Field descriptions (Sheet 4 of 5)

Field	Subfield or refinement	Entry	Explanation and action
			The R2 trunk is using MFC R2 register signaling (field RGSIGTYP is MFCR2 in table RGSIGSYS, indexed by field RGSSI in table TRKSGRP). The variant of R2 register signaling is CCITT international MFC R2 (field PROTOCOL is INTLMFC in table MFCPROT, indexed by field PROTINDX in table RGSIGSYS). The above is the only combination for which field OVLAP can be set to Y.

TRKSGRP type R2 (continued)

Field descriptions (Sheet 5 of 5)

Field	Subfield or refinement	Entry	Explanation and action
	TRKGRDTM	numeric(1 to 255)	*Trunk lock-out timeout* If the entry in field DIR is OG or 2W, enter the time, in 10-ms intervals, that the trunk waits to receive on-hook from the far-end before reporting lock-out on the trunk. The timer begins on sending an on-hook signal to the far-end. If a new outgoing call is attempted on a trunk before on-hook is received from the far-end, the peripheral will delay outgoing trunk seizure until on-hook is received from the far-end. If on-hook is received from the far-end before this lock-out timer expires, the new call is immediately attempted on the trunk; otherwise, the trunk reports lock-out and the call is reattempted on another trunk. The default is 10 (100 ms). If the trunks are PX/FX, the entry is a 160 ms increment.
	R2LINSIG	ANR2 DIGR2 or T3R2	*R2 line signaling type* Enter the R2 line signaling type. If the entry in field R2LINSIG is ANR2, datafill refinements RLSPLSTM, RLSACKTM, ABCDSND, and ABRCV as described below. If the entry in field R2LINSIG is DIGR2, datafill refinements TRKSZATM and AUDINTTM in the following tables. If the entry in field R2LINSIG is T3R2, datafill refinements ABCDSND, ABRCV, FLTRTIME, RMINSPLS, RMAXSPLS, SSPLSDUR, SLPLSDUR, SMINIDL, and SMINACLB in the following tables.

TRKSGRP type R2 (continued)

R2LINSIG = ANR2

If the entry in field R2LINSIG is ANR2, datafill refinements RLSPLSTM and RLSACKTM as described below.

Field descriptions for conditional data II

Field	Subfield or refinement	Entry	Explanation and action
	RLSPLSTM	numeric(10 to 250)	*Release pulse time* If the entry in field R2LINSIG is ANR2, datafill this field. Enter the time, in 10-ms intervals, of the release pulse. When the incoming trunk receives a clear forward signal, it sends a pulse of this duration on the A-bit. The default is 10 (100 ms).
	RLSACKTM	numeric(10 to 250)	*Release acknowledge time* If the entry in field R2LINSIG is ANR2, datafill this field. Enter the time, in 10-ms intervals, that the outgoing trunk waits after sending a clear forward signal, before checking for a release signal. During this time any changes on the A-bit are ignored. The default is 25 (250 ms).

R2LINSIG = ANR2, T3R2

If the entry in field R2LINSIG is ANR2 or T3R2, datafill fields ABCDSND and ABRCV as described below.

Field descriptions for conditional data II

Field	Subfield or refinement	Entry	Explanation and action
	ABCDSND	numeric (4 digits of 0 or 1)	*Value of the ABCD-bits sent on idle* If the entry in field R2LINSIG is ANR2 or T3R2, datafill this field. Enter the value of the ABCD-bits to be sent on idle state. The default is 1101.
	ABRCV	numeric (00, 01, 10, 11, or N)	*Value of the AB-bits received on idle* If the entry in field R2LINSIG is ANR2 or T3R2, datafill this field. Enter the value of the AB-bits expected on idle state. The A-bit indicates on or off hook signals. The B-bit indicator is not used. If N is datafilled for any bit, that bit is ignored. The default is 11. If the entry in field R2LINSIG is ANR2, go to field RGSSI in the following tables to continue datafill.

TRKSGRP type R2 (continued)

R2LINSIG = T3R2

If the entry in field R2LINSIG is T3R2, datafill refinements FLTRTIME, RMINSPLS, RMAXSPLS, RMINLPLS, RMAXLPLS, SSPLSDUR, SLPLSDUR, SMINIDL, and SMINACLB as described below.

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

Field	Subfield or refinement	Entry	Explanation and action
	FLTRTIME	numeric(0 to 15)	*Filter time* If the entry in field R2LINSIG is T3R2, datafill this field. Enter the maximum interruption, in 10 ms units, to a signal that is ignored. The default is 3 (30 ms).
	RMINSPLS	numeric(0 to 15)	*Minimum received short pulse time* If the entry in field R2LINSIG is T3R2, datafill this field. Enter the minimum time, in 10-ms units, to recognize a received short pulse, beyond the filter time. The default is 3 (30 ms).
	RMAXSPLS	numeric(0 to 15)	*Maximum received short pulse time* If the entry in field R2LINSIG is T3R2, datafill this field. Enter the maximum time, in 10-ms units, for a received short pulse, beyond the minimum short pulse time. The default is 3 (30 ms).
	RMINLPLS	numeric(0 to 255)	*Minimum received long pulse time* If the entry in field R2LINSIG is T3R2, datafill this field. Enter the minimum time, in 10-ms units, to recognize a received long pulse, beyond the maximum time of a short pulse. The default is 11 (110 ms).
	RMAXLPLS	numeric(0 to 255)	*Maximum received long pulse time* If the entry in field R2LINSIG is T3R2, datafill this field. Enter the maximum time, in 10-ms units, for a received long pulse, beyond the minimum long pulse time. The default is 42 (420 ms).

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

Field	Subfield or refinement	Entry	Explanation and action
	SSPLSDUR	numeric(0 to 255)	*Send short pulse duration* If the entry in field R2LINSIG is T3R2, datafill this field. Enter the duration, in 10-ms units, for sending a short pulse. The default is 15 (150 ms).
	SLPLSDUR	numeric(0 to 255)	*Send long pulse duration* If the entry in field R2LINSIG is T3R2, datafill this field. Enter the duration, in 10-ms units, for sending a long pulse. The default is 60 (600 ms).
	SMINIDL	numeric(0 to 255)	*Minimum time between successive signal* If the entry in field R2LINSIG is T3R2, datafill this field. Enter the minimum time, in 10-ms units, between the sending of successive signals. The default is 30 (300 ms).
	SMINACLB	numeric(0 to 255)	*Minimum time to prevent clear backward signal* If the entry in field R2LINSIG is T3R2, datafill this field. Enter the minimum time, in 10-ms units, that the answer signal is held before being pulsed back. This is to prevent a clear backward signal from occurring and being returned immediately after answer. The default is 12 (120 ms). Go to field RGSSI in the following tables to continue datafill.

TRKSGRP type R2 (continued)

R2LINSIG = DIGR2

If the entry in field R2LINSIG is DIGR2, datafill refinements TRKSZATM and AUDINTTM as described below.

Field descriptions for conditional data ll

Field	Subfield or refinement	Entry	Explanation and action
	TRKSZATM	numeric(0 to 200)	*Trunk seizure acknowledgement timer* If the entry in field R2LINSIG is DIGR2, datafill this field. After a seize signal is sent, the seizure acknowledgement timer is started. A seizure acknowledgement signal is expected till this timer expires. Time is measured in 10 ms units, that is, an entry of 1 is actually 10 ms. This field is only for two-way and outgoing trunk subgroups. Enter 0 (zero) for an incoming trunk group. The range for field TRKSZATM is different for satellite and terrestrial calls. For satellite calls the range is 100 to 200 and for terrestrial calls the range is 10 to 20.
	AUDINTTM	numeric(0 to 4)	*Audit interval time* If the entry in field R2LINSIG is DIGR2, datafill this field. This field determines the timer interval in which the audit for R2 trunks run. The time is given a 1-minute unit. This field is only for two-way and outgoing trunk subgroups. Enter 0 (zero) if the entry in field DIR is IC. Enter 2 to 4 for two-way or outgoing trunk subgroups (field DIR is set to 2W or OG).

R2LINSIG = all entries

For all entries in field R2LINSIG, datafill fields RGSSI and DIR as described below.

Field descriptions for conditional data ll

Field	Subfield or refinement	Entry	Explanation and action
	RGSSI	alphanumeric (1 to 16 characters)	*Register signaling system instance* Enter a register signaling system instance of table RGSIGSYS.
	DIR	2WIC or OG	*Direction* Enter the trunk group direction: 2W (two-way), IC (incoming), or OG (outgoing). If the entry in field R2LINSIG is ANR2, the entry in field DIR must be IC or OG. The trunk cannot be 2W. If the entry in field DIR is 2W, datafill fields TRKCBTM, MFCR2RPT, and OPTION. If the entry in field DIR is IC, datafill field TRKCBTM. If the entry in field DIR is OG, datafill fields MFCR2RPT and OPTION.

DIR = 2W or IC

If the entry in field DIR is 2W or IC, datafill refinement TRKCBTM as described below.

Field descriptions for conditional data ll

Field	Subfield or refinement	Entry	Explanation and action
	TRKCBTM	numeric(10 to 250)or blank	*Trunk clear back time* Enter the time, in seconds, that an incoming or two-way trunk waits following the propagation of a clear back signal, for a clear forward signal from the calling end or a reanswer signal from the called end. The default is 60 (60 s). If the entry in field DIR is IC, datafill is complete for the R2 signaling system (subfield SIGDATA set to R2).

TRKSGRP type R2 (continued)

DIR = 2W or OG

If the entry in field DIR is 2W or OG, datafill refinement MFCR2RPT and OPTION as described below.

Field descriptions for conditional data ll

Field	Subfield or refinement	Entry	Explanation and action
	MFCR2RPT	Y or N	*Multifrequency compelled R2 repeat* This field is used to control whether a repeat attempt is done if a timeout occurs on outpulsing the digits. Enter Y if R2 register signaling behaves as before. Enter N for no repeat attempt.
	OPTION	DCME	*Option* Enter DCME to indicate that all members of this trunk subgroup terminate on an enhanced digital carrier module.

Data ll e xample

An example of datafill for R2 signaling is shown below.

MAP display example for table TRKSGRP type R2

```
                  SGRPKEY   CARDCODE
SGRPVAR
                                                        SGRPVAR
_____________________________________________________________

             INCR2TRK 0 DS1SIG
R2
 N N  Y  10  ANR2 100 25 0101 01 GWMFC IC 60
```

An example of datafill for an R2 trunk permitted to use overlap signaling is shown below.

MAP display example for table TRKSGRP type R2

```
                SGRPKEY   CARDCODE
SGRPVAR
                                                        SGRPVAR
_____________________________________________________________

              R2TRK2W 0 DS1SIG
R2
 N N  N Y 200  DIGR2 10 2 GWMFC 2W 60 N
```

An example of datafill for an R2 trunk if R2LINSIG has an entry of DIGR2 is shown below.

MAP display example for table TRKSGRP type R2

```
                SGRPKEY   CARDCODE
SGRPVAR
                                                        SGRPVAR
_____________________________________________________________

              R2DOGBA 0 DS1SIG
R2
 N N  Y Y 100  DIGR2 20 2 GWMFC OG  N
```

An example of datafill for an R2 trunk with field ECSTAT introduced is shown below.

MAP display example for table TRKSGRP type R2

```
                 SGRPKEY   CARDCODE
SGRPVAR
                                                        SGRPVAR
_____________________________________________________________

             R2LOOP2W 0 DS1SIG
R2
 N N  EXTERNAL N N 100  DIGR2 N5DEF EXTERNAL GWMFC
 2W 60 N
```

TRKSGRP type SIGSYS

SIGSYS

If trunk group type in table TRKGRP is OPR, MTR, or ITOPS, datafill table TRKSGRP as described in the following datafill table.

Data II

The following table lists the datafill for table TRKSGRP type SIGSYS.

Field descriptions (Sheet 1 of 3)

Field	Subfield or refinement	Entry	Explanation and action
SGRPKEY		see subfields	*Subgroup key*This field consists of subfields CLLI and SGRP.
	CLLI	alphanumeric (1 to 16 characters)	*Common language location identifier*Enter the common language location identifier (CLLI) code that is assigned in table CLLI to the trunk group to which the subgroup belongs.
	SGRP	numeric(0 or 1)	*Subgroup number*Enter the number assigned to the trunk subgroup.
CARDCODE		P30CAS	*Card code*Enter P30CAS, the cardcode for an international extended multiprocessor system (XMS)-based peripheral module (IXPM) trunk with pulse code modulation 30 (PCM30).
SGRPVAR		see subfield	*Variable subgroup data*This subfield consists of subfield SIGDATA and refinements RXTXSEP, REMBSY, OVLP, DIALSTRT, DIR, LNICSSI, RGICSSI, MTICSSI, ALERTCTL, DIALMODE, CONTMARK, LNOGSSI, RGOGSSI, MTOGSSI, LN2WSSI, RG2WSSI, MT2WSSI, ALERTCTL, and DIALMODE.
	SIGDATA	SIGSYS	*Signaling data*Enter SIGSYS for international signaling.
	RXTXSEP	Y or N	*Receive transmit path separate*Enter Y (yes) for a trunk conversion to analog, using a channel bank and an analog transmit path separate from an analog receive path. Otherwise, enter N (no).

TRKSGRP type SIGSYS (continued)

Field descriptions (Sheet 2 of 3)

Field	Subfield or refinement	Entry	Explanation and action
	REMBSY	Y or N	*Remote make busy*Enter Y if trunk subgroup is assigned the remote make busy (RMB) feature. Otherwise, enter N.
	OVLP	Y or N	*Overlap signaling*Enter Y if the register signaling is dial pulse (DP) or multifrequency compelled (MFC). This indicates that overlap signaling is available for the trunk subgroup. Through field OVLP, trunks can be selectively datafilled for the overlap signaling operation. Otherwise, enter N. ***Note:*** For dump and restore purposes, this field must be set to N.

TRKSGRP type SIGSYS (continued)

Field descriptions (Sheet 3 of 3)

Field	Subfield or refinement	Entry	Explanation and action
	DIALSTRT	DELDIALIMMEDIATEMANSWBSASWBWINKorNILTYPE	*Dial start mode*Enter the type of dial start trunk required: • DELDIAL - delay dial start trunk • IMMEDIATE - immediate dial trunk • MANSWB - manual-toll switchboard incoming trunk • SASWB - semiautomatic switchboard incoming trunk • WINK - wink start dialing trunk Enter NILTYPE if this field is not applicable. The default is NILTYPE. If the line signaling type is NTLS24, field DIALSTRT must be datafilled either IMMEDIATE, DELDIAL, or WINK.
	DIR	2WICorOG	*Direction*Enter the trunk group direction: 2W (two-way), IC (incoming), or OG (outgoing). If the trunk type in table TRKGRP is SPC, the entry in field DIR must be OG. If the entry in field DIR is 2W, datafill fields LN2WSSI, R2WSSI, MT2WSSI as described below. If the entry in field DIR is IC, datafill fields LNICSSI, RGICSSI, and MTICSSI, and ALERTCTL and DIALMODE. If the entry in field DIR is OG, datafill fields LNOGSSI, RGOGSSI, MTOGSSI and fields ALERTCTL and DIALMODE.

DIR = 2W

If the entry in field DIR is 2W, datafill fields LN2WSSI, RG2WSSI, and MT2WSSI as described below.

Field descriptions for conditional data II

Field	Subfield or refinement	Entry	Explanation and action
	LN2WSSI	NTLS16	*Line two-way signaling system instance*If the entry in field DIR is 2W, datafill this field. Enter NTLS16 if an index into table LNSIGSYS is needed. This entry provides the line signaling system (LSS) used by the two-way trunk.
	RG2WSSI	NTRS11	*Register two-way signaling system instance*If the entry in field DIR is 2W, datafill this field. Enter NTRS11 if an index into table RGSISGYS is needed. This entry provides the register signaling system (RSS) used by the two-way trunk.
	MT2WSSI	alphanumeric (1 to 16 characters)	*Meter two-way signaling system instance*If the entry in field DIR is 2W, datafill this field. Enter a meter signaling system instance of table MTSIGSYS. Enter NIL if trunk group type is OPR. If the entry in field DIR is 2W, datafill for SIGDATA = SIGSYS is complete.

TRKSGRP type SIGSYS (continued)

DIR = IC

If the entry in field DIR is IC, datafill fields LNICSSI, RGICSSI, and MTICSSI as described below.

Field descriptions for conditional data II

Field	Subfield or refinement	Entry	Explanation and action
	LNICSSI	alphanumeric (1 to 16 characters)	*Line incoming signaling system instance*If the entry in field DIR is IC, datafill this field. Enter a line signaling system instance of table LNSIGSYS. ***Note:*** If the trunk type is SPC, the entry in field LNICSSI must be NTLS14 and must have been previously datafilled in table LNSIGSYS.
	RGICSSI	alphanumeric (1 to 16 characters)	*Register incoming signaling system instance*If the entry in field DIR is IC, datafill this field. Enter a register signaling system instance of table RGSIGSYS. Changing the register signaling system type is not allowed. The message signaling type cannot be changed on an update or the following error message is displayed: `SIGNALING TYPE CANNOT BE CHANGED ON AN UPDATE` To change the register signaling system type (by changing fields RGOGSSI and/or RGICSSI) the trunk subgroup must be deleted and added again. This necessitates deleting the trunk members also.
	MTICSSI	alphanumeric (1 to 16 characters) or NIL	*Meter incoming signaling system instance*If the entry in field DIR is IC, datafill this field. Enter a meter signaling system instance of table MTSIGSYS. Enter NIL if trunk group type is OPR. Go to field ALERTCTL to complete datafill for incoming trunks (field DIR is set to IC).

DIR = OG

If the entry in field DIR is OG, datafill fields LNOGSSI, RGOGSSI, MTOGSSI, ALERTCTL, and DIALMODE as described below.

Field descriptions for conditional data II

Field	Subfield or refinement	Entry	Explanation and action
	LNOGSSI	alphanumeric (1 to 16 characters)	*Line outgoing signaling system instance*If the entry in field DIR is OG, datafill this field. Enter a line signaling system instance of table LNSIGSYS.
	RGOGSSI	alphanumeric (1 to 16 characters)	*Register outgoing signaling system instance*If trunk direction is outgoing, datafill this field. Enter a register signaling system instance of table RGSIGSYS. Changing the register signaling system type is not allowed. The message signaling type cannot be changed on an update or the following error message is displayed: `SIGNALING TYPE CANNOT BE CHANGED ON AN UPDATE` To change the register signaling system type (by changing fields RGOGSSI and/or RGICSSI) the trunk subgroup must be deleted and added again. This necessitates deleting the trunk members also.
	MTOGSSI	alphanumeric (1 to 16 characters)or NIL	*Meter outgoing signaling system instance*If the entry in field DIR is OG, datafill this field. Enter a meter signaling system instance of table MTSIGSYS. Enter NIL if trunk group type is OPR. Go to field ALERTCTL to complete datafill for outgoing trunks (field DIR is set to OG).

TRKSGRP type SIGSYS (continued)

DIR = IC or OG

If the entry in field DIR is IC or OG, datafill fields ALERTCTL and DIALMODE as described below.

Field descriptions for conditional data ll

Field	Subfield or refinement	Entry	Explanation and action
	ALERTCTL	TERM or ORIG	*Alert signal control*If the entry in field DIR is IC or OG, datafill this field. An alert signal can be such as a start ringing signal or a toll break-in (TBI) ringing signal. Enter ORIG if the originator has control of the alert signal and must physically initiate ringing to begin. The operator must initiate ringing to the subscriber. Enter TERM if the terminator has control of the alert signal and ringing is initiated if the terminator is connected. When subscriber A goes on hook after a TBI, subscriber A receives physical ringing immediately and the operator's lamp lights until the subscriber answers. If subscriber B goes on hook before subscriber A, the operator must rering subscriber A.
	DIALMODE	C or M	*Dial mode*If the entry in field DIR is IC or OG, datafill this field. Enter C (customer) if customer dialing is expected. In the case of an operator, the entry is C. Enter M (machine) if machine dialing is expected.

Data ll e xample

Examples of possible datafill with indexes into table RGSIGSYS and LNSIGSYS for two-way trunks, and datafill for incoming and outgoing trunks, are shown below.

TRKSGRP type SIGSYS (end)

MAP display example for table TRKSGRP type SIGSYS

```
          SGRPKEY  CARDCODE
SGRPVAR
                                                  SGRPVAR
_____________________________________________________________________

        TEST2W 0 P30CAS
SIGSYS
 N N NILTYPE 2W          R22W R22W NIL TERM M $

        INCFRBKA 0 P30CAS
SIGSYS
 Y N DELDIAL IC LOCLNSIGDX LOCRGSIGDX NIL TERM M $

        OGTOBKA 0 P30CAS
SIGSYS
 Y N DELDIAL OG     LOCLNSIGDX LOCRGSIGDX NIL $
```

An example of datafill with field OVLP is shown below.

MAP display example for table TRKSGRP type SIGSYS

```
          SGRPKEY  CARDCODE
SGRPVAR
                                                  SGRPVAR
_____________________________________________________________________

         2WNTLS20 0 P30CAS
SIGSYS
 N N N WINK 2W NTLS20SIG RGLOCSIG NIL TERM M $

        INCTLS20 0 P30CAS
SIGSYS
 N N N WINK IC NTLS20SIG RGLOCSIG NIL TERM M $

        OGNTLS20 0 P30CAS
SIGSYS
 N N Y NILTYPE OG NTLS20SIG RGLOCSIG NIL $
```

TRKSGRP type STD

STD

For each trunk group with standard (STD) signaling datafill table TRKSGRP as described in the following datafill table.

Data ll

The following table lists the datafill for table TRKSGRP type STD.

Field descriptions (Sheet 1 of 6)

Field	Subfield or refinement	Entry	Explanation and action
SGRPKEY		see subfields	*Subgroup key* This field consists of subfields CLLI and SGRP.
	CLLI	alphanumeric (1 to 16 characters)	*Common language location identifier* Enter the common language location identifier (CLLI) code that is assigned in table CLLI to the trunk group to which the subgroup belongs.
	SGRP	numeric(0 or 1)	*Subgroup number* Enter the number assigned to the trunk subgroup.

TRKSGRP type STD (continued)

Field descriptions (Sheet 2 of 6)

Field	Subfield or refinement	Entry	Explanation and action
CARDCODE		2X72BA 2X72BB 2X75BA 2X81AA 2X81BA 2X82AA 2X84BA 2X85AA 2X86AA 2X95AA 2X95BA 2X95BB 3X01AA 3X04AA 3X06AA 3X07AA 4X97AA DS1FXSGS DS1FXSLS DS1FXO DS1SIG FXOGS FXOLS FXSGS FXSLS MFESCN MFESCP UK3JIC UK3JOG UKAC15 UKEARTH UKLOOP UKDC15	*Card code* If the trunk is analog, enter the product engineering code (PEC) of the trunk card (for example, 2X82AA). If the trunk is digital, enter the applicable code as detailed below. If trunk group type is PX, enter DS1SIG, FXSLS, FXSGS, 2X82AA, 2X83AA, 2X88AA, or 2X81AA. If the trunk group is an integrated business network (IBN) foreign exchange station side (FXS), use cardcode DS1FXO and use ground start or loop start signaling protocol to access the Meridian SuperNode (MSN). Incoming signaling protocol for IBN per trunk signaling (PTS) trunks is specified by field ISTARTSIG, and must be datafilled as ground or loop start. Enter 2X75BA for the A-law looparound test line if trunk group type is LOOPA. Enter 2X85AA or 2X86AA for simplex ring back (the entry in field RNGBCK is SX). Enter 3X04AA if trunk group is incoming from A.E. Co. local test desk. Enter 2X95AA if trunk group type is P2. If trunk group type is PX, cardcode 2X95AA is not supported.

TRKSGRP type STD (continued)

Field descriptions (Sheet 3 of 6)

Field	Subfield or refinement	Entry	Explanation and action
			Enter 3X06AA if trunk group type is recording completing (RC) and operator NE 3, 3C, 3CL, or A.E. No. 30 or 31 switchboard is located in the same building as the switching unit. Enter DS1FXSLS if the entry in field OPTION in table TRKGRP is ACD. Enter DS1FXO for digital FX (foreign exchange) trunks. If an IBNTO or IBNT2 trunk group is added and has a cardcode of DS1FXO, table IBNFXDS1 must be examined and the trunk seize sequence (field SEIZESEQ in table IBNFXDS1) altered if necessary. The cardcode for an IBNT2 trunk can be either DS1FX0 or 6X50AB, but not DS1SIG. Enter DS1SIG if the trunk group is digital and other than an FX or IBNT2 trunk. Enter DS1SIG if the trunk group is NFA (network facility access). If switching unit is DMS-250 and trunk is an FX circuit, enter one of the following: FXOGS, FXOLS, FXSGS, or FXSLS. If an IBNTI or IBNT2 trunk group is added, and has a cardcode of UKAC15, dual tone multifrequency (DTMF) immediate start signaling can be used provided the trunks reside on a pulse code modulation (PCM)30 digital trunk controller (PDTC) with a universal tone receiver (UTR), the entry in field IPULSTYP must be DT, and the entry in field ISTARTSG must be IM. Enter UKLOOP if CLLI is UKLOOPIC, UKLOOPOG, or UKLOOP2W. Enter UKEARTH if CLLI is UKEARTHIC, UKEARTHOG, or UKEARTH2W. Enter 2X86AA for third wire coin control (the entry in field CCONT is 3W).

Field descriptions (Sheet 4 of 6)

Field	Subfield or refinement	Entry	Explanation and action
			Enter 3X07AA if trunk group type is incoming operator (IO) and operator NE 3, 3C, 3CL, or A.E. No. 30 or 31 switchboard is located in the same building as the switching unit. Enter 3X01AA if the entry in field CLLI is ROTLTP. If the CLLI is MTU, enter 4X97AA. The following are cardcodes used by United Kingdom operating companies: • 2X72BA - DC5 four-wire trunk used to handle calls between SL-100 digital private branch exchange (PBX) and the network. • 2X81BA - DC5 two-wire trunk used to handle calls between digital PBX and PBX by using private circuit. • 2X84BA - earth calling trunk used to handle calls between digital PBX and the network. • 2X95BA - DDI trunk used to handle calls from a local exchange to digital PBX. • UKAC15 - MEL type 2 trunk with AC15 signaling. • UKDC5 - MEL type 2 trunk with DC5 signaling. • UK3JIC - 3J type 4 incoming trunk with loop disconnect signaling. • UK3JOG - 3J type 2 outgoing trunk with loop disconnect signaling.

TRKSGRP type STD (continued)

Field descriptions (Sheet 5 of 6)

Field	Subfield or refinement	Entry	Explanation and action
			The following are cardcodes used to allow Spanish multifrequency (MFE) SOCOTEL signaling on IBN trunk types IBNTI (incoming) and IBNTO (outgoing): • MFESCN - incoming Spanish SOCOTEL trunk using type N line signaling and with trunk type IBNTI. • MFESCP - outgoing Spanish SOCOTEL trunk using type P line signaling and with trunk type IBNTO The following cardcodes are used in Spain: • 2X95BB - JUSMAG trunk, two-wire, 600 ohms direct dial outward. • 2X72BB - CAIA trunk, four-wire, 600 ohms direct dial outward. Incoming MFE SOCOTEL trunks with field IPULSTYP set to MFC must have the following additional datafill: • field ISTARTSG set to M • field OVLP set to M • field REMBSY set to Y • field DIALMODE set to M Outgoing MFE SOCOTEL trunks with field OPULSTYP set to MFC must have the following additional datafill: • field OSTARTSG set to IM • field DIALMODE set to M
SGRPVAR		see subfields	*Variable subgroup data* For standard signaling, this field consists of subfield SIGDATA and refinements DIR, IPULSTYP, ISTARTSG, OVLP, PSPDSEIZ, PARTDIAL, OPULSTYP, OSTARTSG, IDGTIME, NUMSTOPS, GLAREYD, CCONT, RNGBCK, ESUPR, SAT, REMBSY, DIALMODE, TRKGRDTM, and ECSTAT.

TRKSGRP type STD (continued)

Field descriptions (Sheet 6 of 6)

Field	Subfield or refinement	Entry	Explanation and action
	SIGDATA	STD	*Signaling data* Enter STD for standard signaling.
	DIR	2W, IC, or OG	*Direction* Enter the trunk group direction: two-way (2W), incoming (IC), or outgoing (OG). Enter 2W if trunk group is NFA. Enter IC or OG if the entry in field GRPTYP in table TRKGRP is TPS101. If the entry in field DIR is IC, datafill refinements IPULSTYP, ISTARTSG, OVLP, PSPDSEIZ, PARTDIAL, CCONT, RNGBCK, ESUPR, SAT, REMBSY, DIALMODE, and ECSELECT. Refer to the datafill descriptions in table 2. If the entry in field DIR is 2W, datafill refinements IPULSTYP, ISTARTSG, OVLP, PSPDSEIZ, PARTDIAL, OPULSTYP, OSTARTSG, IDGTIME, NUMSTOPS, GLAREYD, CCONT, RNGBCK, ESUPR, SAT, REMBSY, DIALMODE, TRKGRDTM, and ECSELECT. Refer to the datafill descriptions in table 3. If the entry in field DIR is OG, datafill refinements OPULSTYP, OSTARTSG, IDGTIME, NUMSTOPS, CCONT, RNGBCK, ESUPR, SAT, REMBSY, TRKGRDTM, and ECSELECT. Refer to the datafill descriptions in table 4.

TRKSGRP type STD (continued)

DIR = IC

If the entry in field DIR is IC, datafill refinements IPULSTYP, ISTARTSG, OVLP, PSPDSEIZ, PARTDIAL, CCONT, RNGBCK, ESUPR, SAT, REMBSY, DIALMODE, and ECSELECT as described below.

TRKSGRP type STD (continued)

Field descriptions for conditional data II (Sheet 1 of 14)

Field	Subfield or refinement	Entry	Explanation and action
	IPULSTYP	DP, DT, MF MFC, NP, RP, or blank	*Incoming type of pulsing* Enter one of the following types of pulsing: • DP - dial pulse • DT - Digitone • MF - multifrequency • MFC - multifrequency compelled • NP - no pulsing • RP - revertive pulsing Enter DP, MF, or NP if the trunk group type is E911. Enter DP, MF, MFC, or RP if the trunk group type is T1. Enter DP or MF if the trunk group type is T2. Enter DP if the trunk group is UKEARTH2W. Enter DP if the trunk group is incoming from A.E. Co. local test desk. Enter DP if a trunk whose CLLI corresponds to the IBN cut-through selector. See table IBNXLA for cut-through dialing.

TRKSGRP type STD (continued)

Field descriptions for conditional data II (Sheet 2 of 14)

Field	Subfield or refinement	Entry	Explanation and action
			Enter DP or DT if trunk group type is P2 or TPS101. Enter DT if trunk group is NFA. Enter DT if trunk group is UKLOOPIC or UKLOOP2W, or UKEARTHIC. Enter DT if all of the following conditions exist: • the trunk group type is IBNT2 • the cardcode is UKDC5 • Capability Set 1 Refined (CS-1R) trigger criteria checking can occur Enter MF for feature group D (FGD) calls over IBNTI and IBNT2 trunks to the MSN. If trunk group type is ATC, leave this field blank. If the entry in field OFFNET is not Y (yes) and the entry in field OFFNTACC is not DAT in table TRKGRP, an error message is output on the map stating that this trunk signaling combination is not allowed.

TRKSGRP type STD (continued)

Field descriptions for conditional data II (Sheet 3 of 14)

Field	Subfield or refinement	Entry	Explanation and action
			The selection of DT, MF, and MFC type of incoming pulsing is incompatible with IM start dial signaling (field ISTARTSG set to IM). DT, MF, and MFC require tone receivers to process the incoming signaling tones. Under high traffic conditions, attachment of the receiver can take several hundred ms. Normally, this is handled by the selection of a start dial signaling protocol that includes a method to allow the necessary time needed to attach the tone receiver before tone dialing begins. An entry of IM in field ISTARTSG specifies that dialing can start within 70 ms of initiation of the trunk connection. This practice can result in improper connections. In table TRKGRP, if required, one or two digits (fields DIGIT0 and DIGIT1) can be prefixed to the incoming digits stream. However, if either field DIGIT0 or field DIGIT1 is datafilled with anything other than N and the entry in field IPULSTYP in table TRKSGRP is DT, there can be a delay in call completion of 12 to 14 s. Datafilling the above combinations on incoming trunks is prohibited by table control. Datafill is not allowed for two-way trunks beginning in BCS31. Trunks already datafilled are allowed. The combination DT IM in fields IPULSTYP and ISTARTSG respectively, must only be allowed for trunk group types DAL, MEL, and IAL.

TRKSGRP type STD (continued)

Field descriptions for conditional data II (Sheet 4 of 14)

Field	Subfield or refinement	Entry	Explanation and action
			While the checking of office parameter DUMP_RESTORE_IN_PROGRESS in table OFCSTD enables existing DT IM trunks to be datafilled, no further DT IM trunks can be added. If an IBNTI or IBNT2 trunk group is added, and has a cardcode of UKAC15, DTMF can be used providing the trunks reside on a PDTC with a universal tone receiver (UTR), field IPULSTYP is set to DT, and field ISTARTSG is set to IM. If an attempt is made to add a tuple to table TRKSGRP with field IPULSTYP set to DT and field ISTARTSG set to IM, or to change a tuple to this configuration, the entry for this subgroup is checked to ensure that this is an offnet trunk using dedicated access trunk offnet access.
	ISTARTSG	DD, DIALTONE, GD, GO, GS, IM, LP, LS, SZ, WK, or, blank	*Incoming start dial signal* If incoming pulse type is DP, DT, or MF (field IPULSTYP), enter the type of start dial signal required: • DD - delay dial on-hook idle • DIALTONE • GD - ground • GO - ground start • GS - ground start • IM - immediate dial • LP - loop start • LS - loop start • SZ - seize protocol • WK - wink Enter DIALTONE if trunk group type is P2. Enter DIALTONE for non-FXS circuits if trunk group type is PX, and dial tone is provided on origination.

TRKSGRP type STD (continued)

Field descriptions for conditional data II (Sheet 5 of 14)

Field	Subfield or refinement	Entry	Explanation and action
			Enter IM if the entry in field IPULSTYP is NP (for two-way trunk groups GD is also a valid entry for this field value). Enter IM if the entry in field CARDCODE is DS1SIG and the trunk group is IBNTI (DIALTONE is not compatible with cardcode DS1SIG for IBN trunks). Enter GD if the entry in field CARDCODE is DS1FXO (IBNT2 trunks should use a cardcode of DS1FXO). Enter GS if the entry in field CARDCODE is FXOGS or FXSGS.

TRKSGRP type STD (continued)

Field descriptions for conditional data II (Sheet 6 of 14)

Field	Subfield or refinement	Entry	Explanation and action
			Enter IM if trunk group is incoming from A.E. Co. local test desk. Enter LS if the entry in field CARDCODE is FXOLS or FXSLS. Enter WK if trunk group type is ATC or NFA. Enter WK if all of the following conditions exist: • the trunk group type is IBNT2 • the cardcode is UKDC5 • CS-1R trigger criteria checking can occur The type of start dial signals used by the DMS-250 switch are: • For ONAL trunks: — GO - ground start — LP - loop start • For DAL trunks: — GS - ground start — LS - loop start • For DAL and ONAL trunks: — SZ - seize protocol For FXS circuits, field DTONE in table TRKGRP for PX trunks must be used. Enter any of the permitted values in field ISTARTSG.

Field descriptions for conditional data II (Sheet 7 of 14)

Field	Subfield or refinement	Entry	Explanation and action
			If an attempt is made to add or change a tuple to table TRKSGRP with field IPULSTYP set to DT and field ISTARTSG set to IM, the entry in table TRKGRP for this subgroup is checked to ensure that this is an offnet trunk using dedicated access trunk offnet access. If field OFFNET is not set to Y (yes) and field OFFNTACC is not set to DAT in table TRKGRP, an error message is output on the MAP stating that this trunk signaling combination is not allowed. The only exception is for DTMF pulsing with an immediate start trunk signaling combination. If an IBNTI or IBNT2 trunk group is added with a cardcode of UKAC15, DTMF immediate start signaling combination can be used provided the trunks reside on a PDTC with a UTR, field IPULSTYP is set to DT, and field ISTARTSG is set to IM.
	OVLP	Y, N , or, blank	*Overlap outpulsing* If trunk group is DP, intertoll, local, or IBN, and if trunk-to-trunk overlap outpulsing is required, enter Y. Otherwise enter N (no). Enter N if trunk group is applicable to DP trunks. Enter N if the entry in field CLLI is UKLOOPIC, UKLOOP2W, UKEARTHIC, or UKEARTH2W.
	PSPDSEIZ	numeric(2 to 30) or blank	*Permanent signal or partial dial on seizure timing* Enter the time, in seconds, that the trunk has to wait for reception of each digit up to and including the specified minimum number of digits expected.
	PARTDIAL	numeric(2 to 30) or blank	*Partial dial timing* Enter the time, in seconds, that the trunk waits for reception of each digit received after the specified minimum expected number of digits is received.

TRKSGRP type STD (continued)

Field descriptions for conditional data II (Sheet 8 of 14)

Field	Subfield or refinement	Entry	Explanation and action
	CCONT	EI, IB, LN, MW, TR, 3W, or NO	*Coin control* If the trunk subgroup is configured for coin control, enter the type of coin control required: • EI - expanded inband • IB - inband • MW - multiwink • TR - coin control • LN - line number • 3W - third wire Otherwise, enter NO. Expanded inband coin control and ring back (entry value EI) can be specified if the switching unit supports outgoing traffic service position system (TSPS). Expanded inband coin control and ring back is not allowed if office parameter EXPANDED_INBAND_PERMITTED in table OFCOPT is set to N.

Field descriptions for conditional data II (Sheet 9 of 14)

Field	Subfield or refinement	Entry	Explanation and action
			If the entry in field CCONT is LN, the entry in field RNGBCK cannot be IB. With MW coin control, a series of on-hook winks is sent from a TSPS to a local switching unit, to collect and return coins. Enter NO if the trunk type is NFA. Wink durations are 70 to 130 ms for transmit and 50 to 150 ms for receive. The sequence between winks is 100 to 150 ms for transmit and 75 to 185 ms for receive. The number of winks is interpreted as follows: • 1 - operator released • 2 - operator attached • 3 - coin collect • 4 - coin return • 5 - re-ring If TR is specified, the product is a positional coin control system. The plus or minus 130 V signal used to effect collect or return of coins is sent over the T and R leads. If 3W is specified, the PEC must be 2X86AA. Third-wire coin control is a method of signaling from the switchboard to the switching unit over a third wire.

TRKSGRP type STD (continued)

Field descriptions for conditional data II (Sheet 10 of 14)

Field	Subfield or refinement	Entry	Explanation and action
			DC signals on this wire are detected by the switching unit, that initiates a coin collect or a coin return to the coin station. ***Note:*** IB, MW, TR, and 3W types of coin control are supplied with the local basic software package. IB, MW, LN, and TR types of coin control are supplied with the basic traffic operator position system (TOPS) software package. Fields CCONT and RNGBCK must be datafilled as the same signaling type in order for ring back to function. If the datafill for field CCONT is TR, 3W, or NO, then the datafill for field RNGBCK has no restriction.
	RNGBCK	C6, C7_RING, EI, IB, LN, MW, SX, WK, or, NO	*Ringback* If the trunk subgroup is configured for ring back signal, enter the type of ring back signal required: • C6 - CCITT No. 6 Signaling • C7_RING - Common Channeling Signaling 7 • EI - expanded inband • IB - inband • LN - line number • MW - multiwink • SX - simplex • WK - wink Otherwise, enter NO. The default value is NO.

Field descriptions for conditional data II (Sheet 11 of 14)

Field	Subfield or refinement	Entry	Explanation and action
			Entry value IB cannot be specified if the entry in field CCONT is LN. Enter MW in order for ring forward and ring back to work if a Traffic Operator Position System (TOPS) operator attempts to ring forward to another TOPS operator, using an intertoll trunk. If SX is specified, the entry in field CARDCODE must be 2X85AA or 2X86AA. Enter NO if the trunk group is NFA. ***Note:*** Fields CCONT and RNGBCK must be datafilled as the same signaling type in order for ring back to function. If the datafill for field CCONT is TR, 3W, or NO, then the datafill for field RNGBCK has no restriction.
	ESUPR	F, H , or, N	*Echo suppressor* Enter F (full) if a full echo suppressor is located at the near end of the trunk group. The switch takes no action and is used for administrative purposes only. No echo suppressor is inserted in the connection. Enter H (half) if the trunk group has echo suppressors and a half echo suppressor is located at the near end of the trunk group. Enter N (no) if the trunk group has no echo suppressors located at the near end of the trunk group. Enter N if trunk group type is NFA, or if trunk type is INT101, used by DMS-300.
	SAT	Y or N	*Satellite* Enter Y if trunk subgroup is configured to switch through satellite. Otherwise, enter N. Enter N if trunk group type is NFA.

TRKSGRP type STD (continued)

Field descriptions for conditional data II (Sheet 12 of 14)

Field	Subfield or refinement	Entry	Explanation and action
	REMBSY	Y or N	*Remote make busy* Enter Y if the trunk subgroup is assigned the Remote Make Busy (RMB) feature. Otherwise, enter N. If Y is entered, if the circuit is busied, an off hook signal is sent on the trunk and an off hook signal on the FXS circuit starts ringing the phone from the channel-bank. Enter Y for the voice links in an OC_REMOTE OC_HOST configuration. Failure to do so can result in a REMOTE_PROCESS_O software error (Swer) in the OC_REMOTE switching unit. The problem occurs if the OC-HOST assigns a voice link to be used for a TOPS call, tells the OC_REMOTE of the assignment, and the OC_REMOTE finds the assigned voice link in a state other than IDL. The OC_REMOTE terminates the call and generates a Swer and a series of AUDs. Enter Y if the entry in field CLLI is UKLOOPIC, UKLOOP2W, UKEARTHIC, or UKEARTH2W. Enter N if trunk group type is PX for FXS circuits. Enter N if the trunk group type is NFA.
	DIALMODE	C, M , or blank	*Dial mode* Enter C if incoming digits originate from a subscriber. Otherwise, enter M if incoming digits are machine produced. If customer dialed, no logs are produced for permanent signal, partial dial, and abandoned calls. Enter M If trunk group type is NFA.
	ECSELECT	see subfield	*Echo canceler selector* This field consists of subfield ECSTAT.

TRKSGRP type STD (continued)

Field descriptions for conditional data II (Sheet 13 of 14)

Field	Subfield or refinement	Entry	Explanation and action
	ECSTAT	EXTERNAL INNOTONE INTERNAL or UNEQ	*Echo canceler status* Datafill this field to indicate the status of the echo canceler on the trunk subgroup. This subfield replaces field ECEQUIP. Enter EXTERNAL if echo cancelations on this trunk subgroup are performed by external canceler status equipment, and no call processing control is involved. Enter INNOTONE if internal echo canceler status are to be used for the trunk subgroup, but the use of 2100-Hz tone disabling is turned off. This value is not allowed if the echo suppressor is instrumented on the trunk subgroup. Datafill refinement NSMATCH. Enter INTERNAL if the echo canceler status on this trunk subgroup are equipped on the NT6X50EC card in the DTC frame, and are enabled by call processing if the call is not a data call. This value is not allowed if echo suppressor is instrumented on the trunk subgroup. Datafill refinements NSMATCH and AUTOON. Enter UNEQ (unequipped) if echo canceler status is not equipped on this trunk subgroup. Enter UNEQ if the trunk group type is NFA.

TRKSGRP type STD (continued)

Field descriptions for conditional data II (Sheet 14 of 14)

Field	Subfield or refinement	Entry	Explanation and action
	NSMATCH	Y or N	*Noise match control* If the entry in subfield ECSTAT is INTERNAL or INNOTONE, datafill this field. To show that noise matching is ON, indicating that background noise levels are maintained if internal echo canceler status is actively canceling echoes, enter Y. To indicate that background noise is not maintained if internal echo canceler status is actively cancelling echoes, enter N. The default is N.
	AUTOON	Y or N	*Auto re-enable control* If the entry in subfield ECSTAT is INTERNAL, datafill this field. To show that auto re-enable is ON, the echo canceler status is automatically turned on after the 2100-Hz tone is removed upon absence of energy, enter Y. To indicate that the echo canceler status is not automatically turned on after the 2100-Hz tone control is removed, enter N. This option is similar to the END OF CALL option for tone disablers in external echo canceler status. The default is Y.

DIR = 2W

If the entry in field DIR is 2W, datafill refinements IPULSTYP, ISTARTSG, OVLP, PSPDSEIZ, PARTDIAL, OPULSTYP, OSTARTSG, IDGTIME,

TRKSGRP type STD (continued)

NUMSTOPS, GLAREYD, CCONT, RNGBCK, ESUPR, SAT, REMBSY, DIALMODE, TRKGRDTM, and ECSELECT as described below.

TRKSGRP type STD (continued)

Field descriptions for conditional data II (Sheet 1 of 19)

Field	Subfield or refinement	Entry	Explanation and action
	IPULSTYP	DP, DT, MF, MFC, NP, RP, or blank	*Incoming type of pulsing* Enter one of the following types of pulsing: • DP - dial pulse • DT - Digitone • MF - multifrequency • MFC - multifrequency compelled • NP - no pulsing • RP - revertive pulsing Enter DP, MF, or NP if the trunk group type is E911. Enter DP, MF, MFC, or RP if trunk group type is T1. Enter DP or MF if the trunk group type is T2. Enter DP if trunk group is UKEARTH2W. Enter DP if trunk group is incoming from A.E. Co. local test desk.

TRKSGRP type STD (continued)

Field descriptions for conditional data II (Sheet 2 of 19)

Field	Subfield or refinement	Entry	Explanation and action
			Enter DP if a trunk whose CLLI corresponds to the IBN cut-through selector. See table IBNXLA for cut-through dialing. Enter DP or DT if trunk group type is P2 or TPS101. Enter DT if trunk group is NFA. Enter DT if trunk group is UKLOOPIC or UKLOOP2W, or UKEARTHIC. Enter DT if all of the following conditions exist: • the trunk group type is IBNT2 • the cardcode is UKDC5 • CS-1R trigger criteria checking can occur Enter MF for feature group D (FGD) calls over IBNTI and IBNT2 trunks to the MSN. If trunk group type is ATC, leave this field blank. If the entry in field OFFNET is not Y (yes) and the entry in field OFFNTACC is not DAT in table TRKGRP, an error message is output on the map stating that this trunk signaling combination is not allowed.

TRKSGRP type STD (continued)

Field descriptions for conditional data II (Sheet 3 of 19)

Field	Subfield or refinement	Entry	Explanation and action
			The selection of DT, MF, and MFC type of incoming pulsing is incompatible with IM start dial signaling (field ISTARTSG set to IM). DT, MF, and MFC require tone receivers to process the incoming signaling tones. Under high traffic conditions, attachment of the receiver can take several hundred ms. Normally, this is handled by the selection of a start dial signaling protocol that includes a method to allow the necessary time needed to attach the tone receiver before tone dialing begins. An entry of IM in field ISTARTSG specifies that dialing can start within 70 ms of initiation of the trunk connection. This practice can result in improper connections. In table TRKGRP, if required, one or two digits (fields DIGIT0 and DIGIT1) can be prefixed to the incoming digits stream. However, if either field DIGIT0 or field DIGIT1 is datafilled with anything other than N and the entry in field IPULSTYP in table TRKSGRP is DT, there can be a delay in call completion of 12 to 14 s. Datafilling the above combinations on incoming trunks is prohibited by table control. Datafill is not allowed for two-way trunks. The combination DT IM in fields IPULSTYP and ISTARTSG respectively, must only be allowed for trunk group types DAL, MEL, and IAL.

TRKSGRP type STD (continued)

Field descriptions for conditional data II (Sheet 4 of 19)

Field	Subfield or refinement	Entry	Explanation and action
			While the checking of office parameter DUMP_RESTORE_IN_PROGRESS in table OFCSTD allows existing DT IM trunks to be datafilled, no further DT IM trunks can be added. If an IBNTI or IBNT2 trunk group is added, and has a cardcode of UKAC15, DTMF can be used providing the trunks reside on a PDTC with a universal tone receiver (UTR), field IPULSTYP is set to DT, and field ISTARTSG is set to IM. If an attempt is made to add a tuple to table TRKSGRP with field IPULSTYP set to DT and field ISTARTSG set to IM, or to change a tuple to this configuration, the entry for this subgroup is checked to ensure that this is an offnet trunk using dedicated access trunk offnet access.

TRKSGRP type STD (continued)

Field descriptions for conditional data II (Sheet 5 of 19)

Field	Subfield or refinement	Entry	Explanation and action
	ISTARTSG	DD, DIALTONE, GD, GO, GS, IM, LP, LS, SZ, WK, or blank	*Incoming start dial signal* If incoming pulse type is DP, DT, or MF (field IPULSTYP), enter the type of start dial signal required: • DD - delay dial on-hook idle • DIALTONE • GD - ground • GO - ground start • GS - ground start • IM - immediate dial • LP - loop start • LS - loop start • SZ - seize protocol • WK - wink Enter DIALTONE if trunk group type is P2. Enter DIALTONE for non-FXS circuits if trunk group type is PX, and dial tone is provided on origination. Enter GD if the entry in field CARDCODE is DS1FXO (IBNT2 trunks should use a cardcode of DS1FXO). Enter GS if the entry in field CARDCODE is FXOGS or FXSGS. Enter IM if the entry in field IPULSTYP is NP (for two-way trunk groups GD is also a valid entry for this field value). Enter IM if the entry in field CARDCODE is DS1SIG and the trunk group is IBNTI (DIALTONE is not compatible with cardcode DS1SIG for IBN trunks).

TRKSGRP type STD (continued)

Field descriptions for conditional data II (Sheet 6 of 19)

Field	Subfield or refinement	Entry	Explanation and action
			Enter IM if trunk group is incoming from A.E. Co. local test desk. Enter LS if the entry in field CARDCODE is FXOLS or FXSLS. Enter WK if trunk group type is ATC or NFA. Enter WK if all of the following conditions exist: • the trunk group type is IBNT2 • the cardcode is UKDC5 • CS-1R trigger criteria checking can occur The type of start dial signals used by the DMS-250 switch are: • For ONAL trunks: — GO - ground start — LP - loop start • For DAL trunks: — GS - ground start — LS - loop start • For DAL and ONAL trunks: — SZ - seize protocol For FXS circuits, field DTONE in table TRKGRP for PX trunks must be used. Enter any of the permitted values in field ISTARTSG.

TRKSGRP type STD (continued)

Field descriptions for conditional data II (Sheet 7 of 19)

Field	Subfield or refinement	Entry	Explanation and action
			If an attempt is made to add or change a tuple to table TRKSGRP with field IPULSTYP set to DT and field ISTARTSG set to IM, the entry in table TRKGRP for this subgroup is checked to ensure that this is an offnet trunk using dedicated access trunk offnet access. If field OFFNET is not set to Y (yes) and field OFFNTACC is not set to DAT in table TRKGRP, an error message is output on the MAP stating that this trunk signaling combination is not allowed. The only exception is for DTMF pulsing with an immediate start trunk signaling combination. If an IBNTI or IBNT2 trunk group is added with a cardcode of UKAC15, DTMF immediate start signaling combination can be used provided the trunks reside on a PDTC with a UTR, field IPULSTYP is set to DT, and field ISTARTSG is set to IM.
	OVLP	Y, N, or blank	*Overlap outpulsing* If trunk group is DP, intertoll, local, or IBN, and if trunk-to-trunk overlap outpulsing is required, enter Y. Otherwise enter N (no). Enter N if trunk group is applicable to DP trunks. Enter N if the entry in field CLLI is UKLOOPIC, UKLOOP2W, UKEARTHIC, or UKEARTH2W.
	PSPDSEIZ	numeric(2 to 30) or blank	*Permanent signal or partial dial on seizure timing* Enter the time, in seconds, that the trunk has to wait for reception of each digit up to and including the specified minimum number of digits expected.

TRKSGRP type STD (continued)

Field descriptions for conditional data II (Sheet 8 of 19)

Field	Subfield or refinement	Entry	Explanation and action
	PARTDIAL	numeric(2 to 30) or blank	*Partial dial timing* Enter the time, in seconds, that the trunk waits for reception of each digit received after the specified minimum expected number of digits is received.
	OPULSTYP	DP, DT, MF, MFC, NP, RP, or blank	*Outgoing type of pulsing* Enter one of the following types of pulsing: • DP - dial pulse • DT - Digitone • MF - multifrequency • MFC - multifrequency compelled • NP - no pulsing • RP - revertive pulsing

TRKSGRP type STD (continued)

Field descriptions for conditional data II (Sheet 9 of 19)

Field	Subfield or refinement	Entry	Explanation and action
			Enter DP if trunk group type is EA FGB. Enter DP or DT if trunk group type is TPS101. Enter DP or MF if the trunk is an outgoing end office trunk with trunk group type TO. Enter DT if trunk group type is two-way PBX. Enter DT if trunk group type is NFA. Enter DT if the outgoing type is NFA. Enter DT if all of the following conditions exist: • the trunk group type is IBNT2 • the cardcode is UKDC5 • CS-1R trigger criteria checking can occur ***Note:*** If DT is the selected pulsing type, an NT3X68 card is required. Enter MF if trunk group type is ATCP. Enter MF if trunk group type is PX. Enter NP if trunk group type is AN. Enter NP for FXS circuits, outpulsing of digits is not done. ***Note:*** Using NP for FGB traffic can cause problems for FGB billing.

Field descriptions for conditional data II (Sheet 10 of 19)

Field	Subfield or refinement	Entry	Explanation and action
	OSTARTSG	DD, IM, GO, GS, LO, LS, SZ, WK, XD, or, blank	*Outgoing start dial signal* If outgoing pulse type is DP, MF, or DT, enter the type of start dial signal required: • DD - delay dial off-hook idle • IM - immediate dial • GO - ground start • GS - ground start • LO - loop start • LS - loop start • SZ - seize protocol • WK - wink • XD - delay dial off-hook idle Enter IM if OPULSTYP is NP. Enter IM if trunk group is NFA. Enter SZ if the connection is always to an ATD, even if the entry in field ATDANS in table TRKGRP is N. Enter WK if trunk group is ATC. Enter WK if all of the following conditions exist: • the trunk group type is IBNT2 • the cardcode is UKDC5 • CS-1R trigger criteria checking can occur The type of start dial signals used by DMS-250 are: • For ONAL trunks: GO and LO. • For DAL trunks: GS and LS. • For DAL and ONAL trunks: SZ.

TRKSGRP type STD (continued)

Field descriptions for conditional data II (Sheet 11 of 19)

Field	Subfield or refinement	Entry	Explanation and action
	IDGTIME	numeric0 to 100, or blank	*Interdigital timing* If the entry in field OPULSTYP is DP, MF, or NP, enter the interdigital timing interval in 10-ms intervals. Enter a minimum time of 20 (200 ms) for DP trunks. Enter 7 (70 ms) if type of pulsing is MF. Enter 0 (zero) if type of pulsing is NP.
	NUMSTOPS	numeric0 to 3, or blank	*Number of stop/goes* If the trunks are intertoll with DP pulsing, enter the maximum allowable number of stop/go signals. Otherwise, enter 0 (zero). Enter 0 (zero) if trunk group type is NFA.
	GLAREYD	Y, N, or blank	*Yield to glare* If the trunk subgroup must yield to glare, enter Y. Otherwise, enter N. Enter Y if trunk group is two-way PBX. Enter Y if the entry in field CLLI is UKLOOP2W or UKEARTH2W. Enter N if trunk group is NFA.

Field descriptions for conditional data II (Sheet 12 of 19)

Field	Subfield or refinement	Entry	Explanation and action
	CCONT	EI, IB, LN, MW, TR, 3W, or NO	*Coin control* If the trunk subgroup is configured for coin control, enter the type of coin control required: • EI - expanded inband • IB - inband • MW - multiwink • TR - coin control • LN - line number • 3W - third wire Otherwise, enter NO. Extended inband coin control and ring back (field value EI) can be specified if switching unit supports outgoing traffic service position system (TSPS). Entended inband coin control and ring back is not allowed if office parameter EXPANDED_INBAND_PERMITTED in table OFCOPT is set to N. If the entry in field CCONT is LN, the entry in field RNGBCK cannot be IB. With MW coin control, a series of on-hook winks is sent from a TSPS to a local switching unit, to collect and return coins. Enter NO if the trunk type is NFA. Wink durations are 70 to 130 ms for transmit and 50 to 150 ms for receive. The sequence between winks is 100 to 150 ms for transmit and 75 to 185 ms for receive.

TRKSGRP type STD (continued)

Field descriptions for conditional data II (Sheet 13 of 19)

Field	Subfield or refinement	Entry	Explanation and action
			The number of winks is interpreted as follows: • 1 - operator released • 2 - operator attached • 3 - coin collect • 4 - coin return • 5 - re-ring If TR is specified, the product is a positional coin control system. The plus or minus 130 V signal used to effect collect or return of coins is sent over the T and R leads. If 3W is specified, the PEC must be 2X86AA. Third-wire coin control is a method of signaling from the switchboard to the switching unit over a third wire. DC signals on this wire are detected by the switching unit, that initiates a coin collect or a coin return to the coin station. ***Note:*** IB, MW, TR, and 3W types of coin control are supplied with the local basic software package. IB, MW, LN, and TR types of coin control are supplied with the basic traffic operator position system (TOPS) software package. Fields CCONT and RNGBCK must be datafilled as the same signaling type in order for ring back to function. If the datafill for field CCONT is TR, 3W, or NO, then the datafill for field RNGBCK has no restriction.

Field descriptions for conditional data II (Sheet 14 of 19)

Field	Subfield or refinement	Entry	Explanation and action
	RNGBCK	C6, C7_RING, EI, IB, LN, MW, SX, WK, or NO	*Ringback* If the trunk subgroup is configured for ring back signal, enter the type of ring back signal required: • C6 - CCITT No. 6 Signaling • C7_RING - Common Channeling Signaling 7 • EI - expanded inband • IB - inband • LN - line number • MW - multiwink • SX - simplex • WK - wink Otherwise, enter NO. The default value is NO. Entry value IB cannot be specified if the entry in field CCONT is LN. Enter MW in order for ring forward and ring back to work if a Traffic Operator Position System (TOPS) operator attempts to ring forward to another TOPS operator, using an intertoll trunk. If SX is specified, the entry in field CARDCODE must be 2X85AA or 2X86AA. Enter NO if the trunk group is NFA. Fields CCONT and RNGBCK must be datafilled as the same signaling type in order for ring back to function. If the datafill for field CCONT is TR, 3W, or NO, then the datafill for field RNGBCK has no restriction.

TRKSGRP type STD (continued)

Field descriptions for conditional data II (Sheet 15 of 19)

Field	Subfield or refinement	Entry	Explanation and action
			Enter NO if the trunk group is NFA. ***Note:*** Fields CCONT and RNGBCK must be datafilled as the same signaling type in order for ring back to function. If the datafill for field CCONT is TR, 3W, or NO, then the datafill for field RNGBCK has no restriction.
	ESUPR	F, H, or N	*Echo suppressor* Enter F (full) if a full echo suppressor is located at the near end of the trunk group. The switch takes no action and is used for administrative purposes only. No echo suppressor is inserted in the connection. Enter H (half) if the trunk group has echo suppressors and a half echo suppressor is located at the near end of the trunk group. Enter N (no) if the trunk group has no echo suppressors located at the near end of the trunk group. Enter N if trunk group type is NFA, or if trunk type is INT101, used by DMS-300.
	SAT	Y or N	*Satellite*Enter Y if trunk subgroup is configured to switch through satellite. Otherwise, enter N. Enter N if trunk group type is NFA.
	REMBSY	Y or N	*Remote make busy*Enter Y if the trunk subgroup is assigned the Remote Make Busy (RMB) feature. Otherwise, enter N.

TRKSGRP type STD (continued)

Field descriptions for conditional data II (Sheet 16 of 19)

Field	Subfield or refinement	Entry	Explanation and action
			If Y is entered, if the circuit is busied, an off hook signal is sent on the trunk and an off hook signal on the FXS circuit starts ringing the phone from the channel-bank. Enter Y for the voice links in an OC_REMOTE OC_HOST configuration. Failure to do so can result in a REMOTE_PROCESS_O software error (Swer) in the OC_REMOTE switching unit. The problem occurs if the OC-HOST assigns a voice link to be used for a TOPS call, tells the OC_REMOTE of the assignment, and the OC_REMOTE finds the assigned voice link in a state other than IDL. The OC_REMOTE terminates the call and generates a Swer and a series of AUDs. Enter Y if the entry in field CLLI is UKLOOPIC, UKLOOP2W, UKEARTHIC, or UKEARTH2W. Enter N if trunk group type is PX for FXS circuits. Enter N if the trunk group type is NFA.
	DIALMODE	C, M, or blank	*Dial mode* Enter C if incoming digits originate from a subscriber. Otherwise, enter M if incoming digits are machine produced. If customer dialed, no logs are produced for permanent signal, partial dial, and abandoned calls. Enter M If trunk group type is NFA.

TRKSGRP type STD (continued)

Field descriptions for conditional data II (Sheet 17 of 19)

Field	Subfield or refinement	Entry	Explanation and action
	TRKGRDTM	numeric(1 to 255) or blank	*Trunk lock-out timeout* If the entry in field DIR is OG, enter the time, in 10-ms intervals, that the trunk waits to receive on-hook from the far-end before reporting lock-out on the trunk. The timer begins on sending an on-hook signal to the far-end. If a new outgoing call is attempted on a trunk before on-hook is received from the far-end, the peripheral will delay outgoing trunk seizure until on-hook is received from the far-end. If on-hook is received from the far-end before this lock-out timer expires, the new call is immediately attempted on the trunk; otherwise, the trunk reports lock-out and the call is reattempted on another trunk. If the entry in field OSTARTSG is LS or GS, the entry in field TRKGRDTM must be greater than 17 (170 ms). Enter 160 if the trunks are PX or FX. Enter 50 or greater if trunk group type is PX. Enter 70 if the entry in field CLLI is UKLOOPOG, UKLOOP2W, or UKEARTH2W.
	ECSELECT	see subfield	*Echo canceler selector* This field consists of subfield ECSTAT.
OPTIONS		CLB	*Clear back* Enter CLB for incoming and two-way CAS routes with UKAC15 or UKDC5 card codes. This options field is only datafilled in the CEU market where a CLB option is bound against the vector. Default value is $.

Field descriptions for conditional data II (Sheet 18 of 19)

Field	Subfield or refinement	Entry	Explanation and action
	ECSTAT	EXTERNAL INNOTONE INTERNAL or UNEQ	*Echo canceler status* Datafill this field to indicate the status of the echo canceler on the trunk subgroup. This subfield replaces field ECEQUIP. Enter EXTERNAL if echo cancelations on this trunk subgroup are performed by external canceler status equipment, and no call processing control is involved. Enter INNOTONE if internal echo canceler status are to be used for the trunk subgroup, but the use of 2100-Hz tone disabling is turned off. This value is not allowed if the echo suppressor is instrumented on the trunk subgroup. Datafill refinement NSMATCH. Enter INTERNAL if the echo canceler status on this trunk subgroup are equipped on the NT6X50EC card in the DTC frame, and are enabled by call processing if the call is not a data call. This value is not allowed if echo suppressor is instrumented on the trunk subgroup. Datafill refinements NSMATCH and AUTOON. Enter UNEQ (unequipped) if echo canceler status is not equipped on this trunk subgroup. Enter UNEQ if the trunk group type is NFA.

TRKSGRP type STD (continued)

Field descriptions for conditional data II (Sheet 19 of 19)

Field	Subfield or refinement	Entry	Explanation and action
	NSMATCH	Y or N	*Noise match control* If the entry in subfield ECSTAT is INTERNAL or INNOTONE, datafill this field. To show that noise matching is ON, indicating that background noise levels are maintained if internal echo canceler status is actively canceling echoes, enter Y. To indicate that background noise is not maintained if internal echo canceler status is actively cancelling echoes, enter N. The default is N.
	AUTOON	Y or N	*Auto re-enable control* If the entry in subfield ECSTAT is INTERNAL, datafill this field. To show that auto re-enable is ON, the echo canceler status is automatically turned on after the 2100-Hz tone is removed upon absence of energy, enter Y. To indicate that the echo canceler status is not automatically turned on after the 2100-Hz tone control is removed, enter N. This option is similar to the END OF CALL option for tone disablers in external echo canceler status. The default is Y.

TRKSGRP type STD (continued)

DIR = OG

If the entry in field DIR is IC, datafill refinements OPULSTYP, OSTARTSG, IDGTIME, NUMSTOPS, CCONT, RNGBCK, ESUPR, SAT, REMBSY, TRKGRDTM, and ECSELECT as described below.

TRKSGRP type STD (continued)

Field descriptions for conditional data II (Sheet 1 of 11)

Field	Subfield or refinement	Entry	Explanation and action
	OPULSTYP	DP, DT, MF, MFC, NP, RP, or blank	*Outgoing type of pulsing* Enter one of the following types of pulsing: • DP - dial pulse • DT - Digitone • MF - multifrequency • MFC - multifrequency compelled • NP - no pulsing • RP - revertive pulsing Enter DP if trunk group type is EA FGB. Enter DP or DT if trunk group type is TPS101. Enter DP or MF if the trunk is an outgoing end office trunk with trunk group type TO. Enter DT if trunk group type is two-way PBX. Enter DT if trunk group type is NFA. Enter DT if the outgoing type is NFA. Enter DT if all of the following conditions exist: • the trunk group type is IBNT2 • the cardcode is UKDC5 • CS-1R trigger criteria checking can occur ***Note:*** If DT is the selected pulsing type, an NT3X68 card is required. Enter NP for FXS circuits, outpulsing of digits is not done. ***Note:*** Using NP for FGB traffic can cause problems for FGB billing. Enter MF if trunk group type is ATCP. Enter MF if trunk group type is PX. Enter NP if trunk group type is AN.

Field descriptions for conditional data II (Sheet 2 of 11)

Field	Subfield or refinement	Entry	Explanation and action
	OSTARTSG	DD, IM, GO, GS, LO, LS, SZ, WK, XD, or blank	*Outgoing start dial signal* If outgoing pulse type is DP, MF, or DT, enter the type of start dial signal required: • DD - delay dial off-hook idle • IM - immediate dial • GO - ground start • GS - ground start • LO - loop start • LS - loop start • SZ - seize protocol • WK - wink • XD - delay dial off-hook idle Enter IM if OPULSTYP is NP. Enter SZ if the connection is always to an ATD, even if the entry in field ATDANS in table TRKGRP is N. Enter IM if trunk group is NFA. Enter WK if trunk group is ATC. Enter WK if all of the following conditions exist: • the trunk group type is IBNT2 • the cardcode is UKDC5 • CS-1R trigger criteria checking can occur The type of start dial signals used by DMS-250 are: • For ONAL trunks: GO and LO. • For DAL trunks: GS and LS. • For DAL and ONAL trunks: SZ.

TRKSGRP type STD (continued)

Field descriptions for conditional data II (Sheet 3 of 11)

Field	Subfield or refinement	Entry	Explanation and action
	IDGTIME	numeric0 to 100, or blank	*Inter-digital timing* If the entry in field OPULSTYP is DP, MF, or NP, enter the interdigital timing interval in 10-ms intervals. Enter a minimum time of 20 (200 ms) for DP trunks. Enter 7 (70 ms) if type of pulsing is MF. Enter 0 (zero) if type of pulsing is NP.
	NUMSTOPS	numeric0 to 3, or blank	*Number of stop/goes* If the trunks are intertoll with DP pulsing, enter the maximum allowable number of stop/go signals. Otherwise, enter 0 (zero). Enter 0 (zero) if trunk group type is NFA.

Field descriptions for conditional data II (Sheet 4 of 11)

Field	Subfield or refinement	Entry	Explanation and action
	CCONT	EI, IB, LN, MW, TR, 3W, or NO	*Coin control* If the trunk subgroup is configured for coin control, enter the type of coin control required: • EI - expanded inband • IB - inband • MW - multiwink • TR - coin control • LN - line number • 3W - third wire Otherwise, enter NO. Expanded inband coin control and ring back (field value EI) can be specified if switching unit supports outgoing traffic service position system (TSPS). Expanded inband coin control and ring back is not allowed if office parameter EXPANDED_INBAND_PERMITTED in table OFCOPT is set to N. If the entry in field CCONT is LN, the entry in field RNGBCK cannot be IB. With MW coin control, a series of on-hook winks is sent from a TSPS to a local switching unit, to collect and return coins. Enter NO if the trunk type is NFA.

TRKSGRP type STD (continued)

Field descriptions for conditional data II (Sheet 5 of 11)

Field	Subfield or refinement	Entry	Explanation and action
			Wink durations are 70 to 130 ms for transmit and 50 to 150 ms for receive. The sequence between winks is 100 to 150 ms for transmit and 75 to 185 ms for receive. The number of winks is interpreted as follows: • 1 - operator released • 2 - operator attached • 3 - coin collect • 4 - coin return • 5 - re-ring If TR is specified, the product is a positional coin control system. The plus or minus 130 V signal used to effect collect or return of coins is sent over the T and R leads. If 3W is specified, the PEC must be 2X86AA. Third-wire coin control is a method of signaling from the switchboard to the switching unit over a third wire. DC signals on this wire are detected by the switching unit, that initiates a coin collect or a coin return to the coin station. ***Note:*** IB, MW, TR, and 3W types of coin control are supplied with the local basic software package. IB, MW, LN, and TR types of coin control are supplied with the basic traffic operator position system (TOPS) software package. Fields CCONT and RNGBCK must be datafilled as the same signaling type in order for ring back to function. If the datafill for field CCONT is TR, 3W, or NO, then the datafill for field RNGBCK has no restriction.

Field descriptions for conditional data II (Sheet 6 of 11)

Field	Subfield or refinement	Entry	Explanation and action
	RNGBCK	C6, C7_RING, EI, IB, LN, MW, SX, WK, or NO	*Ringback* If the trunk subgroup is configured for ring back signal, enter the type of ring back signal required: • C6 - CCITT No. 6 Signaling • C7_RING - Common Channeling Signaling 7 • EI - expanded inband • IB - inband • LN - line number • MW - multiwink • SX - simplex • WK - wink Otherwise, enter NO. The default value is NO. Entry value IB cannot be specified if the entry in field CCONT is LN. Enter MW in order for ring forward and ring back to work if a Traffic Operator Position System (TOPS) operator attempts to ring forward to another TOPS operator, using an intertoll trunk. If SX is specified, the entry in field CARDCODE must be 2X85AA or 2X86AA. Enter NO if the trunk group is NFA. ***Note:*** Fields CCONT and RNGBCK must be datafilled as the same signaling type in order for ring back to function. If the datafill for field CCONT is TR, 3W, or NO, then the datafill for field RNGBCK has no restriction.

TRKSGRP type STD (continued)

Field descriptions for conditional data II (Sheet 7 of 11)

Field	Subfield or refinement	Entry	Explanation and action
	ESUPR	F, H, or N	*Echo suppressor* Enter F (full) if a full echo suppressor is located at the near end of the trunk group. The switch takes no action and is used for administrative purposes only. No echo suppressor is inserted in the connection. Enter H (half) if the trunk group has echo suppressors and a half echo suppressor is located at the near end of the trunk group. Enter N (no) if the trunk group has no echo suppressors located at the near end of the trunk group. Enter N if trunk group type is NFA, or if trunk type is INT101, used by DMS-300.
	SAT	Y or N	*Satellite* Enter Y if trunk subgroup is configured to switch through satellite. Otherwise, enter N. Enter N if trunk group type is NFA.

Field descriptions for conditional data II (Sheet 8 of 11)

Field	Subfield or refinement	Entry	Explanation and action
	REMBSY	Y or N	*Remote make busy* Enter Y if the trunk subgroup is assigned the Remote Make Busy (RMB) feature. Otherwise, enter N. If Y is entered, if the circuit is busied, an off hook signal is sent on the trunk and an off hook signal on the FXS circuit starts ringing the phone from the channel-bank. Enter Y for the voice links in an OC_REMOTE OC_HOST configuration. Failure to do so can result in a REMOTE_PROCESS_O software error (Swer) in the OC_REMOTE switching unit. The problem occurs if the OC-HOST assigns a voice link to be used for a TOPS call, tells the OC_REMOTE of the assignment, and the OC_REMOTE finds the assigned voice link in a state other than IDL. The OC_REMOTE terminates the call and generates a Swer and a series of AUDs. Enter Y if the entry in field CLLI is UKLOOPIC, UKLOOP2W, UKEARTHIC, or UKEARTH2W. Enter N if trunk group type is PX for FXS circuits. Enter N if the trunk group type is NFA.

TRKSGRP type STD (continued)

Field descriptions for conditional data II (Sheet 9 of 11)

Field	Subfield or refinement	Entry	Explanation and action
	TRKGRDTM	numeric(1 to 255) or blank	*Trunk lock-out timeout* If the entry in field DIR is OG, enter the time, in 10-ms intervals, that the trunk waits to receive on-hook from the far-end before reporting lock-out on the trunk. The timer begins on sending an on-hook signal to the far-end. If a new outgoing call is attempted on a trunk before on-hook is received from the far-end, the peripheral will delay outgoing trunk seizure until on-hook is received from the far-end. If on-hook is received from the far-end before this lock-out timer expires, the new call is immediately attempted on the trunk; otherwise, the trunk reports lock-out and the call is reattempted on another trunk. If the entry in field OSTARTSG is LS or GS, the entry in field TRKGRDTM must be greater than 17 (170 ms). Enter 160 if the trunks are PX or FX. Enter 50 or greater if trunk group type is PX. Enter 70 if the entry in field CLLI is UKLOOPOG, UKLOOP2W, or UKEARTH2W.
	ECSELECT	see subfield	*Echo canceler selector* This field consists of subfield ECSTAT.

TRKSGRP type STD (continued)

Field descriptions for conditional data II (Sheet 10 of 11)

Field	Subfield or refinement	Entry	Explanation and action
	ECSTAT	EXTERNAL INNOTONE INTERNAL or UNEQ	*Echo canceler status* Datafill this field to indicate the status of the echo canceler on the trunk subgroup. This subfield replaces field ECEQUIP. Enter EXTERNAL if echo cancelations on this trunk subgroup are performed by external canceler status equipment, and no call processing control is involved. Enter INNOTONE if internal echo canceler status are to be used for the trunk subgroup, but the use of 2100-Hz tone disabling is turned off. This value is not allowed if the echo suppressor is instrumented on the trunk subgroup. Datafill refinement NSMATCH. Enter INTERNAL if the echo canceler status on this trunk subgroup are equipped on the NT6X50EC card in the DTC frame, and are enabled by call processing if the call is not a data call. This value is not allowed if echo suppressor is instrumented on the trunk subgroup. Datafill refinements NSMATCH and AUTOON. Enter UNEQ (unequipped) if echo canceler status is not equipped on this trunk subgroup. Enter UNEQ if the trunk group type is NFA.

TRKSGRP type STD (continued)

Field descriptions for conditional data II (Sheet 11 of 11)

Field	Subfield or refinement	Entry	Explanation and action
	NSMATCH	Y or N	*Noise match control* If the entry in subfield ECSTAT is INTERNAL or INNOTONE, datafill this field. To show that noise matching is ON, indicating that background noise levels are maintained if internal echo canceler status is actively canceling echoes, enter Y. To indicate that background noise is not maintained if internal echo canceler status is actively cancelling echoes, enter N. The default is N.
	AUTOON	Y or N	*Auto re-enable control* If the entry in subfield ECSTAT is INTERNAL, enter Y to show that auto re-enable is ON, the echo canceler status is automatically turned on after the 2100-Hz tone is removed upon absence of energy. Enter N to indicate that the echo canceler status is not automatically turned on after the 2100-Hz tone control is removed. This option is similar to the END OF CALL option for tone disablers in external echo canceler status. The default is Y.

Data II e xample

Examples of possible datafill for STD signaling are shown below.

MAP display example for table TRKSGRP type STD

```
          SGRPKEY   CARDCODE
SGRPVAR
                                                    SGRPVAR
_____________________________________________________________

   OTWAON109000 0 DS1SIG
STD
2W DP WK N 30 30 MF WK 7 0 Y NO NO N N N M  70 UNEQ

   OTWAON2303T1 0 DS1SIG
STD
IC DP WK N 10 10         NO NO N N N M       UNEQ

   OTWAON0872A0 0 2X88AA
STD
OG MF WK 7 0            NO NO N N N          70 UNEQ
```

An example of datafill for ACD trunk members, if ACD is datafilled as an option in table TRKGRP, is shown below.

MAP display example for table TRKSGRP type STD

```
          SGRPKEY   CARDCODE
SGRPVAR
                                                    SGRPVAR
_____________________________________________________________

        X1WNT 0 FXSGS
STD
IC DT GS N 10 10    NO NO N N N C      UNEQ
```

An example of datafill for SL-1 to DMS digital CO/FX/WATS ground start trunks is shown below.

TRKSGRP type STD (end)

MAP display example for table TRKSGRP type STD

```
           SGRPKEY   CARDCODE
SGRPVAR
                                                    SGRPVAR
_____________________________________________________________________

         ACDFX 1 DS1FXSLS
STD
 2W NP N 5 5 NP LP 5 0 N NO NO N N N M 6     UNEQ
```

An example of datafill, with fields IPULSTYP and ISTARTSG datafilled DT and IM respectively, is shown below.

MAP display example for table TRKSGRP type STD

```
           SGRPKEY   CARDCODE
SGRPVAR
                                                    SGRPVAR
_____________________________________________________________________

         DATTIE1 0 DS1SIGLS
STD
2W DT IM N 10 10 DT IM 7 0 Y NO NO N N N C 160 UNEQ
```

An example of datafill for NFA trunk group type is shown below.

MAP display example for table TRKSGRP type STD

```
           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
```

TRKSGRP type STDTL/CCIS6

STDTL or CCIS6

If the type of pulsing is CCIS6 (Common Channel Interface Signaling No. 6), or if trunk group type in table TRKGRP is TL (transmission link), datafill table TRKSGRP as described in the following datafill table.

Data II

The following table lists the datafill for table TRKSGRP type STDTL/CCIS6.

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
SGRPKEY		see subfields	*Subgroup key* This field consists of subfields CLLI and SGRP.
	CLLI	alphanumeric (1 to 16 characters)	*Common language location identifier* Enter the common language location identifier (CLLI) code that is assigned in table CLLI to the trunk group to which the subgroup belongs.
	SGRP	numeric(0 or 1)	*Subgroup number* Enter the number assigned to the trunk subgroup.
CARDCODE		DS1SIG	*Card code* Enter DS1SIG.
SGRPVAR		see subfield	*Variable subgroup data* This field consists of subfield SIGDATA and refinements.
	SIGDATA	CCIS6 orSTDTL	*Signaling data* For CCIS6 type trunks, enter CCIS6 and datafill refinements DIR, IPULSTYP, OPULSTYP, CONTCH, ESUPR, SAT, and GLARECTL from the following tables. For trunk type TL, enter STDTL (standard transmission link) and datafill refinements ECSTATUS and OPTIONS as described below.

TRKSGRP type STDTL/CCIS6 (continued)

SIGDATA = STDTL

If the entry in subfield SIGDATA is STDTL, datafill fields ECSTATUS and OPTIONS as described below.

Field descriptions for conditional data ll

Field	Subfield or refinement	Entry	Explanation and action
	ECSTATUS	see subfield	*Echo canceler status* This field consists of subfield ECSTAT.
	ECSTAT	EXTERNAL INNOTONE INTERNAL or UNEQ	*Echo canceler status* If the entry in subfield SIGDATA is STDTL, datafill this field to indicate the status of the echo canceler on the trunk subgroup. Enter the type of echo canceler status used for STDTL trunks. Enter EXTERNAL for external echo canceler status and datafill fields ECREQD and OPTIONS. The default is UNEQ (unequipped).
	ECREQD	Y or N	*Echo cancelers datafilled* If the entry in subfield ECSTAT is EXTERNAL, datafill this field. Enter Y (yes) if the echo canceler status datafilled in subfield ECSTAT must be turned on if a nailed-up connection is made. Otherwise, enter N (no). Leave this field blank if the entry in subfield ECSTAT is INNOTONE, INTERNAL, or UNEQ.
	OPTIONS	see subfield	*Options* This field consists of subfield OPTION.
	OPTION	DCME	*Option* If the entry in subfield SIGDATA is STDTL, datafill this field. Enter the options applicable to this subgroup. The only valid entry is DCME. The default is an empty list. Datafill is complete for SIGDATA = STDTL.

SIGDATA = CCIS6

If the entry in subfield SIGDATA is CCIS6, datafill field DIR as described below.

Field descriptions for conditional data II

Field	Subfield or refinement	Entry	Explanation and action
	DIR	2W IC or OG	*Direction* If the entry in subfield SIGDATA is CCIS6, datafill this field. Enter the trunk group direction: 2W (two-way), IC (incoming), or OG (outgoing).

DIR = 2W or IC

If the entry in field DIR is 2W or IC, datafill field IPULSTYP as described below, then datafill fields CONTCHK, ESUPR, and SAT as described below.

Field descriptions for conditional data II

Field	Subfield or refinement	Entry	Explanation and action
	IPULSTYP	C6 or blank	*Incoming type of pulsing* If the entry in subfield SIGDATA is CCIS6, and if the entry in field DIR is 2W or IC, datafill this field. Enter C6 for type of pulsing.

DIR = OG

If the entry in field DIR is OG, datafill field OPULSTYP as described below, then datafill fields CONTCHK, ESUPR, and SAT as described below.

Field descriptions for conditional data II

Field	Subfield or refinement	Entry	Explanation and action
	OPULSTYP	C6 or blank	*Outgoing type of pulsing* If the entry in subfield SIGDATA is CCIS6, and if the entry in field DIR is OG, datafill this field. Enter C6.

TRKSGRP type STDTL/CCIS6 (continued)

DIR = all entries

For all entires in field DIR, datafill fields CONTCHK, ESUPR, and SAT as described below.

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

Field	Subfield or refinement	Entry	Explanation and action
	CONTCHK	LOOP-AROUNDTHRHTHRLTLRHor2W2W	*Continuity check* Enter one of the following values: • LOOPAROUND • THRH - transmit high and receive high • THRL - transmit high and receive low • TLRH - transmit low and receive high • 2W2W - two-wire-two-way If this value is datafilled for a two-way trunk subgroup, the DMS performs a continuity test on the two-way trunk subgroup as if the DMS is a two-wire machine. If this value is specified for non two-way trunk subgroup, the attempt is rejected.
	ESUPR	F, H, or N	*Echo suppressor* If the entry in subfield SIGDATA is CCIS6, datafill this field. Enter F (full) if a full echo suppressor is located at the near end of the trunk group. The switch takes no action and is used for administrative purposes only. No echo suppressor is inserted in the connection.

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

Field	Subfield or refinement	Entry	Explanation and action
			Enter H (half) if the trunk group has echo suppressors, and a half echo suppressor is located at the near end of the trunk group. Enter N (no) if the trunk group has no echo suppressors located at the near end of the trunk group. Enter N if trunk group type is NFA. Enter N if trunk type is INT101, used by the DMS-300 switch.
	SAT	Y, N, or blank	*Satellite* If the entry in subfield SIGDATA is CCIS6, datafill this field. Enter Y if the trunk subgroup is configured to switch through satellite. Otherwise, enter N. If the entry in field DIR is IC or OG, datafill is complete for SIGDATA = CCIS6.

DIR = 2W

If the entry in field DIR is 2W, datafill field GLARECTL as described below.

Field descriptions for conditional data ll

Field	Subfield or refinement	Entry	Explanation and action
	GLARECTL	ODD, EVEN, or blank	*Glare control* If the entry in subfield SIGDATA is CCIS6, and if the entry in field DIR is 2W, datafill this field. Enter ODD if the trunk group is two-way, and if CCIS glare control is on odd bands for the switching unit. Otherwise, enter EVEN. Datafill is complete for SIGDATA = CCIS6.

Data ll e xample

An example of datafill for CCIS6 signaling is shown below.

TRKSGRP type STDTL/CCIS6 (end)

MAP display example for table TRKSGRP type STDTL/CCIS6

```
                SGRPKEY   CARDCODE
        SGRPVAR
                                                        SGRPVAR

        ________________________________________________________________
                OTWAON2302T2 0 DS1SIG
        CCIS6
         2W C6    THRL N N ODD

                TOROON0101T0 0 DS1SIG
        CCIS6
         IC C6    THRL N N

                TOROON0101T1 0 DS1SIG
        CCIS6
         OG    C6 THRL N N
```

An example of datafill for STDTL signaling is shown below.

MAP display example for table TRKSGRP type STDTL

```
             SGRPKEY   CARDCODE
    SGRPVAR
                                                  SGRPVAR

    ____________________________________________________________
            NLUP_IC 0 NIL_CC
    STDTL
     EXTERNAL N DCME
```

TRKSGRP type TUP

TUP

If the type of signaling is telephone user part (TUP) on trunk group types IBNTI, IBNTO, and IBNT2 as datafilled in table TRKGRP, datafill table TRKSGRP as described in the following datafill table.

Data II

The following table lists the datafill for table TRKSGRP type TUP.

Field descriptions (Sheet 1 of 2)

Field	Subfield	Entry	Explanation and action
SGRPKEY		see subfields	*Subgroup key* This field consists of subfields CLLI and SGRP.
	CLLI	alphanumeric (1 to 16 characters)	*Common language location identifier* Enter the common language location identifier (CLLI) code that is assigned in table CLLI to the trunk group to which the subgroup belongs.
	SGRP	numeric (0 or 1)	*Subgroup number* Enter the number assigned to the trunk subgroup.
CARDCODE		DS1SIG	*Card code* Enter DS1SIG.
SGRPVAR		see subfield	*Variable subgroup data* This field consists of subfield SIGDATA and refinements DIR, IPULSTYP, OPULSTYP, ESUPR, SAT, ECSTAT, PROTOCOL, CBI, ALTRTE, and TMRNAME.

TRKSGRP type TUP (continued)

Field descriptions (Sheet 2 of 2)

Field	Subfield	Entry	Explanation and action
	SIGDATA	TUP	*Signaling data* Enter TUP for the United Kingdom national variant of the Common Channel Signaling 7 ISDN user part type trunks.
	DIR	2W, IC, or OG	*Direction* Enter the trunk group direction: 2W (two-way), IC (incoming), or OG (outgoing). If the entry in field DIR is 2W, datafill subfields IPULSTYP, ESUPR, SAT, ECSTAT, PROTOCOL, CBI, ALTRTE, TMRNAME, OVLP, GLAREVAR, RCGLI, and OPTIONS as described below. If the entry in field DIR is IC, datafill subfields IPULSTYP, ESUPR, SAT, ECSTAT, PROTOCOL, ALTRTE, TMRNAME, and RCGLI. If the entry in field DIR is OG, datafill subfields OPULSTYP, ESUPR, SAT, ECSTAT, PROTOCOL, CBI, ALTRTE, TMRNAME, OVLP, and OPTIONS.

DIR = 2W

If the entry in field DIR is 2W, datafill subfields IPULSTYP, ESUPR, SAT, ECSTAT, PROTOCOL, CBI, ALTRTE, TMRNAME, OVLP, GLAREVAR, RCGLI, and OPTIONS as described below.

Field descriptions for conditional data II (Sheet 1 of 4)

Field	Subfield	Entry	Explanation and action
	IPULSTYP	SS7	*Incoming type of pulsing* Enter SS7.
	ESUPR	F, H, or N	*Echo suppressor* Enter F (full) if a full echo suppressor is located at the near end of the trunk group. The switch takes no action and is used for administrative purposes only. No echo suppressor is inserted in the connection. Enter H (half) if the trunk group has echo suppressors and a half echo suppressor is located at the near end of the trunk group. Enter N (no) if the trunk group has no echo suppressors located at the near end of the trunk group. The default value is N.
	SAT	Y, N, or NIL	*Satellite* Enter Y (yes), if the trunk subgroup is configured to switch through satellite. Otherwise, enter N (no). Enter NIL if the call processing and trunk maintenance datafillable timers are hard coded. Table C7UPTMR is not datafilled for this trunk.

TRKSGRP type TUP (continued)

Field descriptions for conditional data II (Sheet 2 of 4)

Field	Subfield	Entry	Explanation and action
	ECSTAT	EXTERNAL INNOTONE INTERNAL or UNEQ	*Echo canceller status* This field indicates the status of the echo canceller on the trunk subgroup. Enter EXTERNAL if echo cancellations on this trunk subgroup are performed by external echo canceller status equipment, and no call processing control is involved. Enter INNOTONE if internal echo canceller status are to be used for the trunk subgroup, but the use of 2100-Hz tone disabling is turned off. This value is not allowed if the echo suppressor is instrumented on the trunk subgroup. Enter INTERNAL if the echo canceller status on this trunk subgroup are equipped on the NT6X50EC card in the digital trunk controller (DTC) frame, and are enabled by call processing if the call is not a data call. This value is not allowed if echo suppressor is instrumented on the trunk subgroup. Enter UNEQ (unequipped) if echo canceller status is not equipped on this trunk subgroup.
	PROTOCOL	BTUP MBTUP or UCP	*Signaling protocol type* Enter BTUP if the protocol is for the United Kingdom variant of the national user part. Enter MBTUP if the protocol is for United Kingdom variant of the national user part used within a UK market specific network. Enter UCP to provide ISDN user part (ISUP) connectivity between the DMS-250 and the MSL-100 switching units.
	CBI	Y or N	*Cross border indicator* Enter Y if the call is traversing the boundary between two networks. Otherwise, enter N.

TRKSGRP type TUP (continued)

Field descriptions for conditional data II (Sheet 3 of 4)

Field	Subfield	Entry	Explanation and action
	ALTRTE	Y or N	*Alternate routing* This field determines whether routing control indicator (RCI) override is in effect. To specify that RCI override is operative, enter Y (yes). Otherwise, enter N (no).
	TMRNAME	alphanumeric (1 to 16 characters) or NIL	*Timer name* Enter the timer name, previously datafilled in table C7UPTMR, that is the key to the tuple where the call processing and trunk maintenance timers for the trunk group are found.
	OVLP	Y or N	*Overlap outpulsing* Enter Y if trunk-to-trunk overlap outpulsing is required. Otherwise, enter N.
	GLAREVAR	see subfield	*Variable glare control data* This field consists of subfield GLARETYP.
	GLARETYP	CIC or SGRPYLD	*Glare type* Enter CIC (circuit identification code) if glare is resolved using CICs. For example, given two switching units connected with two-way trunks, if glare occurs, the switching unit with the higher originating point code is granted control of all the trunks with even-numbered CICs. This other switching unit, with the lower originating point code, is granted control of all the trunks with odd-numbered CICs. Enter SGRPYLD (subgroup yield) if glare is resolved on a trunk subgroup basis, and datafill subfield GLAREYLD. For example, the switching unit administrators agree between themselves as to which trunk subgroups they are going to control and which they are going to yield. This is done on a trunk subgroup basis. The subgroup glare resolution method is only available if the value of office parameter ISUP_SUBGRP_GLARE_AVAILABLE in table OFCOPT is set to Y.

TRKSGRP type TUP (continued)

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

Field	Subfield	Entry	Explanation and action
	GLAREYLD	Y or N	*Glare yield* Datafill this field if the entry in subfield GLARETYP is SGRPYLD. Enter Y if this switching unit is to yield control of the trunks in a glare condition in this subgroup. Otherwise, enter N.
	RCGLI	Y or N	*Request calling line identity* Enter Y to request the calling line identity (CLI). Otherwise, enter N.
	OPTIONS	see subfield	*Options* This field has one subfield, OPTION.
	OPTION	ACO, SPMECIDX, or blank	*Option* Enter ACO to specify answer charge override. Enter SPMECIDX to specify a Spectrum peripheral module (SPM) echo canceller index. Then enter data for subfield EC_IDX.
	EC_IDX	0 to 255	*Echo canceller index* Enter the value created for this trunk subgroup in table SPMECAN. After entering data to the OPTIONS field, datafill is complete for SIGDATA = TUP.

DIR = IC

If the entry in field DIR is IC, datafill subfields IPULSTYP, ESUPR, SAT, ECSTAT, PROTOCOL, ALTRTE, TMRNAME, RCGLI, and OPTIONS as described below.

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

Field	Subfield	Entry	Explanation and action
	IPULSTYP	SS7	*Incoming type of pulsing* Enter SS7.
	ESUPR	F, H, or N	*Echo suppressor* Enter F (full) if a full echo suppressor is located at the near end of the trunk group. The switch takes no action and is used for administrative purposes only. No echo suppressor is inserted in the connection. Enter H (half) if the trunk group has echo suppressors and a half echo suppressor is located at the near end of the trunk group. Enter N (no) if the trunk group has no echo suppressors located at the near end of the trunk group. The default value is N.
	SAT	Y, N, or NIL	*Satellite* Enter Y (yes), if the trunk subgroup is configured to switch through satellite. Otherwise, enter N (no). Enter NIL if the call processing and trunk maintenance datafillable timers are hard coded. Table C7UPTMR is not datafilled for this trunk.

TRKSGRP type TUP (continued)

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

Field	Subfield	Entry	Explanation and action
	ECSTAT	EXTERNAL INNOTONE INTERNAL or UNEQ	*Echo canceller status* This field indicates the status of the echo canceller on the trunk subgroup. Enter EXTERNAL if echo cancellations on this trunk subgroup are performed by external echo canceller status equipment, and no call processing control is involved. Enter INNOTONE if internal echo canceller status are to be used for the trunk subgroup, but the use of 2100-Hz tone disabling is turned off. This value is not allowed if the echo suppressor is instrumented on the trunk subgroup. Enter INTERNAL if the echo canceller status on this trunk subgroup are equipped on the NT6X50EC card in the DTC frame, and are enabled by call processing if the call is not a data call. This value is not allowed if echo suppressor is instrumented on the trunk subgroup. Enter UNEQ (unequipped) if echo canceller status is not equipped on this trunk subgroup.
	PROTOCOL	BTUP MBTUP or UCP	*Signaling protocol type* Enter BTUP if the protocol is for the United Kingdom variant of the national user part. Enter MBTUP if the protocol is for United Kingdom variant of the national user part used within a UK market specific network. Enter UCP to provide ISDN user part (ISUP) connectivity between the DMS-250 and the MSL-100 switching units.
	ALTRTE	Y or N	*Alternate routing* This field determines whether routing control indicator (RCI) override is in effect. To specify that RCI override is operative, enter Y (yes). Otherwise, enter N (no).

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

Field	Subfield	Entry	Explanation and action
	TMRNAME	alphanumeric (1 to 16 characters) or NIL	*Timer name* Enter the timer name, previously datafilled in table C7UPTMR, that is the key to the tuple where the call processing and trunk maintenance timers for the trunk group are found.
	RCGLI	Y or N	*Request calling line identification* Enter Y (yes) to request the CLI. When RCGLI is datafilled with Y, this CLI request functions regardless of the terminating agent. Otherwise, enter N (no), the default value. If the entry in field DIR is IC, datafill is complete for SIGDATA = TUP. ***Note:*** For the UK market, software release EUR004 modified this field to accept CLI requests when terminating to any agent, not just ISUP.
	OPTIONS	see subfield	*Options* This field has one subfield, OPTION.
	OPTION	ACO, SPMECIDX, or blank	*Option* Enter ACO to specify answer charge override. Enter SPMECIDX to specify a Spectrum peripheral module (SPM) echo canceller index. Then enter data for subfield EC_IDX.
	EC_IDX	0 to 255	*Echo canceller index* Enter the value created for this trunk subgroup in table SPMECAN. After entering data to the OPTIONS field, datafill is complete for SIGDATA = TUP.

Note: The options list is common to the datafill for all the signaling data selectors. Therefore some options may not be applicable to certain trunk types. For TUP signaling, the ACO option cannot be datafilled on an incoming trunk. An attempt to do so causes the following error message: *** ACO option is invalid on incoming IUP trunks

TRKSGRP type TUP (continued)

DIR = OG

If the entry in field DIR is OG, datafill subfields OPULSTYP, ESUPR, SAT, ECSTAT, PROTOCOL, CBI, ALTRTE, TMRNAME, OVLP, and OPTIONS as described below.

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

Field	Subfield	Entry	Explanation and action
	OPULSTYP	SS7	*Outgoing type of pulsing* Enter SS7.
	ESUPR	F, H, or N	*Echo suppressor* Enter F (full) if a full echo suppressor is located at the near end of the trunk group. The switch takes no action and is used for administrative purposes only. No echo suppressor is inserted in the connection. Enter H (half) if the trunk group has echo suppressors and a half echo suppressor is located at the near end of the trunk group. Enter N (no) if the trunk group has no echo suppressors located at the near end of the trunk group. The default value is N.
	SAT	Y, N, or NIL	*Satellite* Enter Y (yes), if the trunk subgroup is configured to switch through satellite. Otherwise, enter N (no). Enter NIL if the call processing and trunk maintenance datafillable timers are hard coded. Table C7UPTMR is not datafilled for this trunk.

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

Field	Subfield	Entry	Explanation and action
	ECSTAT	EXTERNAL INNOTONE INTERNAL or UNEQ	*Echo canceller status* This field indicates the status of the echo canceller on the trunk subgroup.Enter EXTERNAL if echo cancellations on this trunk subgroup are performed by external echo canceller status equipment, and no call processing control is involved. Enter INNOTONE if internal echo canceller status are to be used for the trunk subgroup, but the use of 2100-Hz tone disabling is turned off. This value is not allowed if the echo suppressor is instrumented on the trunk subgroup. Enter INTERNAL if the echo canceller status on this trunk subgroup are equipped on the NT6X50EC card in the DTC frame, and are enabled by call processing if the call is not a data call. This value is not allowed if echo suppressor is instrumented on the trunk subgroup. Enter UNEQ (unequipped) if echo canceller status is not equipped on this trunk subgroup.
	PROTOCOL	BTUP MBTUP or UCP	*Signaling protocol type* Enter BTUP if the protocol is for the United Kingdom variant of the national user part. Enter MBTUP if the protocol is for United Kingdom variant of the national user part used within a UK market specific network. Enter UCP to provide ISDN user part (ISUP) connectivity between the DMS-250 and the MSL-100 switching units.
	CBI	Y or N	*Cross border indicator* Enter Y if the call is traversing the boundary between two networks. Otherwise, enter N.
	ALTRTE	Y or N	*Alternate routing* Enter Y if alternate routing is allowed. Otherwise, enter N.

TRKSGRP type TUP (continued)

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

Field	Subfield	Entry	Explanation and action
	TMRNAME	alphanumeric (1 to 16 characters) or NIL	*Timer name* Enter the timer name, previously datafilled in table C7UPTMR, that is the key to the tuple where the call processing and trunk maintenance timers for the trunk group are found.
	OVLP	Y or N	*Overlap outpulsing* Enter Y if trunk-to-trunk overlap outpulsing is required. Otherwise, enter N.
	OPTIONS	see subfield	*Options* This field has one subfield, OPTION.
	OPTION	ACO, SPMECIDX, or blank	*Option* Enter ACO to specify answer charge override. Enter SPMECIDX to specify a Spectrum peripheral module (SPM) echo canceller index. Then enter data for subfield EC_IDX.
	EC_IDX	0 to 255	*Echo canceller index* Enter the value created for this trunk subgroup in table SPMECAN. After entering data to the OPTIONS field, datafill is complete for SIGDATA = TUP.

Data II e xample

An example of datafill for the United Kingdom variant of national user part (TUP) is shown below.

TRKSGRP type TUP (end)

MAP display example for table TRKSGRP type TUP

```
          SGRPKEY  CARDCODE
SGRPVAR
                                                  SGRPVAR
-------------------------------------------------------------
         BTUPIBN2W 0 DS1SIG
TUP
  2W SS7  N N UNEQ BTUP N   TMRS1 N SGRPYLD Y ACO

         BTUPIBNIC 0 DS1SIG
TUP
  IC SS7  N N UNEQ BTUP N N BTUPIC Y CIC N (SPMECIDX 1) $

         BTUPIBNOG 0 DS1SIG
TUP
  OG SS7  N N UNEQ BTUP N N  TMRS1 N          ACO

         QNSY200BTBWE 0 DS1SIG
TUP
  2W SS7  N N UNEQ BTUP N N BTUP2W N CIC N (SPMECIDX 0) $
```

TRKSGRP type UKSTD

UKSTD

This trunk subgroup data is used for outgoing integrated business network (IBN) trunks supporting United Kingdom operating companies' 3J type III/IV loop disconnect signaling. A BT3J type III/IV call is a call outgoing from a DMS switch to a group switching center in the United Kingdom.

Data II

The following table lists the datafill for table TRKSGRP type UKSTD.

Field descriptions (Sheet 1 of 7)

Field	Subfield or refinement	Entry	Explanation and action
SGRPKEY		see subfields	*Subgroup key* This field consists of subfields CLLI and SGRP.
	CLLI	alphanumeric (1 to 16 characters)	*Common language location identifier* Enter the common language location identifier (CLLI) code that is assigned in table CLLI to the trunk group to which the subgroup belongs.
	SGRP	numeric (0 or 1)	*Subgroup number* Enter the number assigned to the trunk subgroup.
CARDCODE		UK3JLDE	*Card code* Enter UK3JLDE, the card code for the United Kingdom 3J loop disconnect signaling trunk.
SGRPVAR		see subfield	*Variable subgroup data* For United Kingdom standard signaling, this field consists of subfield SIGDATA and refinements DIR, OPULSTYP, OSTARTSG, IDGTIME, NUMSTOPS, CCONT, RNGBCK, ESUPR, SAT, REMBSY, TRKGRDTM, and OPDELAY.
	SIGDATA	UKSTD	*Signaling data* Enter UKSTD for United Kingdom standard signaling.

TRKSGRP type UKSTD (continued)

Field descriptions (Sheet 2 of 7)

Field	Subfield or refinement	Entry	Explanation and action
	DIR	OG	*Direction* Enter the trunk group direction, OG (outgoing). Only outgoing trunks are currently supported for UKSTD signaling.
	OPULSTYP	DP	*Outgoing type of pulsing* Enter DP (dial pulse). Only DP is supported for cardcode UK3JLDE.
	OSTARTSG	SZ	*Outgoing start dial signa* *I*f the entry in field DIR is OG and the entry in field OPULSTYP is DP, enter SZ (seize protocol). Only seize protocol is supported for cardcode UK3JLDE.
	IDGTIME	numeric (50 to 135)	*Interdigital timing* If the entry in field DIR is OG and the entry in field OPULSTYP is DP, enter the interdigital timing interval in 10-ms intervals. For DP trunks, the minimum allowed interdigital time is 200 ms. The default is 80 (800 ms).
	NUMSTOPS	0	*Number of stop/goes* Enter 0 (zero) since stop and go signals are not supported.

TRKSGRP type UKSTD (continued)

Field descriptions (Sheet 3 of 7)

Field	Subfield or refinement	Entry	Explanation and action
	CCONT	EI, IB, LN, MW, or NO	*Coin contro* If the trunk subgroup is configured for coin control, enter the type of coin control required: • EI - expanded inband • B - inband • MW - multiwink • TR - Coin control • LN - line number Otherwise, enter NO. The default is NO. EI for coin control and ring back is not allowed if office parameter EXPANDED_INBAND_PERMITTED in table OFCOPT is set to N (no). If entry in field CCONT is LN, the entry in field RNGBCK cannot be IB. With MW coin control, a series of on-hook winks is sent from a traffic service position system (TSPS) to a local switching unit, to collect and return coins.

TRKSGRP type UKSTD (continued)

Field descriptions (Sheet 4 of 7)

Field	Subfield or refinement	Entry	Explanation and action
			Wink durations are 70 to 130 ms for transmit and 50 to 150 ms for receive. • The sequence between winks is 100 to 150 ms for transmit and 75 to 185 ms for receive. • The number of winks is interpreted as follows: — 1. operator released — 2. operator attached — 3. coin collect — 4. coin return — 5. re-ring If TR is specified, the product is a positional coin control system. The plus or minus 130 V signal used to effect collect or return of coins is sent over the T and R leads. IB, MW, LN, and TR types of coin control are supplied with the basic traffic operator position system (TOPS) software package. Fields CCONT and RNGBCK must be datafilled as the same signaling type in order for ring back to function. If the datafill for field CCONT is TR or NO, then the datafill for field RNGBCK has no restriction.

TRKSGRP type UKSTD (continued)

Field descriptions (Sheet 5 of 7)

Field	Subfield or refinement	Entry	Explanation and action
	RNGBCK	EI, IB, LN, MW, WK, or NO	*Ringback* If the trunk subgroup is configured for ring back signal, enter the type of ring back signal required: • EI - expanded inband • IB - inband • LN - line numbe • MW - multiwink • WK - wink Otherwise, enter NO. The default is NO. If entry in field CCONT is LN, the entry in field RNGBCK cannot be IB. Fields CCONT and RNGBCK must be datafilled as the same signaling type in order for ring back to function. If the datafill for field CCONT is TR or NO, then the datafill for field RNGBCK has no restriction. If office parameter EXPANDED_INBAND_PERMITTED in table OFCOPT is equal to N, EI for coin control and ring back is not allowed.

TRKSGRP type UKSTD (continued)

Field descriptions (Sheet 6 of 7)

Field	Subfield or refinement	Entry	Explanation and action
	ESUPR	F, H, or N	*Echo suppressor* This field indicates the status of the echo canceler on the trunk subgroup. Enter F (full) if a full echo suppressor is located at the near end of the trunk group. The switch takes no action and is used for administrative purposes only. No echo suppressor is inserted in the connection. Enter H (half) if the trunk group has echo suppressors and a half echo suppressor is located at the near end of the trunk group. Enter N (no) if the trunk group has no echo suppressors located at the near end of the trunk group. The default is N.
	SAT	Y or N	*Satellite* Enter Y (yes) if trunk subgroup is configured to switch through satellite. Otherwise, enter N (no). The default is N.
	REMBSY	Y or N	*Remote make busy* Enter Y if trunk subgroup is assigned the Remote Make Busy (RMB) feature. Otherwise, enter N. The default is N.

TRKSGRP type UKSTD (end)

Field descriptions (Sheet 7 of 7)

Field	Subfield or refinement	Entry	Explanation and action
	TRKGRDTM	numeric (1 to 255) or blank	*Trunk lock-out timeout* If the entry in field DIR is OG, enter the time, in 10-ms intervals, that the trunk waits to receive on-hook from the far-end before reporting lock-out on the trunk. The timer begins on sending an on-hook signal to the far-end. If a new outgoing call is attempted on a trunk before on-hook is received from the far-end, the peripheral will delay outgoing trunk seizure until on-hook is received from the far-end. If on-hook is received from the far-end before this lock-out timer expires, the new call is immediately attempted on the trunk; otherwise, the trunk reports lock-out and the call is reattempted on another trunk. Enter a 160 ms increment if the trunks are PX/FX.
	OPDELAY		*Outpulsing delay* If the entry in field DIR is OG and the entry in field OUPLSTYP is DP, enter the maximum delay, in 10-ms intervals, between receiving a seize acknowledgement signal from the far end and the start of digit outpulsing. The default is 60 (600 ms).

Data ll e xample

An example of datafill for UKSTD signaling is shown below.

MAP display example for table TRKSGRP type UKSTD

```
           SGRPKEY   CARDCODE
SGRPVAR
                                                    SGRPVAR

_____________________________________________________________
              UKLDOG 0 UK3JLDE
UKSTD
  OG DP SZ 80 0 NO NO N N N 50 60
```

TRKSGRP type X25

X25

Table TRKSGRP (Trunk Subgroup) provides the table control type for X.25. The SGRPVAR field can be populated with signaling type X.25. Signaling type X.25 distinguishes the PRI as a X.25 semi-permanent packet

Data ll

The following table lists the datafill for table TRKSGRP type X25.

Field descriptions

Field	Subfield	Entry	Explanation and action
SGRPVAR	SIGDATA	X25	Signaling data. This field establishes the PRA subgroup as X.25 semi-permanent packet.Enter X25 to indicate X.25 signaling type.

Data ll e xample

The following example shows sample datafill for table TRKSGRP type X25.

MAP display example for table TRKSGRP type X25

```
SGRPKEY      CARDCODE      SGRPVAR
_____________________________________________________________

PKTPRI 0    DS1SIG        X25
```

TRKSGRP type X75

X75

Table TRKSGRP provides the table control required to datafill for X.75 signaling. This signaling type can only be used for subgroups on X.75 trunk groups. Input data must be specified for exactly one subgroup (subgroup 0) for each X.75 trunk group listed in table TRKSGRP.

Data II

The following table lists the datafill for table TRKSGRP type X75.

Field descriptions (Sheet 1 of 3)

Field	Subfield or refinement	Entry	Explanation and action
SGRPKEY		see subfields	*Subgroup key* This field consists of subfields CLLI and SGRP.
	CLLI	alphanumeric (1 to 16 characters)	*Common language location identifier* Enter the common language location identifier (CLLI) code representing the trunk group in table CLLI.
	SGRP	numeric (0 or 1)	*Subgroup number* Enter the number assigned to the trunk subgroup. Enter 1 if two different signaling types are required in the trunk group. Otherwise, enter 0 (zero). The default is 0.
CARDCODE		DS1SIG	*Card code* Enter DS1SIG.
SGRPVAR		see subfields	*Variable subgroup data* This field consists of subfield SIGDATA and refinements SIGDATA, VERSION, TDI, RCI, CNIC, TDS, TRFOUT, TRFINC, NUI, CUGSCR, ACCHAR, PCP, and X75IDS.
	SIGDATA	X75	*Signaling data* Enter X75 to specify X.75 signaling.
	VERSION	X75 or X75P	*Version* Enter X75 or X75P.

TRKSGRP type X75 (continued)

Field descriptions (Sheet 2 of 3)

Field	Subfield or refinement	Entry	Explanation and action
	TDI	Y or N	*Transit delay indication* The international mandatory utility is used to signal the transit delay of the virtual circuit. Enter Y (yes) if the international mandatory utility is inserted or passed. Otherwise, enter N (no).
	RCI	Y or N	*Reverse charging indication* Reverse charging indication is an international utility used for establishing virtual calls. Enter Y if virtual calls are allowed. Enter N if virtual calls are cleared.
	CNIC	Y or N	*Clearing network identification code* Enter Y if the international option X.75 network utility that provides additional information on the origin of the clear request packet is inserted or passed. Otherwise, enter N.
	TDS	Y or N	*Transit delay selection* Enter Y if an international optional utility used to signal the transit delay requested by the calling digital trunk equipment (DTE) is inserted or passed. Otherwise, enter N.
	TRFOUT	Y or N	*Tariff-outgoing call* Enter Y if the international optional X.75 utility is inserted to pass information from one network to one or more other networks participating in the call to bill, account or tariff arrangements that exist among the respective administrations. Otherwise, enter N.
	TRFINC	Y or N	*Tariff-incoming call* Enter Y if the international optional X.75 utility is passed to send information from one network to one or more other networks participating in the call to bill, account or tariff arrangements that exist among the respective administrations. Otherwise, enter N.

TRKSGRP type X75 (continued)

Field descriptions (Sheet 3 of 3)

Field	Subfield or refinement	Entry	Explanation and action
	NUI	Y or N	*Network user identification* Enter Y if the X.75 utility is inserted or passed. Enter N if the packet is passed without the utility once it has been validated and the call is cleared.
	CUGSCR	Y or N	*Closed user group screening* Enter Y if the trunk performs closed user group (CUG) screening on outgoing CUG calls. Otherwise, enter N. If the entry in field VERSIOn is X75, datafill is complete for SIGDATA = X75.
	ACCHAR	Y or N	*Access characteristics* If the entry in field VERSION is X75P, datafill this field. Enter Y if the Bell operating companies' (BOC) specific utility that carries information recorded in the automatic message accounting (AMA) records is inserted or passed. Otherwise, enter N.
	PCP	Y or N	*Protocol conversion permissions* If the entry in field SIGDATA is X75P, datafill this field. Enter Y if the BOC specific utility requiring protocol information is passed. Enter N if the utility is not passed, it is tandem only.
	X75IDS	Y or N	*X75 interface identifier signaled* If the entry in field SIGDATA is X75P, datafill this field. Enter Y if the BOC specific X.75 utility used to pass the X.75 identifier between subnetworks is inserted or passed. Otherwise, enter N.

TRKSGRP type X75 (end)

Data ll e xample

The following example shows sample datafill for table TRKSGRP type X75.

MAP display example for table TRKSGRP type X75

```
              SGRPKEY   CARDCODE
SGRPVAR
                                                        SGRPVAR
_____________________________________________________________

              ICTRK01 0 DS1SIG
X75
 X75P N Y Y N Y Y Y N Y N Y
```

TRKMEM

Table name

Trunk Member Table

Functional description

Table TRKMEM lists the data for each trunk specified in tables TRKGRP and TRKSGRP.

Table TRKMEM does not include members of intertoll trunk groups that have common channel interoffice signaling (CCIS) and members of CCITT7 trunk groups in DMS-300 gateway switches.

For members of intertoll trunk groups with CCIS, see table C7TRKMEM. For members of CCITT7 trunk groups in DMS-300 switches, see tables N7TRKMEM and NO7TKMEM. For members of Global Trunks, see table TRKBCHNL.

Spectrum Peripheral Module (SPM) is datafilled into the PMTYPE field of table TRKMEM.

TRKMEM records the following data for each trunk group member and for each analog or digital trunk, including the spare trunks:

- the code assigned to the trunk group in table CLLI
- the external trunk number assigned by the operating company
- the number of the trunk subgroup
- the equipment number

To change a trunk member from a working trunk group to a spare, delete the member from the working trunk group in table TRKMEM, then add the member to the spare trunk group in table TRKMEM.

> ***Note:*** If the switch has remote operation, the digital carrier module (DCM) assignments in table LMINV cannot be used for assignment to trunk groups.

Assign Common Channel Signaling (CCS7) links with a linkset type (field LSTYPE value ALINK in table C7LKSET) and an allocation scheme (field ALLOC value STBASIC or STPOOL in table C7LINK) to different digital trunk controllers (DTC) in table TRKMEM to provide for redundancy. Failure to do this leads to CCS7 outage if the DTC goes out of service.

Trunk groups DTU, LTU, MTU, TTT, and TTU

Each member of the trunk groups with a common language location identifier (CLLI) of DTU, LTU, MTU, TTT or TTU consists of two trunk circuits that are always located in adjacent slots in the trunk or maintenance trunk module. For product engineering code DTU4X23AA both circuits must be specified in the trunk member table. For the following PECs, only the physical location of the circuit is required in the trunk member table:

- TTT2X96AA
- TTU2X47AA
- LTU2X11AA
- MTU4X97AA
- DTU4X23AA

The line test units for the host switch and its associated remote location are all listed under the fixed pseudo-CLLI code LTU.

Datafill an LTU or MTU in table TRKMEM before adding them to table MTAHORIZ. If the LTU or MTU is deleted from table TRKMEM, the corresponding tuple in table MTAHORIZ is marked as deleted, but it is automatically restored if the LTU or MTU is reentered in table TRKMEM.

The following table indicates how the datafill in table TRKMEM corresponds with the time slots.

Data ll and time slots (Sheet 1 of 2)

Trunk	Time slot	Trunk	Time slot
1	1	16	17
2	2	17	18
3	3	18	19
4	4	19	20
5	5	20	21
6	6	21	22
7	7	22	23
8	8	23	24
9	9	24	25

TRKMEM (continued)

Data II and time slots (Sheet 2 of 2)

Trunk	Time slot	Trunk	Time slot
10	10	25	26
11	11	26	27
12	12	27	28
13	13	28	29
14	14	29	30
15	15	30	31

Note 1: Time slot 16 cannot be datafilled because it is reserved for signaling. Only a maximum of 30 trunks can be datafilled in a particular carrier. If time slot 16 is activated, a maximum of 31 trunks can be datafilled. To activate time slot 16, the following conditions must be met:

- Table LTCINV must be datafilled for optional card NT6X28.
- Table LTCPSINV carriers must be CCS. Channel 16 cannot be datafilled on a CAS or digital private network signaling system (DPNSS) carrier.

Note 2: If offices are equipped with time slot flexibility for PCM30 carriers, the maximum number of non-signaling trunks that can be added to a PDTC is 480. Since datafill checks are not made to prevent operating company personnel from datafilling more than 480 non-signaling trunks, care must be exercised when adding new trunk circuits to a PDTC. If a PDTC is equipped with more than 480 trunks, PM180 switch error messages will result. In such a case, the following message is an indication that the capacity of the non-signaling trunks in the PDTC has been exceeded:

NO DB AVAIL

Note 3: All trunks with a signaling type of a DPNSS in table TRKSGRP must have their associated signaling links and inter-peripheral message links datafilled before they can be added to table TRKMEM.

Note 4: For trunk groups using the auto-identified outward dialing (AIOD) trunk feature, a tuple is automatically added to or deleted from table AIODTKN for each TRKMEM tuple added or deleted. The external trunk number of the trunk member is used as the AIOD token for table AIODTKN. The external trunk number must be unique over all trunks and lines using the same AIOD group for AIOD servicing.

X.75 trunk groups

For an X.75 trunk member to be datafilled in table TRKMEM, the following conditions must be satisfied:

- The trunk member must be datafilled first in table X75INFO.
- The DS0 channel must be datafilled in table SPECCONN against an XSG channel.

X.25 trunk groups

For an X.25 trunk member to be datafilled in table TRKMEM, the DS0 channel must be datafilled in table SPECCONN against an XSG channel.

Restricting access to table TRKMEM

Access to table TRKMEM can be restricted by datafilling table CUSTPROT. For United Kingdom customers, access to table TRKMEM must be restricted by datafilling table CUSTPROT to prevent the operating company from moving physical trunks into a different trunk group.

Data II sequence and implications

The following tables must be datafilled before table TRKMEM:

- CLLI
- TRKGRP
- TRKSGRP
- RCCINV
- RCCPSINV
- X75INFO (for an X.75 trunk member)
- SPECCONN (for an X.75 or X.25 trunk member)
- DS0 links on a PCM30 digital trunk controller (PDTC) must first be datafilled in table LTCPSINV before digital jack trunks can be datafilled
- RCCINV (Synchronous Optical Network (SONET) remote cluster controllers (SRCC) must be datafilled first in table RCCINV)
- DS1 must be defined on its P-side in table RCCPSINV
- For PMTYPE of DTM, tables TMINV and TRSGRP must be datafilled before this table. Tables DRAMS and EDRAMINV must also be datafilled.
- When the office is configured with SPMs that have integrated services digital network (ISDN) user part (ISUP) or per trunk signaling (PTS) trunks, datafill table TRKMEM after table MNCKTPAK.

TRKMEM (continued)

Table OAVLMAP must be datafilled after table TRKMEM. Deletions in table TRKMEM are not allowed if table OAVLMAP has a reference to the tuple being deleted.

When an ISUP or a PTS trunk is added to an SPM, the following dependencies apply:

- AB-bit resources must be datafilled in table MNCKTPAK before a PTS trunk is added in TRKMEM.
- At least one MF resource must be datafilled in table MNCKTPAK before a PTS trunk with an incoming pulse type of MF is added to table TRKMEM (on a given SPM node). The incoming pulse type is datafilled in the associated trunk subgroup (table TRKSGRP).
- At least one dual-tone multifrequency (DTMF) resource must be datafilled in table MNCKTPAK before a PTS trunk with an incoming pulse type of DT is added to table TRKMEM (on a given SPM node).
- If the PM type of the TRKMEM tuple = SPM, the incoming pulse type (IPULSTYP) field in the associated table TRKSGRP tuple cannot be datafilled as NP (nil_pulse_type).
- An ISUP trunk must be datafilled in table TRKMEM before it can be datafilled in table C7TRKMEM.

Table size

0 to 16 000 000 tuples

Note: The SPM tuples in the TRKMEM table use a refinement of the MEM_VAR_AREA, which is part of the TRUNK_MEMBER_DATA_TUPLE area. Therefore, no reformats are needed for dump and restore.

Data II

The following table lists datafill for table TRKMEM.

Field descriptions (Sheet 1 of 5)

Field	Subfield	Entry	Explanation and action
CLLI		alphanumeric (1 to 16 characters)	*Common language location identifier* Enter the common language location identifier (CLLI) code that is assigned to the trunk group to which the trunk is a member. This CLLI code is assigned in table CLLI.
EXTRKNM		numeric (0 to 9999)	*External trunk number* Enter the external trunk number that is assigned to the trunk. For members of trunk groups using the AIOD option, the external trunk number must be unique over all trunks and lines using the same AIOD group.
SGRP		numeric (0 to 1)	*Subgroup number* Enter the subgroup number to which the trunk is assigned.
MEMVAR		see subfield	*Variable data for members* This field consists of subfield PMTYPE and refinements.

TRKMEM (continued)

Field descriptions (Sheet 2 of 5)

Field	Subfield	Entry	Explanation and action
	PMTYPE	ADTC AIM ALGC ARCC ATM DCA DCM DTC DTCI DTM ICP IDT IDTC ILTC ISM LGC LTC MMA MTM OAU PDTC PLGC PTM RCC RCC2 RCO2 RMM RMSC RSM SMA SMA2 SPM SMU SRCC STM TAN T8A TM2	*Peripheral module type* Enter the peripheral module (PM) type on which the trunk is mounted and datafill the refinements associated with this entry value. Each refinement entry must be separated from the next by a blank space. If the CLLI code is for a trunk group of type TPS101, it must be assigned to a maintenance trunk module (MTM) or packaged trunk module (PTM). If the value of field PMTYPE is ADTC, ALGC, ARCC, DCA, IDTC, ILTC, PDTC, PLGC, datafill subfields DEQNO, DEQCKTNO, and DEQCKTTS. If the value of field PMTYPE is AIM, ATM, DTM, ISM, MMA, MTM, OAU, PTM, RMM, RSM, STM, TAN, T8A, TM2, TM4, TM8, or TMA, datafill subfields TMNO and TMCKTNO. If the value of field PMTYPE is DCM, datafill subfields DCMNO, DCMCKTNO, and DCMCKTTS. If the value of field PMTYPE is DTC, datafill subfields DTCNO, DTCCKTNO, and DTCCKTTS. If the value of field PMTYPE is DTCI, datafill subfields DTCINO, DTCICKTNO, and DTCICKTTS.

Field descriptions (Sheet 3 of 5)

Field	Subfield	Entry	Explanation and action
		TM4 TM8 TMA or TMS	If the value of field PMTYPE is ICP, datafill subfields ICPNO, ICPCKTNO, and ICPCKTTS. If the value of field PMTYPE is IDT, datafill subfields IDTNO and SHELFSLT. If the value of field PMTYPE is LGC, datafill subfields LGCNO, LGCCKTNO, and LGCCKTTS. If the value of field PMTYPE is LTC, datafill subfields LTCNO, LTCCKTNO, and LTCCKTTS. If the value of field PMTYPE is RCC, datafill subfields RCCNO, RCCCKTNO, and RCCCKTTS. If the value of field PMTYPE is RCC2, datafill subfields RCC2NO, RCC2CKTNO, and RCC2CKTTS. If the value of field PMTYPE is RCO2, datafill subfields RCO2NO, RCO2CKTNO, and RCO2CKTTS. If the value of field PMTYPE is RMSC, datafill subfields RMSCNO, RMCCKTNO, and RMCCKTTS. If the value of field PMTYPE is RMSC, datafill subfields RMSCNO, RMCCKTNO, and RMCCKTTS. If the value of field PMTYPE is SMA, datafill subfields SMANO, SMACKTNO, and SMACKTTS. If the value of field PMTYPE is SMA2, datafill subfields SMA2NO, SMA2CKTNO, and SMA2CKTTS. If the value of field PMTYPE is SMU, datafill subfields SMUNO, SMUCKTNO, and SMUCKTTS.

TRKMEM (continued)

Field descriptions (Sheet 4 of 5)

Field	Subfield	Entry	Explanation and action
			If the value of field PMTYPE is SPM, datafill subfields SPMNO, SPMCKTNO, and SPMCKTTS. If the value of field PMTYPE is SRCC, datafill subfields SRCCNO, SRCCCKTNO, and SRCCCKTTS. If the value of field PMTYPE is TMS, datafill subfields TMSNO, TMSCKTNO, and TMSCKTTS. ***Note:*** PRA type trunks can be datafilled on an ISDN Austrian digital trunk controller (ADTC). These trunks can be datafilled on ports 1 to 31. All members must have an interface identifier specified in table LTCPSINV before they can be added. An ISDN capable ADTC shelf differs from the standard ADTC because it has an ISP card NTBX01AA and a universal time switch NT6X44EA card present. The shelf PEC is 6X02NA, the frame type is LTEI. Time switch cards AX73 and AX79 can also be used. For offices with PTMs, datafill the value MTM. PTMs are manufacturer discontinued. If the peripheral module is PDTC, digital jack trunks can be datafilled if optional package NTXK50AA (TTP-digital jack ended trunks) is in the load. Digital jack trunks can only be datafilled on time slot 1. The PDTC must be datafilled in table LTCINV and the specified circuit must be datafilled as a DS0 link in table LTCPSINV.

Field descriptions (Sheet 5 of 5)

Field	Subfield	Entry	Explanation and action
			If the peripheral module is PDTC, PRA type trunks can be datafilled on ports 0 through 15 and on circuits 1 through 31. Time slot 16 can be datafilled for IDTCs with carriers of signaling type CCS. If an attempt is made to datafill time slot 16 with carriers of type CAS or DPNSS, an error message is output. For NFA trunk member, the type of peripheral module (PM) is restricted to either DTC or LTC. These PMs must be equipped with universal tone receiver (UTR). The RCO2 is a remote unit part of the CPM (Common Peripheral Module) family, used in the DMS-100 family for international applications. It is the international version of the RCC2. The RCO2 has the same architecture as the RCC2 and is based on two shelves (introduced for the Domestic RCC2 program in BCS33). RCO2 supports up to 16 PCM30 on the C-side (mapping towards the LGCO) and up to 46 PCM30 on the P-side including 24 PCM30 on the extension shelf. RCO2 supports several types of lines, trunks, and certain small remotes on its P-side, as listed below: • line concentrating module (LCM) • extended line concentrating module (LCME) • community dial office (CDO) trunks • PBX trunks • remote unit (TBD) RCO2 supports up to 16 PCM30s on the C-side (mapping towards the LGCO) and up to 46 PCM30s on the P-side, including 24 PCM30s on the extension shelf.

TRKMEM (continued)

PMTYPE = ADTC, ALGC, ARCC, DCA, IDTC, ILTC, PDTC, or PLGC

If the value of field PMTYPE is ADTC, ALGC, ARCC, DCA, IDTC, ILTC, PDTC, or PLGC, datafill subfields DEQNO, DEQCKTNO, and DEQCKTTS as described below.

Field descriptions for conditional data II

Field	Subfield	Entry	Explanation and action
	DEQNO	numeric (0 to 511)	*Digital equipment number* Enter the number of the digital equipment module to which the trunk group member is assigned.
	DEQCKTNO	numeric (0 to 19)	*Digital equipment circuit number* Enter the number of the digital equipment module circuit card to which the trunk group member is assigned.
	DEQCKTTS	numeric (1 to 31)	*Digital equipment circuit time slot* Enter the number of the digital equipment circuit card time slot to which the trunk group member is assigned. If the flexible time slot feature is not turned on, the range of valid entries is 1 to 30. Datafill NT6X28 as an optional card in table LTCINV to turn on the flexible time slot feature.

PMTYPE = AIM, ATM, ISM, DTM, MMA, MTM, OAU, PTM, RMM, RSM, STM, TAN, T8A, TM2, TM4, TM8, or TMA

If the value of field PMTYPE is AIM, ATM, ISM, DTM, MMA, MTM, OAU, PTM, RMM, RSM, STM, TAN, T8A, TM2, TM4, TM8, or TMA, datafill subfields TMNO and TMCKTNO as described below.

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

Field	Subfield	Entry	Explanation and action
	TMNO	numeric (0 to 2047)	*Trunk module number* Enter the number assigned to the trunk module on which the trunk group member is assigned.
	TMCKTNO	numeric (0 to 29)	*Trunk module circuit number* Enter the number of the trunk module circuit to which the trunk group member is assigned. The value for each subfield must be separated by a blank space.
			or
		numeric (1 to 15 and 17 to 29)	See note added to table STN.
			or
		numeric (7 to 10) 11 12 13 to 16 17 or 18 19 20 or 21 22 23 24 25 26 to 28	(AIM type TM only) If trunk emulation is provided for NT2X75AA/BA, enter 7 to 10. If trunk emulation is provided for NT1X54AA or NT2X72AA/AB/AC/BA and FX48AA is datafilled for AIM in table TMINV, enter 11. ***Note:*** Only one emulation type can be used at a time for NT2X72xx, NT2X81xx and NT2X90xx If trunk emulation is provided for Montalk and FX48AA is datafilled for AIM in table TMINV, enter 12.

TRKMEM (continued)

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

Field	Subfield	Entry	Explanation and action
			If trunk emulation is provided for NT5X30AA/BA, NT2X95AA, NT2X82AA or Montalk and FX48AA is datafilled for AIM in table TMINV, enter 13 to 16. If trunk emulation is provided for NT2X82AA, NT2X95AA or Montalk and FX48AA is datafilled for AIM in table TMINV, enter 17 or 18. If trunk emulation is provided for NT5X30AA/BA and FX48AA is datafilled for AIM in table TMINV, enter 19. If trunk emulation is provided for NT2X71AA and FX48AA is datafilled for AIM in table TMINV, enter 20 or 21. If trunk emulation is provided for NT2X81AA/AB/BA, NT2X90AD or Montalk and FX48AA is datafilled for AIM in table TMINV, enter 22. ***Note:*** Only one emulation type can be used at a time for NT2X72xx, NT2X81xx and NT2X90xx If trunk emulation is provided for NT1X54AA, NT2X72AA/AB/AC/BA, enter 23. ***Note:*** Emulation of NT2X72xx on circuit 23 and NT2X81xx on circuit 25 may not be used at the same time If trunk emulation is provided for NT5X30AA/BA, enter 24.

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

Field	Subfield	Entry	Explanation and action
			If trunk emulation is provided for NT2X81AA/AB/BA, NT2X90AD or Montalk, enter 25. ***Note:*** Emulation of NT2X72xx on circuit 23 and NT2X81xx on circuit 25 may not be used at the same time If trunk emulation is provided for NT2X90AD or Montalk, enter 26 to 28.
		numeric (4 to 24, 25 to 27, 28)	(AIM based RMM type TM only) If trunk emulation is provided by a pass-through to the RMM shelf, enter 4 to 24. ***Note:*** Non-AIM circuit packs can be provisioned in these circuits and used if the RMM is not AIM based If trunk emulation is provided for NT2X90AD or Montalk, enter 25 to 27. If trunk emulation is provided for Montalk, enter 28.

PMTYPE = DCM

If the value of field PMTYPE is DCM, datafill subfields DCMNO, DCMCKTNO, and DCMCKTTS as described below.

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

Field	Subfield	Entry	Explanation and action
	DCMNO	numeric (0 to 511)	*Digital carrier module number* Enter number of the digital carrier module (DCM) to which the trunk group member is assigned.

TRKMEM (continued)

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

Field	Subfield	Entry	Explanation and action
	DCMCKTNO	numeric (0 to 4)	*Digital carrier module circuit number* Enter the number of the DCM circuit card to which the trunk group member is assigned.
	DCMCKTTS	numeric (1 to 24)	*Digital carrier module circuit time slot* Enter the number of the DCM circuit card DS1 time slot to which the trunk group member is assigned.

PMTYPE = DTC

If the value of field PMTYPE is DTC, datafill subfields DTCNO, DTCCKTNO, and DTCCKTTS as described below.

Field descriptions for conditional data II

Field	Subfield	Entry	Explanation and action
	DTCNO	numeric (0 to 511)	*Digital trunk controller number* Enter the number of the digital trunk controller (DTC) module to which the trunk group member is assigned.
	DTCCKTNO	numeric (0 to 19)	*Digital trunk controller circuit number* Enter the number of the DTC circuit card to which the trunk group member is assigned.
	DTCCKTTS	numeric (1 to 24)	*Digital trunk controller circuit time slot* Enter the number of the circuit card DS0 time slot to which the trunk group member is assigned.

PMTYPE = DTCI

If the value of field PMTYPE is DTCI, datafill subfields DTCINO, DTCICKTNO, and DTCICKTTS as described below.

Field descriptions for conditional data II

Field	Subfield	Entry	Explanation and action
	DTCINO	numeric (0 to 511)	*ISDN digital trunk controller number* Enter the number of the ISDN DTC (DTCI) module to which the trunk group member is assigned.
	DTCICKTNO	numeric (0 to 19)	*ISDN digital trunk controller circuit number* Enter the number of the DTCI DS1 span to which the trunk group member is assigned.
	DTCICKTTS	numeric (1 to 24)	*ISDN digital trunk controller circuit time slot* Enter the number of the circuit card DS0 time slot to which the trunk group member is assigned.

PMTYPE = ICP

If the value of field PMTYPE is ICP, datafill subfields ICPNO, ICPCKTNO, and ICPCKTTS as described below.

Field descriptions for conditional data II

Field	Subfield	Entry	Explanation and action
	ICPNO	numeric (0 to 511)	*Integrated cellular peripheral number* Enter the number of the integrated cellular peripheral (ICP) to which the trunk group member is assigned.
	ICPCKTNO	numeric (0 to 19)	*Integrated cellular peripheral circuit number* Enter the number of the ICP circuit card to which the trunk group member is assigned.
	ICPCKTTS	numeric (1 to 31)	*Integrated cellular peripheral circuit time slot* Enter the number of the ICP circuit card time slot to which the trunk group member is assigned.

TRKMEM (continued)

PMTYPE = IDT

If the value of field PMTYPE is IDT, datafill subfields IDTNO and SHELFSLT as described below.

Field descriptions for conditional data II

Field	Subfield	Entry	Explanation and action
	IDTNO	numeric (0 to 255)	*Integrated digital terminal number* Enter the number of the integrated digital terminal (IDT) to which the trunk group member is assigned.
	SHELFSLT	see subfields	*Integrated digital terminal shelf and slot* This subfield consists of refinements SHELF and SLOT.
	SHELF	numeric (1 to 31)	*Integrated digital terminal shelf number* Enter the number of the IDT shelf to which the trunk group member is assigned.
	SLOT	numeric (1 to 99)	*Integrated digital terminal slot number* Enter the number of the IDT slot number to which the trunk group is assigned.

PMTYPE = LGC

If the value of field PMTYPE is LGC, datafill subfields LGCNO, LGCCKTNO, and LGCCKTTS as described below.

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

Field	Subfield	Entry	Explanation and action
	LGCNO	numeric (0 to 511)	*Line group controller number* Enter the number of the line group controller (LGC) to which the trunk group member is assigned.

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

Field	Subfield	Entry	Explanation and action
	LGCCKTNO	numeric (0 to 19)	*Line group controller circuit number* Enter the number of the LGC circuit card to which the trunk group member is assigned.
	LGCCKTTS	numeric (1 to 24)	*Line group controller circuit time slot* Enter the number of the LGC circuit card time slot to which the trunk group member is assigned.

PMTYPE = LTC

If the value of field PMTYPE is LTC, datafill subfields LTCNO, LTCCKTNO, and LTCCKTTS as described below.

Field descriptions for conditional data II

Field	Subfield	Entry	Explanation and action
	LTCNO	numeric (0 to 511)	*Line trunk controller number* Enter the number of the line trunk controller (LTC) module to which the trunk group member is assigned.
	LTCCKTNO	numeric (0 to 19)	*Line trunk controller circuit number* Enter the number of the LTC circuit card to which trunk group member is assigned.
	LTCCKTTS	numeric (1 to 24)	*Line trunk controller circuit time slot* Enter the number of the LTC circuit card DS0 time slot to which the trunk group member is assigned.

TRKMEM (continued)

PMTYPE = RCC

If the value of field PMTYPE is RCC, datafill subfields RCCNO, RCCCKTNO, and RCCCKTTS as described below.

Field descriptions for conditional data II

Field	Subfield	Entry	Explanation and action
	RCCNO	numeric (0 to 511)	*Remote cluster controller equipment number* Enter the number of the remote cluster controller (RCC) equipment to which the trunk group member is assigned.
	RCCCKTNO	numeric (0 to 19)	*Remote cluster controller equipment circuit number* Enter the number of the RCC equipment circuit card to which the trunk group member is assigned.
	RCCCKTTS	numeric (1 to 24)	*Remote cluster controller equipment circuit time slot* Enter the number of the RCC equipment circuit card time slot to which the trunk group member is assigned.

PMTYPE = RCC2

If the value of field PMTYPE is RCC2, datafill subfields RCC2NO, RCC2CKTNO, and RCC2CKTTS as described below.

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

Field	Subfield	Entry	Explanation and action
	RCC2NO	numeric (0 to 511)	*Compact remote cluster controller equipment number* Enter the number of the compact RCC (RCC2) equipment to which the trunk group member is assigned.

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

Field	Subfield	Entry	Explanation and action
	RCC2CKTNO	numeric (0 to 47)	*Compact remote cluster controller equipment circuit number* Enter the number of the RCC2 equipment circuit card to which the trunk group member is assigned.
	RCC2CKTTS	numeric (1 to 24)	*Compact remote cluster controller equipment circuit time slot* Enter the number of the RCC2 equipment circuit card time slot to which the trunk group member is assigned.

PMTYPE = RC02

If the value of field PMTYPE is RCO2, datafill subfields RCO2NO, RCO2CKTNO, and RCO2CKTTS as described below.

Field descriptions for conditional data II

Field	Subfield	Entry	Explanation and action
	RCO2NO	numeric (0 to 511)	*Offshore remote cluster controller equipment number* Enter the number of the offshore RCC (RCCO) equipment to which the trunk group member is assigned.
	RCO2CKTNO	numeric (0 to 47)	*Offshore remote cluster controller equipment circuit number* Enter the number of the RCCO equipment circuit card to which the trunk group member is assigned.
	RCO2CKTTS	numeric (1 to 31)	*Offshore remote cluster controller equipment circuit time slot* Enter the number of the RCCO equipment circuit card time slot to which the trunk group member is assigned.

TRKMEM (continued)

PMTYPE = RMSC

If the value of field PMTYPE is RMSC, datafill subfields RMSCNO, RMCCKTNO, and RMCCKTTS as described below.

Field descriptions for conditional data II

Field	Subfield	Entry	Explanation and action
	RMSCNO	numeric (0 to 511)	*Remote mobile switching center number* Enter the number of the remote mobile switching center (RMSC) module to which the trunk group member is assigned.
	RMCCKTNO	numeric (0 to 19)	*Remote mobile switching center circuit number* Enter the number of the RMSC module circuit card to which the trunk group member is assigned.
	RMCCKTTS	numeric (1 to 31)	*Remote mobile switching center circuit time slot* Enter the number of the RMSC module circuit card time slot to which the trunk group member is assigned.

PMTYPE = SMA

If the value of field PMTYPE is SMA, datafill subfields SMANO, SMACKTNO, and SMACKTTS as described below.

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

Field	Subfield	Entry	Explanation and action
	SMANO	numeric (0 to 511)	*Subscriber carrier module-100s access mobile switching center number* Enter the number of the subscriber carrier module-100S access (SMA) mobile switching center module to which the trunk group member is assigned.

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

Field	Subfield	Entry	Explanation and action
	SMACKTNO	numeric (0 to 19)	*Subscriber carrier module-100s access mobile switching center circuit number* Enter the number of the subscriber module access (SMA) mobile switching center module circuit card to which the trunk group member is assigned.
	SMACKTTS	numeric (1 to 24)	*Subscriber carrier module-100s access mobile switching center circuit time slot* Enter the number of the SMA mobile switching center module circuit card time slot to which the trunk group member is assigned.

PMTYPE = SMA2

If the value of field PMTYPE is SMA2, datafill subfields SMA2NO, SMA2CKTNO, and SMA2CKTTS as described below.

Field descriptions for conditional data II

Field	Subfield	Entry	Explanation and action
	SMA2NO	numeric (0 to 511)	*Expanded subscriber carrier module-100s access mobile switching center number* Enter the number of the expanded subscriber carrier module-100S access (SMA2) mobile switching center module to which the trunk group member is assigned.
	SMA2CKTNO	numeric (0 to 47)	*Expanded subscriber carrier module-100s access mobile switching center circuit number* Enter the number of the expanded subscriber module access (SMA2) mobile switching center module circuit card to which the trunk group member is assigned.
	SMA2CKTTS	numeric (1 to 24)	*Expanded subscriber carrier module-100s access mobile switching center circuit time slot* Enter the number of the SMA2 mobile switching center module circuit card time slot to which the trunk group member is assigned.

TRKMEM (continued)

PMTYPE = SMU

If the value of field PMTYPE is SMU, datafill subfields SMUNO, SMUCKTNO, and SMUCKTTS as described below.

Field descriptions for conditional data II

Field	Subfield	Entry	Explanation and action
	SMUNO	numeric (0 to 511)	*Subscriber carrier module-100 urban number* Enter the number of the subscriber carrier module-100 urban (SMU) to which the trunk group member is assigned.
	SMUCKTNO	numeric (0 to 19)	*Subscriber carrier module-100 urban circuit number* Enter the number of the SMU circuit card to which the trunk group member is assigned.
	SMUCKTTS	numeric (1 to 24)	*Subscriber carrier module-100 urban circuit time slot* Enter the number of the SMU circuit card time slot to which the trunk group member is assigned.

PMTYPE = SPM

If the value in field PMTYPE is SPM, datafill subfields SPMNO, SPMCKTNO, and SPMCKTTS as described below.

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

Field	Subfield	Entry	Explanation and action
	SPMNO	numeric (0 to 63)	*SPM number* Enter the number of the SPM to which the trunk group member is assigned.

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

Field	Subfield	Entry	Explanation and action
	SPMCKTNO	numeric (0 to 181)	*SPM circuit number* Enter the number of the circuit card to which the trunk group member is assigned. The maximum number of circuits in an SPM is 84.
	SPMCKTTS	numeric (1 to 31)	*SPM circuit time slot* Enter the number of the PCM30 time slot to which the trunk group member is assigned. Enter the number (in the range 1 to 24) of the DS1 time slot to which the trunk group member is assigned. The DMS-100 MMP switch generates an error message if you attempt to enter data for a DS1 carrier with a time slot greater than 24.

PMTYPE = SRCC

If the value of field PMTYPE is SRCC, datafill subfields SRCCNO, SRCCCKTNO, and SRCCCKTTS as described below.

Field descriptions for conditional data II

Field	Subfield	Entry	Explanation and action
	SRCCNO	numeric (0 to 511)	*SONET remote cluster controller number* Enter the number of the SONET remote cluster controller (SRCC) to which the trunk group member is assigned.
	SRCCCKTNO	numeric (0 to 47)	*SONET remote cluster controller circuit number* Enter the number of the SRCC circuit card to which the trunk group member is assigned.
	SRCCCKTTS	numeric (1 to 24)	*SONET remote cluster controller circuit time slot* Enter the number of the SRCC circuit card time slot to which the trunk group member is assigned.

TRKMEM (continued)

PMTYPE = TMS

If the value of field PMTYPE is TMS, datafill subfields TMSNO, TMSCKTNO, and TMSCKTTS as described below.

Field descriptions for conditional data ll

Field	Subfield	Entry	Explanation and action
	TMSNO	numeric (0 to 255)	*TMS number* Enter the number of the Traffic Operator Position System (TOPS) message switch (TMS) to which the trunk group member is assigned.
	TMSCKTNO	numeric (0 to 19)	*TMS circuit number* Enter the number of the TMS circuit card to which the trunk group member is assigned.
	TMSCKTTS	numeric (1 to 31)	*TMS circuit time slot* Enter the number of the TMS circuit card time slot to which the trunk group member is assigned.

Data ll e xample

Five examples of datafill for table TRKMEM are shown below.

The first example is for a local/toll switch and consists of two digital trunks and one analog trunk.

MAP display example for table TRKMEM

```
CLLI             EXTRKNM     SGRP    MEMVAR
_____________________________________________________

OTWAON1002T0     303         0       DCM 1 1 5 $
CCIS4A             0         0       DTC 3 0 4 $
OTWAON0872AO      47         0       TM8 12 5 1 $
SRCCTRK            0         0       SRCC 0 0 1 $
```

The second example is for a gateway switch and consists of four members of trunk group with CLLI of BEL01CANMTL and four members of trunk group with CLLI of NAS01BAH.

MAP display example for table TRKMEM

```
CLLI            EXTRKNM     SGRP    MEMVAR
_____________________________________________________

BEL01CANMTL     101         0       DCM 0 0 1 $
BEL01CANMTL     102         0       DCM 0 1 7 $
BEL01CANMTL     103         0       DCM 1 1 17 $
BEL01CANMTL     104         0       DCM 1 2 11 $
NAS01BAH          2         0       T8A 7 12 $
NAS01BAH          3         0       T8A 13 12 $
NAS01BAH          4         0       T8A 15 12 $
NAS01BAH          5         0       T8A 18 12 $
```

The third example shows datafill for loads including an analog jack and a digital jack. This example also shows datafill for when a PRA type trunk can be datafilled on the PDTC.

MAP display example for table TRKMEM

```
CLLI            EXTRKNM     SGRP    MEMVAR
_____________________________________________________

JACK            0           0       MTM 10 10 $
JACK            1           1       PDTC 4 0 1 $
PCM30TG1        0           0       PDTC 1 1 0 $
```

The fourth example is for a DMS-100 ISDN office with ISDN PRI and X25/X75 packet trunks.

MAP display example for table TRKMEM

```
CLLI            EXTRKNM     SGRP    MEMVAR
_____________________________________________________

PRAISDN         1           0       DTCI 0 0 1 $
X75PKT          1           0       DTC  0 0 0 $
X25PKT          1           0       DTCI 0 0 2 $
```

The final example shows datafill when an SPM is provisioned. The last line shows a trunk group member assigned to PCM30 time slot 25.

TRKMEM (continued)

MAP display example for table TRKMEM

```
CLLI            EXTRKNM     SGRP    MEMVAR
_____________________________________________________

SPM13OG         0           0       SPM 40 5 1
SPM13OG         1           0       SPM 40 5 2
SPM13OG         2           0       SPM 40 5 3
SPM13OG         22          0       SPM 40 5 23
SPM13OG         23          0       SPM 40 5 24
SPM13IC         0           0       SPM 40 4 1
SPM13IC         1           0       SPM 40 4 2
SPM13IC         2           0       SPM 40 4 3
SPM13IC         3           0       SPM 40 4 4
SPM13IC         4           0       SPM 40 4 5
SPM13IC         5           0       SPM 40 4 6
SPM13IC         6           0       SPM 40 4 7
TLINK           1           0       SPM  2 6 24
TLINK           2           0       SPM  3 6 24
SPMCRS0OG2      0           0       SPM  3 9 25
```

The ‘TLINK’ lines show the transmission link provisioning for STM-1 channelized access. TLINK 1 is provisioned on SPM 2, circuit 6, time slot 24. TLINK 2 is provisioned on SPM 3, circuit 6, time slot 24.

> ***Note:*** The name ‘TLINK’ must be already defined in table CLLI. See table MNHSCARR for the datafill sequence required to provision the channelized access path from an STM-1 carrier to the LIU7.

The last line of the datafill example shows a trunk group member assigned to PCM30 time slot 25.

Supplementary information

This section explains the error messages that can occur if you enter data incorrectly in table TRKMEM.

Error message table (Sheet 1 of 2)

Error message	Explanation and action
`Delete the AINPRI entry before deleting TRKMEM.`	An attempt was made to delete a tuple that is being referenced by table AINPRI.
`DATA IN ASSOCIATED TABLES NOT DELETED YET`	An attempt was made to enter data out of sequence. A tuple in table TRKMEM can be deleted, added, or changed only if the tuple is empty or has been deleted from table C7TRKMEM.
`Failed to get AB bit resource. Increase count of AB bit resources for DSPs on this SPM in table MNCKTPAK.`	An AB-bit resource is not available for the SPM DS1 carrier to be used by the given PTS trunk.
`ERROR: The IPULSTYP field = nil_pulse_type in table TRKSGRP. Trunks datafilled on an SPM node cannot have a nil incoming pulse type.`	An attempt was made to enter data for an SPM PTS trunk and the associated incoming pulse type (IPULSTYP) field in table TRKSGRP = NP (nil_pulse_type).
`ERROR: This trunk has an associated IPULSTYP = MF in table TRKSGRP, but there are no MF resources provisioned in table MNCKTPAK.`	An attempt was made to enter data for a PTS trunk whose associated incoming pulse type = MF, but there are no MF resources provisioned in table MNCKTPAK.
`ERROR: This trunk has an associated IPULSTYP = DT in table TRKSGRP, but there are no DTMF resources provisioned in table MNCKTPAK.`	An attempt was made to enter data for a PTS trunk whose associated incoming pulse type = DT, but there are no DTMF resources provisioned in table MNCKTPAK.
`ERROR: Carrier does not support the time slot specified.`	An attempt was made to enter data for a DS1 carrier with a time slot greater than 24 (time slots 25 to 31 are for PCM30 carriers only).

TRKMEM (continued)

Error message table (Sheet 2 of 2)

Error message	Explanation and action
Table TRKOPTS DYNAMIC option is assigned. Manual operations are not allowed in Table TRKMEM.	No tuples of a dynamic trunk group can be manually added, changed, or removed from table TRKMEM. Trunk groups are defined as dynamic in table TRKOPTS by field OPTION = DYNAMIC. In order to make changes to trunk members of a dynamic trunk group, use the application-specific method, such as table IPINV for the TOPS OC application. The TOPS OC application automatically allocates 48 dynamic trunk members in table TRKMEM when an IP gateway node is defined in table IPINV.
`NO CHANNEL AVAILABLE`	Carriers that are associated with an IDT cannot be added to table TRKMEM. This message is displayed when you attempt to add a trunk memeber that is associated with a remote device, such as datafilled in table RDTINV.
`Warning: You have reached 75% of the total limit of carriers provisioned in this office`	You have reached 75% of the total limit of provisioned carriers assigned with either PRI or ISUP/PTS trunks in this office.
`ERROR: The office has reached its upper limit of carriers provisioned`	The upper limit of provisioned carriers with either PRI or ISUP/PTS has been reached. If you need to add additional tuples, please contact Nortel Networks for more provisioning.

Error messages speci c to PRI with Semipermanent P acket

Use the following information for an explanation of the error messages associated with table TRKMEM.

Reason: While tables CLLI, TRKGRP, and TRKSGRP datafill, table SPECCONN does not datafill. When table TRKMEM datafills, table TRKMEM searches for a DS0 connection on table SPECCONN. If the DS0

connection is not present on table SPECCONN, the following error message displays.

```
DS-0 must be nailed up in SPECCONN for X25 PRA.
```

Action: Datafill table SPECCONN before table TRKMEM.

Reason: All the tables datafill for PRI with Semipermanent Packet LTID. An error message displays when operating company personnel try to change the DS0, which maps to a PRI with Semipermanent Packet LTID.

```
Delete the LTMAP entry first.
```

Action: Delete the tuple in table LTMAP. Then try to change the tuple in table TRKMEM for the corresponding DS0.

Error messages speci c to the PRI-PRI Over Multiple XPMs f eature

Error messages appear under the following conditions:

If the CLLI is not mapped in table LTMAP and the protocol variant is other than NTNI:

- adding a distributed B-channel displays a warning message as follows:

  ```
  Warning: Members spanning different PMs are supported only
  for NTNI protocol variant
  ```

- changing a normal/distributed B-channel to distributed B-channel displays a warning message as follows:

  ```
  Warning: Members spanning different PMs are supported only
  for NTNI protocol variant
  ```

If the CLLI is mapped in table LTMAP and the protocol variant is other than NTNI:

- adding a distributed B-channel is rejected and the switch displays the following error message

  ```
  ERROR: Members spanning different PMs are supported only for
  NTNI protocol variant
  ```

- changing a normal/distributed B-channel to distributed B-channel is rejected and the switch displays the following error message:

  ```
  ERROR: Members spanning different PMs are supported only for
  NTNI protocol variant
  ```

TRKMEM (continued)

If the protocol variant is NTNI, adding a distributed B-channel in the 17th distributed XPM as an interface, the switch displays the following error message

```
ERROR: Distributed PRI interface can span only 16 XPMs
```

Table history

SP15

Updated the Explanation and action of the error message related to the upper limit of PRI or ISUP/PTS trunks, based on feature 59027128.

SP14

Made the following changes:

- Added “No channel available” error message to the table of error messages, based on feature 59012232.
- Added two additional error/warning messages related to carrier provisoning, based on feature 59018431.

MMP13

Added an example to illustrate the datafill required for STM-1 channelized access.

NA013

Added requirement to datafill ISUP trunks in table TRKMEM before datafilling them in table C7TRKMEM for the Succession Network VToA (Voice Trunking over ATM) application release 01.

Added error message about dynamic trunks.

MMP12

Changed the range of subfield SPMCKTTS from 1 to 24 to 1 to 31.

NA012

Added error messages for the PRI-PRI Over Multiple XPMs feature.

NA011

Added notes to the supplementary information about the error messages that display for the PRI with Semipermanent Packet feature. This information includes the reason the error messages displays and the corrective action.

CSP08

SPM system datafill was introduced to table TRKMEM.

NA010

Added note to the supplementary information about error message that the system generates when operating company personnel attempt to delete a tuple that table AINPRI is using.

NA008

Removed references to BITS from table 13. Table TRKMEM has been updated for the NA011 release of this document. This update was made in response to a Problem Resolution Solution (PRS) request for the NA008 timeframe.

CSP06

The following changes have been made:

- AIM added to subfield PMTYPE
- Restrictions added to field TMCKTNO for AIM type TM and AIM based RMM type TM
- Added table OAVLMAP to “Datafill sequence” section according to feature AN1589 in functionality Operator Services AIN, ENSV00014.

CSP04

The following changes were made to table LTCINV:

- added note stating that table TRKMEM interacts with table SYLNKINV and verifies that RCC2 DS1 links 0 or 8 are not defined as building integrated timing supply (BITS) links before defining the links as trunks
- removed references to PRCC, RCCI, HSI, HSIE, and IAC PM types that are no longer supported

The following changes have been made

- Note on PMTYPE DTM added to datafill sequence section.
- DTM added to subfield PMTYPE and entry to subfield TMCKTNO.

BCS26

Added note concerning the maximum number of non-signaling trunks that can be added to a PDTC.

TRTMTACT

Table name

Treatment to Activity Mapping Table

Functional description

Table TRTMTACT is used by the central control (CC) and provides a translation from an extended treatment to an R2 activity. It is used when an office recognizes that a treatment must be applied to a call.

This table is only required for incoming R2 multifrequency-compelled (MFC) signaling trunks.

If the treatment translates into a non-nil activity, then a backwards signal is sent to a previous office, indicating the type of treatment to apply. The treatment is not connected in this office.

If the extended treatment translates into the nil activity, then the treatment is connected at this office. Previous offices are instructed to connect speech.

Each protocol has one set of TRTMTACT tuples datafilled to provide the mappings required. A maximum of 256 valid treatments are allowed.

For related information, refer to table ACTTRTMT for a list of R2 activities.

Data ll sequence and implications

There is no requirement to datafill other tables prior to table TRTMTACT, however, if the operating company intends to supply trunk access, the following tables must be datafilled first.

- ACTCTL
- ACTSIG
- R2PROT

Table size

0 to 3840 tuples

Table size is dynamically determined by the number of tuples added. Up to 256 tuples can be datafilled for each treatment-to-activity mapping. Up to 15 mappings can be defined in each office.

Data II

The following table lists datafill for table TRTMTACT.

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
INDEX		see subfields	*Treatment index* This field consists of subfields TRTNAME and TRTMT.
	TRTNAME	vector (up to 8 characters)	*Treatment group name* Enter the treatment group name that associates a trunk group with a range of treatments or treatment group. This field is used by table TRKGRP on MTR and OPR trunk types, and TRKSGRP on FST trunk types. Up to 16 names can be entered, including the name NIL.
	TRTMT	alphanumeric (up to 4 characters)	*Treatment* Enter the name of the extended treatment. The full list of extended treatments is valid. Reference table TMTCNTL for a full list of extended treatment types and their descriptions.
ACTIVITY		CONGES-TION SPARE_-TRTMT 1SPARE_-TRTMT2 SUB_BUSY SUB_LBUSY SUB_OUT_-ORD SUB_TBUSY SUB_XFRD TEMP_OUT-_ORD UNASSIGN-_NUM	*R2 activity* Enter the type of treatment activity. Any entry outside the range indicated for this field is invalid. Reference table ACTCTL for entry descriptions.

TRTMTACT (end)

Data ll e xample

The following example shows sample datafill for table TRTMTACT.

MAP display example for table TRTMTACT

```
INDEX                  ACTIVITY
TRTNAME    TRTMT
_____________________________________________________________

MORTRTT    BUSY        SUB_BUSY
```

TRTMTMFC

Table name

Extended Treatment to MFC Activity Translation Table

Overview

The treatment and multifrequency compelled (MFC) activity translation tables provide translations from treatments to activities and activities to treatments.

If possible, when a treatment must be applied to a call, a backwards signal is sent so that one of the previous offices can connect the treatment.

Table TRTMTMFC

Table TRTMTMFC is a read-only table. Once it is determined that a call is to be routed to a treatment, the switch uses table TRTMTMFC to attempt to convert the treatment into a backwards signal. Table TRTMTMFC is indexed with the treatment to be applied, and returns an activity corresponding to a backwards signal.

- If the activity returned is not NILACT (no activity), the corresponding backwards signal is sent out to a previous office. Once the incoming trunk circuit sends the backwards signal indicating a treatment is to be applied, it waits for a clear forward signal from a previous office before idling.
- If the activity returned is NILACT, the treatment must be applied at this office. Before applying the treatment, this office ensures that the A3 and KB backwards signals have been sent to previous offices. For toll connections, a KB1 signal is sent. For local connections, a KB6 is sent. These KB signals indicate to the previous office that the called subscriber is idle. This is done so that all previous offices back to the originating local have connected a speech path.

Table MFCTRTMT

If an outgoing MFC trunk (not in end-to-end mode) receives one of the backwards signals (A4, A5, B2, B3, B4, or B5), the DMS must convert that signal to a treatment. This is done through table MFCTRTMT, which is indexed with the activity that corresponds to the received signal. Once the table is indexed, the appropriate treatment can be determined.

Once the treatment is determined, and if the originating agent of the call is also an MFC trunk, the DMS uses the same logic as described above to determine whether the treatment is applied locally or a signal is sent to a previous office instructing it to apply the treatment.

TRTMTMFC (continued)

Once the treatment is determined, and if the originating agent of the call is not an MFC trunk (for example, a line or DP trunk), the treatment is applied locally to the originating agent.

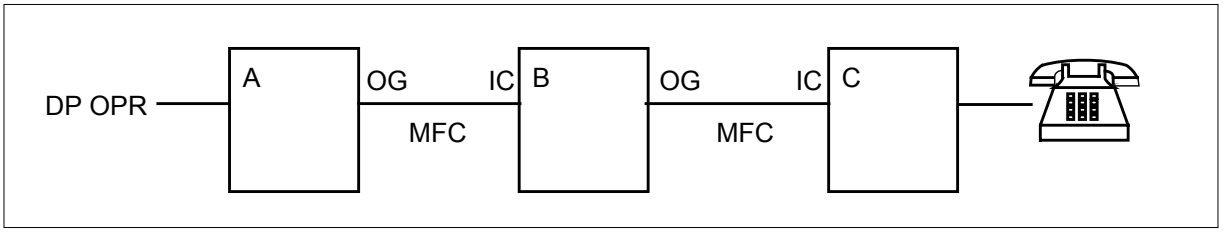
In either case, the outgoing MFC trunk sends a clear forward and return to its idle state.

> ***Note:*** The signals KB=2 and KB=3, indicating subscriber local busy and subscriber toll busy respectively, are only valid as Group B backwards signals on toll or test connections. If table TRTMTMFC translates a treatment to either of these signals, but the call is either in its Group A backwards phase or is a local connection, the congestion signal (A4 or B4) is sent backwards instead.

Treatment provisions for trunk offering

In order to provide trunk offering from operator boards, an exception to the above treatment logic is made. If an outgoing MFC trunk receives a KB=2 (sub_lbusy) or KB=3 (sub_tbusy) backwards signal, and the KD forward signal is KD=1 (semi-automatic call from toll operator), the outgoing MFC trunk simply connects speech. It does not clear forward. If the originating agent is a dial pulse (DP) (or multifrequency pulse [MFP]) trunk, the incoming trunk connects speech and sends a subscriber busy line signal backwards. If the originating agent is an MFC trunk, the incoming trunk propagates the KB signal backwards and then connects speech. See the following figure.

Treatments and trunk offerings



In this example, an operator is connected to office A by a DP operator trunk circuit. The trunks between office A and office B, as well as the trunks between office B and office C are MFC, trunks.

The operator has called the subscriber at office C (KD=1 was sent from office A to office C). If the subscriber is busy, then either KB=2 or KB=3 backwards signal is sent from office C to office B. The outgoing MFC trunk at office B receives the subscriber busy KB signal. Since KD=1 on this call, the subscriber busy KB signal is sent back to office A. The incoming and outgoing MFC trunks at office B connect speech.

The outgoing MFC trunk at office A receives the subscriber busy KB signal. Since KD=1 on this call, a subscriber busy line signal is sent back on the incoming DP trunk to the operator board. Both the incoming DP trunk and outgoing MFC trunk connect speech.

If the mode of break-in at office C is manual, then besides sending the subscriber busy KB signal back to office B, a busy tone is also applied to the incoming MFC trunk at office C. If the mode of break-in is automatic, no tone is applied. In this instance, the incoming MFC trunk immediately breaks into the subscriber's call.

Functional description

The extended treatment to MFC (TRTMTMFC) activity translation table provides a translation from an extended treatment to an MFC activity. This table is only required for incoming R2 MFC signaling trunks.

If the treatment translates into a non-NIL activity, a backwards signal is sent to the previous office, indicating the type of treatment to apply. The treatment is not connected in this office.

If the extended treatment translates into NILACT (nil activity), the treatment is connected at this office. All offices preceding this office are instructed to connect speech.

Default value

The default value for tuples in table TRTMTMFC is NILACT. When table TRTMTMFC is being datafilled, if a particular treatment is not entered into the table, the activity that corresponds to that treatment is NILACT.

Data ll sequence and implications

Table TMTCNTL must be datafilled before table TRTMTMFC.

Table size

1 to 256 tuples

One tuple is allocated for each extended treatment defined in an office.

TRTMTMFC (continued)

Data II

The following table lists datafill for table TRTMTMFC.

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
TREATMNT		alphanumeric (4 characters)	*Extended treatment* Enter an extended treatment to be applied for the backwards signal. See table TMTCNTL, subtable TREAT, for the list of treatments.
ACTIVITY		CONFUSION CONGES-TION DN-CHANGED INTLCONG LOCAL-CONG NILACT NUM--CHANGE OUTOFORDSUB SBUSY SUBSICP SUBSSEIZ TIMEOUT UNALLC-NVM	*Status activity* Enter the activity corresponding to a backwards signal. • Enter CONFUSION (confusion) • CONGESTION (congestion) • DNCHANGED (directory number changed) • INTLCONG (international congestion) • LOCALCONG (local congestion) • NILACT (no activity) • NUMCHANGE (number change) • OUTOFORD (out of order) • SUBSBUSY (subscriber busy) • SUBSICP (subscriber intercept) • SUBSSEIZ (subscriber seize) • TIMEOUT (time out) • UNALLCNVM (unallocated) The default is NILACT.

Data ll e xample

The following example shows sample datafill for table TRTMTMFC.

MAP display example for table TRTMTMFC

```
TREATMNT      ACTIVITY
_____________________________________________________________

   BUSY     CONGESTION
```

TSTAB

Table name

Table Data Synchronizer Table

Functional description

Table TSTAB is used for the synchronization of table data between the DMS and an operation, administration and maintenance (OAM) database. The process works in both directions, that is, from the DMS to the OAM database, and from the OAM database to the DMS.

Data changes made on the DMS that are captured by the DMS journal file, are captured by the data distributor and are then synchronized with the OAM database.

Data changes made on the OAM database are sent to the DMS. If data inconsistency occurs, the DMS can reject the data from the OAM processor. If this occurs, failure messages are sent from the DMS to the OAM processor. At this point, the OAM processor begins a synchronization routine and deletes the invalid data from the OAM database.

Table changes made using the command interpreter (CI) command JF APPLY (journal file apply) are not synchronized.

Data ll sequence and implications

Table CUSTAB must be datafilled before table TSTAB.

Table size

0 to 2048 tuples

Data store is dynamically allocated each time a tuple is added to table TSTAB.

The maximum number of tuples in table TSTAB is tied directly to the size of table CUSTAB.

Data fill

The following table lists datafill for table TSTAB.

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
TABNAME		alphanumeric (1 to 16 characters)	*Table name*Enter a table name that is used by the table data synchronization process.

Data fill example

The following example shows sample datafill for table TSTAB.

MAP display example for table TSTAB

```
TABNAME
_____________________________________________________________

CLLI
```

TSTCCT

Table name

Test Circuit Table

Functional description

Table TSTCCT defines the location of each test access network (TAN) test circuit.

Data II sequence and implications

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

Table size

Memory is automatically allocated for a maximum of 256 TAN test circuits.

Data II

The following table lists datafill for table TSTCCT.

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
INDEX		0 to 255	*Index* Enter the number assigned by the operating company to a particular test access network (TAN) test circuit (NT5X02AA).
MODTYPE		TAN	*Module type* Enter the type of module on which the TAN test circuit (NT5X02AA) is assigned. Entries outside the range indicated for this field are invalid.
MODNO		0 to 2047	*Module number* Enter the module number on which the TAN test circuit (NT5X02AA) is assigned.
MODCKTNO		0 to 15	*Module circuit numbe* *r*Enter the software card location of the TAN test circuit (NT5X02AA).

Data ll e xample

The following example shows sample datafill for table TSTCCT.

MAP display example for table TSTCCT

```
INDEX     MODTYPE MODNO MODCKTNO
_____________________________________________________________

    0         TAN     0       15
```

TSTCCTIX

Table name

Test Circuit Index Table

Functional description

Table TSTCCTIX relates the trunk test position (TTP) number and the test trunk circuit to the index in table TSTCCT.

Data II sequence and implications

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

Table size

Memory is automatically allocated for a maximum of 16 TTPs and 16 test circuits.

Data II

The following table lists datafill for table TSTCCTIX.

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
TCCTINDX		see subfields	*Test circuit index* This field is the key to the table and consists of subfields TTPNO and NINGRP.
	TTPNO	0 to 15	*Trunk test position number* Enter the number assigned to the particular trunk test position (TTP) that is to be used to test.
	NINGRP	0 to 15	*Number in group* Enter the number of the test circuit that is to be assigned to the specific TTP.
INDEX		0 to 255	*Index* Enter the number assigned by the operating company to a particular test access network (TAN) test circuit (NT5X02AA).

Data ll e xample

The following example shows sample datafill for table TSTCCTIX.

MAP display example for table TSTCCTIX

```
TCCTINDX      INDEX
_____________________________________________________________

    1   0          0
```

TSTEQUIP

Table name

Test Equipment Table

Functional description

Table TSTEQUIP stores all provisioning data for stand-alone test equipment. Each TSTEQUIP tuple consists of an index field and a field that contains test equipment provisioning information. Applications that require datafill in this table specify their datafill requirements by binding their tuple definition to the table TSTEQUIP interface.

Data ll sequence and implications

Table LNINV must be datafilled before table TSTEQUIP.

Table PMLOADS must be datafilled before table TSTEQUIP.

Table TSTEQUIP must be datafilled before table MTAHORIZ if enhanced service test unit (ESTU) datafill is required. If an ESTU is not datafilled in table TSTEQUIP, then the ESTU is not available as test equipment for the switch and cannot be used to test subscriber lines.

Table TSTEQUIP is only accessible to the table editor if one or more stand-alone test equipment packages are in the switch. If no test equipment packages are in the switch, the table editor responds to an attempt to access the table by indicating that table TSTEQUIP is an unknown table.

Table size

0 to 256 tuples

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

Data II

The following table lists datafill for table TSTEQUIP.

Field descriptions (Sheet 1 of 3)

Field	Subfield or refinement	Entry	Explanation and action
EQINDEX		see subfield	*Equipment index* This field consists of subfield EQINDEX.
	EQINDEX	0 to 255	*Equipment index* Enter a unique index number for each test equipment tuple.
EQINFO		see subfield	*Equipment information* This field consists of subfield EQTYPE and its refinements.
	EQTYPE	alphanumeric (1 to 32 characters)	*Equipment type selector* Enter the symbol corresponding to the test equipment feature package. Symbols are added to the range of this field when each test equipment feature package is loaded into the DMS switch. ESTU is the only entry for this field. Enter ESTU for enhanced service test units and datafill refinements ESTUNUM, FRTYPE, FRNO, SHPOS, FLOOR, ROW, FRPOS, DIALIN, and CSIF.
	ESTUNUM	0 to 254	*ESTU number* Enter a unique identification number for each ESTU. An entry value greater than 254 is not valid for this field.
	FRTYPE	alphanumeric (1 to 5 characters)	*Frame type* Enter the symbolic name corresponding to the frame type. The recommended entry value is MIS (miscellaneous).
	FRNO	0 to 511	*Frame number* Enter a numeric value to specify the ESTU frame number.

TSTEQUIP (continued)

Field descriptions (Sheet 2 of 3)

Field	Subfield or refinement	Entry	Explanation and action
	SHPOS	0 to 77	*Shelf position* Enter a numeric value to specify the position of the ESTU on the shelf.
	FLOOR	0 to 99	*Floor position* Enter a numeric value to specify the position of the ESTU frame on the floor.
	ROW	A to Z or AA to ZZ (except I, O II, and OO)	*Row position* Enter one- or two-character value to specify the row on the floor where the ESTU frame is located.
	FRPOS	0 to 99	*Frame position* Enter a numeric value to specify the position of the ESTU frame.
	DIALIN	vector of up to 15 digits	*Dial-in number* Enter the directory number for ESTU dial-in support.
	CSIF	LINE	*C-side interface selector* This refinement specifies the C-side interface selector for the ESTU. Enter LINE for a plain ordinary telephone service (POTS) line connected to a dedicated ESTU port and datafill refinement LEN.
	LEN	see subfields	*Line equipment number* This field defines the physical location of the equipment that is connected to a specific telephone line. Because field LEN is common to many tables, it is documented in a single section to avoid unnecessary duplication. Refer to section “Common entry field LEN" for a complete description of field LEN and associated subfields. Field LEN consists of subfields SITE, FRAME, UNIT, DRAWER or LSG, SHELF, SLOT, and CIRCUIT.

Field descriptions (Sheet 3 of 3)

Field	Subfield or refinement	Entry	Explanation and action
	LINK	DMHSM	*Control link* DM is for digital modem. HSM is for high speed modem.
	LOADINFO	see subfields	*Load information* This field consists of subfields MODULE and LOAD. Two load information entries can be made in a tuple.
	MODULE	alphanumeric (1 to 8 characters)	*Module name* The name of the module in an installed system. An ESTU can have EMM and ITM modules. EMM is for ESTU master module.ITM is for ISDN test module.
	LOAD	alphanumeric (1 to 8 characters)	*Load name* The load name of the module.

Data ll e xample

The following example shows sample datafill for table TSTEQUIP.

In this example, the tuple defined at index 100 specifies that ESTU 200 is located on MIS frame 4 at shelf position 4, fourth floor, row A, and frame position 9. The C-side interface is LINE, with the dedicated port connected to POTS line HOST 00 0 00 00. The link is by high speed modem. There is an EMM and ITM module in the installed ESTU system.

MAP display example for table TSTEQUIP

```
  EQINDEX
                                                                  EQINFO
_____________________________________________________________________________

      100
ESTU 200  MIS  4  4  4  A  9  $ LINE HOST 00 0 00 00 HSM (EMM EMMAB08F)
(ITM ITMAB05D) $
```

TSTEQUIP (end)

Table history

NA002

ADDED the LINK, LOADINFO, MODULE, and LOAD subfields.

BCS35

Table TSTEQUIP was introduced.

TSTLCONT

Table name

Test Line Control Table

Functional description

Table TSTLCONT lists the index (TSTNOIND) within the range of 000 to 164 assigned to each of the test line number (TLNOS) subtables.

This table is not used when test calls are performed on common channel interoffice signaling (CCIS) trunks. However, even if the office is entirely CCIS, this table must be datafilled for testcall software to function.

Data ll sequence and implications

Refer to table TSTLCONT.TLNOS

Table size

Refer to table TSTLCONT.TLNOS

Data ll

Refer to table TSTLCONT.TLNOS.

Data ll e xample

Refer to table TSTLCONT.TLNOS.

MAP display example for table TSTLCONT

```
TSTNOIND   TLNOS
_____________________________________________________________

        0 (   27)
        1 (    0)
        2 (    0)
        3 (    0)
```

TSTLCONT.TLNOS

Table name

Test Line Number Subtable

Functional description

Subtable TLNOS lists the test line names and their associated codes. Each subtable can be shared by one or more outgoing or two-way trunk groups.

This subtable is not used if test calls are performed on common channel interoffice signaling (CCIS) trunks. However, even if the office is entirely CCIS, this subtable must be datafilled in order for test call software to function.

The following table lists the test line names and their standard codes. The codes listed under Local can be different for different switching units.

Test lines (Sheet 1 of 2)

		Test line code	
Description	**Name**	**DMS-300 or Toll**	**Local**
Balance termination	T100	100	1191
Test board communication line	T101	101	1005
Milliwatt supply	T102	102	1111
Signal supervisory	T103	103	-
Transmission test and noise check	T104	104	xxxx
Transmission test line	T105	105	xxxx
Bit error rate test line	TB08	108	xxxx
Short circuit	TCLC	-	1192
E&M lead test line	TE_M	notes	notes
International signal supervisory line	TISS	163	-

Note 1: xxxx = any four-digit number

Note 2: The E&M lead test and the repeat two tests terminate on the 103 test line in a toll office.

Note 3: The E&M lead test and the repeat two tests terminate on the non-synchronous or synchronous test line in a local office.

Test lines (Sheet 2 of 2)

		Test line code	
Description	**Name**	**DMS-300 or Toll**	**Local**
Looparound port 1	TLPA	-	1194
Looparound port 2	TLPB	-	1195
Non-synchronous test	TNSS	-	1120
Open circuit	TOPC	-	1193
Repeat two long delay	TR2L	notes	notes
Repeat two short delay	TR2S	notes	notes
Synchronous test	TSYN	-	1181
ATME-2 type A responder	TYPA	444	-
ATME-2 type B responder	TYPB	445	-
ATME-2 type C (busy flash) responder	TYPC	446	-

Note 1: xxxx = any four-digit number

Note 2: The E&M lead test and the repeat two tests terminate on the 103 test line in a toll office.

Note 3: The E&M lead test and the repeat two tests terminate on the non-synchronous or synchronous test line in a local office.

The following table shows the standard DMS test name and its subset test names. Only the standard DMS test name is entered in field TESTLINE in subtable TLNOS.

Standard DMS test names (Sheet 1 of 2)

STD DMS test name	Subset test names
T100	N100, S100
T101	(not a test line, only a communication line)
T102	
T103	

TSTLCONT.TLNOS (continued)

Standard DMS test names (Sheet 2 of 2)

STD DMS test name	Subset test names
T104	S104
T105	TL0N, TL0S, TL05, T164, TL6N, TL6S, TL65, TS05, TS65, T5AS, T5AT, T50L, T56N, T5LB, TSBS, TSBT, T5SB, T5BS, TERL, T5LH
TART	(Turkish loads)
TB08	TB18 (only used by automatic trunk test)
TCLC	
TE_M	
TISS	(International loads)
TLPA	
TLPB	
TNSS	
TOPC	
TR2L	
TR2S	
TSYN	
TYPA	TA01, TA02, TA03, TA04, TA05, TA07, TA08, TA09, TA10, TA11, TA14, TA15, TA16, TA17, TA18, TA20, TA21, TA22, TA23, TA24
TYPB	TA06, TA12, TA19, TA25
TYPC	TA13

Test lines for ISUP trunks

ISDN user part (ISUP) trunks use Common Channel Signaling 7 (CCS7) for all signaling requirements. The ISUP/CCS7 message-based protocol contains specific details on how to handle test line tests for ISUP trunks.

In the CLLIMTCE table record for ISUP trunks, the entry in field TSTNOIND is changed to agree with the entry in field TSTNOIND in table TSTLCONT,

after the entry for ISUP trunks is added to table TSTLCONT and subtable TLNOS.

Fields TESTLINE, TLNUMBER, and TL_MFC_OG_SIG in subtable TLNOS must be datafilled as shown in the following table to follow the ISUP protocol according to the T1X1 specification.

ISUP protocol data II

TESTLINE	TLNUMBER	TL_MFC_OG_SIG
T100	100	N
T102	102	N
T101	101	N
T104	104	N

Test lines for CCITT 7 ISUP trunks in a DMS-300

The CCITT-recommended digits for the T100 test line are 64. To use the T100 test line on a CCITT trunk, the entry in field TSTNOIND (table CLLIMTCE) must point to subtable TSTLCONT.TLNOS, which translates the T100 test line code to 64. The required datafill for fields TESTLINE, TLNUMBER, and TL_MFC_OG_SIG are shown in the following table.

CCITT 7 ISUP protocol data II

TESTLINE	TLNUMBER	TL_MFC_OG_SIG
T100	64	N

Originating 105 test line

Each transmission test unit (TTU) circuit consists of a control signal generator card and a digital filter. The following table lists pairs of interconnected cards that can be provisioned together to form a TTU for the listed test procedure type.

Transmission test unit pairs (Sheet 1 of 2)

Control signal generator	Digital filter	Test procedure type
NT2X47AA	NT2X56AA	ATME2 (rated MD)
NT2X47AB	NT2X56AA	ATME2 (DMS-300 switching units)

TSTLCONT.TLNOS (continued)

Transmission test unit pairs (Sheet 2 of 2)

Control signal generator	Digital filter	Test procedure type
NT2X47AC	NT2X56AB	ATME2 (104 test line) and ATMS (105 test line)
NT2X47AD	NT2X56AB	ALT (automatic line testing) and ATMS (105 test line)
NT2X47BA	NT2X56BA	International (A-law) ATME and ATMS

Originating 105 test line - new tests provided with NT2X47AD

The following table shows the new tests provided by the NT2X47AD card.

New tests for originating 105 test line

Test	Description of test
ERL	Echo return loss measurement with quiet termination
ERLSC	Echo return loss self-check with quiet termination
SRL	Low frequency singing return loss measurement with quiet termination
SRLSC	Low frequency singing return loss self-check with quiet termination
SHI	High frequency singing return loss measurement with quiet termination
SHISC	High frequency singing return loss self-check with quiet termination

Note: For additional information on DMS tests, see the *Trunks Maintenance Guide,* 297-1001-595.

Data II sequence

There is no requirement to datafill other tables prior to table TSTLCONT.TLNOS.

Data II

The following table lists datafill for table TSTLCONT.TLNOS.

Field descriptions (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
TESTLINE		alphanumeric (4 characters)	*Test line name* Enter the standard DMS test line name. Use the command interpreter (CI) command RANGE to obtain the standard DMS test line codes. See the table ”Test lines” in section “Functional description” for a description of the test lines.
TLNUMBER		0 to 9, B to F (up to 12 characters)	*Test line number* If the switching unit is other than DMS-300, enter the digits of the test line number that are to be outpulsed (not including the prefix digits from table CLLIMTCE). If the switching unit is DMS-300, with a signaling system other than CCIS7, enter KP (key-pulse), the digits of the test line number (maximum 12) that are to be outpulsed, and ST (signaling terminal). KP1 is represented by entry D; KP2 is represented by entry E; ST is represented by entry F. The first digit position in the test line number following KP, for No.6 signaling trunks, is the calling party's category indicator (CPCI) with the following values: Entry — Decimal value 1 to 9 — 1 to 9 0 — 10 B — 11 C — 12 D — 13 E — 14 F — 15

TSTLCONT.TLNOS (continued)

Field descriptions (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
			If switching unit is DMS-300, with a CCITT 7 signaling system, the recommended value for a T100 test line is 64. ***Note:*** The test line number entered in this field applies to the test name entered in field TESTLINE as well as all subset test names associated with the test name as listed in a table, section “Standard DMS test names”. For example, if T105 is entered as the test line name in field TESTLINE, the test line number entered in field TLNUMBER will apply to the T105 test as well as all its subset tests (such as T164 and TERL).
TL_MFC_OG_ SIG N		N	*Testline multifrequency compelled signal* This field is used to test for multifrequency compelled (MFC) trunks. Enter N.

Data ll e xample

The following example shows sample datafill for table TSTLCONT.TLNOS.

MAP display example for table TSTLCONT.TLNOS

```
TESTLINE            TLNUMBER TL_MFC_OG_SIG

_____________________________________________________

    T100                1191             N
    T102                1111             N
    TSYN                1181             N
    TLPA                1194             N
    TLPB                1195             N
```

The example specifies the following data:

- Test line names and test line codes for the trunk group are listed in subtable TLNOS #0 (see table CLLIMTCE, field TSTNOIND).
- Table Table , "Example digits" on page -699 shows the digits that are automatically outpulsed for the specified test lines (see table CLLIMTCE, field PRFXDIGS, and subtable TSTLCONT.TLNOS, field TLNUMBER).

Example digits

		Digits outpulsed	
Description	**TESTNAME**	**PFXDIGS**	**TLNUMBER**
Balance termination	T100	8	+ 1191
Milliwatt supply	T102	8	+ 1111
Synchronous test	TSYN	8	+ 1181
Looparound port 1	TLPA	8	+ 1194
Looparound port 2	TLPB	8	+ 1195

TSTXCON

Table name

Test Cross Connections Table

Functional description

Table TSTXCON acts as a look-up table to define the relationship between MAP (maintenance and administration position) terminal jacks and headsets, and external trunk numbers (EXTRKNM). Table TSTXCON uses the terminal descriptions provided in table TERMDEV, using field TERMDES as the key. The EXTRKNMs are selected from the datafill in table TRKMEM. Jack, headset, and EXTRKNM connections are made from the MANUAL sublevel of the Trunk Test Position (TTP) level of the MAP.

Data ll sequence and implications

The following tables must be datafilled before table TSTXCON:

- TERMDEV
- TRKMEM

Table size

0 to defined number of tuples

Table size and memory size are defined by the maximum number of MAP devices entered in table TERMDEV.

Data II

The following table lists datafill for table TSTXCON.

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
TERMDES		alphaumeric (up to 8 characters)	*Terminal designation* Enter the MAP (maintenance and administration position) terminal device name. The entry must be a valid device name datafilled in field TERMDES in table TERMDEV. This is the key field.
JKHSETAB		see subfields	*Jack and headset A&B trunk combinations* This field consists of subfields TRKNAME and EXTRKNM. A vector of up to 24 multiples of jack (or headset) and external trunk number combinations can be datafilled. If less than 24 multiples are required, end the list with a $ (dollar sign).
	TRKNAME	JACK or HSET	*Trunk name* Enter the name of the trunk test connection. Entries are a vector consisting of the type of test connection (JACK or HSET) followed by the external trunk number. Datafill subfield EXTRKNM to complete each combination.
	EXTRKNM	1 to 9999	*External trunk number* Enter the external trunk number associated with the trunk name datafilled in subfield TRKNAME to complete each combination. Entries outside this range are invalid.

TSTXCON (end)

Data ll e xample

The following example shows sample datafill for table TSTXCON.

MAP display example for table TSTXCON

```
  TERMDES

JKHSETAB
_____________________________________________________________________
   MAP
(HSET    4)$
```

Table history

BCS36

Field JKHSETAB was changed to accept up to 24 multiples.

BCS34

Table TSTXCON was introduced.

TTANTTPG

Table name

Test Access Network Trunk Test Position Group Table

Functional description

Table TTANTTPG defines the relationship between the trunk test position (TTP) level of the MAP (maintenance and administration position) and the dedicated test trunk location. The test trunk is associated with, and dedicated to, a given TTP. The test trunk is used to supply line signaling tones and is the means by which multifrequency (MF) tones can be injected into a connection. A two-way CCITT No.5 trunk can be used to fill the requirements of the dedicated test trunk.

Data II sequence and implications

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

Table size

Memory is automatically allocated for a maximum of 16 TTPs.

Data II

The following table lists datafill for table TTANTTPG.

Field descriptions (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
TTPNO		0 to 15	*Trunk test position number* Enter the number assigned to the particular trunk test position (TTP) that is to be tested.
TMTYPE		T8A	*Trunk module type* Enter the type of trunk module to which the dedicated test trunk has been assigned. Enter T8A for a trunk module with 120 pairs (eight-wire circuits) of conductors. Entries outside the range indicated for this field are invalid.
TMNO		0 to 2047	*Trunk module number* Enter the trunk module number to which the dedicated test trunk has been assigned.

TTANTTPG (end)

Field descriptions (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
TMCKTNO		0 to 29	*Trunk module circuit number* Enter the circuit number assigned to the dedicated test trunk.
RELPT		0 to 2	*Relay point* Enter the relay point number of the test circuit (NT5X02AA) to which the TTP is to be assigned.

Data ll e xample

The following example shows sample datafill for table TTANTTPG.

MAP display example for table TTANTTPG

```
TTPNO     TMTYPE TMNO
                       TMCKTNO    RELPT
_____________________________________________________________

     0        T8A     4
                             20        0
```

TTL4

Table name

Terminating Test Line #4 Table

Functional description

Table TTL4 defines up to a maximum of eight sets of values for use by the 104 test line. The following information is specified by each of the eight sets of values:

- the reference transmission test tone level
- the near-to-far-end transmission noise threshold level
- whether answer supervision is returned to the near end

Data II sequence and implications

There is no requirement to datafill other tables prior to table TTL4.

Table size

Table TTL4 has a fixed length of eight entries.

Data II

The following table lists datafill for table TTL4.

Field descriptions (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
INDEX		numeric (0 to 7)	*Index* Enter the index into table TTL4.
TTLEV		numeric (0 to 100)	*Transmission test tone level* Enter the reference transmission test tone level in increments of 0.1 decibel (dB).

TTL4 (end)

Field descriptions (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
NOISELEV		numeric (0 to 50)	*Noise level* Enter the near-to-far-end transmission noise level in increments of 1 decibel above reference noise (dBrn) with C-message weighting (dBrnc).
ANSSUPRV		Y or N	*Answer supervision* Enter Y (yes) if answer supervision is required to return to the near end. Otherwise, enter N (no). Any entry outside the range indicated for this field is invalid.

Data ll e xample

An example of initial datafill for table TTL4 is shown below. This example has been datafilled in accordance with the following requirements:

- For index 0, the transmission test tone level is 0 dB, the near-to-far-end transmission noise level is 41 dBrnc, and answer supervision is returned to the near end.
- For index 1, the transmission test tone level is 0 dB, the near-to-far-end transmission noise level is 44 dBrnc, and answer supervision is not returned to the near end.

MAP display example for table TTL4

```
INDEX     TTLEV      NOISELEV   ANSSUPRV
_____________________________________________________

    0         0            41          N
```

TVDSTRKS

Table name

Trunk Verification from Designated Station Trunks Table

Functional description

Trunk verification from designated station (TVDS) allows maintenance personnel to audibly verify transmission quality on selected trunks, using a telephone to access specific trunks originating and terminating on a Meridian SL-100 private branch exchange (PBX).

Feature NTX717AB (IBN Trunk Verification From Designated Station) can be used from any directly-terminated station (2500 set, electronic telephone set [ETS]), or remotely by direct system inward access (DISA), or a subsequent invoking of TVDS on an incoming trunk. Feature TVDS can also be used from a dial-pulse telephone, but without tandeming, or by way of DISA.

The TVDS feature can select and outpulse on a number of outgoing and two-way trunk types using either dial pulse (DP), digit tone (DT), or digit tone multifrequency (DTMF) signaling. The trunk group types supported are: IT, TO, T2, IBNTO, and IBNT2. See table TRKGRP. Not all trunk types on the Meridian SL-100 are supported.

Table TVDSTRKS restricts TVDS access to trunk-specified groups. A user can only test trunk groups that are associated with their customer group in table TVDSTRKS.

In regular call processing, customer group screening on trunks is done through translations, such as line screening codes. Feature TVDS bypasses this kind of screening and uses table TVDSTRKS to associate permissible trunk groups with customer groups.

The key to table TVDSTRKS consists of the customer group and the trunk group common language location identifier (CLLI). The only other data field is the three-digit access code for the trunk group CLLI. This access code is dialed by the user if the TVDS feature prompts with a tone.

A special customer group value of ALL can be entered allowing any customer group to dial the specified access code and gain access.

For access to the TVDS feature on an network class of service (NCOS)-basis, the TVDS access code must be datafilled in an NCOS preliminary translator defined for the appropriate customer-designated NCOS. A 2500 set or ETS assigned this NCOS can have originating access to the TVDS feature.

TVDSTRKS (continued)

The TVDS feature can also be assigned on a customer-group basis. If there is not a NCOS limitation requirement, the TVDS activation code can be datafilled in table IBNXLA against the customer feature translator to identify the TVDS feature activation code. A 2500 set or ETS assigned to this customer group then has originating access to the TVDS feature.

Data II sequence and implications

The following tables must be datafilled before table TVDSTRKS:

- CUSTENG
- CLLI
- CUSTHEAD

Access codes are unique for each customer group.

Access codes can be reused between customer groups.

An access code can be datafilled for a specific customer group or for all customer groups. During the TVDS call, the dialed access code is first checked against the user's customer group. If it is not found, the ALL group is also checked.

Trunk CLLIs are sorted alphabetically by customer group.

TVDS users are only able to access trunks that are datafilled in table TVDSTRKS for their customer group or the trunks that are datafilled as ALL.

Table size

0 to 999 tuples

Data fill

The following table lists datafill for table TVDSTRKS.

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
KEVINV		see subfields	*Key inventory* This field consists of subfields CUST_GROUP and CLLI.
	CUST_ GROUP	alphanumeric (1 to 16 characters) orALL	*Customer group* Enter the customer group name from table CUSTENG, or enter ALL for all customer groups.
	CLLI	alphanumeric (1 to 16 characters)	*Common language location identifier* Enter the common language location identifier (CLLI) from table CLLI.
ACCESS		0 to 999	*Trunk verification from designated station access data* Enter the access code that corresponds to the CLLI.

Data fill example

The following example shows sample datafill for table TVDSTRKS.

In the example, customer group ABC has access to trunk group WXYZ.

MAP display example for table TVDSTRKS

```
                              KEYINF ACCESS
_____________________________________________________________

                ABC             WXYZ    312
```

Table history

BCS36

Field TVDS_KEY was changed to KEYINF.

UCDGRP

Table name

Uniform Call Distribution Group Table

Functional description

Uniform call distribution (UCD) on Meridian 500/2500 stations is an option adaptable to operate in Integrated Business Networks (IBN). UCD option is provided individually to each customer group.

A UCD group can contain a primary UCD directory number (DN) and up to four supplementary UCD directory numbers. Each supplementary DN has associated with it a call priority, in the range 0 to 3 (0 is the highest), which indicates the priority of all calls terminating on that DN. Calls of a higher priority are answered by the customer group's agents before calls of a lower priority.

The primary DN has a priority for toll calls associated with it and toll calls terminating on that DN assume that priority. Local calls receive a datafilled default priority.

Incoming calls terminating on any of the five DNs in a UCD group are offered to the agent who has been idle for the longest period of time. If no free agent exists, calls are queued (based on priority) into an appropriate call queue for that UCD group.

Calls that are queued can be provided with the announcement or music datafilled in table AUDIO for the chosen audio group datafilled under feature BV0433 (Uniform Call Distribution from Queue) (UCDQ). If the number of calls queued equals the value specified in field MAXCQSIZ, or the first call in the queue has waited longer than the time specified in field MAXWAIT, subsequent calls are diverted to the overflow route specified in field THROUTE.

If the queue status lamp (QSL) option is specified for a UCD group, a visual indication of the waiting time is provided for the first call in the incoming call queues. The visual indication is updated by a background audit process at intervals specified by parameter UCD_QSL_AUDIT_INTERVAL in table OFCSTD. The visual indication consists of lighting one of three lamps connected to three signal distribution (SD) points (SDPOINT1, SDPOINT2, SDPOINT3). If the values in fields MAXCQSIZ and MAXWAIT are 0 (zero), then all three lamps are turned off. If both values are not 0 and there is no incoming call queued, the three lamps are turned off. The following table shows the status of the SD points for other combinations of values.

If the wait time of the first call is less than or equal to the audit interval, only the first lamp assigned to SDPOINT1 is turned on. If the wait time of the first call has exceeded the audit interval, but is less than or equal to twice the audit interval, SDPOINT2 is turned on and SDPOINT1 is turned off. If the wait time is more than twice the audit interval, SDPOINT3 is turned on and SDPOINT1 and SDPOINT2 are turned off.

SD points, wait times, and audit intervals

				Status of SD points		
MAXCQSIZ value	**MAXWAIT value(s)**	**Audit internal**	**Time on queue(s)**	**1**	**2**	**3**
0	0	30	0	Off	Off	Off
0	45	30	0	Off	Off	Off
10	0	30	0	Off	Off	Off
10	45	30	0	Off	Off	Off
10	45	30	20	On	Off	Off
10	45	30	50	Off	On	Off
10	45	30	80	Off	Off	On
20	80	30	0	Off	Off	Off
20	80	30	25	On	Off	Off
20	80	30	55	On	Off	Off
20	80	30	85	Off	Off	On
15	20	20	0	Off	Off	Off
15	20	20	25	On	Off	Off
15	20	20	65	Off	On	Off
15	20	20	105	Off	Off	On

There are four incoming call queues for each UCD group, each with a different priority (0 to 3). Calls terminating on a UCD DN are placed, in the order of their arrival, into one of the call queues belonging to the UCD group that owns the particular UCD DN. Calls of a higher priority are answered before calls of lower priority. This can result in calls in the lower priority queues staying

UCDGRP (continued)

unanswered by an agent for an indefinite period of time. A timer causes a call in a lower priority queue to be shifted up to a higher priority queue.

There is a maximum of one queue of agents for each UCD group that consists of no more than 1024 agents. An agent can be activated into one and only one UCD group at a time. To activate a station into a UCD group, the station must be assigned the UCD line option in table IBNLINES. An agent goes off-hook, and dials a UCD activation code followed by a valid UCD DN. Upon going on-hook, the agent is placed in the queue of available agents belonging to the UCD group that contains the dialed UCD DN.

If the DN of the UCD group is dialed, the system tries to terminate the call at the agent that has been idle for the longest period of time. If such a station is available, the call is processed by regular call processing. If no station is available, the call is queued and given ringback, recorded announcement, or music as required.

The codes used to activate and deactivate UCD must be datafilled in field FEATURE in table IBNXLA as UCDA (UCD activation) and UCDD (UCD deactivation).

For line options and features that are compatible with line option UCD, see table OPTOPT.

The following operational measurements (OM) are provided in OM group UCDGRP:

- the number of calls offered
- the number of calls answered
- the number of calls deflected
- the number of calls abandoned
- the number of calls received during night service

Data II sequence and implications

The following tables must be datafilled before table UCDGRP.

- IBNLINES
- IBNXLA
- BCLIDGRP
- SDGRP
- SLLNKDEV

- IBNRTE (or OFRT)
- TERMDEV
- AUDIO
- NARDATA

Table size

Memory is allocated in blocks of 16 UCD groups. A maximum of 256 blocks can be allocated for a total of 4096 UCD groups.

Field descriptions

Field names, subfield names, and valid data ranges for table UCDGRP are described below.

Field descriptions (Sheet 1 of 4)

Field	Subfield	Entry	Explanation and action
UCDNAME		alphanumeric (1 to 16 characters)	*Uniform call distribution name* Enter the name assigned to the UCD group.
ACD		N	*Automatic call distribution* Enter N (no). The entry Y (yes) is not valid.
CUSTGRP		alphanumeric (1 to 16 characters)	*Customer group name* Enter the name assigned to the customer group to which the UCD group belongs.
UCDRNGTH		0 to 63	*UCD ringing threshold* Enter the ringing threshold, in 1-s intervals, after which an unanswered call that is ringing an agent's phone is forwarded to the route specified in field THROUTE. An entry of 0 (zero) sets the ring timeout for the UCD group to the maximum number of seconds specified by parameter RNG_TMEOUT_NO_OF_SECS in table OFCENG.
THROUTE		see subfields	*Threshold route* This field consists of subfields TABNAME and INDEX. This field specifies the route in table IBNRTE or table OFRT to which overflow and UCD ring time-outs are routed.

UCDGRP (continued)

Field descriptions (Sheet 2 of 4)

Field	Subfield	Entry	Explanation and action
	TABNAME	IBNRTE or OFRT	*Tablename* Enter IBNRTE or OFRT as the table name to which translation routes. Entries outside this range are invalid.
	INDEX	1 to 1023	*Index* Enter the number, assigned to the route list in tables IBNRTE or OFRT, to which translation routes. Entries outside this range are invalid.
NSROUTE		see subfields	*Night service route* This field consists of subfields TABNAME and INDEX. Field NSROUTE specifies the night service route in tables IBNRTE or OFRT to which all incoming calls are routed if there are no active agents in the UCD group. Additionally, NSROUTE specifies the night service route new calls are sent to once Night Service has been activated by dialing the Night Service activation code defined in table IBNXLA.
	TABNAME	IBNRTE or OFRT	*Table name* Enter the name of the table to which translation routes. Entries outside this range are invalid.
	INDEX	1 to 1023	*Index* Enter the number assigned to the route list in tables IBNRTE or OFRT to which translation routes. Entries outside this range are invalid.
PRIOPRO		0 to 255	*Priority promotion time-out* Enter the maximum time, in seconds, that a call can wait in any one queue. When this time expires, the call is put into a queue of higher priority.

UCDGRP (continued)

Field descriptions (Sheet 3 of 4)

Field	Subfield	Entry	Explanation and action
MAXPOS		0 to 1023	*Maximum number of positions* Enter the maximum number of agent positions that can be activated in this group at any one time. A value of 0 (zero) disallows agents from activating into the UCD group.
DBG		Y or N	*Delayed billing* Enter Y to start billing when the call is answered by a UCD agent. Enter N to start billing when the caller receives a recorded announcement. This field is active only if the parameter TOLL_OFFICE_DELAYED_BILLING in table OFCENG=Y.
DEFPRIO		0 to 3	*Default priority* Enter the default priority number applicable to local calls terminating on the primary UCD directory number.
RLSCNT		0 to 31	*Release count* Enter the maximum number of calls that terminate on a UCD station but are not answered, either because the value datafilled in field UCDRNGTH has expired or because the caller has abandoned the call. After this number of calls is reached, the agent is automatically deactivated from the UCD group. An entry of 0 (zero) means infinite time.

UCDGRP (continued)

Field descriptions (Sheet 4 of 4)

Field	Subfield	Entry	Explanation and action
MAXWAIT		0 to 1800	*Maximum wait time* Enter the maximum time, in seconds, that a call waits in the incoming call queue before being answered. A value of 0 (zero) means that all calls that cannot immediately terminate on an available agent position are rerouted to the overflow route specified in field THROUTE. If the first call in the incoming call queue waited longer than the value datafilled in field MAXWAIT, all new calls are rerouted to the route specified in field THROUTE. Until the wait time of the call at the head of the incoming call queue for that UCD group is less than the value datafilled in field MAXWAIT, subsequent calls continue to be rerouted.
MAXCQSIZ		0 to 511	*Maximum call queue size* Enter the maximum number of calls that can be queued in the group's incoming call queue at one time. A value of 0 (zero) means that all calls that cannot immediately terminate on an available agent position are rerouted to the overflow route specified in field THROUTE.
OPTIONS		see subfield (vector of up to 6 multiples)	*Options* Enter the list of options and associated refinements that are assigned to the UCD group. Each option entry and its refinements must be separated by a blank space. Use as many records as required to datafill the list of options and associated refinements. If an option is not provided, no input for that option is required.

OPTION = AUDIO

If a recorded announcement or music, or both, are provided, datafill field OPTION and refinements RANTH, ANNMUSIC, and AUDIOGRP as described below.

Field descriptions for conditional data II

Field	Subfield	Entry	Explanation and action
OPTION		AUDIO	*Option* Enter AUDIO.
	RANTH	0 or 6 to 60	*Recorded announcement threshold* Enter the time, in seconds, that an incoming call waits before a recorded announcement is given. Entries outside this range are invalid.
	ANNMUSIC	Y or N	*Announcement/music* Enter Y if announcement or music, or both are given to calls that cannot be answered immediately. Otherwise, enter N.
	AUDIOGRP	AUDIO1 to AUDIO15	*Audio group* If field ANNMUSIC is Y, enter the audio group datafilled in table AUDIO whose option UCDQ specifies the announcement or music that is applied to calls that cannot be answered immediately.

OPTION = BCLID

If the UCD group has the bulk calling line identification (BCLID) option, datafill field OPTION and refinement BCGRPNUM as described below.

Option BCLID enables information on calls terminating at the UCD group to be sent to the customer premises equipment (CPE) along a dedicated BCLID

UCDGRP (continued)

data link. The UCD group belongs to the BCLID group associated with the data link.

Field descriptions for conditional data ll

Field	Subfield	Entry	Explanation and action
OPTION		BCLID	*Option* Enter BCLID.
	BCGRPNUM	0 to 2047	*Bulk calling group number* Enter the group number of the BCLID group to which the UCD group belongs, as defined in table BCLIDGRP.

OPTION = MQROUTE

If the UCD group has the maximum call queue size threshold route (MQROUTE) option, then the route specified by MQROUTE is used in preference to THROUTE when MAXCQSIZ is exceeded, as described below.

Field descriptions for conditional data ll

Field	Subfield	Entry	Explanation and action
OPTION		MQROUTE	*Option* Enter MQROUTE.
	TABNAME	IBNRTE or OFRT	*Tablename* Enter IBNRTE or OFRT as the table name to which translation routes. Entries outside this range are invalid.
	INDEX	1 to 1023	*Index* Enter the number, assigned to the route list in tables IBNRTE or OFRT, to which translation routes. Entries outside this range are invalid.

OPTION = MWROUTE

If the UCD group has the maximum wait time threshold route (MWROUTE) option, then the route specified by MWROUTE is used in preference to THROUTE when MAXWAIT is exceeded, as described below.

Field descriptions for conditional data II

Field	Subfield	Entry	Explanation and action
OPTION		MWROUTE	*Option* Enter MWROUTE.
	TABNAME	IBNRTE or OFRT	*Tablename* Enter IBNRTE or OFRT as the table name to which translation routes. Entries outside this range are invalid.
	INDEX	1 to 1023	*Index* Enter the number, assigned to the route list in tables IBNRTE or OFRT, to which translation routes. Entries outside this range are invalid.

OPTION = NARS

If the UCD group has the NARS option, datafill field OPTION and refinement NARNAME as described below.

Field descriptions for conditional data II

Field	Subfield	Entry	Explanation and action
OPTION		NARS	*Option* Enter NARS.
	NARNAME	alphanumeric or NILNAR	*Network Access Registers Name* Enter the network access register to which the UCD group belongs, as defined in table CUSTENG, or enter NILNAR.

OPTION = QSL

If the queue-status lamps (QSL) option is provided as a visual indication of waiting times for calls in the incoming call queue, datafill field OPTION and

UCDGRP (continued)

refinements SDGRPNO1, SDPOINT1, SDGRPNO2, SDPOINT2, SDGRPNO3, and SDPOINT3 as described below.

Field descriptions for conditional data II

Field	Subfield	Entry	Explanation and action
OPTION		QSL	*Option* Enter QSL.
	SDGRPN01	0 to 511	*Signal distribution group no 1* Enter the number of the signal distribution (SD) group identifying the tuple in table SDGRP that defines the hardware location of the SD card.
	SDPOINT1	0 to 6	*Signal distribution point 1* Enter the SD point number on the SD card. This point is assigned to the currently named UCD group for the QSL option.
	SDGRPNO2	0 to 511	*Signal distribution group no 2* Enter the number of the SD group identifying the tuple in table SDGRP that defines the hardware location of the SD card.
	SDPOINT2	0 to 6	*Signal distribution point 2* Enter the SD point number on the SD card. This point is assigned to the currently named UCD group for the QSL option.
	SDGRPNO3	0 to 511	*Signal distribution group no 3* Enter the number of the SD group identifying the tuple in table SDGRP that defines the hardware location of the SD card.
	SDPOINT3	0 to 6	*Signal distribution point 3* Enter the SD point number on the SD card. This point is assigned to the currently named UCD group for the QSL option.

OPTION = RTROUTE

If the UCD group has the ringing threshold route (RTROUTE) option, then the route specified by RTROUTE is used in preference to THROUTE when UCDRNGTH is exceeded, as described below.

Field descriptions for conditional data II

Field	Subfield	Entry	Explanation and action
OPTION		RTROUTE	*Option* Enter RTROUTE.
	TABNAME	IBNRTEorOFRT	*Tablename* Enter IBNRTE or OFRT as the table name to which translation routes. Entries outside this range are invalid.
	INDEX	1 to 1023	*Index* Enter the number, assigned to the route list in tables IBNRTE or OFRT, to which translation routes. Entries outside this range are invalid.

OPTION = SMDICND

If the UCD group has the SMDICND option, datafill field OPTION and refinements CGN_FOR_RES_DIRECT, CGN_FOR_RES_INDIRECT, CGN_FOR_IBN_DIRECT, and CGN_FOR_IBN_INDIRECT.

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

Field	Subfield	Entry	Explanation and action
OPTION		SMDICND	*Option* Enter SMDICND.
	CGN_FOR_RES_DIRECT	block, deliver, compare_CG	Calling number for RES direct. Specifies delivery of the calling party information given a direct call to SMDI from a RES agent. Enter block, deliver or compare_CG.
	CGN_FOR_RES_INDIRECT	block, deliver, compare_CG, compare_CG_ALL	Calling number for RES indirect. Specifies delivery of the calling party information given an indirect call to SMDI when the SMDI subscriber (forward-from party) is a RES agent. Enter block, deliver, compare_CG, or compare_CG_ALL.

UCDGRP (continued)

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

Field	Subfield	Entry	Explanation and action
	CGN_FOR_IBN_DIRECT	block, deliver, compare_CG	Calling number for IBN direct. Specifies delivery of the calling party information given a direct call to SMDI from an IBN agent. Enter block, deliver, or compare_CG.
	CGN_FOR_IBN_INDIRECT	block, deliver, compare_CG, compare_CG_ALL	Calling number for IBN indirect. Specifies delivery of the calling party information given an indirect call to SMDI when the SMDI subscriber (forward-from party) is an IBN agent. Enter block, deliver, compare_CG, or compare_CG_ALL.

OPTION = TBO

Feature AF1922 (Terminating Billing Option) (TBO) allows the operating company to generate Automatic Message Accounting (AMA) records for calls terminating at a line. If a call terminates at a line assigned the TBO, an AMA record with a call code between 800 and 999 is generated for each call terminating at that line. The call code is assigned when the TBO is added to the line.

If TBO is used, datafill field OPTION and refinements CALLCODE, SFPRSNT, and SFVAL (if required).

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

Field	Subfield	Entry	Explanation and action
OPTION		TBO	*Option* Enter TBO.
	CALLCODE	800 to 999	*Call code* This field identifies the call code for the AMA record.

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

Field	Subfield	Entry	Explanation and action
	SFRPSNT	Y or N	*Service feature code present* Enter Y to indicate that there is a service code associated with the feature that is printed on the AMA record. Otherwise, enter N. If this field is datafilled as Y, datafill refinement SFVAL.
	SFVAL	800 to 999	*Service feature value* Enter the code associated with the feature printed on the AMA record.

OPTION = UCDNS

If the Uniform Call Distribution Night Service (UCDNS) is used datafill as described below.

Field descriptions for conditional data II

Field	Subfield	Entry	Explanation and action
OPTION		UCDNS	*Option* Enter UCDNS.

OPTION = UCD_SMDI

If the simplified message desk interface (SMDI) option is used, each member of the UCD group acting as the message desk must have the SMDI option.

Datafill refinements SMDILINK, SMDIDESK, and MCOSLIST as described below to enable the SMDI option.

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

Field	Subfield	Entry	Explanation and action
OPTION		UCD_SMDI	*Option* Enter UCD_SMDI.
	SMDILINK	alphanumeric	*Terminal designation* Enter the terminal designation defined in the TERMDES field in the TERMDEV table.

UCDGRP (continued)

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

Field	Subfield	Entry	Explanation and action
	SMDI_DESK_NO	1 to 999	*SMDI desk number* Enter the message desk number. ***Note:*** The message desk blocks the retrieval of voice mail messages when there is no assignment of agents to the UCD group.
	MCOSLIST	CLASSA to CLASSP (vector of up to 4 entries) or $	*Message class of service list* Enter up to four message class of service (MCOS) entries from which the UCD group SMDI can receive messages. If fewer than four MCOS entries are datafilled, enter $ to terminate the vector.

Data II e xample

An example of the datafill for table UCDGRP is described below.

Customer group BNRMC has a UCD group with the name ADMIN.

The UCD ringing threshold is 18 s.

Calls that overflow or have a UCD ringing time-out, are routed to route list number 4 in table IBNRTE.

If there are no active agents in the UCD group, all incoming calls are routed to route list number 5 in table OFRT.

Calls that waited in a queue for 10 s are promoted to a queue of a higher priority.

The maximum number of agent positions that can be activated in the UCD group is 5.

Billing starts when the caller receives the recorded announcement.

The default priority applied to local calls terminating on the primary DN is 1.

The release count is 15.

The maximum wait time that a call waits before being answered is 30 s.

The maximum number of calls that can be queued in the incoming call queue of the UCD group at any one time is 10.

The caller receives the announcement or music defined in table AUDIO for audio group AUDIO2, option UCDQ. The recorded announcement threshold is 15 s.

The signal distribution group number is 2 with signal distribution point numbers 1, 2, and 3 assigned to UCD group ADMIN.

The SMDI uses terminal designation TERM1 and desk number 6.

The TBO call code is 800 and a service feature code is present for service feature value 800.

MAP display example for table UCDGRP

```
        UCDNAME ACD           CUSTGRP UCDRNGTH             THROUTE
      NSROUTE PRIOPRO MAXPOS DBG DEFPRIO RLSCNT MAXWAIT MAXCQSIZ
                                                          OPTIONS
_____________________________________________________________________________
      ADMIN   N             BNRMC        18          IBNRTE    4
         OFRT    5   10        5   N        1     15     30       10
(AUDIO 15 Y AUDIO2) (QSL 2 1 2 2 2 3)
(UCD_SMDI TERM1 6 $) (TBO 800 Y 800) $
```

Table history

NA013

The 59010576 feature expands the SMDI_DESK_NO subfield from 63 to 999 for the UCD_SMDI option.

EUR005

Options RTROUTE, MWROUTE, and MQROUTE are added to table UCDGRP to specify additional threshold routes for overflow thresholds UCDRNGTH, MAXWAIT, and MAXCQSIZ.

NA006

Fields CRITERIA and OTHERWISE under option SMDICND were removed. The following fields were added under option SMDICND: CGN_FOR_RES_DIRECT, CGN_FOR_RES_INDIRECT, CGN_FOR_IBN_DIRECT, CGN_FOR_IBN_INDIRECT.

UCDGRP (end)

NA004

Added option UCDGRP, which was omitted in BCS34.

BCS36

Added options NARS and SMDICND.

USERINF

Table name

Table USERINF

Functional description

Table USERINF is an internal logical software table that is datafilled through the PASSWORD command. User datafill is not required, the table is displayed for information only.

UVMRTE

Table name

UVMRTE

Functional description

Table UVMRTE contains route information to access messaging systems for the Universal Voice Messaging (UVM) service. The routing of UVM calls is provided through standard translations and is represented in the table as either an office route or a routing DN. Table UVMRTE also specifies special billing DNs to which network access charges can be billed if the call is routed through a toll network.

Data ll sequence and implications

Tables OFRT, OFR2, OFR3, OFR4, OCCNAME, and SITE must be datafilled before table UVMRTE.

Table UVMSCR must be datafilled after table UVMRTE.

Table size

Minimum size - 0 tuples

Maximum size - 100 tuples

No restart is required to increase size.

Data ll

The following table lists datafill for table UVMRTE.

Field descriptions (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
UVMRTIDX		0 to 999	UVM route index.
VMSSPBDN		10 digits	VMS special billing DN. This is the DN to which network access charges are billed if the UVM call is a toll call. This DN is used for calls originating at the host site or any site not specified in the SITEBDN list.
VMSDN		10 digits	This is the routing DN of the VMS which is to replace the originally dialed digits. If the call is a toll call, the call is translated as a Primary Interexchange Carrier (PIC) call.

Field descriptions (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
ROUTE		see subfields	This field indicates how the call is to be routed.
	RTESEL	DN or RTE	This field indicates how the call is to be routed. Enter DN if the call is to be routed using the VMSDN. Enter RTE if the call is to be route using the office route tables.
	RTEREF	OFRT, OFRT2, OFRT3, or OFRT4 and 0 to 1023	This is a reference to an entry in one of the office route tables, used to route the call.
	CARRNAME	1 to 16 chars	This is the name of the Inter-Exchange Carrier that the VMS service provided prefers to use when a UVM call is a toll call. The UVM DN routing scheme sets up toll calls as PIC calls. This must be a name that is datafilled in table OCCNAME. If the VMSSPBDN field is blank, then this field is not used.
SITEBDN		a list of (4 chars 10 digits) $	This is a list of site special billing DNs. Enter a four-character name for each site coupled with a 10-digit DN. A maximum of 52 site/billing DN pairings is allowed.

Data ll e xample

The following example shows sample datafill for table UVMRTE.

UVMRTE (end)

MAP display example for table UVMRTE

```
UVMRTIDX  VMSSPBDN    VMSDN      ROUTE     SITEBDN
_____________________________________________________
0 6135556666 6138889999 DN AAA (HOST 6132223333) (REM1
6133335555) (NAMO 6137779999) (LEGL 613 9990088) MRVL
6132123030) (PGAL 8198987878) $

33 8198765454 8199876543 RTE OFRT 40 $

67 8196668888 8192324545 DN CARR_B $
99 6136224444 6136227777 RTE OFRT 90 (HOST 6132223333)
(REM1 6133335555) (NAMO 6137779999) (LEGL 613 9990088)
MRVL 6132123030) (PGAL 8198987878) $
```

Table history

NA008

Toll calls were set up as PIC calls. The interaction with Toll Denied features was corrected to bypass the toll restrictions assigned on the customer group when the call goes through a virtual facility group (VFG).

CDNB004

First appearance of this table.

UVMSCR

Table name

UVMSCR

Functional description

Table UVMSCR contains screening information for VMS service providers for Universal Voice Messaging (UVM). The key to the table is the access code used to start the feature, as datafilled in table IBNXLA.

For the UVM Deposit feature the table provides screening information for the message recipients specified in terms of digit ranges. The result of a lookup in table UVMSCR specifies the service to be provided to the calling party. The service can specify one of the following:

- route the calling party to a specified treatment
- provide messaging service to the calling party through the Call Messenger feature, or
- provide UVM service to the calling party by a VMS that can be reached at the route specified by the index into table UVMRTE.

For the UVM Retrieve feature, table UVMSCR provides information for validating the MWI requestor DNs in the MWI request queue.

Data ll sequence and implications

Tables UVMRTE, OFRT, OFR2, OFR3 AND OFR4 must be datafilled before table UVMSCR.

Table size

Minimum size - 0 tuples

Maximum size - 60 tuples

No restart is required to increase size.

UVMSCR (continued)

Data II

The following table lists datafill for table UVMSCR.

Field descriptions (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
UVMCODE		000 to 999	UVM feature access code as datafilled in table IBNXLA.
FEAT		UVMR or UVMD	Defines whether the information in the tuple pertains to UVM Deposit or UVM Retrieve.
SCRNDATA		VMSDN or UVMDSCRN	see subfields.
	VMSDN	10-digit DN	The MWI requestor DN for UVMR. Enter the 10-digit DN of the MWI requestor DN of the VMS service provider.
	UVMDSCRN	see subfields	A vector with up to 30 elements. (For UVMD only).
	UVMDSCRN-OCNSCRNG	0 to 99999999990 to 9999999999	This specifies the range(s) of original called number digits for which this tuple applies. The maximum number of ranges allowed is 30.
	UVMDSCRN-SERVSEL	CMSG, UVM, or TRMT	UVM service selector. Enter CMSG to hand the call over to the Call Messenger service, enter UVM to route the call according to table UVMRTE, or enter TRMT to route the call to treatment.
	UVMDSCRN-UVMRTIDX	0 to 999 or NIL	This is the index into table UVMRTE and identifies the entry to use to route the call. A value of NIL in this field indicates that the index in field DEFRTIDX is to be used. (The UVMRTIDX field applies only when SERVSEL = UVM.)

Field descriptions (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
	UVMDSCRN-TRMT	T and 4 chars, or R and one of OFRT, OFR2, OFR3, OFR4 and 0 to 1023	This field species the treatment to provide to the calling party when the value of SERVSEL is TRMT. Enter T and a valid four character DMS treatment as found in table TMTCNTL, or R and an office route table and index where the treatment is provided.
DEFRTIDX		0 to 999	This is an index into table UVMRTE and is used as the default route when UVMRTIDX is NIL and when the original called number does not match any of the ranges in OCNSCRNG.

Data ll e xample

The following example shows sample datafill for table UVMSCR.

MAP display example for table UVMSCR

```
UVMCODE       SCRNDATA                                DEFRTIDX
_____________________________________________________________
98            UVMR  8199876543                       33
99            UVMD  (0 2 TRMT R OFRT 40)
                    (5143334444 5143334444 UVM IDX 99)
                    (40342 40345 UVM NIL )
                    (416 416 TRMT T RODR) $       67
888           UVMR  6138889999                      0
889           UVMD  (1403 1403 CMSG )
                    (0919 0919 UVM IDX 99)
                    (7224 733 TRMT R OFRT 90) $   99
```

Table history

CDNB004

First appearance of this table.

VANDH

Table name

Vertical and Horizontal Coordinates

Functional description

Table VANDH assigns all valid national directory numbers a set of vertical and horizontal coordinates. These coordinates are used within the V and H ratestep calculator to determine the distance between the calling and called number.

Table VANDH is used if table RSNAT field RATETYPE = VH. Then, table VANDH is accessed for the V and H coordinates of the calling and called numbers.

Data ll sequence and implications

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

Table size

0 to 32767 tuples

Data ll

The following table lists datafill for table VANDH.

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
DIGITS		up to 18 digits	Directory number of digits. This field is the index into the table. Enter the national directory number of digits.
V		0 to 32767	Vertical coordinate. Enter the vertical coordinate associated with this directory number digits entry.
H		0 to 32767	Horizontal coordinate. Enter the horizontal coordinate associated with this directory number digits entry.

Data ll e xample

The following example shows sample datafill for table VANDH.

MAP display example for table VANDH

```
DIGITS        V           H
_____________________________________________________________
1021          10123       654
1022          10123       655
20            11345       12452
```

In the above example the calling number 102-166 would be assigned coordinates 10123 and 654. The called number 202-773 would be assigned coordinates 11345 and 12452. The V and H rate step calculator would then use these coordinates to determine the distance between the calling and called numbers, so that a rate step can be found in table DISTANCE.

Table history

BCS34

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

VARACCT

Table name

Variable Account Code

Functional description

Table VARACCT is used by the operating company to assign voluntary, variable-length account codes (2-14 digits) on a feature access code basis. Table VARACCT can also be used to datafill predefined network translator digits (up to 3) to automatically prefix the called number. Table VARACCT was created to enable the MDC Variable Customer Dialed Account Recording (CDAR) functionality.

To input variable-length CDAR, end users dial the feature access code for account code billing that corresponds to the length of the account code they want to enter. Each feature access code entry for option ACCT (in table IBNXLA [IBN Translations], for example) must have a corresponding entry in table VARACCT containing the variable account code information and prefix digits. Multiple access codes allow for various lengths of account codes.

The end user can choose from a selection of variable account code lengths provided by the operating company during datafill. The end user can also enter a directory number (DN) without manually entering a network selector first, if datafilled.

Entries in table VARACCT do not replace customer group entries in table CUSTHEAD (Customer Group Head). An entry in table CUSTHEAD for account code is still needed for feature functionality. Entries in table VARACCT do not replace customer group network selectors defined in MDC translation tables (tables IBNXLA, CUSTHEAD, and XLANAME [Translator Names]). MDC Variable CDAR uses currently defined network selectors in MDC translation tables.

The key to tuples in table VARACCT is a two-part key: the same translator name that translates the account code feature and the same feature access code as defined in table IBNXLA. Table VARACCT must match customer MDC translations. If feature translators are changed in table NCOS (Network Class of Service) or by definable flash conditions, these changes must also have an entry in table VARACCT for feature functionality.

Account code activation is not affected by MDC Variable CDAR.

Data ll sequence and implications

Table XLANAME must be datafilled before table VARACCT.

Table size

0 to 16 383 tuples

Data ll

The following table lists datafill for table VARACCT.

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
KEY		see subfields	Key. This field is the two-part key to the table. It consists of subfields XLANAME and DGLIDX.
	XLANAME	1-8 alphanumeric character name	Translator name. This subfield specifies the name that is assigned to the feature translator defined in table XLANAME. Enter the same 1- to 8-character name that translates the account code feature.
	DGLIDX	1-18 numeric	Digilator index. This subfield specifies the access code. Enter the digits assigned as the access code that activates option ACCT.
DIGINACC		$, 2-14	Digits in account code. This field specifies the number of account code digits the subscriber is to dial. An entry of dollar sign ($) indicates that the functionality is to revert back to the customer group-defined parameters in table CUSTHEAD. ***Note:*** This value takes precedence over the customer group-defined value in table CUSTHEAD.
PFXDIGS		$, 0-999	Prefix digits. This field specifies the number of digits that are to be automatically prefixed to the dialed DNs after account code activation. Enter digits from 0-999. This field must correspond to the network selector entry in table IBNXLA. An entry of dollar sign ($) indicates that no prefix digits are to prefix a dialed DN.

Data ll e xample

The following example shows sample datafill for table VARACCT.

VARACCT (end)

MAP display example for table VARACCT

```
KEY                  DIGINACC                  PFXDIGS
_____________________________________________________

BNRFEAT 26           5                         9
```

Table history

NA005

This table was created to support the MDC Variable CDAR functionality.

VCHIDTAB

Table name

Virtual Channel Identifier table

Functional description

Table VCHIDTAB is used for preserving the relationship between integrated link maintenance (ILM) virtual channels and pairs of access identifiers over BCS applications.

Direct access to the table is restricted. The customer has read only access. Indirect access is permitted through datafilling of a device requiring ILM supported resources, or as part of a restore operation on the N + 1 BCS as part of a BCS application.

Data ll sequence and implications

Not applicable because the table is write protected against direct datafill.

Table size

From 0 to 2048 tuples. Table size is dynamically determined by the number of tuples.

Data ll

Field descriptions (Sheet 1 of 3)

Field	Subfield or refinement	Entry	Explanation and action
VCHID		see subfields	*Virtual channel identifier*The tuple is a unique identifier that ILM uses to identify a virtual channel (VCh). A VCh connects two access identifiers. An access identifier further refines the concept of access key and access identifier by specifying a channel on an access. The VCHID field is a multiple with two parts: EPT_KEY and INDEX.
	EPT_KEY	0 to 2047	*Endpoint key*This subfield contains a unique identifier that ILM uses to identify a pair of access keys that are connected by ILM transport resources.

VCHIDTAB (continued)

Field descriptions (Sheet 2 of 3)

Field	Subfield or refinement	Entry	Explanation and action
	INDEX	0 to 127	*Endpoint index*If there is more than one transport resource between two access keys, the endpoint index is used to differentiate between them.
ACID1		see subfields	*Access identifier one*The first of a pair of access identifiers between which the virtual channel runs. This tuple is a multiple with three parts: KEY, INDEX, and CHANNEL
	KEY	0 to 1023	*Access key*The access key part of the access identifier.
	INDEX	0 to 1023	*Access index*The access index part of the access identifier.
	CHANNEL	0 to 1023	*Access channel*The access channel part of the access identifier.
ACID2		see subfields	*Access identifier two*The second of a pair of access identifiers between which the virtual channel runs. This tuple is a multiple with three parts: KEY, INDEX, and CHANNEL
	KEY	0 to 1023	*Access key*The access key part of the access identifier.
	INDEX	0 to 1023	*Access index*The access index part of the access identifier.
	CHANNEL	0 to 1023	*Access channel*The access channel part of the access identifier.
VCCVCH1		see subfields	*Virtual channel controller* and *local virtual channel* for access key 1.This tuple is a multiple with two parts: VCC and LVCH.
	VCC	0 to 63	*Virtual channel controller*
	LVCH	0 to 511	*Local virtual channel*
VCCVCH2		see subfields	*Virtual channel controller* and *local virtual channel* for access key 2.This tuple is a multiple with two parts: VCC and LVCH.
	VCC	0 to 63	*Virtual channel controller*

Field descriptions (Sheet 3 of 3)

Field	Subfield or refinement	Entry	Explanation and action
	LVCH	0 to 511	*Local virtual channel*
LKEY1		0 to 255	*Local virtual channel endpoint key one*
LKEY2		0 to 255	*Local virtual channel endpoint key two*

Data ll e xample

The following example shows sample datafill for table VCHIDTAB.

MAP display example for table VCHIDTAB

```
VCHID    ACID1    ACID2    VCCVCH1   VCCVCH2   LKEY1   LKEY2
_____________________________________________________________

 0 0     0 0 0    1 0 0     0    0     0    0      0       0
 1 0     1 0 0    2 1 0     1    0     0    0      0       0
 2 1     3 1 0    2 1 0     2    0     0    0      1       0
```

Table history

BCS26

Table VCHIDTAB was introduced.

Supplementary information

Table VCHIDTAB must be restored before any of the inventory tables of the devices that require ILM resources. Currently, these tables are APINV, LIMINV, LIUINV, and NIUIV. It is recommended that this table immediately follow tables PLATAB and TAPIDTAB.

VERSIONS

Table name

Versions Table

Functional description

Table VERSIONS, a read-only table, stores the type versions defined on a particular load. Table VERSIONS consists of three fields: the key and two numeric ranges to store the version data. The external representation of a tuple in table VERSIONS consists of the name of the type, current version of the type, and and the version of the type on the dump side. The version of the type on the dump side has no meaning until the dump side table VERSIONS is transferred to the restore side and the mapping is created. Table VERSIONS contains only tuples for types that have undergone a change requiring its type version to be incremented.

Data ll sequence and implications

During a software upgrade, this table must be transferred first.

Table size

Memory is allocated dynamically for this table.

Data ll

The following table lists datafill for table VERSIONS.

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
TYPENAME		alphanumeric (up to 32 characters)	*Type name* This is the key field; it stores the name of a data dictionary type that is considered to have type versions.
CURRVERS		0 to 32767	*Current version* This field stores the current version of a type.
DUMPVERS		0 to 32767	*Dump version* This field stores the dump version of the current type.

Data ll e xample

The following example shows sample datafill for table VERSIONS.

TYPENAME	CURRVERS	DUMPVERS
EXTENDED_TREATMENT	0	0
TABLE_OWNERSHIP	0	0
DATA_SELECTOR	0	0
OFFICE_PARM_NAME	0	0
VOLUME_TYPE	0	0
BANNER_LOGICAL_TUPLE	0	0
VAR_LTC_PSLINK_TC_TAB	1	0
LTC_LOGTUPLE	1	0

Table history

CSP02

Table VERSIONS was introduced.

VFGDATA

Table name

Virtual Facility Group Data Table

Functional description

Each tuple in table VFGDATA contains the data for one end of the virtual facility group (VFG). Each end of VFG can be an integrated business network (IBN) VFG or plain ordinary telephone service (POTS) VFG. It can be either incoming or outgoing.

Table VFGDATA has a two-part key consisting of the virtual facility group's name (field VFGNAME) and the type and direction of the VFG (field TYPDIR).

Fields VFGNAME and TYPDIR indicate the ownership of each tuple. This allows certain owners access to a subset of all type and direction combinations. The owners of a VFG (VFGNAME in field VIRTGRP in table DATAOWNR) can change the network class of service (NCOS), the line screening code (LSC) flag number, and the alternate line screening code (ALSC) flag number of that VFG through the Service Order System (SERVORD) facility at a MAP terminal. If they have access to table VFGENG, they can also change the size information of that VFG.

The owners of one end of a VFG (field VIRTGRP in table DATAOWNR) who have access to table VFGDATA can change all the data that is related to that end of the VFG. Owners do not need to change the data through the SERVORD facility.

Non-operating company users who own the whole VFG (both ends and the size information), must own the VFG in table DATAOWNR.

Non-operating company users, who own only one end of a VFG or both ends of a VFG, but not the size information, must own only the VFG ends information (VFGDATA entity) in table DATAOWNR.

Non-operating company users must only be allowed to use the tables that are datafilled in table OWNTAB.

If a table is not datafilled in table OWNTAB, the operating company must assign a privilege class to that table so that non-operating company users are not given access to the table.

If the Partitioned Table Editor feature is present, the ownership of each tuple in table VFGDATA is defined in tables DATAOWNR and OWNTAB.

VFGDATA (continued)

The entries in table DATAOWNR that are applicable to table VFGDATA are those with VFGDATA in field TABNAME. The entry in fields VIRTGRP and TYPEDIR in table DATAOWNR must be equal to the value of fields VFGNAME and TYPEDIR in table VFGDATA. The entries in table OWNTAB that are applicable to table VFGDATA, are those with entry VFGDATA in field TABNAME.

Tuples in table VFGDATA are automatically produced by the system are in the following three ways:

- The system automatically adds or deletes tuples to table VFGDATA each time a tuple is added to or deleted from table VIRTGRPS.
- Each time a change is made to table VFGDATA, the system automatically updates the appropriate entries in table VIRTGRPS.
- Each time a change is made to table VIRTGRPS, the system automatically updates the appropriate entries in table VFGDATA.

The four variations of data in table VFGDATA are incoming IBN, outgoing IBN, incoming POTS, and outgoing POTS.

One incoming IBN entry is datafilled for each entry in table VIRTGRPS that has IBN in field INCTYPE. One outgoing IBN entry is datafilled for each entry in table VIRTGRPS that has IBN in field INCTYPE and one or more options assigned.

One incoming POTS entry is datafilled for each entry in table VIRTGRPS that has POTS in field INCTYPE. The outgoing POTS format is for future use and is not required at this time.

For related information refer to table VIRTGRPS.

Datafill sequence and implications

Table VIRTGRPS must be datafilled before table VFGDATA. Other tables that must be datafilled are dependent on fields TYPEDIR and OPTIONS.

Option VFGNOMDR:

- is added to the option list of table VFGDATA, if the entry in table VIRTGRPS for subfield OPTION is NOMDR
- can be added to incoming POTS and IBN VFGs
- cannot be added to an E911 VFG.

When datafilling field TYPEDIR the following tables must be datafilled before table VFGDATA:

- IBNVI
- CUSTENG

When datafilling field OPTIONS the following tables must be datafilled before table VFGDATA:

- CUSTGRP
- CUSTENG
- VLPIC
- OCCNAME

Table size

0 to 8192 tuples

Datafill

The following table lists datafill for table VFGDATA.

Field descriptions for conditional datafill

Field	Subfield or refinement	Entry	Explanation and action
KEY		see subfields	Key. This field consists of subfields VFGNAME and TYPEDIR.
	VFGNAME	alphanumeric	Virtual facility group (VFG) name. This field contains the name assigned to the VFG in table VIRTGRPS.
	TYPEDIR	IBNVI, IBNVO, POTSVI, POTSVO, E911VI, E911VO	Type and direction. This field contains the type and direction for the Integrated Business Network (IBN). Any entry outside of the range indicated for this field is invalid.

VFGDATA (continued)

Field descriptions for conditional datafill

Field	Subfield or refinement	Entry	Explanation and action
DATA		see subfield	Data. This field consists of subfield TYPEDIR.
	TYPEDIR	IBNVI, IBNVO, POTSVI, POTSV0, E911VI, E911VO	Type and direction. This field contains the type and direction for the IBN. Any entry outside of the range indicated for this field is invalid.

TYPEDIR = IBNVI

If the entry in subfield TYPEDIR is IBNVI, datafill subfields BILLNUM, CUSTGRP, SUBGRP, TRC, NCOS, INTRAGRP, SMDR, CDR, and OPTIONS as follows.

Note: If a non 10-digit number is datafilled in field BILLNUM for IBNVI VFGs the following warning message is displayed:

```
Warning: billing numbers should be 10 digits in length
```

Field descriptions for conditional datafill

Field	Subfield or refinement	Entry	Explanation and action
TYPEDIR		IBNVI	Type and direction. This field contains the type and direction for incoming IBN.
	BILLNUM	numeric or N	Billing number. This field contains the data that is datafilled in field BILLNUM of table VIRTGRPS.
	SNPA	3 digit integer	Serving numbering plan area. Enter a 3 digit integer to prefix to the standard 7 digit billing number.
	CUSTGRP	alphanumeric	Customer group name. This field contains the data that is datafilled in field CUSTNAME of table VIRTGRPS.
	SUBGRP	0 to 7	Subgroup. This field contains the data that is datafilled in field SUBGRP of table VIRTGRPS.

Field descriptions for conditional datafill

Field	Subfield or refinement	Entry	Explanation and action
	TRC	0 to 7	Terminating restriction code. This field contains the data that is datafilled in field TRC of table VIRTGRPS.
	NCOS	0 to 511	Network class of service. This field contains the data that is datafilled in field NCOS of table VIRTGRPS.
	INTRAGRP	Y or N	Intragroup. This field contains the data that is datafilled in field INTRAGRP of table VIRTGRPS.
	SMDR	Y or N	Station message detail recording. This field contains the data that is datafilled in field SMDR of table VIRTGRPS.
	CDR	Y or N	Call detail recording. This field contains the data that is datafilled in field CDR of table VIRTGRPS.
OPTIONS		see subfields	Options. This field contains subfield OPTION.
	OPTION	VFGAMA or INTPIC	Option. Enter option; that is, enter VFGAMA for the virtual facility group automatic message accounting feature, or enter INTPIC for the international primary carrier (international PIC) feature.

OPTION = VFGAMA

If the entry in subfield OPTION is VFGAMA, datafill refinement FACILITY as follows.

Field descriptions for conditional datafill

Field	Subfield or refinement	Entry	Explanation and action
	FACILITY	CCSA, TDMTT, FX, ETS	Facility. This field contains the same data that is datafilled in field FACILITY for the option VFGAMA in table VIRTGRPS.

VFGDATA (continued)

OPTION = INTPIC

If the entry in subfield OPTION is INTPIC, datafill refinements as follows.

Note: The World Zone 1 calls do not use option INTPIC. These calls use option PIC to choose a carrier.

Field descriptions for conditional datafill

Field	Subfield or refinement	Entry	Explanation and action
	CARRIER	alphanumeric (up to 16 characters)	Carrier name. Enter the selected international carrier. Table OCCNAME contains a list of valid carrier names.
	CHOICE	Y or N	Choice. Enter Y or N to allow or disallow the choice for Carrier Access Code (CAC) dialing.

Outgoing IBN

TYPEDIR = IBNVO

If the entry in subfield TYPEDIR is IBNVO, datafill subfield OPTIONS as follows.

Field descriptions for conditional datafill

Field	Subfield or refinement	Entry	Explanation and action
	TYPEDIR	IBNVO	Type and direction. This field contains the type and direction for outgoing IBN.
	OPTIONS	see subfield	Options. This field consists of subfield OPTION.
	OPTION	VFGLSC, VFGALSC, or CUSTGRP	Option. Enter the option.

OPTION = CUSTGRP

If the entry in subfield OPTION is CUSTGRP, datafill subfield CUSTGRP as follows.

Field descriptions for conditional datafill

Field	Subfield or refinement	Entry	Explanation and action
	CUSTGRP	alphanumeric	Customer group name. This field contains the data that is datafilled for option CUSTGRP in table VIRTGRPS.

OPTION = VFGLSC

If the entry in subfield OPTION is VFGLSC, datafill subfields LSC and LSCINT as follows.

Field descriptions for conditional datafill

Field	Subfield or refinement	Entry	Explanation and action
	LSC	0 to 255	Line screening code flag number. This field contains the data that is datafilled for the option VFGLSC in table VIRTGRPS.
	LSCINT	0 to 63	Line screening code intercept number. This field contains the data that is datafilled for the option VFGLSC in table VIRTGRPS.

OPTION = VFGALSC

If the entry in subfield OPTION is VFGALSC, datafill subfields ALSC and ALSCINT as follows.

Field descriptions for conditional datafill

Field	Subfield or refinement	Entry	Explanation and action
	ALSC	0 to 255	Alternate line screening code flag number. This field contains the data that is datafilled for the option VFGALSC in table VIRTGRPS.
	ALSCINT	0 to 63	Alternate line screening code intercept number. This field contains the data that is datafilled for the option VFGALSC in table VIRTGRPS.

VFGDATA (continued)

Incoming POTS

TYPEDIR = POTSVI

If the entry in subfield TYPEDIR is POTSVI, datafill subfields BILLNUM, LINEATTR, LINECDR, and OPTIONS as follows.

Note: If a non 10-digit number is datafilled in field BILLNUM for POTSVI VFGs the following warning message is displayed:

```
Warning: billing numbers should be 10 digits in length
```

Field descriptions for conditional datafill

Field	Subfield or refinement	Entry	Explanation and action
	TYPEDIR	POTSVI	Type and direction. This field contains the type and direction for POTS.
	BILLNUM	alphanumeric (vector of up to 11 characters)	Billing number. This field contains the data that is datafilled in field BILLNUM of table VIRTGRPS.
	SNPA	3 digit integer	Serving numbering plan area. Enter a 3 digit integer to prefix to the standard 7 digit billing number.
	LINEATTR	alphanumeric (1 to 16 characters)	Line attribute index. This field contains the data that is datafilled in field LINEATTR of table VIRTGRPS.
	XLAPLAN	alphanumeric (up to 16 characters)	Translation plan index. Enter the index into the XLAPLAN table.
	RATEAREA	alphanumeric (up to 16 characters)	Rate area index. Enter the index into the RATEAREA table.
	LINECDR	Y or N	Line call detail recording. This field contains the data that is datafilled in field LINECDR of table VIRTGRPS.

Field descriptions for conditional datafill

Field	Subfield or refinement	Entry	Explanation and action
	OPTIONS	see subfield	Options. This field consists of subfield OPTION.
	OPTION	VFGEA, VIBNPIC, VTOLLRST, VLPIC, or VCNORIG	Option. Enter the options. Option VCNORIG is valid only for the Canadian market.

OPTION = VFGEA

If the entry in subfield OPTION is VFGEA, datafill subfields IPIC and LCHOICE as follows.

Field descriptions for conditional datafill

Field	Subfield or refinement	Entry	Explanation and action
	IPIC	alphanumeric	Preferred inter-LATA carrier. This field contains the data that is datafilled in field PIC for the option EA in table VIRTGRPS.
	LCHOICE	Y or N	LPIC choice. This field contains the data that is datafilled in field CHOICE for the option EA in table VIRTGRPS.

OPTION = VLPIC

If the entry in subfield OPTION is VLPIC, datafill subfields IPIC and LCHOICE as follows.

Field descriptions for conditional datafill

Field	Subfield or refinement	Entry	Explanation and action
	IPIC	alphanumeric	Intra-LATA carrier. This field contains the data that is datafilled for the Intra-LATA carrier name that is datafilled in table OCCNAME.
	LCHOICE	Y or N	LPIC Choice. This field determines if the LPIC subscriber is permitted to casually dial 10XXX/101XXXX codes. Enter Y or N.

VFGDATA (continued)

E911

TYPEDIR = E911VO

If the entry for subfield TYPEDIR is E911VO, no further datafill is required.

TYPEDIR = E911VI

If the entry for subfield TYPEDIR is E911VI, datafill subfields ESN, ESCO, SNPA, ECPHTIME, ORIGHOLD, and RESTRICT as follows.

Field descriptions for conditional datafill

Field	Subfield or refinement	Entry	Explanation and action
	ESN	0 to 15999	Intra-LATA carrier. Enter a default emergency service number (ESN) that is used to route a call if an ESN cannot be found by querying optional table E911SRDB or if an automatic number identification (ANI) fail condition occurs.
	ESCO	Table of 4 {1, 2, 3, 4, 5, 6, 7, 8, 9, 0} (4 digits)	Emergency service central office code (ESCO). Enter an ESCO in case an ANI fail condition occurs. If the calling party directory number (DN) cannot be obtained, an ESCO is displayed at the public safety answering point (PSAP).
	SNPA	numeric (3 digits)	Serving numbering plan area. Enter the serving NPA of the E911 trunk group that has a numbering plan digit (NPD) datafilled in table E911NPD.
	ECPHTIME	numeric (0 to 255)	Enhanced called party hold (ECPH) time. This entry indicates the number of seconds ECPH will be active.

Field descriptions for conditional datafill

Field	Subfield or refinement	Entry	Explanation and action
	ORIGHOLD	Y or N	Originator hold (ORIGHOLD). Enter Y to activate E911 originator hold for calls routed through this VFG. When ORIGHOLD is active, the originator of an E911 call cannot disconnect the call. Enter N to indicate ORIGHOLD is not active.
	RESTRICT	Y or N	Restrict. Enter Y to indicate that an E911 caller, whose call is routed through an E911 VFG, has the same restrictions as if the call were routed through an emergency services (ES) trunk. For example, the caller cannot activate call waiting or do a call transfer. The entry N is invalid.

Datafill example

The following example shows sample datafill for table VFGDATA.

VFGDATA (continued)

MAP display example for table VFGDATA

```
          KEY
                                                              DATA
_____________________________________________________________________
OWZNE1  POTSVI
POTSVI 6211234 8 Y $

RAGGEE  IBNVI
IBNVI 7777777 COMKODAK 0 0 0 N Y Y $

INW1    POTSVI
POTSVI 6137224001 0 N $

CENVFG  IBNVI
IBNVI 7772000 CENTESN 0 0 0 N Y Y $

BRAVFG  IBNVI
IBNVI 9960000 BRAMESN 0 0 0 N Y Y $

LONVFG  IBNVI
IBNVI 9621111 LONDESN 0 0 0 N Y Y $

GOCVFG  IBNVI
IBNVI 6139905555 GOC990 0 0 0 N Y N $

E911VFG  E911VI
E911VI 118 0621 613 0 Y Y $
```

Table history

SN06 (DMS)

Feature A89007692 added option E911 ESCO expansion to four digits.

NA013

Added option VFGNOMDR for suppression of message detail records.

NA012

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

NA011

Added the XLAPLAN and RATEAREA fields.

NA007

Subfield ECPHTIME option activated.

CNA07

Option INTPIC was added along with subfields CARRIER and CHOICE in accordance with the International Primary Carrier feature.

NA006

Subfield ECPHTIME was added for subfield TYPEDIR=E911 to indicate the number of seconds Enhanced Called Party Hold is active (currently an inactive option).

NA005

Range of subfield ESN was increased to 15,999 in accordance with E911 Non-CallP Enhancements, which enhances E911 tandem by allowing five-digit ESNs.

Supplementary information

None

VFGENG

Table name

Virtual Facility Group Engineering Table

Functional description

Table VFGENG is used to give the size information of each virtual facility group (VFG). Tuples are added to or deleted from table VFGENG through table VIRTGRPS. Only operating-company users are allowed access to table VIRTGRPS. Table VFGENG must be set to read-only or change-only in table CUSTPROT.

A user has access to table VFGENG only if the user also has ownership of both ends of a VFG and the size information of that VFG.

If feature BC1459 (Partitioned Table Editor) is present, the ownership of each tuple in table VFGENG is defined in tables DATAOWNR and OWNTAB.

The entries in table DATAOWNR that are applicable to table VFGENG are those that have entry VIRTGRP in field TABNAME. The entry in field VIRTGRP in table DATAOWNR must be equal to the value of field VIRTGRP in table VFGENG.

The entry in table OWNTAB that is applicable to table VFGENG contains the value VFGENG in field TABNAME.

Tuples in table VFGENG are automatically produced by the system in the three following ways:

- The system automatically adds or deletes tuples to or from table VFGENG each time a tuple is added to or deleted from table VIRTGRPS.
- Each time a change is made to table VFGENG, the system automatically updates the appropriate entries in table VIRTGRPS.
- Each time a change is made to table VIRTGRPS, the system automatically updates the appropriate entries in table VFGENG.

For related information, refer to table VFGENG.

Data ll sequence and implications

Table VIRTGRPS must be datafilled before table VFGENG.

Table size

0 to 8192 tuples

VFGENG (continued)

Data fill

The following table lists datafill for table VFGENG.

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
KEY		see subfield	*Key* This field consists of subfield VIRTGRP.
	VRTGRP	alphanumeric (up to 6 characters)	*Virtual facility group name* This field contains the name assigned to the virtual facility group in table VIRTGRPS.
DATA		see subfield	*Data* This field consists of subfield VFGTYPE.
	VFGTYPE	SIZE or USES	*Virtual facility group type* This field displays the virtual facility group type. If the entry is SIZE, refinement SIZE is also datafilled. If the entry is USES, refinement USESGRP is also datafilled.
	SIZE	0 to 2048	*Size group* If the entry in subfield VFGTYPE is SIZE, and the entry is the first entry for the VFG, this field is datafilled. This field specifies the number of simultaneous accesses allowed for the VFG.
	USESGRP	alphanumeric or CAPVI, NILVFC, OWT1, OWT2, or RSCV1	*Uses group* If the entry in subfield VFGTYPE is USES, this field is datafilled. This field contains an entry that defines the USES group.

Data fill example

The following example shows sample datafill for table VFGENG.

In this example, VFG OWAT1 has a size of 6. VFG INWAT1 uses VFG OWAT1.

MAP display example for table VFGENG

```
  KEY           DATA
_____________________________________________________________

OWAT1         SIZE 6
INWAT1    USES OWAT1
```

VH

Table name

TOPS Vertical-Horizontal Coordinates Table

Overview

The Automatic Rating System provides automatic rating of calls based on the vertical (V) and horizontal (H) coordinates of the calling and called numbering plan area (NPA) and Nxx. Hence, all NPA-Nxx that are to be rated automatically must be made known to the system for this purpose.

For initial datafill, Northern Telecom provides a computer facility, called DMS/RATECOMP, to generate the V&H coordinates for all valid Nxx's for specified NPAs. This arrangement significantly reduces the amount of time and clerical effort in the operating company for completing the rating translation data input.

Nortel provides an engineering aid to assist with datafilling the VH table for initial installations and software extensions.

Permanent records of the V-H coordinates of all NPA-NXX combinations in North America are used to datafill table VH. Nortel's service reduces the costs to the Local Exchange carrier by eliminating manual V-H data assignment, thus improving the accuracy of the table.

You must submit a preliminary input of NPAs to Nortel for use in creating the data. Arrangements to have Nortel create the VH rating data must be made with Nortel Engineering.

Functional description

Table VH is used to input to the DMS machine the V-H coordinates for all NPA-Nxxs to be rated automatically.

Data II sequence and implications

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

Table size

0 to 640 000 tuples

Data ll

The following table lists datafill for table VH.

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
NPANXX		see subfields	NPA-Nxx key. This field is the key to the table and consists of subfields NPA and NXX.
	NPA	200 to 999 (3-digit area code)	Numbering plan area. Enter either a calling or called numbering plan area (NPA).
	NXX	200 to 999 (3-digit exchange number)	Nxx. Enter either a calling or called Nxx within the NPA.
V		0 to 21505	Vertical coordinate. Enter the vertical coordinate of the NPA-Nxx point.
H		0 to 21505	Horizontal coordinate. Enter the horizontal coordinate of the NPA-Nxx point.

Data ll e xample

The following example shows sample datafill for table VH.

MAP display example for table VH

```
 NPANXX      V      H
-------------------------------------------------------------------

613 226  4338  2241
```

Functional description of DMS/RATECOMP input

The following datafill description, which lists automatically rated NPAs and exception Nxx's, applies for input to the Northern Telecom computer program DMS/RATECOMP. This datafill is not required as an input to the DMS machine.

VH (continued)

Examples of exception Nxx's are:

- called Nxx subject to other line charges
- called Nxx subject to the second (low call volume) rate schedule for the NPA, for example, NWT
- Nxx to which other line charges apply to the United States telephone companies but not to Canadian companies, for example, Nxx in 403 and 604
- called Nxx subject to different treatment for collect rating, for example, the rate treatment is not bilateral
- Nxx in the home NPA subject to different taxes
- Nxx with person-only rates (NWT)

Field descriptions for DMS/RATECOMP worksheet

Field names, subfield names, and valid data ranges for DMS/RATECOMP input are described below.

Field descriptions for conditional data ll

Field	Subfield or refinement	Entry	Explanation and action
NPA		200 to 999	Numbering plan area to be rated. Enter the NPAs that are to be rated using the mileage-band method, that is, where V&H coordinates are to be generated.
NXX		0 to 9 (3 digits)	Nxx not to be rated. Enter the Nxx's within the NPA that are not to be rated by the mileage-band method, that is, where V&H coordinates are not to be generated. Nxx's can be listed simply or as a range.

Data ll e xample

An example of datafill for V&H coordinate DMS/RATECOMP input is shown below. In this example, V-H coordinates for all valid Nxx's are generated for NPA 213, except the Nxx's 244, 245, 246, 247, 248, 249, 767, and 852 and for NPAs 613 and 717.

MAP display example for table VH

```
NPA NXX
_____________________________________________________________

213 244 249
213 767
213 852
613
717
```

Table history

BCS36

The range of field NPA was changed to 200 to 999. An indication that the table size is 0 to 640 000 tuples was added.

VIRTGRPS

Table name

Virtual Facility Group Table

Overview

The virtual facility group (VFG) tables consist of table VIRTGRPS, table VFGDATA, and table VFGENG.

For switching units with the Partitioned Table Editor, non-operating company users cannot change entries in table VIRTGRPS. They cannot change entries because each entry in the table can contain data for up to three different owners. Tables VFGDATA and VFGENG were created to give non-operating company users access to the data in table VIRTGRPS.

Non-operating company users only have access to tables VFGDATA and VFGENG. Changing the data in table VIRTGRPS affects the data in tables VFGDATA and VFGENG.

Calls via a Virtual Facility Group cannot be routed to make a Network Speed Call or an ESN-Network Speed Call.

Functional description

Table VIRTGRPS provides a mechanism to eliminate loop-around trunks. Loop-around trunks are used to implement Integrated Business Networks (IBN) inward wide area telephone service (INWATS) and outward wide area telephone service (OUTWATS) and to provide equal access capabilities.

To simulate finite resources (lines or trunks) in software, a facility called virtual facility group (VFG) is provided. When a facility group is accessed from table IBNRTE, the switch checks if there are any virtual facilities available. If none are available, the call is blocked. If a virtual facility is available, it is marked as used. The call is then retranslated through the VIRTGRPS table and one of the following events occurs:

- If the type of incoming call is nil, no new attributes are given to the call.
- If the type of incoming call is plain ordinary telephone service (POTS), a new billing number (if datafilled) and a new line attribute index are used for the next leg of the call.
- If the type of incoming call is IBN, a new billing number (if datafilled), a customer group and subgroup number, a terminating restriction code, a network class of service, and other attributes are used for the next leg of the call.

VIRTGRPS (continued)

Billing numbers can be from 1 to 11 digits. It is recommended that the billing code be a ten-digit number. Under certain conditions, billing numbers of less than ten digits can cause traps.

If Station Message Detail Recording (SMDR) is specified, an SMDR record is generated. If SMDR is not specified, an SMDR record is not generated.

If Call Detail Recording (CDR) is specified, regardless of whether SMDR is specified or not, an SMDR record is generated.

The VFG can be assigned one or more of the following options:

- automatic message accounting (AMA) calling entry identification (ENTRYID)
- customer group (CUSTGRP)
- equal access (EA)
- Integrated Business Network Primary Inter-local access and transport access (LATA) carrier (IBNPIC)
- international primary carrier (INTPIC)
- primary billing directory number (PRIBILDN)
- primary interLATA carrier (PIC)
- primary intraLATA carrier (LPIC)
- routing characteristic name (RCNAME)
- special billing directory number (SPBDN)
- terminating billing option (TBO)
- toll restriction (TOLLRST)
- virtual facility group alternate line screening code (VFGALSC)
- virtual facility group automatic message accounting (VFGAMA)
- virtual facility group line screening code (VFGLSC)

A brief description of each of these options is provided in the following.

Automatic Message Accounting (AMA) calling entry identification (ENTRYID)

This option provides the ability to specify whether AMA calling entry identification is provided for AMA billable calls originated from the virtual facility group.

Customer group (CUSTGRP)

This option is required if the VFG is assigned to an attendant console for VFG access control or VFG group busy. This option specifies the customer group to which the VFG is assigned.

Equal access (EA)

This option provides equal access capabilities to IBN stations and incoming trunks. The IBN stations include attendant consoles, data units, P-phone sets, and standard IBN 500/2500 sets. These stations can reside in a dedicated SL-100 private branch exchange (PBX) or part of a customer group in a class 5 switching unit that has the IBN feature.

The EA option can only be used for entries that have POTS in field INCTYPE. It specifies whether the calling party can manually choose the PIC. This is determined by the entry in subfield CHOICE.

If the entry is N (no), the PIC must be specified in table VIRTGRPS. If the entry is Y (yes), the PIC is optional and can be manually chosen.

If the PIC is not specified, the called number must be prefixed by digits 10XXX. If digits 10XXX are used to manually choose a PIC, the digits 10XXX must not be deleted in table IBNXLA.

Integrated Business Network Primary Inter-local access and transport access (LATA) carrier (IBNPIC)

This option allows a line PIC or customer group PIC that is used in the first leg of translations to carry over to the second leg of translations. The VFG PIC, if present, is ignored. If the IBNPIC option is not present, the VFG PIC is used.

If the IBNPIC option is present and neither the line nor the customer group has a PIC assigned, the call proceeds to reorder treatment whether or not the VFG has a PIC assigned.

International Primary Carrier (INTPIC)

This option allows Equal Access End Office (EQEO) subscribers to use a presubscribed long distance carrier for international calls. It is only valid if option EA is also assigned.

When prompted for the option, datafill option INTPIC, the name of the desired international carrier in subfield CARRIER, and Y or N to allow or disallow the choice for Carrier Access Code (CAC) dialing in subfield CHOICE.

VIRTGRPS (continued)

If the subscriber makes an international call and option INTPIC is not assigned in table VIRTGRPS, then the call defaults to the carrier specified in option EA in table VIRTGRPS.

Note: World Zone 1 calls do not use option INTPIC. These calls use option PIC to choose a carrier.

Inter-local access and transport area (LATA) primary carrier (PIC)

This option provides an equal access carrier for inter-LATA calls. It is only valid if option EA is also assigned.

Intra-local access and transport area (LATA) primary carrier (PIC)

This option provides an equal access carrier for intra-LATA calls. It is only valid if the EA option has been assigned.

Billing directory number (BILLDN)

This option spills the PRI trunk group's Billing Directory Number (BILLDN) over an E911 VFG.

Routing characteristic name (RCNAME)

This option provides integrated services digital network (ISDN) translation with an optional new routing characteristic name (RCNAME) for the retranslation of an ISDN originated VFG call.

If the RCNAME option is not present in table VIRTGRPS for an ISDN originated call, then the call's original RCNAME is used for the call's retranslation. If the RCNAME option is present for a non-ISDN originated call, then the option is ignored.

Special billing directory number (SPBDN)

This option spills the Calling DN's SPBDN over an E911 VFG.

Terminating billing option (TBO)

This option provides a billable method for charging the end user for a call. When a call terminates to a line assigned the TBO option, an AMA record with a call code between 800 and 999 is generated. The call code is assigned when the TBO option is added to the line.

Toll restriction (TOLLRST)

This option allows a toll restriction for a call to carry through to the second leg of translations. The option is used when a call terminates to a virtual facility group (VFG) and retranslation occurs.

Virtual facility group alternate line screening code (VFGALSC)

This option is required when the VFG is assigned to an attendant console for VFG access control. With this option, the group is assigned an alternate line screening code flag number in table LSCFLAGS and an alternate IBN treatment number in table IBNTREAT. The alternate line screening and IBN treatment are used when the VFG access control is activated. Calls are routed to the IBN treatment when they fail screening.

Virtual facility group automatic message accounting (VFGAMA)

This option is required for Bellcore AMA recording. It identifies the VFG as being a member of a common control switching arrangement (CCSA) network or a tandem tie trunk (TDMTT).

With this option, an incoming IBN group is designated as a member of a CCSA network or a TDMTT. This AMA record is uniquely identified with call code 21 or call code 032, respectively. Each call that is routed through the VFG generates a detailed AMA recording for analysis.

Virtual facility group line screening code (VFGLSC)

This option provides line screening for the VFG. With this option, the VFG is assigned a line screening code flag number in table LSCFLAGS and an IBN treatment number in table IBNTREAT. Calls are routed to the IBN treatment when they fail screening.

Datafill sequence

Table RCNAME must be datafilled before table VIRTGRPS.

Interaction with office parameters

If office parameter E911_PSAPS_USING_1_INFO_DIGIT in table OFCSTD is set to Y and office parameter E911_NPD_TO_NPA_CONV_IN_EFFECT is set to N, datafill table E911NPD prior to datafilling field NPA in table VIRTGRPS for INCTYPE E911.

If office parameter E911_PSAPS_USING_1_INFO_DIGIT in table OFCSTD is set to Y and office parameter E911_NPD_TO_NPA_CONV _IN_EFFECT is set to Y, table E911 does not need to be datafilled prior to datafilling field NPA in table VIRTGRPS for INCTPE.

If office parameter E911_CHECK_DEFAULT_ESN in table OFCVAR is set to Y (yes), table E911ESN must be datafilled before an E911 VFG entry can be datafilled in table VIRTGRPS.

VIRTGRPS (continued)

If office parameter E911_PSAPS_USING_1_INFO_DIGIT in table OFCVAR is set to Y, table E911NPD must be datafilled before an E911 VFG entry can be datafilled in table VIRTGRPS.

Table size

0 to 8092 tuples

Memory is allocated dynamically. Because of dynamic memory allocation, each tuple is assigned a numeric index. Deleting tuples from table VIRTGRPS can change the index numbers used to populate SMDR records and Operational Measurements.

Datafill

The following table lists datafill for table VIRTGRPS.

CAUTION
Increased CPU occupancy
Each virtual facility group and its members are scanned every 10 s in order to compute OM group VFGIWUSE register VFGIWTRU. CPU occupancy may increase when several large virtual facility groups are added to table VIRTGRPS.

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
KEY		see subfield	Virtual facility group (VFG) key. This field is the key to table VIRTGRPS and consists of subfield VIRTGRP.
	VIRTGRP	alphanumeric (1 to 6 characters) or blank	Virtual facility group. If the entry is the first entry for the VFG, enter a user-defined name. The addition of a tuple defines the name that is used in other tables that need VFGs. If the entry is not the first entry for the VFG, leave this field blank.
DATA		see subfields	Virtual facility group data. This field consists of subfields MEMBERS and INCTYPE.

VIRTGRPS (continued)

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
	MEMBERS	see subfields	Virtual facility group members. This subfield consists of refinement VFGTYPE, and subfields USESGRP and SIZE.
	VFGTYPE	SIZE or USES	Virtual facility group type. If this is the first entry for the VFG, enter SIZE. If this is not the first entry, enter USES.
	USESGRP	alphanumeric or nil	Virtual facility group name. Datafill this refinement if the value of VFGTYPE is USES. The VFG name is the name of the VFG specified in table VIRTGRPS. This entry provides the means to have virtual two-way trunks or to associate more than one set of screening data with the same set of virtual circuits, or both. If the entry is not the first for the VFG, enter NILVFG.
	SIZE	0 to 2048	Size. Datafill this refinement if the value of subfield VFGTYPE is SIZE. Enter the number of simultaneous accesses allowed for the VFG.
	INCTYPE	E911, IBN, NIL, or blank	Incoming type. If this is the first entry for the VFG, do one of the following steps: Enter E911 to terminate 911 calls from an end office to an E911 tandem through incoming ISDN user part (ISUP) or super centralized automatic message accounting (SuperCAMA) trunks. The calls are translated to an E911 VFG and selectively routed to a primary public safety answering point (PSAP) based on the subscriber's directory number (DN). Enter IBN if the call is entering the Integrated Business Network (IBN) translation environment. Enter NIL if the VFG has no associated screening information.

VIRTGRPS (continued)

INCTYPE = POTS

If the entry in subfield INCTYPE is POTS and it is the first entry for the VFG, datafill subfields BILLNUM, LINEATTR, and LINECDR as described in the following table. Otherwise leave the subfields blank.

Note 1: European market: Calls terminating to a POTS VFG do not support the IBN universal translation system.

Note 2: If a non 10-digit number is datafilled in field BILLNUM for POTS VFGs the following warning message is displayed:

```
Warning: billing numbers should be 10 digits in length
```

Field descriptions for POTS conditional datafill

Field	Subfield or refinement	Entry	Explanation and action
	BILLNUM	numeric (vector of up to 11 digits) or N	Billing number. Enter the billing number to which the next leg of the call is charged. If the call is charged to the originator's billing number for the next leg of the call, enter N.
	SNPA	3 digit integer	Serving numbering plan area. Enter a 3 digit integer to prefix to the standard 7 digit billing number.
	LINEATTR	alphanumeric (1 to 16 characters)	Line attribute index. Enter the line attribute index that specifies the translations and screening tables used for the next leg of the call.
	XLAPLAN	alphanumeric (up to 16 characters)	Translation plan index. Enter the index into the XLAPLAN table.
	RATEAREA	alphanumeric (up to 16 characters)	Rate area index. Enter the index into the RATEAREA table.
	LINECDR	Y or N	Line call detail recording. Enter Y if CDR is required to record virtual line type calls. Enter N if CDR is not required.

INCTYPE = IBN

If the entry in subfield INCTYPE is IBN and it is the first VFG entry, datafill subfields BILLNUM and CUSTNAME as described in the following table.

Note: If a non 10-digit number is datafilled in field BILLNUM for IBN VFGs the following warning message is displayed:

```
Warning: billing numbers should be 10 digits in length
```

Field descriptions for IBN conditional datafill if it is the first VFG entry

Field	Subfield or refinement	Entry	Explanation and action
	BILLNUM	numeric (vector of up to 11 digits) or N	Billing number. Enter the billing number to which the next leg of the call is charged. If the call is charged to the originator's billing number for the next leg of the call, enter N.
	SNPA	3 digit integer	Serving numbering plan area. Enter a 3 digit integer to prefix to the standard 7 digit billing number.
	CUSTNAME	alphanumeric (1 to 16 characters)	Customer group name. Enter the customer group name.

INCTYPE = IBN

If the entry for subfield INCTYPE is IBN, and it is the second VFG entry, datafill subfields SUBGRP, TRC, NCOS, INTRAGRP, SMDR and CDR as described in the following table.

Field descriptions for IBN conditional datafill if it is the second entry

Field	Subfield or refinement	Entry	Explanation and action
	SUBGRP	0 to 7	Subgroup number. Enter the subgroup number within the customer group being entered.
	TRC	0 to 7	Terminating restriction code. Enter the TRC that determines whether a trunk can terminate on a specific line.
	NCOS	0 to 511	Network class of service (NCOS). Enter the NCOS number that screens and translates the next leg of the call.

VIRTGRPS (continued)

Field descriptions for IBN conditional datafill if it is the second entry

Field	Subfield or refinement	Entry	Explanation and action
	INTRAGRP	Y or N	Intragroup. If the call is intragroup, enter Y. If the call is not intragroup, enter N.
	SMDR	Y or N	Station message detail recording. If translation data requests SMDR records for this leg of the call, enter Y. Enter N to indicate that SMDR records are not generated.
	CDR	Y or N	Call detail recording. If CDR records are produced unconditionally for this leg of the call, enter Y. If CDR records are not generated for the next leg of the call, enter N.

INCTYPE = E911

If the entry for subfield INCTYPE is E911, datafill subfields ESN, ESCO, SNPA, ECPHTIME, ORIGHOLD, and RESTRICT as described in the following table.

Field descriptions for E911 conditional datafill

Field	Subfield or refinement	Entry	Explanation and action
	ESN	0 to 15999	Emergency service number (ESN). Enter a default ESN that is used to route a call if an ESN cannot be found by querying optional table E911SRDB or if an automatic number identification (ANI) fail condition occurs. ESN must be present in table I911ESN.
	ESCO	Table of 4{1, 2, 3, 4, 5, 6, 7, 8, 9, 0} (4 digits)	Emergency service central office code (ESCO). Enter an ESCO in case an ANI fail condition occurs. If the calling party directory number (DN) cannot be obtained, an ESCO is displayed at the public safety answering point (PSAP).
	SNPA	numeric (3 digits)	Serving numbering plan area. Enter the serving NPA of the E911 trunk group that has a numbering plan digit (NPD) datafilled in table E911NPD.

Field descriptions for E911 conditional datafill

Field	Subfield or refinement	Entry	Explanation and action
	ECPHTIME	0 to 255	Enhanced called party hold (ECPH) time. This entry is used to indicate the number of seconds ECPH will be active. Default value is 0.
	ORIGHOLD	Y or N	Originator hold (ORIGHOLD). Enter Y to activate E911 originator hold for calls routed through this VFG. When ORIGHOLD is active, the originator of an E911 call cannot disconnect the call. Enter N to indicate ORIGHOLD is not active.
	RESTRICT	Y or N	Restrict. Enter Y to indicate that an E911 caller, whose call is routed through an E911 VFG, has the same restrictions as if the call were routed through an emergency services (ES) trunk. N is not valid. For example, the caller cannot activate call waiting or do a call transfer.
	BILLDN	Y or N	Billing Directory Number. Enter Y to spill the PRI trunk group's BILLDN over the E911 VFG.
	SPBDN	Y or N	Special Billing Directory Number. Enter Y to spill the Calling DN's SPBDN over the E911 VFG.
	OFBSR	Y or N	Off-Board Selective Routing Database. Enter Y to use the OFBSR for routing of E911 calls The default is N.

VIRTGRPS (continued)

All tuples

For all tuples, datafill subfield OPTIONS.

Field descriptions for conditional datafill

Field	Subfield or refinement	Entry	Explanation and action
OPTIONS		see subfield	Options. This field consists of subfield OPTION. Subfield OPTION is a vector of up to 11 multiples.
	OPTION	CUSTGRP, EA, ENTRYID, IBNPIC, INTPIC, LPIC, NOMDR, PRIBILDN, SPBDN, RC, TBO, TOLLRST, VFGALSC, VFGAMA, VFGLSC, or NOLNPAMA	Option. Enter the list of options assigned to the VFG. Each option and its refinement must be separated by a space. Use as many records as required to datafill the list of options and associated refinements. If an option is not provided, no datafill for that option is required.

OPTION = CUSTGRP

If the entry in subfield OPTION is CUSTGRP, datafill subfield CUSTGRP as described in the following table.

Field descriptions for conditional datafill

Field	Subfield or refinement	Entry	Explanation and action
CUSTGRP		alphanumeric (1 to 16 characters)	Customer group. Enter the customer group name to which the VFG is assigned.

OPTION = EA

If the entry for subfield OPTION is EA, datafill subfields PIC and CHOICE as described in the following table.

Field descriptions for conditional datafill

Field	Subfield or refinement	Entry	Explanation and action
EA	PIC	alphanumeric (1 to 16 characters)	Primary inter-LATA carrier. Enter the name assigned to the primary inter-LATA carrier (PIC) in table OCCNAME. Enter NONE if a PIC is not required.
	CHOICE	Y or N	Choice. If the caller is allowed to dial a 10XXX prefix to choose a carrier manually, enter Y. If the caller is not allowed, enter N.

OPTION = ENTRYID or IBNPIC

If the entry for subfield OPTION is ENTRYID or IBNPIC, no additional datafill is required.

OPTION = INTPIC

Option INTPIC provides the ability to choose a presubscribed carrier for international calls. This option can only be set if option EA is also assigned.

If the entry for subfield OPTION is INTPIC, datafill field CARRIER as described in the following table.

Field descriptions for conditional datafill

Field	Subfield or refinement	Entry	Explanation and action
INTPIC	CARRIER	alphanumeric (up to 16 characters)	Carrier name. Enter the name of the presubscribed carrier for international calls. Table OCCNAME contains a list of valid carrier names.
	CHOICE	Y or N	Choice. Enter Y to allow the choice for Carrier Access Code (CAC) dialing. Enter N to disallow CAC dialing.

VIRTGRPS (continued)

OPTION = LPIC

The intra-LATA PIC (LPIC) option provides an equal access (EA) carrier for intra-LATA calls. This option can only be set if the EA option has also been assigned.

If the entry for subfield OPTION is LPIC, datafill fields IPIC and LCHOICE as described in the following table.

Field descriptions for conditional datafill

Field	Subfield or refinement	Entry	Explanation and action
LPIC		MCI, ITT, SSO, or NILC	Intra-LATA carrier name. Enter the intra-LATA carrier name for this VFG. The carrier name must be datafilled in table OCCNAME before it can be datafilled in table VIRTGRPS.
	IPIC	alphanumeric (1 to 16 characters)	Intra-LATA (local access and transport area) primary identification code (IPIC). The IPIC option allows the user to choose a primary carrier for intra-LATA service. For the intra-LATA primary inter-LATA carrier option, enter LPIC and datafill refinement IPIC. Enter the name of the subscriber's intra-LATA carrier. This name must be datafilled in field CARRIER in table OCCNAME before it can be used here. The datafill of the IPIC option prompts for the LCHOICE field. ***Note:*** There are special checks made when SOC goes from IDLE to ON to see if it is the first time that the SOC has been turned on after a one night process (ONP) and a TABXFR have occurred. If it is the first time, SOC changes the LPIC option to match the existing PIC option if the PIC option exists.
	LCHOICE	Y or N	LPIC choice. The LCHOICE entry (Y or N) determines if the LPIC subscriber is permitted to dial 10XXX/101XXXX codes. In the LCHOICE field, either Y or N must be entered; this field does not have a default value.

OPTION = NETINFO

If the entry for subfield OPTION is NETINFO, datafill subfields NCOS and CUSTGRP as described in the following table.

> ***Note:*** The new option NETINFO can be datafilled only if the field incoming type (INCTYPE) in table VIRTGRPS is IBN. If the NETINFO option subfields are both datafilled as N for a VFG, then the NETINFO option is not added to that VIRTGRPS tuple.

Field descriptions for conditional datafill

Field	Subfield or refinement	Entry	Explanation and action
	NCOS	Y or N	Choice. If the NCOS subfield is set to Y, the NCOS of the last VFG datafilled to Y is used. If the NCOS parameter is set to N, the system searches through the VFGs previously routed. The first VFG found to have the NCOS subfield set to Y has its NCOS put into the NETINFO parameter of the IAM. If none of the VFGs have the NCOS option set to Y, the NCOS of the originator is used.
	CUSTGRP	Y or N	Choice. If the CUSTGRP subfield is set to Y, the last VFG with CUSTGRP set to Y is used. If the CUSTGRP subfield is set to N, the system searches through the VFG(s) previously routed. The system uses the first VFG found to have CUSTGRP set to Y.The system puts this CUSTGRP data into the NETINFO parameter of the IAM. If none of the VFGs have the CUSTGRP option set to Y, the CUSTGRP of the originator is used.

OPTION = NOMDR

Option NOMDR allows suppression of message detail records to avoid double billing. If the entry for subfield OPTION is NOMDR, no additional datafill is required.

VIRTGRPS (continued)

OPTION = RC

If the entry in subfield OPTION is RC, datafill subfield RCNAME as described in the following table.

Field descriptions for conditional datafill

Field	Subfield or refinement	Entry	Explanation and action
RC	RCNAME	alphanumeric	Routing characteristic name. Enter a routing characteristic name. For ISDN calls routed through VFS, RCNAME overrides the RCNAME originally attributed to the call (before retranslation). If a new RCNAME is not specified, then the old RCNAME applies for retranslation.

OPTION = TBO

If the entry in subfield OPTION is TBO, either subfield TBOVARS or CALLCODE will appear. Datafill subfield TBOVARS or CALLCODE as described in the following table.

Field descriptions for conditional datafill

Field	Subfield or refinement	Entry	Explanation and action
TBO	TBOVARS	see subfields	TBO variables. This field consists of subfields CALLCODE, SFPRSNT, and SFVAL.
	CALLCODE	800 to 999	Call code. Enter the call code for the automatic message accounting (AMA) record.
	SFPRSNT	Y or N	Service feature code present. Enter Y to indicate that there is a service code associated with the feature that is printed on the AMA record. If this field is set to Y, subfield SFVAL must be datafilled. Enter N to indicate that a service code is not associated with the feature.
	SFVAL	800 to 999	Service feature value. Enter the code associated with the feature printed on the AMA record.

OPTION = TOLLRST

If the entry in subfield OPTION is TOLLRST, no additional datafill is required.

OPTION = VFGAMA

If the entry in subfield OPTION is VFGAMA, datafill subfield FACILITY as described in the following table.

Field descriptions for conditional datafill

Field	Subfield or refinement	Entry	Explanation and action
VFGAMA	FACILITY	CCSA, ETS, FX, or TDMTT	Facility. Enter the facility from the following list. • CCSA (common control switching arrangement) • ETS (electronic telephone set) • FX (foreign exchange) • TDMTT (tandem tie trunk)

OPTION = VFGALSC

If the entry in subfield OPTION is VFGALSC, datafill subfields ALSC and ALSCINT as described in the following table.

Field descriptions for conditional datafill

Field	Subfield or refinement	Entry	Explanation and action
VFGALSC	ALSC	0 to 255	Alternate line screening code. Enter the alternate line screening code flag number assigned to the VFG.
	ALSCINT	0 to 63	Alternate line screening code intercept number. Enter the treatment number to which a call is routed if line screening fails. The data for the treatment number is assigned in table IBNTREAT.

VIRTGRPS (continued)

OPTION = VFGLSC

If the entry in subfield OPTION is VFGLSC, datafill subfields LSC and LSCINT as described in the following table.

Field descriptions for conditional datafill

Field	Subfield or refinement	Entry	Explanation and action
VFGLSC	LSC	0 to 255	Line screening code. Enter the line screening code flag number assigned to the VFG.
	LSCINT	0 to 63	Line screening code intercept number. Enter the treatment number to which a call is routed if line screening fails. The data for the treatment number is assigned in table IBNTREAT.

Datafill example

The following examples show sample datafill for table VIRTGRPS.

Example 1 shows VFG OWAT1 with an access size of 6. This VFG retranslates the call using POTS translation tables, has a billing number of 0131111, uses line attribute 34, and has CDR enabled. There are no options.

Example 1 of a MAP display for table VIRTGRPS

```
   KEY                                                    DATA
OPTIONS
_____________________________________________________________

OWAT1                SIZE    6 POTS     0131111   34 Y  $
```

Example 2 shows VFG INWAT1 using VFG OWAT1. This VFG retranslates the call using the IBN translation tables, with customer group KDK1, subgroup 0, terminating restriction code of 3, and the network class of service of 17. The call is not intragroup. The call requires SMDR and CDR. The entries after IBN are essentially the trunk data for the incoming loop-around virtual facility. The VFG has the TDMTT option.

VFG groups OWATS1 and INWAT1 create a two-way VFG for IBN outward wide area telephone service (OUTWATS) and IBN inwards wide area telephone service (INWATS).

Example 2 of a MAP display for table VIRTGRPS

```
   KEY                                                    DATA
OPTIONS
_____________________________________________________________

INWAT1   USES  OWAT1  IBN   0131111  KDK1  0 3 17 N Y Y
VFGAMA TDMTT $
```

Example 3 shows E911 as the entry for subfield INCTYPE. The enhanced called party hold time is set to 123 seconds. This time ensures that an emergency call will be processed whether or not the caller hangs up prior to completing the call. With subfield ORIGHOLD set to Y, the originator of an E911 call cannot disconnect the call.

Example 3 of a MAP display for table VIRTGRPS

```
KEY     DATA     OPTIONS
_____________________________________________________________

CARY1   SIZE  10  E911  111  0333  613  0  Y  Y Y Y  $
```

Example 4 shows option INTPIC.

Example 4 of a MAP display for table VIRTGRPS

```
KEY   DATA    OPTIONS
_____________________________________________________________

BGRP1 SIZE 1 POTS 9199917777 0 N (EA CARR1 Y)(INTPIC XYZ Y)
$ $
```

Example 5 shows option NOMDR.

VIRTGRPS (continued)

Example 5 of a MAP display for table VIRTGRPS

```
KEY    DATA     OPTIONS
_____________________________________________________________

DDPVFG SIZE 2 POTS N XLA1 RATE1 1 N (NOMDR)$
```

Example 6 shows the OFBSR subfield option for an E911 INCTYPE in the DATA field.

Example 6 of a MAP display for table VIRTGRPS

```
TABLE: VIRTGRPS
>pos 911vfg
911VFG       SIZE   10 E911   110 0621 613   0 Y N N Y Y $
                                                 ^
                                                 |
                                              OFBSR
```

Table history

SN06 (DMS)

Feature A89007692 added option E911 ESCO expansion to four digits.

NA015

Added the Off-Board Selective Routing database (OFBSR) subfield under the E911 INCTYPE. This subfield allows routing and translations to be processed through an OFBSR.

NA013

Added qualification about dynamic memory allocation. Added option NOMDR to the set of VFG options.

NA012

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

Option POTS is no longer an option in field INCTYPE.

EUR010

Added option NETINFO. This option allows the DMS-100 switch to correctly identify the VFG used to route calls at both the originating and receiving end of an IBN7 trunk. The option uses the VFGs, NCOS, and CUSTGRP parameter information in the NETINFO of the ISUP_IAM.

NA011

Added option NOLNPAMA to the range of VFG options.

NA009

Added options BILLDN and SPBDN. These options let the E911 VFG spill the PRI trunk group's BILLDN and Calling DN's special billing number for ANI.

NA007

Added option INTPIC with subfields CARRIER and CHOICE according to the International Primary Carrier feature.

NA006

Added option LPIC with subfields CARRIER and LCHOICE in accordance with the Intra-LATA PIC Enhancements feature.

Added subfield ECPHTIME for subfield INCTYPE=E911 to indicate the number of seconds Enhanced Called Party Hold is active. Currently inactive option, Nortel sets to zero.

NA005

Increased range of subfield ESN to 15,999 in accordance with E911 Non-CallP Enhancements, which enhances E911 tandem by allowing five-digit ESN.

Supplementary information

None

VIRTGRPS (end)

VLMEM

Table name

TOPS Voice Link Member Table

Functional description

Table VLMEM is required for offices with the Operator Centralization (OC) feature. This feature is part of the OC-HOST and OC-REMOTE software packages. The voice links between host and remote offices (one link for each call) are analog or digital intertoll (IT) trunks, outgoing at the host office and incoming at the remote office.

Table VLMEM maps voice link terminations between OC equipped offices (normally a host linked to one or more remotes). This table exists in both host and remote offices.

In table TRKSGRP, host voice links must have the entry in field REMBSY equal to Y. Remote voice links must have the entry in field REMBSY equal to N.

The number of voice link circuits in table VLMEM must be the same as the number of voice link circuits in table TRKMEM in both the host and remote TOPS offices. This applies to all host-remote TOPS offices in all BCSs.

If all circuits are idled, the DMS attempts to use all voice links. In the event of a circuit mismatch, this will result in call failures and traps in the host OC office.

Data II sequence and implications

The following tables must be datafilled before table VLMEM:

- CLLI
- TRKGRP
- TRKSGRP
- TRKMEM
- OCOFC
- OCGRP

Table VLMEM must be datafilled before the following tables:

- OCHOST
- OCHOSTQ

VLMEM (continued)

Table VLMEM must be datafilled before issuing the OCNCHOST command in the OCNC MAP increment.

Table size

The size of table VLMEM is controlled by the common language location identifier (CLLI) of the voice link group associated with a given office. This association occurs in table OCGRP, and the size is specified in table CLLI by the TRKGRSIZ field for the voice link group (VLGRP) CLLI. To increase the size of VLMEM for a particular office, the TRKGRSIZ field in table CLLI for the voice link group being affected must be increased. In TOPS04, table VLMEM memory is dynamically allocated. Therefore, it is no longer necessary to delete and re-add all tuples in table VLMEM for the affected office name after increasing the TRKGRSIZ in table CLLI.

The maximum size is computed by multiplying the maximum number of voice links allowed per group (2047) by the number of possible groups (31). Therefore, the table size range is 0 to 63457 tuples.

Data II

The following table lists datafill for table VLMEM.

Field descriptions (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
VLKEY		see subfields	Voice link member key. This field consists of subfields OFCNAME and OFCINDEX.
	OFCNAME	alphanumeric	Voice link office name. In the HOST, this field consists of the names of different remote offices. In the remote, it consists of the name of the host. This field is pre-defined in table OCOFC.
	OFCINDEX	0 to 2047	Voice link office index. Enter a unique number that refers to an actual trunk. This number is an inter-office index that must be identical in host and remote offices for proper operation. Order of entries is unimportant.

Field descriptions (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
VLGRP		alphanumeric (up to 16 characters)	Voice link group. Enter the voice link group CLLI associated with a specific office. In the remote, there is only one, while in the host there is one for each remote office. This field is pre-defined in table OCGRP.
VLEXTRK		0 to 9999	Voice link external trunk number. Enter the external trunk number assigned to the voice link.

Data ll e xample

The following example shows sample datafill for table VLMEM.

MAP display example for table VLMEM

```
VLKEY                          VLGRP      VLEXTRK
_____________________________________________________

MILTRLM    9          MILTVL254IT          341
MILTRLM    7          MILTVL254IT          342
MILTRLM    11         MILTVL254IT          343
```

Table history

TOPS04

Increased field OFCINDEX range from 0-254 to 0-2046. Also, changed memory allocation from static to dynamic. Per feature AN1133 in functionality Enhanced TOPS OC and OC Remote Support, ENSV0008 and ENSV0011.

VMXTAB

Table name

Voice Message Exchange Table

Functional description

Voice message exchange (VMX) communicates directly with the SL-100, using four-wire E & M analog trunks with wink start signaling. Communication is established using dual-tone multifrequency (DTMF) command codes. There are two types of command codes: call connect command codes and VMX commands (dial and special). The call connect command codes are used to interconnect the SL-100 and VMX. There are five call connect command calls, three from the SL-100 to VMX and two from VMX to the SL-100. The five call connect command codes and their functions are listed below.

The three call connect commands from the SL-100 to VMX are as follows:

- To allow the VMX subscriber to access and manipulate messages in his mailbox.
- To allow the VMX subscriber to use the Call Forward Universal feature to forward calls to his voice mailbox (VMX's call answering feature).
- To allow anyone to leave a voice message for a VMX subscriber at the combination message desk.

The two call connect commands from the VMX to the SL-100 are as follows:

- To enable the VMX to instruct the SL-100 to turn on a subscriber's message-waiting indication.
- To enable the VMX to instruct the SL-100 to turn off a subscriber's message-waiting indication.

The user activates features by means of dial commands (two digits) and special dial commands (three digits) upon access to VMX. The dial commands are used to receive and send messages and invoke other standard VMX functions. The special commands are used for selected special VMX features. The network access codes used by a subscriber must not be the same as the first digit(s) of any command code.

User calls to VMX are identified through the use of a location code (for an electronic switched network (ESN) or stand-alone SL-100 environment). A user may view VMX as a remote location in an ESN network or nonlocal or remote to a stand-alone SL-100. The desired SL-100 to VMX function is invoked by using a different four-digit extension number for each function.

The voice message exchange (VMX) provides a voice message store-and-forward service. The system digitizes a spoken message and stores it on disk. Upon retrieval, the message is converted to an audible form. The subscriber hears the message in the sender's own voice.

Each VMX subscriber is assigned a voice mailbox. This is a conceptual term that describes the portion of VMX devoted to a given individual's messages. The voice mailbox functions much like a postal mailbox in that a user has a unique address to which messages are sent.

For VMX's call answering, a user's extension number must match the address of the owner's mailbox, so VMX can identify the recipient's mailbox for the deposit of messages. This means the voice mailbox address of a VMX subscriber must be the location code plus the station number of an SL-1/SL-100 user.

Each mailbox has a user identification (ID) associated with it. The user ID is used as a mailbox key to enable access to the messages inside the mailbox.

The VMX message desk is a VMX feature which enables SL-100 or ESN users to leave messages for VMX subscribers. The VMX message desk is referred to as the VMX combination message desk.

The VMX message desk DN is the directory number (DN) used to direct calls to the VMX message desk feature.

The VMX subscriber access DN is the directory number used by a subscriber to call VMX and to primarily retrieve, send and store messages.

The VMX call forward DN is the directory number used when a subscriber forwards calls to the VMX call answering feature.

The message center is used in calls other than VMX because it is a part of the private branch exchange (PBX) system. It is manned by an individual designated as the message center operator. This operator can transfer calls to the VMX message desk.

VMXTAB (continued)

Each VMX requires either three location codes or one location code and two pseudolocation codes in the SL-100 database. These codes are used as follows:

- Calls directly to a VMX voice mailbox or the VMX message desk. This code must use a standard location code.
- Call-forwarding to a VMX voice mailbox (VMXs call answering feature). This code can use a standard location code or a pseudolocation code.
- VMX to VMX message transfer (the VMX voicenet feature). This code can use a standard location code or a pseudolocation code.

The user need only be aware of the location code specified for direct calls to VMX. This is referred to as the VMX location code. The other two location codes or pseudolocation codes are only used for routing. If pseudolocation codes are used, they must be in the form *0nn*, where *n* = any digit from 2 to 9. This prevents a conflict between a pseudolocation code and a valid numbering plan area (NPA) or office code.

Access to the VMX mailbox is obtained by dialing the VMX subscriber access DN. This DN has the format Network access code + VMX location code + *XCCC*, where *CCC* is the VMX subscriber access command code, and *X* is any digit from 0 to 9. Once connected to VMX, the subscriber is prompted to enter the VMX user ID. The subscriber is informed of the number of messages in the mailbox, then given instructions for utilizing VMX features, for example, retrieving or sending messages.

To access the VMX combination message desk, the user dials the VMX message desk DN. This DN can also be used to forward calls to the combination message desk. This DN has the format Network access code + VMX location code + *XCCC*, where *CCC* is the VMX message desk command code and *X* is any digit from 0 to 9. Once connected to VMX, the caller is prompted to speak the name of the message recipient and leave a message.

The VMX combination message desk feature allows anyone to leave a voice message for a VMX subscriber. The message desk is normally accessed using call transfer three-way calling by a message center operator.

Once connected to the message desk, a caller is prompted with voice instructions to speak the name of the intended recipient and leave the message. The knowledgeable user can dial the recipients voice mailbox address instead of speaking the person's name by entering the recipient's mailbox address (location code plus station number) after hearing the VMX logo. This enables VMX to deposit the message directly into the recipient's mailbox.

If the caller identifies the recipient by speaking the name, the message goes into a message desk queue. Periodically, the VMX message desk operator must scan the queue, redirecting messages to the recipient's voice mailbox. Consequently, there is a delay between the time the message is left and the time the message is deposited into the actual recipients mailbox (and a delay before message waiting indication).

Call Forwarding

All types of Call Forwarding (Universal (CFU), Busy (CFB), and Don't Answer (CFD)), are available to the subscriber when forwarding to the VMX. Traditionally, CFB and CFD are not used to forward calls outside a user's customer group. This can be allowed through datafill.

Call Forwarding Universal

To Call Forward Universal to VMX's call answering feature (to reach the called party's access voice mailbox for deposit only), a user must specify the VMX call forward DN as the destination number. This DN has the following format, Network access code + VMX location code + *XCCC*, where *X* is any digit from 0 to 9 and *CCC* is the VMX call forward command code.

The seven digit number VMX location code + *XCCC* used here must be datafilled in table VMXTAB.

To specify the subscribers voice mailbox address (location code + station number) and to reduce the outpulsed digit string to an acceptable length, the VMX call forward DN is converted to the format Network access code + *CCC* + subscriber's location code + *XXXX*, where *X* is any digit from 0 to 9, *CCC* is the call forward command code, and *XXXX* is the subscriber's station number.

The call forward command code must be either a three-digit standard location code or a pseudolocation code. It must be datafilled to route to the VMX.

Once connected to the VMX, the caller is prompted to leave a message either by a standard recording or a personalized recording made by the subscriber. The caller can only deposit a message. No provisions are made to prevent a non-subscriber from forwarding his calls to the VMX. If this situation occurs, messages cannot be processed.

Call Forwarding Busy

Unlike CFU, CFB is not programmable by the user. The forward number must be entered into the SL-100 database through datafill. To identify the subscriber's mailbox address, the forward number must be in the format Network access code + *CCC* + subcriber's location code + *XXXX*, where *X* is any digit from 0 to 9, *CCC* is the call forward command code, and *XXXX* is the subscriber's station number.

VMXTAB (continued)

If CFB outside the subscriber's customer group is necessary, field CBTYPE must be set to either CBE or N (no). If assigned through service orders, the default assignment is N. The appropriate intragroup designations must also be set to allow CFB outside the subscriber's customer group.

Call Forwarding Don't Answer

CFD is not programmed by the user. The forward number entered into the database is the same as that for CFB. To allow forwarding outside the subscriber's customer group, field CDTYPE must be set to either CDE or N. As with CFB, service orders default to N when the feature is assigned. Again, the appropriate intragroup designations must be made.

Incoming calls

Subscribers can call VMX and access their voice mailboxes from off-net locations. This is accomplished through the SL-100 direct inward system access (DISA) service. The DISA access code is entered, then the VMX dialed as usual. DISA access can require an authorization and account code, if so datafilled.

The types of VMX originated calls are:

- message waiting indication (MWI) calls
- outgoing call requests
- outcall delivery (message delivery to a telephone)
- voicenet calls from a voicenet port

If a subscriber has message waiting indication ON at a station, any of three conditions could exist:

- a message is waiting at the SL-100 message center
- another user has left a call request
- a message is waiting in the subscriber's VMX mailbox

It is recommended that VMX be queried first.

The message waiting indication feature must be enabled on both the SL-100 and VMX for the third condition to happen.

VMX can signal (MWI ON) a subscriber if the subscriber's mailbox has a message deposited in it. This depends on how the subscriber has toggled the dial code 057. The signal is active as long as there are new (unreviewed) messages in the mailbox and 057 has been toggled to enable the MWI signal.

Depending on the type of instrument (500 set, 2500 set or business set), either the message waiting lamp is turned on or stuttered dialtone is heard upon going off hook. On business sets, the alphanumeric display is not used. When a subscriber removes the last message from their message queue (by saving, erasing, or redirecting the message), VMX siezes another trunk and originates an MWI OFF call for the appropriate station. If another feature has not set message waiting indication on, this indication is turned off. If a problem occurs, such as an all-trunks-busy situation, preventing the MWI OFF call from completing, there can be a short delay in turning MWI off.

Outgoing calls

Outgoing calls can be placed by VMX for any of the following functions:

- message delivery telephone numbers on or local to ESN nodes
- message transfer from one VMX to another (voicenet)

Restrictions on VMX originated calls are determined according to the SL-100 Network Class of Service (NCOS) assigned to the VMX or other incoming trunk group.

An outgoing call can be placed by VMX for one of the following purposes:

- A subscriber may direct VMX to deliver a message to any telephone number. This telephone number is dialed by the subscriber and must include all necessary access codes. On-net numbers must include the appropriate location code, even if it is the same as the subscribers.
- A subscriber can direct VMX to take his mailbox off hold (by dialing the VMX special function code 062). When a new message is deposited in the subscriber's mailbox, VMX calls a beeper or the user's telephone. The user calls into VMX to hear his messages. This directory number, including access codes, must be datafilled on VMX.

In either case, if the delivery attempt fails, VMX tries again in a designated length of time.

Retrieving messages

In an ESN environment with multiple VMXs, if a message is left on one VMX (VMX A) for a subscriber assigned a mailbox on another VMX (VMX B) in the network, VMX A places a voicenet call to VMX B to transfer the message. Messages can be transmitted immediately on an individual basis, or stored for later transmission in a batch type operation at a time that may be more economical. VMX is capable of transferring multiple messages to a single VMX location with a single connection. Due to the protocol of VMX, each VMX must have a separate network port dedicated to voicenet transfer. These are identified through the use of ESN location codes or pseudolocation codes

VMXTAB (continued)

that route to a dedicated voicenet trunk group. These location codes must be different from

- the general VMX location codes used for the direct call, message desk calls, and call forward functions
- the call forward command code

The VMX MWI utilizes the same MWI as attendant and station message waiting (message waiting lamp on a business set or stuttered dial tone on 500/2500 sets). The user cannot know which source to query for messages. The call request retrieve code cannot be used to retrieve messages from VMX. A subscriber receives reorder tone if this code is dialed and only the VMX has set MWI on. To retrieve messages from the mailbox, a subscriber must dial the VMX subscriber access DN directly.

Other features

A call can be transferred to or conferenced with a VMX subscriber's voice mailbox or the VMX message desk. Transfer to a subscriber's voice mailbox is not recommended because once access is gained, the caller has full access to the subscribers mailbox and VMX privileges.

Any of the VMX DNs can be programmed for speed calling or automatic dial. The subscriber's user ID must not be appended on the VMX DN.

The VMX message desk DN can be used as the night service number. The caller is prompted to state the name of the recipient and leave the message. This is only useful if the call is for a VMX subscriber.

If VMX is making an outgoing call delivery of a message, that is, ringing a telephone set, and the recipient is a member of a hunt group or multiple access directory number (MADN) group, the message is delivered to anyone who answers the call. If the VMX makes an MWI call to a subscriber who is a member of a hunt group or MADN group, MWI is set for the pilot number or primary member, respectively.

MWI activation or deactivation takes place regardless of whether the Make Set Busy feature is active.

Invalid dialing situations

Invalid dialing situations results in one of the following treatments (depending on the circumstances):

- The SL-100 and VMX log an error.
- VMX can play a brief message indicating that the call cannot be processed.

- If the caller does not enter specified information as prompted by VMX, VMX logs this action and can disconnect the caller if correct information is not entered after three times.
- The SL-100 can handle this call with certain overflow treatments (for example, 120 IPM tone, operator intercept or recorded announcement).
- After connection, VMX can produce invalid treatments (that is, beeps caused by fragmented or corrupted messages).

The code must be datafilled to route to the SL-100 hosting the appropriate VMX. In the host SL-100, this code must route to an IBNRTE route assigned a digit manipulation index (DMI) corresponding to an entry in table DIGMAN that removes four digits from the beginning of the digit string. This allows outpulsing to begin with the command code.

The call forward command code must be datafilled as a location code or pseudolocation code routing to the SL-100 hosting the appropriate VMX. The route type must be FRTE to allow outpulsing of all the digits. In the host SL-100, this code must route to the VMX trunk group. No DMI is necessary.

If the 0*nn* format is used, the customer group translator for any applicable trunk group must not have 0 datafilled to route to the attendant. The digilator index specified to route to the attendant must be 0000 instead of 0.

For a subscriber to use CFU to forward to their mailbox, tables CUSTENG and VMXTAB must be properly datafilled. The subscriber's customer group must be given the VMX option in table CUSTENG. An index to an entry in table VMXTAB must also be specified. Since that entry must already exist, table VMXTAB must be datafilled before the VMX option is assigned in table CUSTENG.

In the host SL-100, the trunk group going to the VMX must be assigned a unique NCOS. This NCOS must be assigned an NCOS preliminary translator. Within this pretranslator, the following must be datafilled:

- The MWI command codes. These must be assigned the FTR translation selector, with an FTRTYPE of VMX and number of access digits equal to three (the number of digits in the command code).
- Any valid location code or office code that a VMX MWI call might route to. For routes over an ESN, MWI calls must be tagged with a unique ESN class mark (TCOS, call type, and so on) so that they can be identified. The switch must use class of service mapping to convert the unique VMX_MWT class mark into a unique NCOS. This NCOS must be assigned a pretranslator containing the same information as the NCOS pretranslator described for the host SL-100.

VMXTAB (continued)

The VMX precedes the digits in an outgoing call by an outgoing call command code. This can be in pseudolocation code format. This command code must be stripped off in the host switch. This is accomplished in the NCOS pretranslator for the VMX trunks by giving the command code an N selector and setting the prefix fence to three (the number of digits in the command code).

The voicenet location code must be datafilled to route to the SL-100 hosting the appropriate voicenet port (or trunk group). In the host SL-100, this code must route to the voicenet trunk group. As with the call forward command code, this code may be in the form *0nn*. If *0nn* is used, the same attendant routing restrictions stated for call forward apply here.

Data II sequence and implications

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

Table size

1 to 255 tuples

Data II

The following table lists datafill for table VMXTAB.

Field descriptions (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
VMXIDX		0 to 255	*Voice message index* This field is the index into this table. The index is assigned in the voice message exchange (VMX) option in table CUSTENG.
HMLOCCD		0 to 9 (vector of up to 3 digits)	*Home location code* Enter the three-digit location code or office code assigned to the office being datafilled. If neither is used, enter 0 (zero).
NOEXTDGS		0 to 7	*Number of extension digits* Enter the number of digits in the extensions numbers assigned to the stations in the customer group that specifies this VMX index.

Field descriptions (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
NONACDGS		0 to 7	*Number of access code digits* Enter the number of digits in the network access code used by the customer group specifying this VMX index.
VMXCFWDN		0 to 9 (table of 7 digits)	*Voice message exchange call forward directory number* Enter the directory number assigned for use in call forwarding to the VMX. Any entry outside the range indicated for this field is invalid.

Data ll e xample

The following example shows sample datafill for table VMXTAB.

MAP display example for table VMXTAB

```
VMXIDX HMLOCCD NOEXTDGS NONACDGS VMXCFWDN
_____________________________________________________________

     1     226         4         3  2254510
```

VOWINV

Table name

Virtual Office Worker Inventory table

Functional description

Table VOWINV is used to store data associated with VOW functionality. It contains the physical or virtual LEN(s) associated with a VOW's dedicated DN and associated data, his or her personal ID code, and his or her primary DN. As VOW log in and log out of their dedicated DNs, this table is automatically updated to keep the information up-to-date. VOWINV also contains information identifying the physical sets which have the VOWDN line option assigned.

Tuples cannot be added to or deleted from this table through the Table Editor. In addition, only the VOWPID field can be modified through the Table Editor. Any other modifications to the table through the Table Editor are blocked.

Datafill sequence and implications

This table is datafilled automatically when VOWs log in and log out, as well as when switch personnel manipulate VOW set data through the CKLN and CLN commands. It is also updated as VOWs are logged out through the VOW audit. Switch personnel can modify only the VOWPID value within this table. Tuples cannot be added, deleted, or otherwise modified through the table editor.

Virtual VOW LENs are pre-assigned when the VOW line option is added to a set through Servord and a tuple is created in table VOWINV. Virtual VOW LENs are un-assigned only when the VOW line option is removed from a set through Servord and the corresponding tuple is deleted from table VOWINV.

Table size

The table below provides the sizing information for table VOWINV. Table VOWINV takes up 2,406,030 bytes whether full or empty.

Minimum size	Maximum size	CC restart type required to increase size
0 tuples	41, 000 tuples (see Note)	not applicable
Note: A maximum of 20,500 tuples contain a VOWTYPE value of VOW. A maximum of 20,500 tuples contain a VOWTYPE value of VOWDN. The maximum total tuples is 41,000.		

VOWINV (continued)

Datafill

The following table lists datafill for table VOWINV.

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
VOWKEY	CUSTGRP, KEYDATA		*Field VOWKEY* VOWKEY is the table key and uniquely identifies a tuple through a CUSTGRP (customer group) and VOWTYPE (part of subfield KEYDATA).
Subfield CUSTGRP			
CUSTGRP		alphanumeric	Enter the CUSTGRP.
Subfield KEYDATA			
KEYDATA	VOWTYPE	VOW or VOWDN	If a VOWTYPE of VOW is specified, then VOWPDN (see below), identifying the primary DN of the VOW, is also part of VOWKEY. If a VOWTYPE of VOWDN is specified, then VOWDNLEN (see below), identifying a physical LEN on which the VOWDN option is assigned, is also part of VOWKEY.
	VOWPDN	vector of three numeric values	VOWPDN is prompted only if VOWTYPE = VOW. Enter the AREACODE, OFCCODE (office code), and STNCODE (station code).
	VOWDNLEN	VOW, plus numeric value	VOWDNLEN is prompted only if VOWTYPE = VOWDN. The format of VOWDNLEN is: VOW <VOW Node Number> <VOW Terminal Number> A VOW Node Number is a value from 1 to 10, and a VOW Terminal Number is a value 1 to 2050. An example of a VOW LEN is ‘VOW 2 955’.

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
VOWDATA	VOWTYPE	VOW or VOWDN (automatic, not entered)	*Field VOWDATA* VOWDATA contains the remaining data for the tuples. VOWTYPE within VOWDATA matches the value of VOWTYPE within VOWKEY.
For VOWTYPE = VOW, the following additional fields exist:			
VOWPID			VOWPID provides the associated VOW passcode value
VOWLEN			VOWLEN provides the pre-assigned virtual VOW LEN for use by the associated VOW user.
VOWMATE			VOWMATE provides the pre-assigned virtual VOW mate LEN for use by the associated VOW user, if appropriate.
	MATE	Y or N	
	MATELEN	VOW, plus numeric value	MATELEN is prompted only if MATE = Y in VOWMATE field.
LOGGEDIN		Y or N (automatic, not entered)	LOGGEDIN specifies whether the associated VOW user is logged in or not.
PHYSLEN			If LOGGEDIN is set to Y, then PHYSLEN provides the physical LEN through which the VOW user is logged in.
PHYSMATE			If LOGGEDIN is set to Y, then PHYSMATE provides the physical mate LEN, if appropriate.
	MATE	Y or N	
	MATELEN	mate VOW plus numeric value	MATELEN is prompted only if MATE = Y in PHYSMATE field.

VOWINV (end)

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
For VOWTYPE = VOWDN, the following additional field exists:			
VOWDNDN	VOWPDN	vector of three numeric values	VOWPDN is prompted only if VOWTYPE = VOW. Enter the AREACODE, OFCCODE (office code), and STNCODE (station code).

Datafill example

The following example shows sample datafill for table VOWINV.

MAP display example for table VOWINV

```
VOWKEY VOWDATA
--------------
BNRRCH VOWDN LCM1 00 1 09 31 VOWDN 214 997 8880
BNRRCH VOW 2149975134 VOW 839943 VOW 2 66 N N IPE0 0 0 2 3 N
BNRRTP VOWDN IPE0 00 0 00 12 VOWDN 919 657 8181
BNRRTP VOW 9196577665 VOW 5576643 VOW 4 644 Y VOW 4 645 Y DLM0 0 0 4 12 Y DLM0 0 0 4 13
```

Table history

SN07 (DMS)

Table VOWINV introduced by feature A00002011, Virtual Office Worker.

VPSRVDEF

Table name

Default Voice Processing Unit Service Configuration Table

Functional description

Table VPSRVDEF specifies the default configuration for a particular voice processing unit (VPU) service. Defaults specified for a service apply to all VPU nodes supporting that service. Default configurations for each VPU can be changed by using table VPUSERV.

Note: Service configuration data is only required if a default configuration is not defined, or if it is necessary to override the default for some reason, for example, to test a new configuration.

Adding, deleting, or changing tuples

The standard table control functions (add, delete, change) apply to tuples in table VPSRVDEF subject to the following conditions:

Add

The location of the VPU audio load information file, if specified, must be previously datafilled in table PMLOADS.

Delete

No tuples in table VPUSERV can be using the default configuration for the service being deleted from table VPSRVDEF.

Change

All default configuration information being referenced by tuples in table VPUSERV must be specified in table VPSRVDEF.

Data ll sequence and implications

The following tables must be datafilled before table VPSRVDEF.

- PMLOADS
- LIUINV

Table size

0 to 2 tuples

Data II

The following table lists datafill for table VPSRVDEF.

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
KEY		see subfield	*Key* This field consists of subfield SERVICE.
	SERVICE	ADAS or TEST	*Service* This is the key field of the table. Enter the name of the voice processing unit (VPU) service. Enter ADAS for the Automated Directory Assistance Service or TEST to test a new configuration. The entry in this field must be previously datafilled in table LIUINV.
OPTIONS		see subfield	*Options* This field consists of subfield OPTION.
	OPTION	AUDIO	*Option* Enter AUDIO for the audio option and datafill refinement AUDIO. End the list with a $ (dollar sign). The entry in this field must be previously datafilled in table PMLOADS.
	AUDIO	alphanumeric (up to 8 characters)	*Audio* Enter the name of the file containing the default audio load information for the specified service.

VPSRVDEF (end)

Data ll e xample

The following example shows sample datafill for table VPSRVDEF.

The example consists of one tuple. Field SERVICE is datafilled as ADAS and field AUDIO is datafilled as ADAS34AA.

MAP display example for table VPSRVDEF

```
 KEY           OPTIONS
_____________________________________________________________

ADAS (AUDIO ADAS34AA)$
```

Table history

BCS35

Table VPSRVDEF was introduced.

VPUSERV

Table name

VPU Service Information Table

Functional description

Table VPUSERV assigns services and supplies validation of the table contents to voice processing unit (VPU) nodes.

Tuples in table VPUSERV are added, changed, or deleted using the following guidelines:

Add The location of the VPU audio load information file, if specified, must be previously datafilled in table PMLOADS. The VPU must be previously datafilled in table LIUINV. Any option not specified in table VPSRVDEF must be specified in table VPUSERV. The VPU must be in a manual busy or offline state.

Delete The VPU must be in a manual busy or offline state.

Change Any option not specified in table VPSRVDEF must be specified in table VPUSERV. The location of the VPU audio load information file, if specified, must be previously datafilled in table PMLOADS. The VPU must be in a manual busy or offline state if the service is changed. Options can be changed in any state, but do not take effect until the VPU is returned to service (RTS).

Data ll sequence and implications

The following tables must be datafilled before table VPUSERV.

- LIUINV
- PMLOADS

Table size

0 to 180 tuples

VPUSERV (continued)

Data II

The following table lists datafill for table VPUSERV.

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
KEY		see subfield	*Key* This field is the key to the table and consists of subfield VPUNO.
	VPUNO	0 to 179	*Voice processing unit number* Enter the number of the voice processing unit (VPU).
SERVICE		ADAS or TEST	*Service* Enter the name of the VPU service, ADAS (Automated Directory Assistance Service), or TEST (test) as previously defined in table LIUINV.
OPTIONS		see subfield	*Options* This field consists of subfield OPTION.
	OPTION	AUDIO	*Option* Enter AUDIO for the audio file option and datafill refinement AUDIO.
	AUDIO	alphanumeric (up to 8 characters)	*Audio* Enter the name of the file that contains the audio load information as previously datafilled in table PMLOADS.

Data ll e xample

The following example shows sample datafill for table VPUSERV.

The example consists of one tuple with field VPUNO of 0, field SERVICE of ADAS, and field OPTIONS of AUDIO ADAS34AB.

MAP display example for table VPUSERV

```
KEY SERVICE                                    OPTIONS
_____________________________________________________________

  0    ADAS                            (AUDIO ADAS34AB)$
```

Table history

BCS35

Table VPUSERV was introduced.

VRINV

Table name

Version Registry Inventory (VRINV) Data Table.

Functional description

Table VRINV provides read-only software versioning information by product, load, layer, and fuction. The VRINV table replaces table BCS Number Equivalent Viewable Parameters.

Data II sequence and implications

Table VERSIONS must be datafilled before table VRINV.

All other tables must be datafilled after table VRINV.

Table size

Minimum size: 6 x 14 words per tupleMaximum size: 1100 x 14 words per tuple.

Data II

The following table lists the datafill for table VRINV.

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
VUNAME		alphanumeric 1 to 32 characters.	CLASS = PRODUCTThis field contains the Nortel-defined product name stripped of the version information.CLASS = LOADThis field containsthe first four characters of the eight character product computer module (CM) load's ordering code.CLASS= LAYERThis field contains the predefined layer name stripped of the version and edition information.CLASS= FUNCTIONThis field contains the Nortel-defined runtime software function name.

CLASS = PRODUCT

The following table lists the datafill for table VRINV when the entry in subfield CLASS = PRODUCT.

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
ADMIN		NIL	This field is not used at this time.
VERTAB	VERSION	-1 to 999	This field identifies the active PRODUCT version code.
	LOCATION	node id unit id	This field contains the Location Node identification code (NIL or CM) and the Location Unit Number identification code (0 or 1).

CLASS = LOAD

The following table lists the datafill for table VRINV when the entry in subfield CLASS = LOAD.

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
TARGET		alphanumeric (1 to 32 characters)	This field identifies the Motorola 68K-family loadbuild environment used. Entries may be M68K, M68SNSE, M88K, or M88SNSE.
LCF		alphanumeric (1 to 32 characters)	This field identifies the version and edition of the software used in the control file loadbuild.
ADMIN		NIL	This field is not used at this time.
VERTAB	VERSION	-1 to 999	This field identifies the active LOAD version code.
	ISSUE	alphanumeric (1 to 3 characters)	Identifies the active LOAD issue number.
	LOCATION	node id unit id	This field contains the Location Node identification code (NIL or CM) and the active Location Unit Number identification code (0 or 1).

VRINV (continued)

CLASS = LAYER

The following table lists the datafill for table VRINV when the entry in subfield CLASS = LAYER.

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
ADMIN		NIL	This field is not used at this time.
VERTAB	VERSION	-1 to 999	This field identifies the active LAYER version code.
	SIB-VERSION	-1 to 999	This field identifies the active LAYER sub-version code.
	LOCATION	node id unit id	This field contains the Location Node identification code (NIL or CM) and the active Location Unit Number identification code (0 or 1).

CLASS=FUNCTION

The following table lists the datafill for table VRINV when the entry in subfield CLASS = FUNCTION.

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
ADMIN		NIL	This field is not used at this time.
VERTAB	VERSION	-1 to 999	This field identifies the active FUNCTION version code.
DATA		Eight character alphanumeric	This field contains the eight character alphanumeric function code.
	LOCATION	node idunit id	This field contains the Location Node identification code (NIL or CM) and the active Location Unit Number identification code (0 or 1).

Data ll e xample

The following example shows sample datafill for table VRINV.

MAP display example for table VRINV

```
> lis all
TOP
VUKEY                                                    CLASSVAR
_____________________________________________________________
           LEC0
PRODUCT NIL (9 CM UNIT_1)$
           LEC00
LOAD M88K US_NA100.BB01 NIL (9 000 CM UNIT_1)$
           BAS
LAYER NIL (100 43 CM UNIT_1)$
           TL
LAYER NIL (90 27 CM UNIT_1)$
           SHR
LAYER NIL (90 64 CM UNIT_1)$
           LOAD_CONTEXT_MAPID
FUNCTION DMS_VERSIONING_PLATFORM (44 00005841 CM UNIT_1)$
            DSCWID
FUNCTION CALL_WAITING_DELUXE (1 00000000 CM UNIT_1)$
            C7MTCE
FUNCTION CCS7_SERVICES (5 00000000 CM UNIT_1)
            VERSION_REGISTRY
FUNCTION DMS_VERSION PLATFORM (2 00000000 CM UNIT_1)$
BOTTOM
>quit
```

Table history

Table VRINV was introduced in TL06.

Table VRINV was updated in NA009.

VROPT

Table name

Voice Response Option Table

Functional description

Table VROPT contains parameters required by external voice response units (VRU).

The table consists of two fields: PARM, which contains the name of each specified parameter, and VALUE, which contains the value of each specified parameter.

For related information, refer to table SERVICES.

Parameter descriptions

The following voice response parameters and values are valid entries for this table.

Data II sequence and implications

Table SERVICES must be datafilled before table VROPT parameters TOPSACD_DASERV_INSTANCE and TOPSACD_INTCSERV_INSTANCE.

Table size

24 tuples (fixed)

Data II

The following table lists datafill for table VROPT.

Field descriptions (Sheet 1 of 8)

Field PARM	Field VALUE	Explanation and action
AUTO_INT_ TIMEOUT	0 to 60	This parameter defines the auto intercept timeout period. Datafill this parameter value to specify the number of seconds that the DMS switch must wait for the Directory Assistance System (DAS) to respond after the following message is sent to initiate auto intercept call. The default is 5.
BCS_ID	0 to 255	This parameter identifies the BCS release to the DAS. It can be used to handle cases in which different DMS/DAS protocol versions are used for different BCS releases. Datafill this parameter value with a number identifying the BCS release. The default is 25.
BEGIN_ANN_ TIMEOUT	0 to 60	This parameter defines the begin-announcement time period. Datafill this parameter value to specify the number of seconds that the DMS switch must wait for the DAS to begin the announcement once the following message has been sent to the DAS. In TOPS03, this parameter has a new use. This parameter is the time period the DMS waits for ADAS+ to answer the ADAS+ ARU which it has seized. ADAS+ is provided by feature AN0880 in DA Automation I/F (OSDA0006). The default is 5.
CALL_ ARRIVAL_ TIMEOUT	0 to 60	Parameter AUTO_INT_TIMEOUT is renamed to CALL_ARRIVAL_TIMEOUT since it can be used for more call types. For feature AN0880 in DA Automation I/F (OSDA0006), this parameter is be used for ADAS+ calls. It is the time period the DMS waits for a response from ADAS+ after notifying it of an ADAS+ eligible call. If the sanity timer expires, the DMS ends communication with ADAS+ and sends the call to an operator. The range is 0-60 (seconds). The default is 5.

VROPT (continued)

Field descriptions (Sheet 2 of 8)

Field PARM	Field VALUE	Explanation and action
DA_ANN_FAIL _ RECALLS_ ALLOWED	Y or N	This parameter specifies whether signaling failure directory assistance (DA) recall is allowed. Datafill this parameter with value N (no) if signaling failure DA recall is to be blocked and the calls taken down. Datafill this parameter with value Y (yes) to enable signaling failure DA recall. The default is Y.
DA_AUTO_ POS_ RLS	Y or N	This parameter specifies whether DA calls are automatically released from Traffic Operator Position System (TOPS) positions when the calling line goes on-hook. Datafill this parameter with value Y if TOPS is to attempt to release a position from the DA call when the calling line goes on-hook. Otherwise, datafill this parameter with value N. Value Y is intended to save operator work time. It is recommended to set this parameter to N when handling ADAS calls to prevent potential operator confusion. Refer to TOPS translations, functionality Automated DA Service, OSDA0004, in the Operation section under "Overview of tables", table VROPT, for further information. The default is N.
DA_BLOCK_ FWD_NUMBER	Y or N	This parameter specifies whether a TOPS operator can enter a forward number on a DA call. Datafill this parameter with value Y if TOPS should ignore an operator request for a forward number. Datafill this parameter with value N for TOPS to process a forward number request normally. The default is N.
DA_BP_HOTEL _ ROOM_ REQUIRED	Y or N	This parameter specifies whether billable hotel DA calls can be released from a TOPS multipurpose extended position (MPX) / Auxiliary Operator Services System (AOSS) position without a room number. If a room number is required before a billable hotel DA call can be released, enter Y. Enter N to specify that no room number is required to release the call. The default is Y.
DACC_BILL_ TO_ THIRD	Y or N	This parameter specifies whether to offer automatic directory assistance call completion (ADACC) service to calls that are billed to a third number. Enter value Y to offer the service, or N to not offer the service. The default is N.

Field descriptions (Sheet 3 of 8)

Field PARM	Field VALUE	Explanation and action
DACC_LOCAL_ TOLL_ ACTIVATION	ALL, NONE, TOLL, or LOCAL	This parameter enables the operating company to restrict directory assistance call completion (DACC) on an office-wide basis. The value of this parameter determines the type of calls that are eligible for completion (see note). Datafill this parameter to specify the type of directory assistance (DA) calls that are to complete. ***Note:*** Restrictions imposed by this parameter are in addition to any restrictions imposed by field CCPDTYPS in table RESTBIL for restricted billing class numbers. The default is ALL.
DA_DELAY_ BLOCK_FWD_ BK	Y or N	This parameter specifies whether the key-pulse (KP) forward, KP back, and special verify delay keying functions are disabled on delay calls from DA-only operators at multipurpose (MP) positions. To disable the keying functions and features, enter Y. Otherwise, enter N. The default is N.
DA_ INTERACTIVE_ RECONNECT	Y or N	This parameter controls the method of reconnecting to an operator during a DA call. This is applicable to the standard and IBM protocols in Cellular/IEC/LEC ADACC, OSDA0005. • N - Method prior to feature AN0841 in Cellular/IEC/LEC ADACC, OSDA0005. • Y - Method of feature AN0841 in Cellular/IEC/LEC ADACC, OSDA0005. This value can ony be used if the protocol version in table SERVICES is greater than 1. The default is 1.
FLOAT_INT_ TIMEOUT	0 to 60	This parameter defines the float intercept call timeout period. Datafill this parameter value to specify the number of seconds that the DMS switch must wait for the DAS to respond with database search results after the DMS switch has received the following message from the DAS. The default is 5.

VROPT (continued)

Field descriptions (Sheet 4 of 8)

Field PARM	Field VALUE	Explanation and action
FORMAT_ PMIST_ MPC_DA_MSG	FULL or OFF	This parameter specifies whether the peripheral module intercept system test (PMIST) output for messages sent between the DAS and the DMS core is formatted or unformatted. Enter value FULL to specify formatted, or readable output. Enter value OFF to specify unformatted, hexadecimal output. The default is OFF.
INT_ANN_FAIL _ RECALLS_ ALLOWED	Y or N	This parameter determines whether signaling failure INT-RCL and INT-SPL calls are allowed. Datafill this parameter with value N if signaling failure INT-RCL and INT-SPL calls are to be blocked and the calls taken down. Datafill this parameter with value Y to enable intercept announcement fail recalls. The default is Y.
INT_CUT_ THROUGH_ ALLOWED	Y or N	This parameter specifies whether intercept cut-through is allowed. Datafill this parameter value with N to prevent intercept cut-through from going to an operator position. Datafill this parameter value with Y to enable intercept cut-through. The default is Y.
LOGINOUT_ TIMEOUT	0 to 60	This parameter defines the login/logout timeout period. Datafill this parameter value to specify the number of seconds that the DMS switch must wait for the DAS to respond after the following message is sent to the DAS for login or logout: `POS STATUS` The default is 5.
MAXIMUM_DA _ RECALLS	0 to 15	This parameter defines the maximum number of post-announcement DA recalls allowed. Datafill this parameter value to specify the maximum number of recalls. A value of 0 (zero) prevents all DA recalls. The default is 2.
MAXIMUM_INT _ RECALLS	0 to 15	This parameter specifies the maximum number of post-announcement INT recalls allowed. Datafill this parameter value to specify the maximum number of recalls. A value of 0 (zero) prevents all INT recalls. The default is 2.

Field descriptions (Sheet 5 of 8)

Field PARM	Field VALUE	Explanation and action
POST_ANN_ TIMEOUT	0 to 60	This parameter specifies the post-announcement time period. Datafill this parameter value to specify the number of seconds that the line must remain off-hook after an announcement in order to connect to an operator. In TOPS03, this parameter has a new use. This parameter is the time period the DMS waits after ADAS+ hangs up before sending the call to an operator position. This timer is cleared if the caller hangs up or if ADAS+ indicates to the DMS how the call should be routed. If the call is already at an operator position, this timer is not set. ADAS+ is provided by feature AN0880 in DA Automation I/F (OSDA0006). The default is 2.
PRIMARY_ LANGUAGE	ENGLISH or FRENCH	This parameter specifies the primary language used for voice response intercept announcements. The default is ENGLISH.
SECONDARY_ LANGUAGE	ENGLISH or FRENCH	This parameter specifies the secondary language used for voice response intercept announcements. If this language is the same as the primary language, the announcement is given in one language only. If this language is not the same as the primary language, both languages are used with the primary language being played first. The default is FRENCH.

VROPT (continued)

Field descriptions (Sheet 6 of 8)

Field PARM	Field VALUE	Explanation and action
TOPSACD_ DASERV_ INSTANCE	TOPSVR1 0 to TOPSVR1 15, TOPSVR2 0 to TOPSVR2 15, STUB 0 to STUB 15	This parameter defines which application and instance (database) to use for TOPS automatic call distribution (ACD) directory assistance (DA) service calls. The allowable values are composed of an application (TOPSVR1 or TOPSVR2) and an instance (0 to 15). An instance is a subset of the application. The default is either TOPSVR1 0 or TOPSVR2 0 depending on the application defined as DASERV in table SERVICES on the `dump' side of the switch during an upgrade. In order to change the instance, the instance must first be defined in table SERVICES. Only instances of the DA application may be assigned to this parameter. Parameters TOPSACD_DASERV_INSTANCE and TOPSACD_INTCSERV_INSTANCE cannot both be set to the same application (TOPSVR1 or TOPSVR2). For example, TOPSACD_DASERV_INSTANCE = TOPSVR1 x and TOPSACD_INTCSERV_INSTANCE = TOPSVR1 y (where x and y are instances) is not allowed. STUB is for a lab environment where database simulators are in use. This parameter associates a service with an application for ACD. For QMS, this association is made in table TQMSSERV.

Field descriptions (Sheet 7 of 8)

Field PARM	Field VALUE	Explanation and action
TOPSACD_ INTCSERV_ INSTANCE	TOPSVR1 0 to TOPSVR1 15, TOPSVR2 0 to TOPSVR2 15, STUB 0 to STUB 15	This parameter defines which application and instance (database) to use for TOPS automatic call distribution (ACD) intercept service calls. The allowable values are composed of an application (TOPSVR1 or TOPSVR2) and an instance (0 to 15). An instance is a subset of the application. The default is either TOPSVR1 0 or TOPSVR2 0 depending on the application defined as INTCSERV in table SERVICES on the `dump' side of the switch during an upgrade. In order to change the instance, the database instance must first be defined in table SERVICES. Only instances of the INTC application may be assigned to this parameter. Parameters TOPSACD_DASERV_INSTANCE and TOPSACD_INTCSERV_INSTANCE cannot both be set to the same application (TOPSVR1 or TOPSVR2). For example, TOPSACD_DASERV_INSTANCE = TOPSVR1 x and TOPSACD_INTCSERV_INSTANCE = TOPSVR1 y (where x and y are instances) is not allowed. STUB is used primarily in a lab environment, but is sometimes used in configurations that do not have DMS-DAS links. This parameter associates a service with an application for ACD. For QMS, this association is made in table TQMSSERV.
TOPSVR1_ CRITICAL_ ALARMS	0 to 16	This alarm parameter specifies the number of low speed links in service for a CRITICAL alarm in application TOPSVR1. This alarm was moved from table SERVICES. The default is set from table SERVICES on the dump side of the switch.
TOPSVR1_ MAJOR_ ALARMS	0 to 16	This alarm parameter specifies the number of low speed links in service for a MAJOR alarm in application TOPSVR1. This alarm was moved from table SERVICES. The default is set from table SERVICES on the dump side of the switch.
TOPSVR1_ MINOR_ ALARMS	0 to 16	This alarm parameter specifies the number of low speed links in service for a MINOR alarm in application TOPSVR1. This alarm was moved from table SERVICES. The default is set from table SERVICES on the `dump' side of the switch.
TOPSVR2_ CRITICAL_ ALARMS	0 to 16	This alarm parameter specifies the number of low speed links in service for a MINOR alarm in application TOPSVR2. This alarm was moved from table SERVICES. The default is set from table SERVICES on the dump side of the switch.

VROPT (continued)

Field descriptions (Sheet 8 of 8)

Field PARM	Field VALUE	Explanation and action
TOPSVR2_ MAJOR_ ALARMS	0 to 16	This alarm parameter specifies the number of low speed links in service for a MINOR alarm in application TOPSVR2. This alarm was moved from table SERVICES. The default is set from table SERVICES on the dump side of the switch.
TOPSVR2_ MINOR_ ALARMS	0 to 16	This alarm parameter specifies the number of low speed links in service for a MINOR alarm in application TOPSVR2. This alarm was moved from table SERVICES. The default is set from table SERVICES on the dump side of the switch.

Data ll e xample

The following example shows sample datafill for table VROPT.

MAP display example for table VROPT

```
                        PARM                                VALUE
_____________________________________________________________________
             AUTO_INT_TIMEOUT                                    5
                       BCS_ID                                   31
           BEGIN_ANN_TIMEOUT                                    5
         CALL_ARRIVAL_TIMEOUT                                   5
 DA_ANN_FAIL_RECALLS_ALLOWED                                    Y
              DA_AUTO_POS_RLS                                   Y
          DA_BLOCK_FWD_NUMBER                                   N
   DA_BP_HOTEL_ROOM_REQUIRED                                    N
          DACC_BILL_TO_THIRD                                    Y
  DACC_LOCAL_TOLL_ACTIVATION                                  ALL
       DA_DELAY_BLOCK_FWD_BK                                    Y
    DA_INTERACTIVE_RECONNECT                                    Y
           FLOAT_INT_TIMEOUT                                   10
     FORMAT_PMIST_MPC_DA_MSG                                  OFF
INT_ANN_FAIL_RECALLS_ALLOWED                                    N
     INT_CUT_THROUGH_ALLOWED                                    N
            LOGINOUT_TIMEOUT                                    5
          MAXIMUM_DA_RECALLS                                    2
         MAXIMUM_INT_RECALLS                                    2
            POST_ANN_TIMEOUT                                    2
           PRIMARY_LANGUAGE                              ENGLISH
         SECONDARY_LANGUAGE                               FRENCH
    TOPSACD_DASERV_INSTANCE                           TOPSVR1 0
  TOPSACD_INTCSERV_INSTANCE                           TOPSVR2 0
      TOPSVR1_CRITICAL_ALARM                                    0
         TOPSVR1_MAJOR_ALARM                                    1
         TOPSVR1_MINOR_ALARM                                    2
      TOPSVR2_CRITICAL_ALARM                                    0
         TOPSVR2_MAJOR_ALARM                                    1
         TOPSVR2_MINOR_ALARM                                    2
```

Table history

TOPS07

Feature AF6711 in functionality Branding via SPID made the following changes:

- DA_STANDARD_PROTOCOL_VERSION and DA_IBM_PROTOCOL_VERSION are removed. The version is moved to new field VERSION in table SERVICES.
- DA_INTERACTIVE_RECONNECT use is changed

VROPT (end)

TOPS06

Feature AN1844 in functionality Multiple DA System I, (OSDA00001) parameter SWITCH_ID (moved to table SERVICES). Also, the following parameters are added:

- TOPSACD_DASERV_INSTANCE
- TOPSACD_INTCSERV_INSTANCE
- TOPSVR1_MINOR_ALARMS (moved from table SERVICES)
- TOPSVR1_MAJOR_ALARMS (moved from table SERVICES)
- TOPSVR1_CRITICAL_ALARMS (moved from table SERVICES)
- TOPSVR2_MINOR_ALARMS (moved from table SERVICES)
- TOPSVR2_MAJOR_ALARMS (moved from table SERVICES)
- TOPSVR2_CRITICAL_ALARMS (moved from table SERVICES)

TOPS04

Parameter SWITCH_ID range increased from 0-15 to 0-31 per ETMS OC, ENSV0008 and ENSV0011.

TOPS03

Feature AN0841 in Cellular/IXC/LEC ADACC, OSDA0005:

- Added parameters DA_STANDARD_PROTOCOL_VERSION and DA_INTERACTIVE_RECONNECT.

Feature AN0410 in Cellular/IXC/LEC ADACC, OSDA0005:

- Added parameters DA_IBM_PROTOCOL_VERSION.

Feature AN0880 in DA Automation I/F, 0SDA0006.

- Added CALL_ARRIVAL_TIMEOUT
- Added new use to existing BEGIN_ANN_TIMEOUT and POST_ANN_TIMEOUT.
- Added value 3 to DA_STANDARD_PROTOCOL_VERION,

BCS36

The following changes were made to table VROPT.:

- added parameter DA_BLOCK_FWD_NUMBER
- added parameter FORMAT_PMIST_MPC_DA_MSG

VSNALARM

Table name

Voice Service Node Alarms Table

Functional description

Software alarms are used in the DMS switch to notify operating company personnel of any abnormal or maintenance conditions at the voice service node (VSN). The VSN notifies the DMS switch of any such conditions by sending it a maintenance notice message. The maintenance notice message contains an error code that is used to index table VSNALARM to determine the severity of the condition at the VSN.

The error codes are external to the DMS switch. VSN documentation must be consulted to determine the meaning of each code prior to datafilling table VSNALARM.

Data ll sequence and implications

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

Table size

0 to 256 tuples

VSNALARM (continued)

Data II

The following table lists datafill for table VSNALARM.

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
ALMCODE		0 to 255	*Alarm code* This field identifies the alarm code in the maintenance notice message sent by the voice service node (VSN). Refer to VSN vendor documentation for details on the error condition associated with each alarm code. Alarm code 255 is automatically datafilled for situations in which an error code that is not datafilled in table VSNALARM is sent in a maintenance notice message.
SEVERITY		CR, MJ, MN, or NA	*Alarm severity* This field specifies the severity of the alarm associated with the alarm code. The datafill determines which software alarm is activated. The software alarms are identified in table SFWALARM. In addition, if field REPORT in table SFWALARM is set to Y (yes) for the given software alarm, an EXT log is generated if the software alarm is activated or deactivated. The alarms are • CR (critical) • MJ (major) • MN (minor) • NA (no alarm)
ALMTEXT		alphanumeric (vector of up to 17 characters)	*Alarm text* This field contains explanatory text for each alarm code. This text is output on the EXT log if one is generated. Whether the log is generated is dependent on the setting of field REPORT in table SFWALARM.

Data ll e xample

The following example shows sample datafill for table VSNALARM.

The example consists of two tuples that show alarm severity and explanatory text for the given alarm codes.

The tuple for alarm code 255 is automatically datafilled for situations in which an error code that is not datafilled in table VSNALARM is sent in a maintenance notice message. This tuple cannot be changed or deleted.

MAP display example for table VSNALARM

```
ALMCODE   SEVERITY       ALMTEXT
_____________________________________________________
4         CR             LANLINK_FAILURE
102       MJ             MJCNTRLNK_INTERFACE
255       MJ             ALM_CODE_VSN
```

VSNEXTID

Table name

Voice Services Node External Identifier Table

Functional description

Table VSNEXTID maps an internal voice services node (VSN) identifier (ID) to an external VSN ID, if required. External IDs, which range from 0 to 99, can be specified against each of the internal VSN IDs, which range from 0 to 15.

Any external ID that is specified must be either the same as its corresponding internal VSN ID, or greater than the maximum internal VSN ID, which is 15.

Table VSNEXTID needs to be datafilled only if mapping to external ID numbers is required. The table can be left empty for VSNs not requiring this mapping. Messages sent from the DMS to a particular VSN contain the external ID if a tuple exists for the internal VSN number. Messages sent by the VSN to the DMS, in this case, must also contain the external VSN ID. Table VSNEXTID allows the operating company to optionally datafill an external VSN ID in the range of 0 to 99 against an internal VNS number. If an entry exists against an internal VSN number in field VSNNUM, the external VSN ID specified, in field EXTVSNID, is passed instead of the internal VSN number in the data link messaging between the DMS and the VSN. All other DMS tables that refer to a VSN number are unaffected by entries in this table, and continue to use the internal (0 to 15) value.

Data ll sequence and implications

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

Table size

0 to 16 tuples

Data fill

The following table lists datafill for table VSNEXTID.

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
VSNNUM		0 to 15	*Voice services node number* This field is the key to the table. Enter the internal voice services node (VSN) identifier (ID) used to uniquely identify the VSN to the system.
EXTVSNID		0 to 99	*External voice services node identifier* Enter the external VSN identifier assigned to the VSN ID specified in field VSNNUM. The identifier is passed to the internal VSN ID in messages sent from the DMS to the VSN, and from the VSN to the DMS.

Data fill example

The following example shows sample datafill for table VSNEXTID.

MAP display example for table VSNEXTID

```
VSNNUM EXTVSNID
_____________________________________________________________

     4        98
```

VSNMEMBR

Table name

Voice Service Node Table

Functional description

Table VSNMEMBR is used to select the voice connections necessary to link a DMS switch with one or more voice service nodes (VSN). A DMS switch is connected to VSNs through both voice and data links. The trunk members that serve as the voice links are mapped to VSNs in table VSNMEMBR.

Table VSNMEMBR contains VSN common language location identifiers (CLLI), trunk member numbers, and VSN numbers. The VSN CLLIs are the trunk group CLLIs to which the trunk member numbers correspond. Only CLLIs referenced in table TOPSVNIN can be used. The member numbers and the VSN numbers specify which trunk members connect to which VSNs.

For related information, refer to table TOPSVNIN.

Data ll sequence and implications

The following tables must be datafilled before table VSNMEMBR:

- CLLI
- TRKGRP
- TRKSGRP
- TOPSVNIN

Table size

0 to 4096 tuples

Data ll

The following table lists datafill for table VSNMEMBR.

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
VSNMEM		see subfields	Voice service node member. This field is the key to the table and consists of subfields VSNCLLI and EXTMEMNUM.
	VSNCLLI	alphanumeric (up to 16 characters)	*Voice service node common language location identifier*. Enter the trunk group common language location identifier (CLLI) referenced in table TOPSVNIN.
	EXTMEMNUM	0 to 9999	External member number. Enter the trunk member number.
VSNNUM		0 to 15	Voice service node number. Enter a voice service node (VSN) link set number as defined in table MPCLSET. The VSN identified by this number is connected to the trunk member specified in field VSNMEM.

Data ll e xample

The following example shows sample datafill for table VSNMEMBR.

This example consists of four tuples, each of which maps a trunk member to a VSN. Trunk members connected to the same VSN constitute a link set. In the datafill below, trunk members 1001 and 1002 are link set 1 and trunk members 2001 and 2002 are link set 2.

MAP display example for table VSNMEMBR

```
                VSNMEM      VSNNUM
_____________________________________________________

AABSVL          1001          1
```

Table history

BCS36

Field VSNMEM was added. Subfield VSNMEM was changed to subfield EXTMEMNUM.

VSNOPT

Table name

Voice Service Node Options Table

Functional description

Table VSNOPT contains the parameters required by the Traffic Operator Position System (TOPS) Automated Alternate Billing Service (AABS) using the voice service node (VSN).

Note: Lower case displays are supported on TOPS MP (multipurpose) only. To get a lower case display at the TOPS MP CRT, enter the string between single quotes.

For related information, refer to table TOPSVNIN.

Data ll sequence and implications

Table TRKGRP must be datafilled before table VSNOPT

Table size

0 to 14 tuples

Data ll

The following table lists parameters for table VSNOPT.

Field descriptions (Sheet 1 of 4)

Field PARM	Field VALUE	Explanation and action
AABS_ FRAUD_FILT	Y or N	This parameter controls filtering of calls based on billed numbers. Enter Y (yes) for filtering checks. . Otherwise, enter N (no).
COLLECT_ ACCEPT_AUTO_ OP	Y or N	This parameter determines if collect accept automatic outpulsing of a forwarded number can occur for a station collect billed call when a database query result indicates billing acceptance must be obtained. Enter Y if collect accept automatic outpulsing of a forwarded number can occur. Otherwise, enter N. The default is Y.
FORMAT_PMIST_ MPC_AABS_MSG	OFF or FULL	This parameter enables decoding and formatting of the PMIST message for the automated alternate billing service (AABS) protocol. The range is OFF and FULL. When set to OFF, the message is displayed in hexadecimal format. When set to FULL, the message is displayed in both the hexadecimal and decoded formats. The default is OFF.

Field descriptions (Sheet 2 of 4)

Field PARM	Field VALUE	Explanation and action
NUM_AUTO_ LANGS_REQD_ FOR_HANDOFF	0 to 2	This parameter specifies the number of languages that must be keyed in by a TOPS operator before a call can be handed off to AABS. This parameter is only visible if feature NC0197 (AABS Dual Language Capabilities) is present in the switch. The values are as follows: • 0: No language must be entered by the operator before handoff. Enter datafill in subfield DEFLANG on the same line after the 0 entry. DEFLANG: This subfield indicates the default language value. The range of the value is 0 to 14, which represents a language defined in table TOPSLANG field LANGNUM. This entry is used only if no language digit is entered by the operator. This entry is used for both the front-end and back-end language sent to the VSN. • 1: The operator must enter the front-end language digit/digits. The back-end language defaults to the front-end language. • 2: The operator must enter two languages even when both the front and back-end use the same language. The entered languages must have entries in table TOPSLANG with field AUTOLANG set to Y.
NUM_HANDOFFS_ ALLOWED	0 to 15	This parameter is used for the handoff feature. Enter 0 (zero) if the handoff feature is inactive and calls cannot be marked for handoff at the operator position. If set to a non-zero value, the handoff feature is active and calls can be handed off to VSN for collect or third number billing acceptance verification, the maximum of the specified number of times. The default is 0.
ONHOOK_ RECOVERY_ TIMER	1 to 20	This parameter specifies the amount of time that the DMS waits for a message from the VSN indicating that the call should be aborted after all parties have gone on-hook. If the DMS does not receive an abort request within the timed period, the DMS frees all resources associated with the call. Enter the amount of time, in seconds, that the DMS waits for a mesage from the VSN. The default is 5.

VSNOPT (continued)

Field descriptions (Sheet 3 of 4)

Field PARM	Field VALUE	Explanation and action
OPR_0PLUS_3RD _DISPLAY	1 to 6 alphanumeric characters	This parameter specifies the operator screen display for third number billed calls without a forward connection that are routed to the operator after partial handling by the VSN. The display can be specified by the operating company. Enter the operator screen display for third number billed calls without a forward connection. For TOPS MP positions, the softkey displays on call arrival are supported only if the default value is used. The default is 0+3RD.
OPR_0PLUS_ 3RDCON_ DISPLAY	1 to 6 alphanumeric characters	This parameter specifies the operator screen display for third number billed calls with a forward connection that are routed to the operator after partial handling by the VSN. The display can be specified by the operating company. Enter the operator screen display for third number billed calls with a forward connection. For TOPS MP positions, the softkey displays on call arrival are supported only if the default value is used. The default is 0+COL.
OPR_0PLUS_ CLDCON_ DISPLAY	1 to 6 alphanumeric characters	This parameter specifies the operator screen display for collect billed calls with a forward connection that are routed to the operator after partial handling by the VSN. The display can be specified by the operating company. Enter the operator screen display for collect billed calls with a forward connection. For TOPS MP positions, the softkey displays on call arrival are supported only if the default value is used. The default is 0+COL.
OPR_0PLUS_ COL_ DISPLAY	1 to 6 alphanumeric characters	This parameter specifies the operator screen display for collect billed calls without a forward connection that are routed to the operator after partial handling by the VSN. The display can be specified by the operating company. Enter the operator screen display for collect billed calls without a forward connection. For TOPS MP positions, the softkey displays on call arrival are supported only if the default value is used. The default is 0+COL.

Field descriptions (Sheet 4 of 4)

Field PARM	Field VALUE	Explanation and action
OPR_SIMULATED_OUTPULSING	Y or N	This parameter specifies if the simulated outpulsing tone and delayed restoration of the billed party's speech path are in effect when the operator keys START on 0+ calls presented to the operator with a forward connection already established. This parameter also applies to keying sequences KP SPL + START and SPL VFY for calls with a third party connected. Enter Y if the simulated outpulsing tone and delayed restoration of the billed party's speech path are in effect. Otherwise, enter N. The default isY.
SPL_SPL_BILLING_ALLOWED	Y or N	This parameter specifies if billing to a 10-digit special number, also known as a QZ code, is allowed for AABS calls. Enter Y if billing to a 10-digit special number is allowed. Otherwise, enter N. The default is N.

Data ll e xample

The following example shows sample datafill for table VSNOPT.

MAP display example for table VSNOPT

```
                          PARM                          VALUE
_____________________________________________________________

                AABS_FRAUD_FILT                             Y
          COLLECT_ACCEPT_AUTO_OP                            Y
       DEFAULT_AABS_TO_OPR_QUEUE                            N
       FORMAT_PMIST_MPC_AABS_MSG                          OFF
NUM_AUTO_LANGS_REQD_FOR_HANDOFF                             1
            NUM_HANDOFFS_ALLOWED                            0
            ONHOOK_RECOVER_TIMER                            5
           OPR_0PLUS_3RD_DISPLAY                       0+3RD
         OPR_0PLUS_3RDCON_DISPLAY                      3RDCON
         OPR_0PLUS_CLDCON_DISPLAY                      CLDCON
            OPR_0PLUS_COL_DISPLAY                       0+COL
         OPR_SIMULATED_OUTPULSING                           Y
          SPL_SPL_BILLING_ALLOWED                           N
```

VSNOPT (end)

Table history

TOPS13

Parameters HANDOFF_ALLOWED_DISPLAY and HANDOFF_VALIDATION_DISPLAY are removed by feature 59012553 in functionality Code Removal of TOPS IV, OSB00001.

TOPS12

Parameter DEFAULT_AABS_TO_OPR_QUEUE is removed by feature 59006865 in functionality MD Code Removal and ReEngineering, OSB00001.

TOPS07

Parameter FORMAT_PMIST_MPC_AABS_MSG added by feature AN1856 in functionality TOPS Robustness, OSB00001.

WATSAUTH

Table name

MDC Enhanced WATS Authorization Table

Functional description

MDC enhanced wide area telephone service (WATS) uses table WATSAUTH. For MDC offices that are also equal access end offices, the MDC-enhanced WATS feature gives the customer access to different interexchange carriers for different outward WATS (OUTWATS) bands.

Table WATSAUTH specifies the carriers an operating company can use to carry its OUTWATS traffic. These carriers are WATS interexchange carriers (WIC). Each WIC has an associated band set that details the bands to which the customer has access to through the carrier. Up to five carriers and associated band sets can be specified.

MDC WATS uses table WATSAUTH to perform carrier and band screening during MDC-enhanced OUTWATS translations. Table IBNXLA points to WATSAUTH. The EWAUTH option in the NET/GEN selector in table IBNXLA specifies the key into table WATSAUTH.

The default attributes used when an entry in table WATSAUTH cannot be found during translations are as follows:

- field INTRALAT set to Y (yes)
- field SAC set to Y
- field CHOICE set to Y
- field WICINFO set to $ (dollar sign)

An entry in table WATSAUTH that uses the above values does not need to be datafilled in the table.

Data ll sequence and implications

Complete the following tables before table WATSAUTH:

- BANDSETS
- WATSBAND

Table size

0 to 1023 tuples

The system allocates data store for this table dynamically.

WATSAUTH (continued)

Data II

The following table lists datafill for table WATSAUTH.

Field descriptions (Sheet 1 of 3)

Field	Subfield or refinement	Entry	Explanation and action
AUTHKEY		see subfield	*Authorization key* This field is the key to the table and consists of subfield WATSAUTH_ID.
	WATSAUTH_ ID	alphanumeric (up to 8 characters)	*Wide area telephone service authorization identifier* Enter a name defined by the operating company.
INTRALAT		Y or N	*Intra-LATA* Enter Y (yes) if intra-LATA (local access and transport area) calls are allowed from a Meridian Digital Centrex (MDC) enhanced wide area telephone service (WATS) virtual facility group (VFG). This screening is enforced on the VFG retranslation leg of an MDC Enhanced WATS call. Otherwise, enter N (no).
SAC		Y or N	*Service access code* Enter Y if service access code (SAC) calling is permitted from the enhanced WATS VFG. An SAC is a code that takes the place of a numbering plan area (NPA), such as an 800 or a 900 number. Otherwise, enter N (no).
CHOICE		Y or N	*Choice* Enter Y to indicate that the caller is allowed to dial 10XXX to access one of the carriers in field WICINFO. Field CHOICE impacts how route selection is performed in table IBNRTE with the EOW route selector.

Field descriptions (Sheet 2 of 3)

Field	Subfield or refinement	Entry	Explanation and action
WICINFO		see subfields	*Wide area telephone service interexchange carrier information* This field consists of up to five multiples of subfields WIC and BANDSET. If fewer than five multiples are required, end the list with a $ (dollar sign). This field is used to designate which carriers and associated band sets are permitted for the caller. If this field contains any WATS interexchange carriers (WICs), these WICs are the only WICs allowed from retranslations out of the VFG. A least one vector must be specified.
	WIC	alphanumeric (up to 16 characters)	*Wide area telephone service interexchange carrier* Enter the name of a carrier from table OCCNAME. If universal WATS (UWATS) is used, the last carrier name must be the UWATS carrier name as entered in table OCCNAME.
	BANDSET	alphanumeric (up to 8 characters)	*Band set* Enter the name of a band set from table BANDSETS. This field indicates the band set that is allowed for the carrier in field WIC.

WATSAUTH (end)

Field descriptions (Sheet 3 of 3)

Field	Subfield or refinement	Entry	Explanation and action
LCHOICE		Y or N	*LATA Choice* This field designates whether the caller is permitted to dial 10XXX/101XXXX to access one of the listed carriers in field LWICINFO described below.
LWICINFO		Vector that contains up to 5 combinations of WIC and BANDSET information	*LATA Wide area telephone service interexchange carrier information* This field designates which IntraLATA carriers and assiciated bandsets are permitted for the caller. If LCHOICE is not permitted, this field can be left empty. If LCHOICE is permitted, at least one LWIC and BANDSET must be specified. In either case, if this area contains any LWICS, they are the only LWICs permitted from retranslations out of the VFG.

Data ll e xample

The following example shows sample datafill for table WATSAUTH.

MAP display example for table WATSAUTH

```
AUTHKEY INTRALAT SAC CHOICE
                              WICINFO  LCHOICE  LWICINFO
_____________________________________________________________________
  CUST1      Y      Y    Y
                          (ATT 0THRU3) N  (CAR1 0THRU9)$
```

Table history

NA010

Added fields LCHOICE and LWICINFO.

WATSBAND

Table name

WATS Band Table

Functional description

Table WATSBAND is designed to allow grouping of certain patterns of digits into entities called bands. These bands define geographical areas that generally form concentric circles around the local area. Table WATSBAND also enables carriers to define their own unique bands. Each different band can be assigned to a different carrier. All carriers that assign the same band to a digit pattern can be lumped together into a default group. This reduces the amount of datafill required for the table.

For related information, refer to table BANDSETS.

Data II sequence and implications

The following tables must be datafilled after table WATSBAND.

- HNPACONT
- OCCNAME

Table size

0 to variable number of tuples

There is no fixed maximum number of tuples for this table. The maximum table size is completely dependent on how the table is datafilled.

Data II

Special considerations apply when datafilling Table WATSBAND for Equal Access InterLATA/IntraLATA calls. Equal Access calls support Overlap Carrier Selection (OCS), allowing a route to be chosen before all the digits are present. This results in Table WATSBAND being searched without all the digits. Only datafill NPA-NXX or NPA for Equal Access calls in Table WATSBAND. Other datafill options for Equal Access calls should be analyzed

WATSBAND (continued)

based on the office's digit collection.The following table lists datafill for table WATSBAND.

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
WATSCODE		see subfields	*WATSBAND key* This field is the key to the table and consists of subfields SVGNPA, WIC, and DIGITS.
	SVGNPA	0 to 9 (3 digits)	*Serving numbering plan area* Enter the home numbering plan area (NPA) code to which the wide area telephone service (WATS) is provided.
	WIC	alphanumeric (up to 16 characters) or DEFAULT	*Wide area telephone service interexchange carrier* Enter the WATS carrier that can be used with this band or DEFAULT.
	DIGITS	0 to 9 (up to 18 digits)	*Digits* Enter the digits that are associated with the band.
BAND		0 to 126, or NIL	*Band* Enter the band number assigned to the digits. Enter NIL if a band number is not assigned.

Data Il e xample

The following example shows sample datafill for table WATSBAND.

In the first, second and fifth tuples an outward WATS (OWATS) call is placed to digits 704. Screening against the subscriber's allowable service area for carrier A and carrier B use bands 3 and 2 respectively to screen the call. The default entry, in tuple five signifies that all other carriers use the default band scheme, which is assigned to band 4.

The third, fourth, and fifth tuples depict digits for which all carriers use the same bands.

The last tuple is a special case and its calls always pass band screening. The NIL band is always valid for any bandset although it does not appear when the tuple is listed in table BANDSETS. Certain restrictions are inherent with this

capability. The call must be inter-LATA (local access and transport area) because band screening is not performed on intra-LATA calls.

MAP display example for table WATSBAND

```
                        WATSCODE BAND
_____________________________________________________________
505 CARRIER_A                704    3
505 CARRIER_B                704    2
505   DEFAULT                413    5
505   DEFAULT                601    4
505   DEFAULT                704    4
505   DEFAULT            5551234  NIL
```

WCKCODES

Table name

Wild Card Key Table

Functional description

Table WCKCODES is required for each customer group that has the wild card key option. The wild card key is assigned in table FNMAP.

At present an attendant can access/use/program a feature if a key is assigned to the console. Since there are 42 assignable keys (14 on basic console and 28 on an add-in module) for Incoming Call Identification (ICI) and other features on the console, the customer can run out of keys.

To preserve keys, the operating company can use the wild card key to invoke special features not directly available on that console through a feature key. Any special feature normally available through the use of a feature key can be invoked through the wild card key with the exception of the following:

- Incoming Call Identification
- Key and Lamp Display
- Position Busy
- Trunk Access Control
- Trunk Group Busy

The wild card key can be used at any time; the invoked feature applies appropriate treatment whenever it is determined that its use is inappropriate.

Data II sequence and implications

Table CUSTHEAD must be datafilled before table WCKCODES.

The customer group names specified in the datafill for this table must be assigned in table CUSTCONS.

The entries in table CUSTENG for the customer group names specified in the datafill for this table must have field CONSOLES equal to Y (yes).

Table size

0 to 10 710 tuples

Memory is automatically allocated for one hundred access codes for each customer group with the wild card key option.

Complete field descriptions are provided for each feature listed in the following table.

Wild card key access codes can be assigned to the features in the following table.

WCKCODES features (Sheet 1 of 2)

Title	Feature
Account Code Entry	ACC
Attendant Console End-to-End Signaling	ACEES
Attendant Query Time and Date	QTIME
Authorization Code	AUTH
Authorization Code Validation	AUTHVAL
Busy Verification Line	BVL
Busy Verification Trunk	BVT
Call Forward Station	CFS
Conference Call	WC
Display Queued Calls	DQC
Flexible Console Alerting	BUZZ
Flexible Display Language	LANG
Group Trunk Access Control	GTAC
Group Trunk Group Busy	GTGB
Global Virtual Access Control	GVAC
Global Virtual Group Busy	GVGB
Message Index	MSGIND
Night Service Programmming	NSPRG
Parking of Calls by the Attendant	PARK
PVN Calling Number Attendant Assistance	PVNSRCDN
PVN Remote Access Call Attendant Assistance	PVNRMAC

WCKCODES (end)

WCKCODES features (Sheet 2 of 2)

Title	Feature
Serial Calling	SERIAL
Speed Calling List Short	SC10
Speed Calling List Long	SC30, SC50, or SC70
Trouble Code	TRBL
Unparking of Calls by the Attendant	UNPK

Account Code Entry (ACC)

This datafill is required if the customer group has the Account Code Entry feature assigned to one of the wild card key access codes.

It can only be assigned if the customer group has the ACCT option assigned in table CUSTHEAD.

Data ll

The following table lists the datafill for table WCKCODES feature ACC.

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
WCKEY		see subfields	*Wild card key* This field consists of subfields CUSTGRP and TABIDX.
	CUSTGRP	alphanumeric (1 to 16 characters)	*Customer group name* Enter the name assigned to the customer group.
	TABIDX	0 to 99	*Table index* Enter the wild card key access code which is assigned to the Account Code Entry feature.
VALUE		see subfield	*Value* This field consists of subfield WCSPFN.
	WCSPFN	ACC	*Wild card key special function* Enter the wild card key special function for the Account Code Entry feature.

Data ll e xample

The following is an example of assigning the Account Code Entry feature to access code 02 of the wild card key for the customer group which has the code BNRMC assigned to it in table CUSTHEAD.

WCKCODES feature ACC (end)

MAP display example for table WCKCODES feature ACC

```
            WCKEY                                   Value
_____________________________________________________________

          BNRMC  02                                  ACC
```

Attendant Console End-to-End (DTMF) Signaling (ACEES)

This datafill is required if the customer group has the Attendant Console End-to-End (DTMF) Signaling feature assigned to one of the wild card key access codes.

Prior to BCS29 it was found in the field that in some applications the attendant was given a very small amount of time by the remote system to initiate digit entry. This time was found to be as low as 5 s. With ACEES, no outpulsing was done until all digits were keyed in and the ACEES key was pressed. Here, the 5-s timeout period was not enough time to press the ACEES key, key in ten digits and then press the ACEES key again. Because of the frequency of the problem, changes were made to the outpulsing method to reduce the chance of the far end timing out.

In BCS29 for ACEES, the first digit is outpulsed as soon as it is keyed in. This greatly reduces the chance of the far end timing out because no digits are received within the 5-s period. In addition, once the fourth digit is entered, digits two to four are outpulsed automatically. This was done to reduce the chance of the far end timing out due to interdigital time out. Similarly, the fifth to the eleventh digits are sent automatically.

The main impact on feature functionality is that previously, if the attendant made a keying error while entering the digits to be outpulsed, it could be corrected by pressing the loop key. This would clear the digit register and the attendant could start again. Since the first digit is now sent immediately, keying errors cannot be corrected in this manner.

As of BCS34 a choice of automatic or manual digit sending is available by completing the field ADIGSEND.

Data II

The following table lists the datafill for table WCKCODES feature ACEES.

Field descriptions (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
WCKEY		see subfields	*Wild card key* This field consists of subfields CUSTGRP and TABIDX.
	CUSTGRP	alphanumeric (1 to 16 characters)	*Customer group name* Enter the name assigned to the customer group.

WCKCODES feature ACEES (end)

Field descriptions (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
	TABIDX	0 to 99	*Table index* Enter the wild card key access code which is assigned to the Attendant Console End-to-End (DTMF) Signaling feature.
VALUE		see subfield	*Value* This field consists of subfield WCSPFN and refinements SENDBFA and ADIGSEND.
	WCSPFN	ACEES	*Wild card key special function* Enter the wild card key special function for the Attendant Console End-to-End Signaling feature.
	SENDBFA	Y or N	*Send before answer* Enter Y (yes) to enable the Send Before Answer refinement. Otherwise, enter N (no).
	ADIGSEND	Y or N	*Automatic digit sending* Enter Y (yes) to enable Automatic Digit Sending. Enter N (no) for manual digit sending. Y is the default value.

Data Il e xample

The following is an example of assigning the Attendant Console End-to-End Signaling feature to access code 02 of the wild card key for the customer group which has the code BNRMC assigned to it in table CUSTHEAD. The Send Before Answer feature is not enabled and the Automatic Digit Sending feature is enabled.

MAP display example for table WCKCODES feature ACEES

```
                WCKEY                                Value
_____________________________________________________________________

            BNRMC   02                          ACEES N Y
```

Authorization Code (AUTH)

This datafill is required if the customer group has the Entry of Authorization Codes feature assigned to one of the wild card key access codes.

It can only be assigned if the customer group has the AUTH option assigned in table CUSTHEAD.

Data ll

The following table lists the datafill for table WCKCODES feature AUTH.

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
WCKEY		see subfields	*Wild card key* This field consists of subfields CUSTGRP and TABIDX.
	CUSTGRP	alphanumeric (1 to 16 characters)	*Customer group name* Enter the name assigned to the customer group.
	TABIDX	0 to 99	*Table index* Enter the wild card key access code which is assigned to the Entry of Authorization Codes feature.
VALUE		see subfield	*Value* This field consists of subfield WCSPFN.
	WCSPFN	AUTH	*Wild card key special function* Enter the wild card key special function for the Entry of Authorization Codes feature.

Data ll e xample

The following is an example of assigning the Entry of Authorization Codes feature to access code 09 of the wild card key for the Customer Group which has the code BNRMC assigned to it in table CUSTHEAD.

WCKCODES feature AUTH (end)

MAP display example for table WCKCODES feature AUTH

```
                WCKEY                                   Value
_____________________________________________________________

           BNRMC   09                                   AUTH
```

Authorization Code Validation (AUTHVAL)

This datafill is required if the customer group has the Authorization Code Validation feature assigned to one of the wild card key access codes.

It can only be assigned if the customer group has the AUTH option assigned in table CUSTHEAD.

Data ll

The following table lists the datafill for table WCKCODES feature AUTHVAL.

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
WCKEY		see subfields	*Wild card key* This field consists of subfields CUSTGRP and TABIDX.
	CUSTGRP	alphanumeric (1 to 16 characters)	*Customer group name* Enter the name assigned to the customer group.
	TABIDX	0 to 99	*Table index* Enter the wild card key access code which is assigned to the Authorization Code Validation feature.
VALUE		see subfield	*Value* This field consists of subfield WCSPFN.
	WCSPFN	AUTHVAL	*Wild card key special function* Enter the wild card key special function for the Authorization Code Validation feature.

Data ll e xample

The following is an example of assigning the Authorization Code Validation feature to access code 10 of the wild card key for the customer group which has the code BNRMC assigned to it in table CUSTHEAD.

WCKCODES feature AUTHVAL (end)

MAP display example for table WCKCODES feature AUTHVAL

```
                WCKEY                                  Value
_____________________________________________________________

           BNRMC  10                              AUTHVAL
```

Flexible Console Alerting (BUZZ)

This datafill is required if the customer group has the Flexible Console Alerting feature assigned to one of the wild card key access codes.

This feature permits longer console buzzing during off-hours. During regular hours, console buzzing can be eliminated to reduce room noise, in which case alerting is done with the headset, not the console speaker.

The following table illustrates valid attendant keying sequences.

Valid attendant keying sequences

Desired state	Keying sequence
Activate Short	WC + AC + 1 + WC
Activate Tone	WC + AC + 2 + WC
Activate Both	WC + AC + 3 + WC
Activate Long	WC + AC + 4 + WC

Note:

where
WC is depress WC key
AC is access code for the flexible console alerting feature
1, 2, 3, and 4 are single digits entered using the keypad

Data II

The following table lists the datafill for table WCKCODES feature BUZZ.

Field descriptions (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
WCKEY		see subfields	*Key* This field consists of subfields CUSTGRP and TABIDX.
	CUSTGRP	alphanumeric (1 to 16 characters)	*Customer group name* Enter the name assigned to the customer group.

WCKCODES feature BUZZ (end)

Field descriptions (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
	TABIDX	0 to 99	*Table index* Enter the wild card key access code which is assigned to the Flexible Console Alerting feature.
RESULT		see subfield	*Result* This field consists of subfield WCSPFN.
	WCSPFN	BUZZ	*Wild card key special function* Enter the wild card key special function for the Flexible Console Alerting feature.

Data ll e xample

The following is an example of assigning the Flexible Console Alerting feature to access code 07 of the wild card key for the customer group which has the code BNRMC assigned to it in table CUSTHEAD.

MAP display example for table WCKCODES feature BUZZ

```
                WCKEY                                Value
_____________________________________________________________________

           BNRMC   07                                 BUZZ
```

Busy Veri cation Line (BVL)

This datafill is required if the customer group has the Busy Verification Line feature assigned to one of the wild card key access codes.

The attendant is automatically removed, and the original connection restored after 45 s, if one or both parties disconnect while the attendant is connected and the trunk is not seized or reserved for the attendant. If one of both parties do not disconnect while the attendant is connected, the attendant is dropped after 45 s.

Data ll

The following table lists the datafill for table WCKCODES feature BVL.

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
WCKEY		see subfields	*Wild card key* This field consists of subfields CUSTGRP and TABIDX.
	CUSTGRP	alphanumeric (1 to 16 characters)	*Customer group name* Enter the name assigned to the customer group.
TABIDX		0 to 99	*Table index* Enter the wild card key access code which is assigned to the Busy Verification Line feature.
VALUE		see subfield	*Value* This field consists of subfield WCSPFN.
	WCSPFN	BVL	*Wild card key special function* Enter the wild card key special function for the Busy Verification Line feature.
APREEMPT		Y or N	*Attendant pre-emption* Enter Y (yes) if attendant can pre-empt all connections to the line. Otherwise, enter N (no).
BVLNRVAL		5 to 20	*Busy verification line interval* Enter the interval in seconds between BVL tones.

WCKCODES feature BVL (end)

Data ll e xample

The following is an example of assigning the Busy Verification Line feature to the access code 03 of the wild card key for the customer group which has the code BNRMC assigned to it in table CUSTHEAD.

Attendant pre-emption is allowed and the interval between BVL tones is 10 s.

MAP display example for table WCKCODES feature BVL

```
          WCKEY                              Value
_____________________________________________________________
        BNRMC  03                        BLV Y 10
```

Busy Veri cation T runk (BVT)

This datafill is required if the customer group has the Busy Verification Trunk feature assigned to one of the wild card key access codes.

The attendant is automatically removed, and the original connection restored after 45 s, if one or both parties disconnect while the attendant is connected and the trunk is not seized or reserved for the attendant. If one of both parties do not disconnect while the attendant is connected, the attendant is dropped after 45 s.

Data ll

The following table lists the datafill for table WCKCODES feature BVT.

Field descriptions (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
WCKEY		see subfields	*Wild card key* This field consists of subfields CUSTGRP and TABIDX.
	CUSTGRP	alphanumeric (1 to 16 characters)	*Customer group name* Enter the name assigned to the customer group.
	TABIDX	0 to 99	*Table index* Enter the wild card key access code which is assigned to the Busy Verification Trunk feature.
VALUE		see subfield	*Value* This field consists of subfield WCSPFN.
	WCSPFN	BVT	*Wild card key special function* Enter the wild card key special function for the Busy Verification Trunk feature.
APREEMPT		Y or N	*Attendant pre-emption* Enter Y (yes) if attendant can pre-empt all connections to the trunk. Otherwise, enter N (no).

WCKCODES feature BVT (end)

Field descriptions (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
BVTAUD		Y or N	*Busy verification trunk audible* Enter Y (yes) to enable an attendant to verify the status of a trunk without immediate barge-in. Default is N (no).
BVTNRVAL		5 to 20	*Busy verification trunk interval* Enter the interval in seconds between BVT tones.

Data ll e xample

The following is an example of assigning the Busy Verification Trunk feature to access code 04 of the wild card key for the customer group which has the code BNRMC assigned to it in table CUSTHEAD.

Attendant pre-emption is not allowed, the BVTAUD capability is not assigned and the interval between BVT tones is 10 s.

MAP display example for table WCKCODES feature BVT

```
          WCKEY                              Value
_____________________________________________________________

        BNRMC  04                      BVT N N 10
```

Call Forward Station (CFS)

This datafill is required if the customer group has the Call Forward Station (CFS) Code Validation feature assigned to one of the wild card key access codes.

Data II

The following table lists the datafill for table WCKCODES feature CFS.

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
WCKEY		see subfields	*Wild card key* This field consists of subfields CUSTGRP and TABIDX.
	CUSTGRP	alphanumeric (1 to 16 characters)	*Customer group name* Enter the name assigned to the customer group.
	TABIDX	0 to 99	*Table index* Enter the wild card key access code which is assigned to the Call Forward Station Code Validation feature.
VALUE		see subfield	*Value* This field consists of subfield WCSPFN.
	WCSPFN	CFS	*Wild card key special function* Enter the wild card key special function for the Call Forward Station Code Validation feature.

Data II e xample

The following is an example of assigning the Call Forward Station Code Validation feature to access code 01 of the wild card key for the Customer Group which has the code BNRMC assigned to it in table CUSTHEAD.

MAP display example for table WCKCODES feature CFS

```
              WCKEY                              Value
-----------------------------------------------------------
          BNRMC   01                               CFS
```

WCKCODES feature DQC

Display Queued Calls (DQC)

This datafill is required if the customer group has the Display Queued Calls feature assigned to one of the wild card key access codes.

This feature provides the attendant with a visual indication of the number of calls queued to be answered.

With this feature the attendant can display the number of calls queued to be answered for the attendant's subgroup, or for a specific ICI category.

The display shows an ICI name or ALL, the number of queued calls, and the time the oldest call has waited in seconds.

If no calls are queued for the desired input, then NO CALLS QUEUED is displayed.

Speed Calling and Auto Dial are not allowed when entering the digits for an ICI category; the Display Queued Calls feature is terminated and these two features are treated as usual.

Only the Trouble Key, Position Busy Key and Query Time and Date Key are compatible with this feature. When these feature keys are entered while in the Display Queued Calls feature, they are executed, then the Display Queued Calls feature is returned.

If a non-compatible feature key is entered while this feature is activated, the feature is terminated and the non-compatible feature key is processed as usual. Upon termination, the feature key is turned off and the screen is restored.

Data II

The following table lists the datafill for table WCKCODES feature DQC.

Field descriptions (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
WCKEY		see subfields	*Wild card key* This field consists of subfields CUSTGRP and TABIDX.
	CUSTGRP	alphanumeric (1 to 16 characters)	*Customer group name* Enter the name assigned to the customer group.

WCKCODES feature DQC (end)

Field descriptions (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
	TABIDX	0 to 99	*Table index* Enter the wild card key access code which is assigned for Display Queued Calls feature.
VALUE		see subfield	*Value* This field consists of subfield WCSPFN.
	WCSPFN	DQC	*Wild card key special function* Enter the wild card key special function for the Display Queued Calls feature.

Data ll e xample

The following is an example of assigning the Display Queued Calls feature to access code 06 of the wild card key for the customer group which has the code BNRMC assigned to it in table CUSTHEAD.

MAP display example for table WCKCODES feature DQC

```
              WCKEY                                  Value
_____________________________________________________________________

          BNRMC   06                                   DQC
```

WCKCODES feature GTAC

Group Trunk Access Control (GTAC)

This datafill is required if the customer group has the Group Trunk Access Control feature assigned to one of the wild card key access codes.

With this feature only one access code is required for all trunk groups which require this feature.

The trunk group number the attendant enters is the number assigned in the TRKNAME table to the trunk group CLLI code.

If one key and lamp is required for each trunk group which requires this feature, see assignment of TAC to a key and lamp in the FNMAP table.

Data ll

The following table lists the datafill for table WCKCODES feature GTAC.

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
WCKEY		see subfields	*Wild card key* This field consists of subfields CUSTGRP and TABIDX.
	CUSTGRP	alphanumeric (1 to 16 characters)	*Customer group name* Enter the name assigned to the customer group.
	TABIDX	0 to 99	*Table index* Enter the wild card key access code which is assigned to the Group Trunk Access Control feature.
VALUE		see subfield	*Value* This field consists of subfield WCSPFN.
	WCSPFN	GTAC	*Wild card key special function* Enter the wild card key special function for the Group Trunk Access Control feature.

Data ll e xample

The following is an example of assigning the Group Trunk Access Control feature to access code 12 of the wild card key for the customer group which has the code BNRMC assigned to it in table CUSTHEAD.

WCKCODES feature GTAC (end)

MAP display example for table WCKCODES feature GTAC

```
                WCKEY                                   Value
_____________________________________________________________

            BNRMC  12                                   GTAC
```

WCKCODES feature GTGB

Group Trunk Group Busy (GTGB)

This datafill is required if the customer group has the Group Trunk Group Busy feature assigned to one of the wild card key access codes.

With this feature only one access code is required for all trunk groups which require this feature.

The trunk group number the attendant enters is the number assigned in the TRKNAME table to the trunk group CLLI code.

If one lamp is required for each trunk group with this feature, see assignment of TGB to a key and lamp in the FNMAP table.

Data ll

The following table lists the datafill for table WCKCODES feature GTGB.

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
WCKEY		see subfields	*Wild card key* This field consists of subfields CUSTGRP and TABIDX.
	CUSTGRP	alphanumeric (1 to 16 characters)	*Customer group name* Enter the name assigned to the customer group.
	TABIDX	0 to 99	*Table index* Enter the wild card key access code which is assigned to the Group Trunk Group Busy feature.
VALUE		see subfield	*Value* This field consists of subfield WCSPFN.
	WCSPFN	GTGB	*Wild card key special function* Enter the wild card key special function for the Group Trunk Group Busy feature.

Data ll e xample

The following is an example of assigning the Group Trunk Group Busy feature to access code 13 of the wild card key for the customer group which has the code BNRMC assigned to it in table CUSTHEAD.

WCKCODES feature GTGB (end)

MAP display example for table WCKCODES feature GTGB

```
            WCKEY                                   Value
_____________________________________________________________

          BNRMC  13                                 GTGB
```

WCKCODES feature GVAC

Global Virtual Access Control (GVAC)

This feature allows the attendant to select any virtual facility group (VFG) using the wild card key access code, and control its access by stations or incoming trunk groups. Access is allowed only when the bit associated with the line's or trunk group's LSC and the ALSC of the selected VFG is set. The VFG must belong to the same customer group to which the attendant belongs.

The lamp display is identical to that described for Global Virtual Group Busy (GVGB).

Data ll

The following table lists the datafill for table WCKCODES feature GVAC.

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
WCKEY		see subfields	*Wild card key* This field consists of subfields CUSTGRP and TABIDX.
	CUSTGRP	alphanumeric (1 to 16 characters)	*Customer group* NAME Enter the name assigned to the customer group.
	TABIDX	0 to 99	*Table index* Enter the wild card key access code which is assigned for the Global Virtual Access Control feature.
VALUE		see subfield	*Value* This field consists of subfield WCSPFN.
	WCSPFN	GVAC	*Wild card key special function* Enter the wild card key special function for the Global Virtual Access Control feature.

Data ll e xample

The following is an example of assigning the Global Virtual Access Control feature to access code 22 of the wild card key for the customer group which has the code BNRMC assigned to it in table CUSTHEAD.

WCKCODES feature GVAC (end)

MAP display example for table WCKCODES feature GVAC

```
                WCKEY                                   Value
_____________________________________________________________

           BNRMC  22                                    GVAC
```

WCKCODES feature GVGB

Global Virtual Group Busy (GVGB)

This feature allows the attendant to select any virtual facility group (VFG) and have its current idle/busy status displayed through the use of a wild card key access code. The lamp state is a snapshot of the status — which lasts for 3 s — and is not updated. The lamp state also gives an indication of whether VAC (Virtual Access Control) is in effect.

The VFG selected must belong to the same customer group to which the attendant belongs.

GVGB lamp states

VFG status	VAC in effect	VAC not in effect
IDLE (at least one member is available)	60 IPM	OFF
BUSY (all members are in use)	120 IPM	ON
Note: IPM = Impulses per minute		

Data II

The following table lists the datafill for table WCKCODES feature GVGB.

Field descriptions (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
WCKEY		see subfields	*Wild card key* This field consists of subfields CUSTGRP and TABIDX.
	CUSTGRP	alphanumeric (1 to 16 characters)	*Customer group name* Enter the name assigned to the customer group.
	TABIDX	0 to 99	*Table index* Enter the wild card key access code which is assigned for the Global Virtual Group Busy feature.

WCKCODES feature GVGB (end)

Field descriptions (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
VALUE		see subfield	*Value* This field consists of subfield WCSPFN.
	WCSPFN	GVGB	*Wild card key special function* Enter the wild card key special function for the Global Virtual Group Busy feature.

Data ll e xample

The following is an example of assigning the Global Virtual Group Busy feature to access code 18 of the wild card key for the customer group which has the code BNRMC assigned to it in table CUSTHEAD.

MAP display example for table WCKCODES feature GVGB

```
              WCKEY                                  Value
_____________________________________________________________________

          BNRMC  18                                   GVGB
```

WCKCODES feature LANG

Flexible Display Language (LANG)

This datafill is required if the customer group has the Flexible Display Language feature assigned to one of the wild card key access codes.

This feature permits the display of a language, other than the default language specified in table ATTCONS, on the alphanumeric display on the attendant console.

Data ll

The following table lists the datafill for table WCKCODES feature LANG.

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
WCKEY		see subfields	*Key* This field consists of subfields CUSTGRP and TABIDX.
	CUSTGRP	alphanumeric (1 to 16 characters)	*Customer group name* Enter the name assigned to the customer group.
	TABIDX	0 to 99	*Table index* Enter the wild card key access code which is assigned to the Flexible Display Language feature.
RESULT		see subfield	*Result* This field consists of subfield WCSPFN.
	WCSPFN	LANG	*Wild card key special function* Enter the wild card key special function for the Flexible Display Language feature.

Data ll e xample

The following is an example of assigning the Flexible Display Language feature to access code 14 of the wild card key for the customer group which has the code BNRMC assigned to it in table CUSTHEAD.

WCKCODES feature LANG (end)

MAP display example for table WCKCODES feature LANG

```
              WCKEY                                  Value
_____________________________________________________________________

          BNRMC   14                                  LANG
```

WCKCODES feature MSGIND

Message Index (MSGIND)

This datafill is required if the customer group has the Message Index feature.

Data fill

The following table lists the datafill for table WCKCODES feature MSGIND.

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
WCKEY		see subfields	*Wild card key* This field consists of subfields CUSTGRP and TABIDX.
	CUSTGRP	alphanumeric (1 to 16 characters)	*Customer group name* Enter the name assigned to the customer group.
	TABIDX	0 to 99	*Table index* Enter the wild card key access code which is assigned for the Message Index feature.
VALUE		see subfield	*Value* This field consists of subfield WCSPFN.
	WCSPFN	MSGIND	*Wild card key special function* Enter the wild card key special function for the Message Index feature.

Data fill example

The following is an example of assigning the Message Index feature to access code 23 of the wild card key for the customer group which has the code BNRMC assigned to it in table CUSTHEAD.

MAP display example for table WCKCODES feature MSGIND

```
            WCKEY                                Value
_____________________________________________________________

         BNRMC  23                             MSGIND
```

Night Service Programming (NSPRG)

This datafill is required if the customer group has the Night Service Programming feature assigned to one of the wild card key access codes.

The following table shows examples of adding or changing a number in the Night Service Flexible (ICIDATA) table from an attendant console:

Adding or changing numbers in ICIDATA

Type of number to be stored	WC keying sequence
Station Number	WC+AC+ 150 + 23456 + WC
Local Switching Unit	WC+AC+ 151 + 9 + 7D + WC
DDD	WC+AC+ 152 + 9 + (1) + 7/10D + WC
IDDD	WC+AC+ 153 + 9 + 011 + 7 to 12D + WC
Local Tandem	WC+AC+ 154 + 1 + 5D +WC
EPSCS	WC+AC+ 155 + 28 + 7/10D + WC
Nil Route (Reorder)	WC+AC+ 156 + # + WC

Note: WC = Wild Card Key
AC = Access code for NSP

The three-digit numbers 150 to 156 are ICI numbers which are assigned in the ICIDATA table.

Data II

The following table lists the datafill for table WCKCODES feature NSPRG.

Field descriptions (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
WCKEY		see subfields	*Wild card key* This field consists of subfields CUSTGRP and TABIDX.
	CUSTGRP	alphanumeric (1 to 16 characters)	*Customer group name* Enter the name assigned to the customer group.

WCKCODES feature NSPRG (end)

Field descriptions (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
	TABIDX	0 to 99	*Table index* Enter the wild card key access code which is assigned to the Night Service Programming feature.
VALUE		see subfield	*Value* This field consists of subfield WCSPFN.
	WCSPFN	NSPRG	*Wild card key special function* Enter the wild card key special function for the Night Service Programming feature.

Data ll e xample

The following is an example of assigning the Night Service Programming feature to access code 15 of the wild card key for the customer group which has the code BNRMC assigned to it in table CUSTHEAD.

MAP display example for table WCKCODES feature NSPRG

```
              WCKEY                                Value
_____________________________________________________________

          BNRMC  15                                NSPRG
```

Parking of Calls by the Attendant (PARK)

This datafill is required if the customer group has the Parking of Calls by the Attendant feature assigned to one of the wild card key access codes.

It can only be assigned if the customer group has the CPARK feature assigned in table CUSTSTN.

Data ll

The following table lists the datafill for table WCKCODES feature PARK.

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
WCKEY		see subfields	*Wild card key* This field consists of subfields CUSTGRP and TABIDX.
	CUSTGRP	alphanumeric (1 to 16 characters)	*Customer group name* Enter the name assigned to the customer group.
	TABIDX	0 to 99	*Table index* Enter the wild card key access code which is assigned for the Parking of Calls by the Attendant feature.
VALUE		see subfield	*Value* This field consists of subfield WCSPFN.
	WCSPFN	PARK	*Wild card key special function* Enter the wild card key special function for the Parking of Calls by the Attendant feature.

Data ll e xample

The following is an example of assigning the Parking of Calls by the Attendant feature to access code 16 of the wild card key for the customer group which has the code BNRMC assigned to it in table CUSTHEAD.

WCKCODES feature PARK (end)

MAP display example for table WCKCODES feature PARK

```
            WCKEY                                   Value
_____________________________________________________________

         BNRMC  16                                  PARK
```

PVN Remote Access Call Attendant Assistance (PVNRMAC)

This datafill is required if PVN Remote Access Call Attendant Assistance is assigned to one of the wild card key access codes. This feature allows the PVN attendant to enter the remote access number, PIN, calling number and called number for the caller who may use a rotary dial phone and has difficulty entering the PIN and called number. The valid length of the remote access number is 10 digits.

Data ll

The following table lists the datafill for table WCKCODES feature PVNRMAC.

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
WCKEY		see subfields	*Wild card key* This field consists of subfields CUSTGRP and TABIDX.
	CUSTGRP	alphanumeric (1 to 16 characters)	*Customer group name* Enter the name assigned to the customer group.
	TABIDX	0 to 99	*Table index* Enter the wild card key access code which is assigned for the PVN Remote Access Call Attendant Assistance feature.
VALUE		see subfield	*Value* This field consists of subfield WCSPFN.
	WCSPFN	PVNRMAC	*Wild card key special function* Enter the wild card key special function for the PVN Remote Access Call Attendant Assistance feature.

Data ll e xample

The following is an example of assigning the PVN Remote Access Call Attendant Assistance feature to access code 17 of the wild card key for the customer group which has the code BNRMC assigned to it in table CUSTHEAD.

WCKCODES feature PVNRMAC (end)

MAP display example for table WCKCODES feature PVNRMAC

```
              WCKEY                                  Value
_____________________________________________________________________

          BNRMC  17                              PVNRMAC
```

PVN Calling Number Attendant Assistance (PVNSRCDN)

This datafill is required if PVN Calling Number Attendant Assistance is assigned to one of the wild card key access codes. This feature allows the PVN attendant to enter the calling number for the caller on the caller's request. This is because the caller's identity may be lost if a tandem call is sent from other switches. The calling number must be entered before the called number. The valid length of the calling number is 10 digits.

Data ll

The following table lists the datafill for table WCKCODES feature PVNSRCDN.

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
WCKEY		see subfields	*Wild card key* This field consists of subfields CUSTGRP and TABIDX.
	CUSTGRP	alphanumeric (1 to 16 characters)	*Customer group name* Enter the name assigned to the customer group.
	TABIDX	0 to 99	*Table index* Enter the wild card key access code which is assigned for the PVN Calling Number Attendant Assistance feature.
VALUE		see subfield	*Value* This field consists of subfield WCSPFN.
	WCSPFN	PVNSRCDN	*Wild card key special function* Enter the wild card key special function for the PVN Calling Number Attendant Assistance.

Data ll e xample

The following is an example of assigning the PVN Calling Number Attendant Assistance feature to access code 16 of the wild card key for the customer group which has the code BNRMC assigned to it in table CUSTHEAD.

WCKCODES feature PVNSRCDN (end)

MAP display example for table WCKCODES feature PVNSRCDN

```
                WCKEY                                   Value
_____________________________________________________________

           BNRMC  16                                PVNSRCDN
```

Attendant Query Time and Date (QTIME)

This datafill is required if the customer group has the Attendant Query Time and Date feature assigned to one of the wild card key access codes.

If a 12-h clock is required instead of a 24-h clock, the TIM12 option must be assigned in table CUSTCONS.

Data ll

The following table lists the datafill for table WCKCODES feature QTIME.

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
WCKEY		see subfields	*Wild card key* This field consists of subfields CUSTGRP and TABIDX.
	CUSTGRP	alphanumeric (1 to 16 characters)	*Customer group name* Enter the name assigned to the customer group.
	TABIDX	0 to 99	*Table index* Enter the wild card key access code which is assigned to the Attendant Query Time and Date feature.
VALUE		see subfield	*Value* This field consists of subfield WCSPFN.
	WCSPFN	QTIME	*Wild card key special function* Enter the wild card key special function for the Attendant Query Time and Date feature.

Data ll e xample

The following is an example of assigning the Attendant Query Time and Date feature to access code 17 of the wild card key for the customer group which has the code BNRMC assigned to it in table CUSTHEAD.

WCKCODES feature QTIME (end)

MAP display example for table WCKCODES feature QTIME

```
            WCKEY                                   Value
_____________________________________________________________

          BNRMC  17                                 QTIME
```

WCKCODES feature SC10, SC30, SC50, or SC70

Speed Calling List (SC10, SC30, SC50, or SC70)

This datafill is required if the customer group has the Attendant Speed Calling feature assigned to one of the wild card key access codes.

This feature permits an attendant to dial numbers, which are frequently called, by depressing the wild card key and dialing the speed calling wild card key access code plus the one- or two- digit speed calling code. The numbers may be station numbers, CO number, or any other number which may be used to complete an outgoing call.

A customer group can be assigned up to three access codes for this feature.

The access codes are assigned as follows:

- Speed Calling List Short (SC10)
- Speed Calling List Long (SC30, SC50, or SC70)

The customer group can be assigned one long list for thirty (SC30), fifty (SC50), or seventy (SC70) entries.

An attendant console can be the user of a long speed calling list which belongs to another customer group.

The code assigned in the CLLI table to the attendant who owns the speed calling list is required for input data.

Data II

The following table lists the datafill for table WCKCODES feature SC10, SC30, SC50, or SC70.

Field descriptions (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
WCKEY		see subfields	*Wild card key* This field consists of subfields CUSTGRP and TABIDX.
	TABIDX	0 to 99	*Table index* Enter the wild card key access code which is assigned to the Speed Calling feature.

WCKCODES feature SC10, SC30, SC50, or SC70 (continued)

Field descriptions (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
	CUSTGRP	alphanumeric (1 to 16 characters)	*Customer group name* Enter the name assigned to the customer group.
VALUE		see subfield	*Value* This field consists of subfields WCSPFN and CONTRLAC.
	WCSPFN	SC10, SC30, SC50, or SC70	*Wild card key special function* Enter the wild card key special function for the Speed Calling Short List(SC10), Speed Calling Long List (SC30, SC50, or SC70).
	CONTRLAC	blank	*Controlling attendant console* Leave blank.

Data ll e xample

The following is an example of assigning the Speed Calling feature to the following access codes of the wild card key for the customer group which has the code BNRMC assigned to it in table CUSTHEAD.

List of entry examples

Wild card key code	Usage
19	Speed Calling Short List
20	Speed Calling Long List (30 numbers)
21	Speed Calling Long List (50 numbers)

The code in the CLLI table for the controlling customer group is BNRMCCON2.

WCKCODES feature SC10, SC30, SC50, or SC70 (end)

MAP display example for table WCKCODES feature SC10, SC30, SC50, or SC70

```
WCKEY                              Value
_____________________________________________________________

 BNRMC  19                              SC10
 BNRMC  20                              SC30
 BNRMC  21                              SC50
```

WCKCODES feature SERIAL

Serial Calling (SERIAL)

This datafill is required if Serial Calling is assigned to one of the wild card key access codes. This feature allows an attendant to designate a caller as serial and then release the loop. When the called party disconnects, the serial caller recalls the attendant console Serial Calling Incoming Call ID key.

Data ll

The following table lists the datafill for table WCKCODES feature SERIAL.

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
WCKEY		see subfields	*Wild card key* This field consists of subfields CUSTGRP and TABIDX.
	CUSTGRP	alphanumeric (1 to 16 characters)	*Customer group name* Enter the name assigned to the customer group.
	TABIDX	0 to 99	*Table index* Enter the wild card key access code which is assigned for the Serial Calling feature.
VALUE		see subfield	*Value* This field consists of subfield WCSPFN.
	WCSPFN	SERIAL	*Wild card key special function* Enter the wild card key special function for the Serial Calling feature.

Data ll e xample

The following is an example of assigning the Serial Calling feature to access code 17 of the wild card key for the customer group which has the code BNRMC assigned to it in table CUSTHEAD.

MAP display example for table WCKCODES feature SERIAL

```
            WCKEY                                Value
_____________________________________________________________

         BNRMC  17                             SERIAL
```

Trouble Code (TRBL)

This datafill is required if the customer group has the Trouble Code feature assigned to one of the wild card key access codes.

Each Trouble Code with its definition and alarm level is defined in table TRBLCODE.

Data ll

The following table lists the datafill for table WCKCODES feature TRBL.

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
WCKEY		see subfields	*Key* This field consists of subfields CUSTGRP and TABIDX.
	CUSTGRP	alphanumeric (1 to 16 characters)	*Customer group name* Enter the name assigned to the customer group.
	TABIDX	0 to 99	*Table index* Enter the wild card key access code which is assigned to the Trouble Code feature.
VALUE		see subfield	*Value* This field consists of subfield WCSPFN.
	WCSPFN	TRBL	*Wild card key special function* Enter the wild card key special function for the Trouble Code feature.

Data ll e xample

The following is an example of assigning the Trouble Code feature to wild card key code 08 for the customer group which has the code BNRMC assigned to it in table CUSTHEAD.

WCKCODES feature TRBL (end)

MAP display example for table WCKCODES feature TRBL

```
WCKEY                              Value
_____________________________________________________________

BNRMC   08                                  TRBL
```

Unparking of Calls by the Attendant (UNPK)

This datafill is required if the customer group has the feature which allows the attendant to unpark calls assigned to one of the wild card key access codes.

It can only be assigned if the customer group has the CPARK option assigned in table CUSTSTN.

See Parking of Calls by the Attendant, which allows attendant to park calls.

Data ll

The following table lists the datafill for table WCKCODES feature UNPK.

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
WCKEY		see subfields	*Wild card key* This field consists of subfields CUSTGRP and TABIDX.
	CUSTGRP	alphanumeric (1 to 16 characters)	*Customer group name* Enter the name assigned to the customer group.
	TABIDX	0 to 99	*Table index* Enter the wild card key access code which is assigned for the Unparking of Calls by the Attendant feature.
VALUE		see subfield	*Value* This field consists of subfield WCSPFN.
	WCSPFN	UNPK	*Wild card key special function* Enter the wild card key special function for the Unparking of Calls by the Attendant feature.

Data ll e xample

The following is an example of assigning the Unparking of Calls by the Attendant feature to access code 23 of the wild card key for the customer group which has the code BNRMC assigned to it in table CUSTHEAD.

WCKCODES feature UNPK (end)

MAP display example for table WCKCODES feature UNPK

```
WCKEY                              Value
_____________________________________________________________

BNRMC   23                                  UNPK
```

Conference Call (WC)

This datafill is required if the customer group has the Conference Call feature assigned to a wild card key access code.

Data ll

The following table lists the datafill for table WCKCODES feature WC.

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
WCKEY		see subfields	*Wild card key* This field consists of subfields CUSTGRP and TABIDX.
	CUSTGRP	alphanumeric (1 to 16 characters)	*Customer group name* Enter the name assigned to the customer group.
	TABIDX	0 to 99	*Table index* Enter the wild card key access code which is assigned to the Conference Call feature.
VALUE		see subfield	*Value* This field consists of subfield WCSPFN.
	WCSPFN	WC	*Wild card key special function* Enter the wild card key special function for the Conference Call feature.

Data ll e xample

The following is an example of assigning the Conference Call feature to access code 05 of the wild card key for the customer group which has the code BNRMC assigned to it in table CUSTHEAD.

WCKCODES feature WC (end)

MAP display example for table WCKCODES feature WC

```
            WCKEY                                   Value
_____________________________________________________________

          BNRMC  05                                  WC
```

WRDNCODE

Table name

Write Directory Number Code Table

Functional description

Table WRDNCODE has the same format as table DNCODE. Unlike table DNCODE, which is a read-only table, table WRDNCODE is both readable and writable.

Table WRDNCODE adds directory numbers (DN) to table DNCODE that were not added automatically through datafill from tables LENLINES, HUNTGRP, or HUNTMEM. Tuples that were added automatically to table DNCODE do not appear in table WRDNCODE and cannot be modified directly through tables DNCODE or WRDNCODE. Tuples are modified in table DNCODE through a change of the tuples in tables LENLINES, HUNTGRP, or HUNTMEM.

Directory numbers that terminate in a treatment, a feature, or a route are datafilled in table WRDNCODE.

Table WRDNCODE displays the DNs that can be modified from a maintenance and administration position (MAP) and which must therefore be saved in the dump and restore process. DNs that cannot be modified from a MAP are restored when tables LENLINES, HUNTGRP, and HUNTMEM are restored.

For related information, refer to tables DNHEAD and DNCODE.

Data ll sequence and implications

Table DNHEAD must be datafilled before table WRDNCODE.

Table size

64 to 1024 tuples

Memory is automatically allocated. The size is initially set to 64 and the table is extended automatically.

WRDNCODE (continued)

Data II

The following table lists datafill for table WRDNCODE.

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
XLANAME		alphanumeric (1 to 8 characters)	*Translation name* Enter the translation name from the corresponding head table.
DNNO		numeric (1 to 11 digits)	*Directory number* Enter the required directory number.
DNTDATA		see subfield	*Directory number translation data* This field is a vector that consists of subfield SEL and refinements.
	SEL	TRMT, RTE, or FEAT	*Translation selector* Enter TRMT if the call is required to route to a treatment. Enter RTE if translation is required to terminate when a translation result has been found. Enter FEAT if access to a feature is required.

SEL = TRMT

If subfield SEL has value TRMT, datafill refinement OPT as described below.

Field descriptions for conditional data II

Field	Subfield or refinement	Entry	Explanation and action
	OPT	alphanumeric	*Options* This field is a vector of up to ten options. For each option, datafill subfield OSEL followed by a space and refinement OFC.
	OSEL	OFC	*Option selector* Enter OFC for the office treatment option selector.
	OFC	alphanumeric	*Office treatment* Enter a treatment name from field TREATMT in subtable TMTCNTL.TREAT (office treatment subtable).

SEL = RTE

If subfield SEL has value RTE, datafill refinement OPT as described below.

Field descriptions for conditional data ll

Field	Subfield or refinement	Entry	Explanation and action
	OPT	alphanumeric	*Options* This field is a vector of up to ten options. For each option, datafill subfield OSEL followed by a space and refinement DEST.
	OSEL	DEST	*Option selector* Enter DEST for the destination route list option selector.
	DEST	0 to 1023	*Destination route list index* Enter the index number in the route list (within the same translation system) that specifies where the call is routed.

SEL = FEAT

If subfield SEL has value FEAT, datafill refinement OPT as described below.

Field descriptions for conditional data ll

Field	Subfield or refinement	Entry	Explanation and action
	OPT	alphanumeric	*Options* This field is a vector of up to six options. For each option, datafill subfield OSEL followed by a space and refinement FTR.
	OSEL	FTR	*Option selector* Enter FTR for the feature name option selector.
	FTR	alphanumeric	*Feature name* Enter the name of the feature to which the call is transferred. ***Note:*** At present, no feature names are available.

WRDNCODE (end)

Data ll e xample

The following example shows sample datafill for table WRDNCODE.

An example of datafill for table WRDNCODE is shown below. For an additional example illustrating the interaction between table WRDNCODE and associated tables, refer to table DNHEAD.

MAP display example for table WRDNCODE

```
 XLANAME         DNNO                                  DNTDATA
_____________________________________________________________

DN120             890                RTE  DEST  890      $
DN130            1111                TRMT OFC   VACT     $
```

WSALEOPT

Table name

Wholesale Options Table

Functional description

Table WSALEOPT provides criteria to screen billing restrictions. Screening can be performed for intra-LATA or intra-zone and, or inter-LATA or inter-zone calls. For these call types, this table determines if billing restrictions should apply according to the incoming trunk group, carrier identification code (CIC), service provider identification (SPID), or automatic number identification (ANI ID).

Data ll sequence and meaning

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

The WSIDX field must be datafilled in WSALEOPT before that field can be datafilled in TOPSTOPT. A WSALEOPT tuple cannot be deleted when another table references it.

Table size

0 to 100 tuples

WSALEOPT (continued)

Data II

The table that follows lists datafill for table WSALEOPT.

Field descriptions (Sheet 1 of 3)

Field	Subfield	Entry	Explanation and action
INDEX		0 - 99	This field is the index into the table from table TOPSTOPT field WSIDX.

Field descriptions (Sheet 2 of 3)

Field	Subfield	Entry	Explanation and action
INTRA		TRK, AOSPID	Intra-LATA or intra-zone screening criteria. The values are as follows: • TRK $ - Trunk. Use table TOPSTOPT field SCRNIDX to index table RESTBIL (TA call) or DARSTBIL (DA call). • AOSPID $ - Account owner SPID. Use table SPIDDB field SCRNIDX to index table RESTBIL (TA call) or DARSTBIL (DA call). • TRK AOSPID $ - Use AOSPID (same as AOSPID above). But, if SPIDDB field SCRNIDX = 100 (nil) or no SPID is associated with the call, use TRK (same as TRK above). • AOSPID TRK $ - Use TRK. But if TOPSTOPT field SCRNIDX = 100 (nil) or no trunk is associated with the call, use AOSPID. If both TRK and AOSPID are selected, then the order in which the entries are selected plays a role in the screening process. The last one entered is the first one selected. The last entry takes precedence if it is a non-nil SCRNIDX. If the last entry results in a nil screening index, then the first entry is used. If both selector choices result in a nil index, then no screening applies to the call.

WSALEOPT (continued)

Field descriptions (Sheet 3 of 3)

Field	Subfield	Entry	Explanation and action
INTER		TRK, CIC	Inter-LATA or inter-zone screening criteria. The values are as follows: • TRK $ - Trunk. Use table TOPSTOPT field SCRNIDX to index table RESTBIL (TA call) or DARSTBIL (DA call). • CIC $ - Carrier identification code. Use table TOPEACAR field SCRNIDX to index table RESTBIL (TA call) or DARSTBIL (DA call). • TRK CIC$ - Use CIC (same as CIC above). But, if TOPEACAR field SCRNIDX = 100 (nil) or no CIC is associated with the call, use TRK (same as TRK above). • CIC TRK $ - Use TRK. But if TOPSTOPT field SCRNIDX = 100 (nil) or no trunk is associated with the call, use CIC. If both TRK and CIC are selected, then the order in which the entries are selected plays a role in the screening process. The last one entered is the first one selected. The last entry takes precedence if it is a non-nil SCRNIDX. If the last entry results in a nil screening index, then the first entry is used. If both selector choices result in a nil index, then no screening applies to the call.

Data Il e xample

The figure that follows shows sample datafill for table WSALEOPT.

MAP display example for table WSALEOPT

```
IDX              INTRA            INTER
_____________________________________________________________________

  1      TRK AOSPID $            CIC $
```

Table history

TOPS12

The feature Calling Restriction for Wholesaling (59006832) introduces this table. This feature is in functionality UNBN Call Restrictions for Wholesaling, UNBN0006.

X75INFO

Table name

X.75 Protocol Information Table

Functional description

Table X75INFO functions as a look-up table to determine integrated services digital network (ISDN) X.75 protocol link and packet layer parameters for use with the DMS packet handler (DMS-PH). The key field is KEY, which contains a common language location identifier (CLLI) from table TRKSGRP and a trunk group member identifier for the X.75 interface. An X.75 interface is a single link protocol (SLP) member of an X.75 trunk group.

The following rules apply for datafilling table X75INFO:

- The combined total of the number of logical channels for permanent virtual circuits (field NPVC) and the number of logical channels for non-restricted circuits (field NNR) must be a minimum of one.
- 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, 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.

Data ll sequence and implications

The following tables must be datafilled before table X75INFO:

- CLLI
- TRKGRP
- TRKSGRP

Table size

0 to 32 768 tuples

Memory store is allocated automatically as new CLLI members are added.

Data II

The following table lists datafill for table X75INFO.

Field names, subfield names, and valid data ranges for table X75INFO are described below.

Field descriptions (Sheet 1 of 7)

Field	Subfield or refinement	Entry	Explanation and action
KEY		see subfields	*X75INFO key* This field consists of subfields CLLI and MEMB. This is the key field.
	CLLI	alphanumeric (1 to 16 characters)	*Common language location identifier* Enter the common language location identifier (CLLI) datafilled in table TRKSGRP for the table X75INFO interface.
	MEMB	0 to 9999	*Member identification* Enter the member number used to identify the X.75 interface.
X75ID		0 to 9 (1 to 11 digits)	*X75 identifier* Enter the unique identifier for the X.75 interface.
OPTIONS		see subfield	*Options* This field consists of subfield X75_OPTION. Enter up to 18 options. If less than 18 options are required, end the list with a $ (dollar sign). Refinements for the option are shown following the X75_OPTION field in alphabetical order.

X75INFO (continued)

Field descriptions (Sheet 2 of 7)

Field	Subfield or refinement	Entry	Explanation and action
	X75_OPTION	see below	*X75 option* Enter the following options:
		ADDRFMT	Enter ADDRFMT for the address format and datafill refinement ADDRFMT.
		ESCDIG	Enter ESCDIG for the packet layer escape digit and datafill refinement ESCDIG.
		IDTC	Enter IDTC for the incoming default throughput class and datafill refinement IDTC.
		IMPS	Enter IMPS for the incoming maximum packet size and datafill refinement IMPS.
		IMWS	Enter IMWS for the incoming maximum window size and datafill refinement IMWS.
		LCA	Enter LCA for the logical channel assignment parameter and datafill refinement LCA.
		LCS	Enter LCS for the logical channel selection and datafill refinement LCS.
		LLFSQ	Enter LLFSQ for the link level frame sequencing and datafill refinement LLFSQ.
		LLWS	Enter LLWS for the link level window size and datafill refinement LLWS.
		N2	Enter N2 for the maximum retransmission and datafill refinement N2.
		ODTC	Enter ODTC for the outgoing default throughput class and datafill refinement ODTC.
		OMPS	Enter OMPS for the outgoing maximum packet size and datafill refinement OMPS.
		PLSQ	Enter PLSQ for the packet level sequencing and datafill refinement PLSQ.

Field descriptions (Sheet 3 of 7)

Field	Subfield or refinement	Entry	Explanation and action
		T1	Enter T1 for the acknowledgement timer and datafill refinement T1.
		T2	Enter T2 for the response timer and datafill refinement T2.
		T3	Enter T3 for the idle channel timer and datafill refinement T3.
		TDVAL	Enter TDVAL for the transit delay value and datafill refinement TDVAL.
ADDRFMT		E164 or X121	*Address format* Enter the packet layer address format specifying the numbering plan. The default value is E164.
ESCDIG		0 or 9	*Escape digit* Enter the packet layer escape digit used in special translations. The default value is 0 (zero).
IDTC		75, 150, 300, 600, 1200, 2400, 4800, 9600, 19200, or 48000	*Incoming default throughput class* Enter the incoming default throughput class baud rate. The default value is 9600.
IMPS		128 or 256	*Incoming maximum packet size* Enter the maximum incoming packet size. The default value is 128.

X75INFO (continued)

Field descriptions (Sheet 4 of 7)

Field	Subfield or refinement	Entry	Explanation and action
IMWS		1 to 127	*Incoming maximum window size* Enter a value from 1 to 7 for modulo 8 packet level sequencing (PLSQ). Enter a value from 1 to 127 for modulo 128 PLSQ. The default value is 2.
	LCA	see subfields	*Logical channel assignment parameter* This subfield specifies the assignment of logical channels for the X.75 interface. This field consists of subfields BLCN, NNR, and NPVC.
	BLCN	1 to 4095	*Beginning logical channel number* If the entry in subfield X75_OPTION is LCA, datafill this subfield. Enter the beginning logical channel number. The default value is 1.
	NNR	0 to 512	*Number of non-restricted channels* If the entry in subfield X75_OPTION is LCA, datafill this subfield. Enter the number of non-restricted (two-way) channels. The default value is 1.
	NPVC	0 to 512	*Number of permanent virtual circuits* If the entry in subfield X75_OPTION is LCA, datafill this subfield. Enter the number of permanent virtual circuits. The default value is 0 (zero).

Field descriptions (Sheet 5 of 7)

Field	Subfield or refinement	Entry	Explanation and action
LCS		ASC or DESC	*Logical channel selection* Enter the order of logical channel selection on the X.75 interface. Enter ASC for ascending order or DESC for descending order of selection. The default value is ASC.
LLFSQ		MOD8 or MOD128	*Link level frame sequencing* Enter the link access procedure balanced (LAPB) layer 2 parameter specifying the link level frame sequencing (LLFSQ) on the X.75 interface. The default value is MOD8.
LLWS		1 to 127	*Link level window size* Enter a value from 1 to 7 for modulo 8 LLFSQ. Enter a value from 1 to 127 for modulo 128 LLFSQ. The value applies to transmissions in both directions. The default value is 2.
N2		2 to 15	*Maximum retransmissions* Enter the maximum number of attempts to complete a transmission. The default value is 3.
ODTC		75, 150, 300, 600, 1200, 2400, 4800, 9600, 19200, or 48000	*Outgoing default throughput class* Enter the outgoing default throughput class baud rate. The default value is 9600.

X75INFO (continued)

Field descriptions (Sheet 6 of 7)

Field	Subfield or refinement	Entry	Explanation and action
OMPS		128 or 256	*Outgoing maximum packet size* Enter the maximum outgoing packet size. The default value is 128.
OMWS		1 to 127	*Outgoing maximum window size* Enter a value from 1 to 7 for modulo 8 PLSQ. Enter a value from 1 to 127 for modulo 128 PLSQ. The default value is 2.
PLSQ		MOD8 or MOD128	*Packet level sequencing* Enter MOD8 for modulo 8 PLSQ. Enter MOD128 for modulo 128 PLSQ. The default value is MOD8.
T1		5 to 100	*Acknowledgment timer* Enter the time, in units of 100 ms, to begin retransmission of a frame. The default value is 30 (3000 ms).
T2		0 to 4	*Response timer* Enter the time available, in units of 100 ms, to initiate the acknowledging frame and ensure its receipt prior to timer T1 running out. The default value is 2 (200 ms).

Field descriptions (Sheet 7 of 7)

Field	Subfield or refinement	Entry	Explanation and action
T3		1 to 30	*Idle channel timer* Enter the maximum time, in units of 1 s, that the channel remains idle. The default value is 5.
TDVAL		0 to 600	*Transit delay value* Enter the packet layer statistical value, in units of 1 ms, for the transit delay on the link. This parameter applies to the transit delay indication (TDI) and is not a timer value. The default value is 0 (zero).

Data ll e xample

The following example shows sample datafill for table X75INFO.

MAP display example for table X75INFO

```
              KEY       X75ID
                                                              OPTIONS
_____________________________________________________________________
        DPPSC 2418 16137635555
                                                 (  IDTC   75) (  OMPS
128)$
```

Table history

BCS36

Reference in field LLWS to PLSQ was changed to LLFSQ.

BCS35

Invalid field reference MNLC was removed.

BCS34

Table X75INFO was introduced.

XAFWLOAD

Table name

XA-Core firmware load table.

Functional description

The table XAFWLOAD stores the following information:

- firmware (FW) load file locations and names
- field replaceable unit (FRU) product equipment codes (PEC)
- FW soak times
- valid FW versions

Field LOADTYPE is added. The entry may either be FW, DLL. FW indicates Firmware ROM type. DLL indicates Firmware Downloadable Load, and is applicable to the HIOP.

The system uses table XAFWLOAD to control firmware versions and to detect a firmware version mismatch.

Data II sequence and meaning

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

Table size

0 to 40 tuples.

Data II

The table that follows lists datafill for table XAFWLOAD.

Field descriptions

Field	Subfield	Entry	Explanation and action
INDEX	none	1 to 40	Tuple entry ID in table XAFWLOAD.
FRU	none	PE, IOP or CMIC	Indicates the type of card or packlet.
PEC	none	alphanumeric (8 characters)	Indicates the product equipment code (PEC).
VERSION	none	alphanumeric (up to 8 characters)	Indicates the FW version.
VOLUME	none	alphanumeric (up to 20 characters)	Indicates the volume name.

XAFWLOAD (continued)

Field descriptions

Field	Subfield	Entry	Explanation and action
FILE	none	alphanumeric (up to 32 characters)	Indicates the file name.
LOADTYPE	none	0 to 40	Tuple entry ID in table XAFWLOAD
STATUS	none	new, current or old	The system uses the status entry to indicate which volume and filename to retrieve when executing the LoadFW command. All tuples have a unique combination of FRU, PEC and STATUS except when status = OLD.
SOAK	none	0 to 240	Indicates the time period in hours that the system soaks the firmware. For HIOP DLL entries, soak time of 0 sould be used. The default entry is 48.

Data Il e xample

The figure that follows shows sample datafill for table XAFWLOAD.

```
INDEX   FRU PEC      VERSION  VOLUME      FILE     LOADTYPE  STATUS   SOAK

1     PE   NTLX02AA XAPE01AC F02LFWLOADS PEFW413  FW        old      48
2     PE   NTLX02AA XAPE01AF F02LFWLOADS PEFW421  FW        current  48
3     PE   NTLX02AA XAPE01BA F02LFWLOADS PEFW424  FW        new      48
4     IOP  NTLX03AA XAIO01AA F02LFWLOADS ISEFW41  FW        old       0
5     IOP  NTLX03AA XAIO01AC F02LFWLOADS ISEFW44  FW        current   0
6     CMIC NTLX05AA OC06PK22 F02LFWLOADS 0C3FW75  FW        current  72
7     AMDI NTLX05AA OC06PK47 F02LFWLOADS 0C3FW87  FW        current  36
8     ETHR NTLX09AA EP14DO03 F02LFWLOADS EP14DO03 FW        current  48
9     HIOP NTLX04AA XHIO01YC F02LFWLOADS NTLX01YC FW        current  48
10    HIOP NTLX04AA XHIO01YD F02LFWLOADS XHIO01YD DLL       current   0
```

XAFWLOAD (end)

Table history

BAS17

Field LOADTYPE is added in BAS17. This field only applies to BAS17 and above.

BAS14

Table XAFWLOAD is added in BAS14.

Additional information

Table XAFWLOAD does not use translation verification tools.

If the system cannot find a matching entry in table XAFWLOAD with the version of firmware currently running, it will create a tuple in the table. Since it is unknown if there is a volume and filename where this firmware load exists, the newly created tuple is created with the default values of unknown_volume_name and unknown_file_name. Tuples with the default value may fail a TABAUDIT, and hence a TABXFER. It is the responsibility of the craftsperson to manually edit this tuple and specify the correct volume name and file name where this load resides.

Refer to your FRU specific IM for additional information. For example, the IM upgrading the IOPs, “Upgrade XA-Core IOP Packs/Packlets to NTLX03AB, NTLX5AB, and NTLX3BB”, IM# 65-6171 refers to the NTP 297-8991-510 “DMS-100 Family XA-Core Maintenance Manual”, section entitled “Upgrade firmware on an xa-core component” which outlines the procedure in detail.

XANNINFO

Table name

External Announcement Information Table

Functional description

Table XANNINFO is based on an announcement number. After an announcement over an external audio response unit (ARU) ends, table XANNINFO is checked by the system to see if the call can be connected or reconnected to an operator.

For related information, refer to table ARURTE.

Data ll sequence and implications

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

Table size

0 to 255 tuples

Table XANNINFO is a static table and requires 32 words of data store for each tuple.

Data ll

The following table lists datafill for table XANNINFO.

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
ANN		0 to 254	Announcement number. This field is the key to the table. Enter the announcement number to be played to the subscriber. The number is sent from the Directory Assistance System (DAS).
OPRCONN		Y or N	Operator connection. Enter Y (yes) if the subscriber can be connected to an operator following the announcement. Otherwise enter N (no).

Data ll e xample

The following example shows sample datafill for table XANNINFO.

XANNINFO (end)

MAP display example for table XANNINFO

```
ANN OPRCONN
_____________________________________________________________

  4        Y
```

XESAINV

Table name

Emergency Stand-Alone Inventory

Functional description

Table XESAINV identifies peripheral modules (PM) with Emergency Stand-Alones (ESA) capability. ESA is an option for remote line concentrating modules (RLCM) and remote digital line modules (RDLM). To enable ESA, operating company personnel must provision table LCMINV for the RLCM or table DLMINV for the RDLM. Operating company personnel enables ESA capability through the data in the table XESAINV.

Note: The system does not check data in table LCMINV or table DLMINV against the data provisioned in table XESAINV.

NT6X45 product engineering codes (PEC) for field PROCPEC are listed in order of non-decreasing capabilities in the string range NT_6X45_PEC. The string type contains the following values in order: 6X45AA, 6X45AB, 6X45AC, 6X45CA, 6X45AD, 6X45AE, 6X45AF, 6X45BA, and 6X45BB. If, for example, the master processor (MP) is a 6X45CA, the signaling processor (SP) is a 6X45AD, and the file processor (FP) is a 6X45AE, the PROCPEC entry is 6X45CA. For these cards, the only valid entry in field E2LOAD is NILLOAD.

For NTMX45 ESA processors, enter MX45 and the card suffix in field PROCPEC. Because NTMX45 cards support firmware downloads, enter the firmware load in field E2LOAD.

Data II sequence and implications

The following tables must be datafilled before table XESAINV:

- LCMINV
- RCCINV
- DLMINV

Data II

The following table lists datafill for table XESAINV.

XESAINV (continued)

Field names, subfield names, and valid data ranges for table XESAINV are described as follows.

Field descriptions (Sheet 1 of 2)

Field	Subfield	Entry	Explanation and action
ESANAME		see subfields	This field consists of subfields ESASITE, ESAPMTYPE, and ESANO.
	ESA_SITE	HOST or REM1	Enter the site name; otherwise, leave the field blank.
	ESAPMTYPE	ESA	Enter ESA to specify the type of peripheral module (PM).
	ESANO	0 to 255	Enter the ESA number. ***Note:*** This number must be unique over all sites.
FRTYPE		DLE or RLCE	Enter the type of type of frame in which the unit is located.
FRNO		0 to 511	Enter the frame number of the ESA.
SHPOS		0 to 77	Enter the shelf position for the ESA.
FLOOR		0 to 99	Enter the floor on which the ESA is located.
ROW		A to H, J to N, P to Z, AA to HH, JJ to NN, and PP to ZZ	Enter the row in which the ESA is located.
FRPOS		0 to 99	Enter the frame position within the office.
LOAD		alphanumeric	Enter the loadfile to be used to load the ESA unit.
EXECTAB		see subfields	This field consists of subfields TRMTYPE and EXEC.
	TRMTYPE	ESALINES M5X09 or M5X12	Enter the type of PM terminals used: ESALINES for emergency stand-alone lines; M5X09 and M5X12 for voice and data lines.

Field descriptions (Sheet 2 of 2)

Field	Subfield	Entry	Explanation and action
	EXEC	ESAEX KSETEX or IESAEX	Enter the set of executive programs required for the PM specified in TRMTYPE.
CSPM		see subfields	This field consists of subfields HOSTLCMT and HOSTLCMN.
	HOSTLCMT	LCM or DLM	Enter the remote PM type to which the ESA is being added.
	HOSTLCMN	0 to 63	Enter the LCM or the DLM number.
PROCPEC		alphanumeric	Enter the processor card and suffix. For example, 6X45AF or MX45AA.
E2LOAD		alphanumeric (0 to 8 characters)	Enter NILLOAD for 6X45 based cards or the firmware loadname for MX45 based cards. ***Note:*** Firmware loadfiles are not backward compatible with NT6X45AF loads.

Data ll e xample

The following example shows sample datafill for table XESAINV.

MAP display example for table XESAINV

```
           ESANAME FRTYPE FRNO SHPOS FLOOR ROW FRPOS       LOAD
                                                              EXECTAB
         CSPM PROCPEC E2LOAD
_____________________________________________________________________
REM1      ESA    0    RLCM     10      0      2    D     6  ESA10AI
                                                  (      ESALINES  ESAEX)$
      LCM  4  MX45AA    BNK0NO02
```

XFERADDR

Table name

Data Transferal Table

Functional description

The data transferal system permits an operating company to transfer information concerning the operation of a DMS-100 Family switch to its data processing center. Normally, two types of information can be requested: billing information, in the form of automatic message accounting (AMA) data, and operational measurements (OM) data. Other types of data can also be handled. Data is contained on storage devices at the DMS switch.

Data transfer is structured by operating company personnel through commands at the DMS-100 switch. Data transferal is effected through a digital data packet switching network, such as DATAPAC.

Table XFERADDR stores the addresses from which XFER can accept requests for information. Table XFERADDR contains the following information:

- the index number of the tuples in the table
- the unit number for either the multiprotocol controller (MPC) or data packet controller (DPC) used for data transmission
- the MPC link used for data transmission

Table XFERADDR is initially datafilled by Northern Telecom support personnel during installation. The table can be modified by operating company personnel using the table editor (see the *Basic Translations Tools Guide*).

Data ll sequence and implications

Table GLADEV must be datafilled before table XFERADDR.

> ***Note:*** Table GDLADEV identifies specific application devices that XFER uses. Table GDLADEV must be datafilled with either MPC or DPC before table XFERADDR can be datafilled. If changing transmission protocols for an application (such as changing to the MPC after the DPC is datafilled), all tuples in table XFERADDR must be deleted before table GDLADEV can be changed.

Table size

Memory for table XFERADDR is automatically allocated for 64 entries. This allocation cannot be changed.

Data II

The following table lists datafill for table XFERADDR.

Field descriptions (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
INDEX		see subfield	*Data transfer address key* This field consists of subfield K. This is the key to the table.
	K	0 to 63	*Table index* Enter an integer value for the table index. This number serves as an index to the tuples in the table. There is no default value.
UNIT		integer (0 to 255 or 0 to 15 [see note])	*Unit number* These values are obtained from table MPC or table DPACNUM. If the multiprotocol controller (MPC) is datafilled in table GDLADEV, values for this field are limited to 0 to 255. If the data packet controller (DPC) is datafilled in table GDLADEV, values for this field are limited to 0 to 15. ***Note:*** Canada only Any entry outside the range indicated for this field is invalid. There is no default value.

XFERADDR (end)

Field descriptions (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
LINK		intege r(-1, 2, or 3)	*Link number* Entry values 2 and 3 are currently the only values that can be entered for the MPC. If the DPC is datafilled in table GDLADEV, the value for the LINK field must be -1. Values other than -1 (MPC) and 2 or 3 (DPC) are not valid. There is no default value.
ADDRESS		numeric (8 to 15 digits)	*Data network address* Enter a minimum of eight digits for the data network address. Data network addresses that are used for MPC card connections must be unique and cannot also appear in table NOPADDR. There is no default address.

Data ll e xample

The following example shows sample datafill for table XFERADDR.

Field INDEX shows the tuple position in the table as 1. Field UNIT shows that DPC 14 is datafilled. Field LINK is -1, the only possible value when the DPC is datafilled in table GDLADEV. The data number address assigned to this DPC and link (16134700010) is the final value.

MAP display example for table XFERADDR

```
INDEX    UNIT    LINK          ADDRESS
_____________________________________________________

    1      14      -1      16134700010
```

Table history

BCS36

Field INDEX was separated into field INDEX and subfield K.

XFERSSYS

Table name

Transfer Subsystem Table

Functional description

Table XFERSSYS holds information about each Device Independent Recording Package (DIRP) subsystem from which data can be transmitted using the transfer (XFER) utility. Table XFERSSYS is an added external table that stores information previously entered using table editor commands. Table editor commands are used to add, delete, and modify tuples in table XFERSSYS.

Table XFERSSYS contains the subsystem name, protocol identification, and function key number (if these are specified). The key to the table is the subsystem name (field SSNAME). This key is the same as the key for table DIRPSSYS.

Data II sequence and implications

Datafill table DIRPSSYS before table XFERSSYS.

Table size

0 to 23 tuples

Data II

The following table lists datafill for table XFERSSYS.

Field descriptions (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
SSNAME		see subfield	*XFER subsystem key* This field consists of subfield K.
	K	alphanumeric (1 to 4 characters)	*Subsystem name* Enter a name to identify the subsystem to the Device Independent Recording Package (DIRP). Subsystem names must be datafilled in table DIRPSSYS before they can be entered in this field.

XFERSSYS (continued)

Field descriptions (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
PROTCLID		numeric (1 to 255)	*Protocol identification* This is the transferal protocol identification (ID) number. With the XFER (transfer) utility, the poller supplies the hexadecimal version of the protocol ID number in its Start Conversation message. Enter the decimal equivalent of this number.
FKEY		F13 F14 F15 F16 F17 F18, or FNONE	*Function key* Enter the function key that is required to represent the subsystem at the XFER level of the MAP. Keys F13 to F18 can be defined for subsystems by using this table. The entry for the defined subsystem does not appear in the menu until the user exits and re-enters the XFER level of the MAP. Enter FNONE if no function key is specified for this subsystem and no entry appears on the menu.

Data ll e xample

The following example shows sample datafill for table XFERSSYS.

MAP display example for table XFERSSYS

```
SSNAME PROTCLID  FKEY
_____________________________________________________________

    OM         3   F15
   AMA         1   F13
```

Table history

BCS36

Field SSNAME was separated into field SSNAME and subfield K.

Supplementary information

This section provides information on dump and restore procedures when datafilling table XFERSSYS.

Dump and restore

Dump and restore procedures in table XFERSSYS rebuild the information between BCS loads. This ensures that information created previously is not lost when a new BCS load is initiated.

XLABILL

Table name

XLAGRP Translation Refinement for Billing Types

Functional description

Table XLABILL provides a mechanism to refine the XLAGRP based on the billing type. The method applies when the switch uses XLAGRP translations for TOPS calls. The XLAGRP translations method relies on obtaining a translator from table XLAGRP and indexing into table TOPSDP.

Table XLABILL allows the XLAGRP to be selected based on a range of billing types including paid, collect, third, cards, special calling, special called. If a match between the existing XLAGRP and the billing type are found, the new XLAGRP is provided.

Station paid and person paid calls are both handled by the PAID criteria. Both are PAID calls, but may have different rates applied. This table captures the billing method but not the rate, therefore station and person ratings are treated the same. This principle applies to all billing types.

During translations, table XLACLASS is processed before table XLABILL.

Datafill sequence and meaning

Enter datafill into tables XLAGRP and TOPSDP before table XLABILL.

Table size

Maximum of 57 330 tuples.

Table size is allocated dynamically based on datafill.

XLABILL (end)

Datafill

The table that follows lists datafill for table XLABILL.

Field descriptions

Field	Subfield	Entry	Explanation and action
XLAGRP		from table XLAGRP	Enter the XLAGRP (from table XLAGRP) to associate with the type of call in field BILLTYPE.
BILLTYPE		UNSPEC, PAID, COLLECT, CCARD, THIRD, SPLCLG, or SPLCLD	Enter a billing type.
NEWXLGRP		from table XLAGRP	Enter the new XLAGRP (from table XLAGRP) to use for the billing type.

Datafill example

The figure that follows shows sample datafill for table XLABILL.

MAP display example for table XLABILL

```
XLAGRP          BILLTYPE          NEWXLGRP
-------------------------------------------------------
TRK1COIN        PAID              TRK1COINPAID_ROUTE
TRK1COIN        THIRD             TRK1COIN_NOROUTE
TRK1COIN        COLLECT           TRK1COIN_NOROUTE
```

Table history

SN07 (DMS)

Table introduced by feature A00002765, XLAGRP Refinements for Coin Station-Paid Routing.

XLACLASS

Table name

XLAGRP Translation Refinement for Calling Service Class

Functional description

Table XLACLASS provides a mechanism to refine the XLAGRP based on the calling service class. The method applies when the switch uses XLAGRP translations and screening for TOPS calls. The XLAGRP translations method relies on obtaining a translator from table XLAGRP and indexing into table TOPSDP.

Table XLACLASS allows the XLAGRP to be selected based upon the calling service class. If a match between the existing XLAGRP and the calling service class are found, the new XLAGRP is provided.

Datafill sequence and meaning

Enter datafill into tables XLAGRP and TOPSDP before table XLACLASS.

Table size

Maximum of 40 950 tuples.

Table size is allocated dynamically based on datafill.

Datafill

The table that follows lists datafill for table XLACLASS.

Field descriptions

Field	Subfield	Entry	Explanation and action
XLAGRP		from table XLAGRP	Enter the XLAGRP (from table XLAGRP) to associate with the type of call in field CLGCLASS.
CLGCLASS		UNKNOWN, STATION, COIN, HOTEL, or RESTRICTED	Enter a Calling Service Class.
NEWXLGRP		from table XLAGRP	Enter the new XLAGRP (from table XLAGRP) to use for the Calling Service Class.

Datafill example

The figure that follows shows sample datafill for table XLACLASS.

XLACLASS (end)

MAP display example for table XLACLASS

```
XLAGRP              CLGCLASS                    NEWXLGRP
-------------------------------------------------------
TRK1                COIN                        TRK1COIN
TRK1                STATION                     TRK1STA
TRK1                HOTEL                       TRK1HOTEL
```

Table history

SN07 (DMS)

Table introduced by feature A00002765, XLAGRP Refinements for Coin Station-Paid Routing.

XLACIC

Table name

Translations Carrier Identification Code

Functional description

This table refines the XLAGRP based on the region for the new TOPS translations and screening. The starting XLAGRP is defined in table TOPEATRK.

Data II sequence and meaning

Enter datafill into the tables that follow after you enter datafill into table XLACIC:

- CICGRP
- TOPEACAR
- XLAGRP
- TOPSDP

Table size

0 to 8,378,370 tuples (which is the maximum number of CICGRPs times the maximum number of XLAGRPs)

Currently, the maximum number of CICGRPs in table CICGRP is 1023. The maximum number of XLAGRPs in table XLAGRP is 8190.

Data II

The table that follows lists datafill for table XLACIC.

Field descriptions (Sheet 1 of 2)

Field	Subfield	Entry	Explanation and action
GRPKEY		see subfields	Group key. This field is the key field and consists of subfields XLAGRP and CICGRP.
	XLAGRP	name from XLAGRP	Translations group. Enter a translations group name defined in table XLAGRP.

Field descriptions (Sheet 2 of 2)

Field	Subfield	Entry	Explanation and action
	CICGRP	name from CICGRP	Carrier identification code group. Enter a CIC group name defined in table CICGRP. Translations and screening uses this group.
NEWXLGRP		name from XLAGRP	New translations group. Enter a translations group name defined in table XLAGRP. This new group is a part of the XLAGRP that contains only CICs in the CICGRP.

Data ll e xample

The figure that follows shows sample datafill for table XLACIC.

MAP display example for table XLACIC

```
GRPKEY                      NEWXLGRP
_____________________________________________________

TRK1   0111                 TRK11LEC
TRK1   1234                 TRK1CLEC
```

Table history

TOPS12

This table was introduced by feature 59006822 in functionality OPRTRANS and EA, UNBN0001.

Additional information

None

XLAEAREG

Table name

Translations Equal Access Region

Functional description

This table refines the XLAGRP by the region for the new TOPS translations and screening. The starting XLAGRP is defined in table TOPEATRK.

Data II sequence and meaning

Enter datafill into the tables that follow after you enter datafill into table XLAEAREG:

- XLAGRP
- TOPSDP
- EAREGN

Table size

0 to 16,380,000 tuples (which is the maximum number of XLAGRPs times the maximum number of regions)

Currently, there are a maximum of 8190 XLAGRPs in table XLAGRP and a maximum of 2000 regions in table EAREGN.

Data II

The table that follows lists datafill for table XLAEAREG.

Field descriptions (Sheet 1 of 2)

Field	Subfield	Entry	Explanation and action
GRPKEY		see subfields	Group key. This field is the key field and consists of subfields XLAGRP and REGION.
	XLAGRP	name from XLAGRP	Translations group. Enter a translations group name defined in table XLAGRP.

Field descriptions (Sheet 2 of 2)

Field	Subfield	Entry	Explanation and action
	REGION	name from EAREGN	Region. Enter a region name according to the screening as follows: LATA screening (table TOPSEATRK field SCRNTYPE = LATA): Only predefined values INTRA, INTER, and OVERSEAS are allowed. Thes values are defined in table EAREGN. • • AONE screening (table TOPEATRK field SCRNTYPE = ZONE): All values defined in table EAREGN are allowed. These values include the predefined (INTRA, INTER, and OVERSEAS) and Operating Company defined values. The predefined values are defined as follows: • INTRA - A domestic carrier call that is intrastate. • INTER - A domestic carrier call that is interstate. • OVERSEAS - An international call when using traditional LATA screening. For ZONE screening, the REGION can be Operating Company defined in tables EAREGN and EASCRN.
NEWXLGRP		name from XLAGRP	New translations group. Enter a translations group name defined in table XLAGRP. This new group contains only members that belong to the region.

Data ll e xample

The figure that follows shows sample datafill for table XLAEAREG.

XLAEAREG (end)

MAP display example for table XLAEAREG

```
GRPKEY                                      NEWXLGRP
_____________________________________________________

TRK1   INTRA                                TRK1ILEC
TRK2   INTER                                TRK1ILEC
TRK3   OVERSEAS                             TRK1CLEC
TRK3   BURLXRAL                             TRK2CLEC
```

Table history

TOPS12

This table was introduced by feature 59006822 in functionality OPRTRANS and EA, UNBN0001.

Additional information

None

XLAGRP

Table name

Translations Group

Functional description

Table XLAGRP defines TOPS translation group names for use by TOPS translations.

Data ll sequence and implications

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

Table XLAGRP must be datafilled before tables TOPSTOPT, XLAODIGS, XLASPID, and TOPSDP.

Table size

0 to 8K words

Data ll

The following table lists datafill for table XLAGRP.

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
XLAGRP		up to 32 alphanumeric characters	Translations group. Enter a TOPS translation group name for use by TOPS translations.

Data ll e xample

The following example shows sample datafill for table XLAGRP.

MAP display example for table XLAGRP

```
XLAGRP
------------------------------------------------------------
TRK1
TRK2
TRK1LEC
TRK1CLEC
TRK1619320
TRK1619322
TRK1ILEC619320
```

XLAGRP (end)

Table history

TOPS09

Initial release by feature AF7159 in functionality Translations and Routing, UNBN0003.

XLAMAP

Table name

ISDN Translation Map Table

Functional description

Table XLAMAP associates a Meridian Digital Centrex (MDC) translator name and a routing characteristic name to obtain a new MDC translator name, a line attribute, or a routing index. This association enables the call to translate differently based upon ISDN routing characteristics.

Data II sequence and implications

The following tables must be datafilled before table XLAMAP:

- LINEATTR
- OFRT
- XLANAME
- IBNRTE
- RCNAME

This table has no restart requirements.

Table size

0 to 1 048 576 tuples

Data store for table XLAMAP is dynamically allocated.

Data II

The following table lists datafill for table XLAMAP.

Field descriptions (Sheet 1 of 3)

Field	Subfield or refinement	Entry	Explanation and action
XLAKEY		see subfields	*Translation key* This field is the key to the table and consists of subfields RCNAME and XLANAME.
	RCNAME	alphanumeric (1 to 8 characters)	*Routing characteristic name* Enter the routing characteristic name required for the translation. Valid entries must be previously datafilled in table RCNAME.

XLAMAP (continued)

Field descriptions (Sheet 2 of 3)

Field	Subfield or refinement	Entry	Explanation and action
	XLANAME	alphanumeric (1 to 8 characters)	*Translation name* Enter the required Meridian Digital Centrex (MDC) translator name. Valid entries must be previously datafilled in table XLANAME.
DATA		see subfield	*Data* This field consists of up to two multiples of subfield SEL and its refinements. If fewer than two multiples are required, end the list with a $ (dollar sign).
	SEL	LINEATTR ROUTE or XLA	*Selector* Enter LINEATTR to specify that routing to a specified line attribute is required. The LINEATTR selector applies if entry into the private network is not required. Datafill refinement LINEATTR. ***Note:*** The LINEATTR selector cannot be used in conjunction with either the ROUTE selector or the XLA selector. For example, if the first routing selector is LINEATTR, the second selector cannot be ROUTE or XLA. The same rule applies if the second selector is LINEATTR; the first selector cannot be ROUTE or XLA. Enter ROUTE to specify that translation is required to proceed to a routing table index if no digits are present and datafill refinement EXTRTEID. Enter XLA to specify that translation is required to continue with a new translator name and datafill refinement NEWXLA.
	LINEATTR	alphanumeric (1 to 16 characters)	*Line attribute index* If the entry in subfield SEL is LINEATTR, datafill this refinement. Enter a valid line attribute index. Valid entries must be previously datafilled in table LINEATTR.
	EXTRTEID	see subfield	*External route identifier* If the entry in subfield SEL is ROUTE, datafill this refinement. This field consists of subfield TABID.
	TABID	IBNRTE or OFRT	*Routing table identifier* Enter the table name of the required routing table and datafill refinement KEY. Entries outside the range indicated for this field are invalid.

Field descriptions (Sheet 3 of 3)

Field	Subfield or refinement	Entry	Explanation and action
	KEY	0 to 1023	*Routing index key* Enter the required translation roting index. Valid entries must be previously datafilled in table IBNRTE or OFRT.
	NEWXLA	alphanumeric (1 to 16 characters)	*New Meridian Digital Centrex translator* If the entry in subfield SEL is XLA, datafill this refinement. Enter an MDC translator name. Valid entries must be previously datafilled in table XLANAME.

Data ll e xample

The following example shows sample datafill for table XLAMAP.

MAP display example for table XLAMAP

```
          XLAKEY                                                    DATA
_____________________________________________________________________NI
LNAME     CXDK      (     XLA RXCML200) (   ROUTE     OFRT   25)$
```

Table history

NA012

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

NA008

Increased the range of field LINEATTR to 31 999.

NA007

Increased the range of field LINEATTR to 4095.

BCS36

Table XLAMAP was introduced.

XLANAME

Table name

List of Translator Names Table

Functional description

Integrated Business Network (IBN) translation is controlled by table IBNXLA and table XLANAME. In table IBNXLA, the translator is required if one or more access codes for a Digitone station have an asterisk (*) as a leading control digit. Otherwise, the translator is optional.

Table XLANAME stores the default data, including the allowable digilator range, for each translator. If no access code is found in table IBNXLA for a particular translator, default data from table XLANAME is used.

If there is no default data for the operating company client group translator, the treatment specified in field VACTRMT of table CUSTHEAD is used. Table XLANAME controls the addition and deletion of translators in table IBNXLA. Each translator is assigned an alphanumeric one- to eight-character default value, default data, and an allowable digilator range.

Default data is used for translator names whenever an access code is not specified in table IBNXLA. All translators, including preliminary, feature, and operating company client group translators, can have default data.

If no default data is specified for the operating company client group translator, the treatment specified in field VACTRMT in table CUSTHEAD is used.

If the Partitioned Table Editor feature is present, the ownership of each tuple in table XLANAME is defined in tables DATAOWNR and OWNTAB.

If the Partitioned Table Editor feature is present, table XLANAME must be set (in table CUSTPROT) to “change" or to “read-only" for users not in the operating company.

Data II sequence and implications

Table dependencies are determined by the selectors chosen in the datafill. The following tables can require datafill prior to table XLANAME, depending on which selectors are datafilled:

- BCDEF
- CLLI
- CDNCHAR
- CUSTCONS

- DIGCOL
- HNPACONT
- LENLINES
- NETNAMES
- OCCNAME
- RCNAME
- REPLNAME
- TOFNAME
- NARDATA

The following tables must be datafilled after table XLANAME:

- DATAOWNR
- IBNXLA

Table size

The range of the XLANAME table is 0 to 8150 tuples.

XLANAME (continued)

Data II

The following table lists datafill for table XLANAME.

Field descriptions (Sheet 1 of 3)

Field	Subfield or refinement	Entry	Explanation and action
XLANAME		alphanumeric (1 to 8 characters)	*Translator name* Enter the name that is assigned to the customer, feature, or preliminary translator.
DEFAULT		see subfield TRSEL in table IBNXLA	*Default data* This field is a vector that consists of translation selector subfield TRSEL and refinements dependent on this selector. This field is identical to field RESULT in table IBNXLA. See table IBNXLA for a full description of field RESULT and refinements. ***Note:*** Due to the large number of TRSEL selector values and corresponding refinements, the RESULT refinement descriptions are not reproduced in this table.
	NET_GEN_ OPTION	RES	NET GEN selector, option RES. Enter RES to direct call processing to use the LINEATTR, XLAPLAN, and RATEAREA on the RES line found in table IBNLINES. ***Note:*** NET GEN option RES is mutually exclusive with NET GEN option LATTR. Table control procedures for table XLANAME enforce exclusivity.

Field descriptions (Sheet 2 of 3)

Field	Subfield or refinement	Entry	Explanation and action
MAXDIG		9, C, or F	Maximum digit range. This field indicates the range of allowable values for the digilator portion of the table IBNXLA key for the specified translator. Enter 9 to specify a range of 0 to 9. This value is used for North America. Enter C to specify a range of 0 to 9, A, B, or C. This value is used for Australia. Enter F to specify a range of 0 to 9, A, B, C, D, E, or F. This value is used for Australia. Entries other than 9, C, or F are not valid. After you enter data in field MAXDIG for a particular tuple, you can change the MAXDIG value. To change this value, you must can delete the entire tuple and enter the tuple again with a new MAXDIG value. The default MAXDIG value is 9.
NETOPTNS			Network options.
	NETRTOPT	DMI, INSNNG, SETCDN, or NARS	Enter data for one of the refinements.
	INSNNG	INSNNG_ PREFIX or TRUNK_ ACCESS_ DIG	Enter data for INSNNG_PREFIX or TRUNK_ACCESS_DIG. The default is $.
	INSNNG_PREF IX	0 to 11	The INSNNG_PREFIX subfield indicates the number of leading digits the system must copy from the originator's DN. The system adds these numbers as a prefix to the translating number.

XLANAME (continued)

Field descriptions (Sheet 3 of 3)

Field	Subfield or refinement	Entry	Explanation and action
	TRUNK_ACCESS_DIG	N. 0, 1, 2, 3, 4, 5, 6, 7, 8, 9, A, B, C, D, E, F	The TRUNK_ACCESS_DIG subfield allows operating company personnel to indicate a trunk access digit. The system adds this digit as a prefix to the translating number. Enter `N' if the translating number does not receive a prefix.
	SETCDN	CDNNAME	Set called number. This subfield contains the CDNNAME refinement.
	CDNNAME	alphanumeric string 0 to 8 characters in length	Called number name. This refinement indicates the CDNNAME to use for the rest of translations. The CDNNAME determines the required characteristics for the outgoing message.
	PORTED	PORTED or blank	Number portability indicator. This entry indicates that the service number for this call has been ported.
RTEOPTNS			Route options.
	SETCDN		Set called number. This subfield contains the CDNNAME refinement.
	CDNNAME	alphanumeric string 0 to 8 characters in length	Called number name. This refinement indicates the CDNNAME to use for the rest of translations. The CDNNAME determines the required characteristics for the outgoing message.
	PORTED	PORTED or blank	Number portability indicator. This entry indicates that the service number for this call has been ported.
EXTOPTS			Extension options.
	SETCDN		Set called number. This subfield contains the CDNNAME refinement.
	CDNNAME	alphanumeric string 0 to 8 characters in length	Called number name. This refinement indicates the CDNNAME to use for the rest of translations. The CDNNAME determines the required characteristics for the outgoing message.

Data II e xample

Datafill examples for table XLANAME follow.

Example 1

The following example shows a TRSEL selector value of FTR (refinable translation result). Refinements NOACCODE and FTRTYPE apply for this selector value.

To keep this example generic, refinements NOACCODE and FTRTYPE are not shown. Different refinements apply for different TRSEL values. See table IBNXLA for subfield TRSEL descriptions.

In this example, the access code 79 is assigned as the group intercom access code. The translator name is WARK.

The allowable digit range for the table IBNXLA digilator value is 0 to 9, which is the range required for North America.

MAP display example for table XLANAME

```
XLANAME
DEFAULT
MAXDIG
_____________________________________________________________________________
WARK
                                              (  FTR 79     GIC )$
     9
```

Example 2

The following example shows datafill for selector INTPIC in table XLANAME.

MAP display example for table XLANAME

```
XLANAME
DEFAULT
MAXDIG
_____________________________________________________________________________

WARK NET N N 0 N NDGT N N GEN ( LATTR0 ) ( EA carr1 Y 0 )
( INTPIC CARR2 Y ) $ 9
```

XLANAME (end)

Table history

NA012

Development activity 59007050 introduces changes to field LINEATTR for the following values of TRSEL: NET, DOD, GEN, MBG, LOC, ESN, OWT, SFMT, and ROUTE. This field now accepts an alphanumeric string instead of an integer string.

NA011

Added fields XLAPLAN and RATEAREA.

MMP011

Added INSNNG subfield to NETRTOPT field.

APC011

Added EXTNOPTS field. Added the SETCDN option to the EXTNOPTS, NETOPTNS, and RETOPTNS fields.

CCM011

Increased the maximum table size from 4095 to 8150 tuples.

NA009

Added the NET GEN option RES to support Cost of Ownership Reduction, RES translation simplification.

Supplementary information

None

XLAODIGS

Table name

Translation Originator Digits

Functional description

Table XLODIGS refines a translation group by the originating NPA-NXX into a new group. That is, table XLAODIGS starts with the XLAGRP as set in table TOPSTOPT. Then, the XLAGRP can have refinement in table XLASPID by the SPID. The resultant XLAGRP is input to XLAODIGS for refinement by the originator NPA-NXX.

Data II sequence and implications

Table XLAGRP must be datafilled before table XLAODIGS.

Table size

0 to (see note)

Note: Table XLAODIGS is a digilator table, so the amount of memory used varies according to datafill. Therefore, use tool DMSMON command DBLOCKS to determine the number of digit blocks used and allocated. Then, the number of digit blocks available can be calculated.

If memory conservation is important, band tuples to reduce memory requirements.

Data II

The following table lists datafill for table XLAODIGS.

Field descriptions (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
GRPKEY		see subfields	Group key. This field is the key field and consists of subfields XLAGRP and SPIDGRP.
	XLAGRP	name from table XLAGRP	Translations group. Enter a translations group name defined in table XLAGRP.

XLAODIGS (end)

Field descriptions (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
	ORIGDIGS	6 digits	Originating digits. Enter the originating NPA-NXX. The MAP display indicates 18 digits maximum; however, exactly 6 digits must be entered.
NEWXLGRP		name from table XLAGRP	New translations group. Enter a translations group name defined in table XLAGRP. This new group is part of the XLAGRP that contains only the originating NPA-NXX.

Data ll e xample

The following example shows sample datafill for table XLAODIGS.

MAP display example for table XLAODIGS

```
GRPKEY                  NEWXLGRP
-------------------------------------------------------
TRK1ILEC  619320        TRK1ILEC619320
TRK1CKEC  919720        TRK1CLEC919720
TRK2ILEC  619320        TRK2ILEC619320
```

Table history

TOPS09

Initial release by feature AF7159 in functionality Translations and Routing, UNBN0003

XLAPLAN

Table name

XLAPLAN

Functional description

Feature AU3279, LINEATTR Servord Enhancements, split table LINEATTR (Line Attribute) into three tables to make data management easier:

- LINEATTR
- RATEAREA
- XLAPLAN

Table XLAPLAN receives initial datafill in a one night process (ONP) from table LINEATTR. If a specific tuple from table LINEATTR results in a tuple that exists in table XLAPLAN, the tuple is not added to table XLAPLAN and the XLAPLAN key copies back to table LINEATTR. If a specific tuple from table LINEATTR does not result in a tuple that exists in table XLAPLAN, the tuple is added to table XLAPLAN and the XLAPLAN key copies back to table LINEATTR.

Note: You can delete tuples in table XLAPLAN that other tables do not reference.

The LINEATTR Compression Tool feature (59017776) checks for duplicate tuples during the ADD, CHA, and REP commands. A warning message appears before the confirmation to provide an alert of a duplicate tuple. The message only generates if table OFCVAR table parameter XLAPLAN_RATEAREA_SERVORD_ENABLED (XRSE) is set to MANDATORY_PROMPTS. This warning does not prevent datafill validation.

Data ll sequence and meaning

The following tables must be datafilled before table XLAPLAN:

- CUSTENG
- SUBGRP
- NCOS
- SCRNCLAS
- SNPANAME
- POSNAME
- STDPRTCT

XLAPLAN (continued)

Table size

Up to 32 000 tuples

Data II

The following table lists datafill for table XLAPLAN.

Field descriptions (Sheet 1 of 2)

Field	Subfield	Entry	Explanation and action
XLAPIDX		alphanumeric (up to 16 characters)	XLAPLAN log key. Enter the index into table XLAPLAN.
SCRNCL		alphanumeric (up to 4 characters) or NSCR	Screening class. If screening by class of service is required, enter the name of the class of service subtable assigned to the LINEATTR key. If screening by class of service is not required, enter NSCR.
HSTS		numeric (0 to 999)	Serving translation scheme. Enter the serving numbering plan area (SNPA) assigned to the LINEATTR key. The HSTS of an existing tuple cannot be changed.
PRTNM		alphanumeric (up to 4 characters) or NPRT	Pretranslator name. If pretranslation of digits is required, enter the name of the standard pretranslator subtable assigned to the LINEATTR key. If standard pretranslation is not required, enter NPRT.
ZEROMPOS		alphanumeric (up to 10 characters) or NONE	Zero minus position. If a LINEATTR is configured for operator (0-) and special toll (0+) dialing, enter the position in the position table to which operator (0-) calls are routed. Otherwise, enter NONE.
RESINF		Y or N	Residential enhanced services information. Enter Y (yes) if the LINEATTR key is required to support RES lines (the LCC must be 1FR, 1MR, OWT, EOW, INW, 2WW, ETW, CCF, CDF, CFD, CSP, ZMD, or ZMZPA). Datafill subfields refinements CUSTGRP, SUBGRP, and NCOS. Otherwise, enter N (no), and leave CUSTGRP, SUBGRP, and NCOS blank.

Field descriptions (Sheet 2 of 2)

Field	Subfield	Entry	Explanation and action
	CUSTGRP	alphanumeric (up to 16 characters)	Customer group. Enter the customer group name assigned to the LINEATTR key. This name must appear in table CUSTENG field CUSTNAME.
	SUBGRP	numeric (0 to 7)	Customer subgroup. Enter the subgroup within the customer group associated with the LINEATTR key. This subgroup must appear in table SUBGRP.
	NCOS	numeric (0 to 511)	Network class of service. Enter the network class of service (NCOS) number in the customer group associated with the LINEATTR key. This number must appear in table NCOS field NCOS.
OPTIONS		SECDT or $	Options. Enter SECDT to enable a secondary dial tone for wireless features that require that the subscriber enter more digits. Enter $ to end the option entry.
ADMININF		alphanumeric (up to 32 characters)	Administration information. Enter any string containing alphabetic characters, numeric characters, or underscores up to 32 characters. This entry provides a short explanation or note regarding the use of the LINEATTR tuple. The operating company defines the content of this entry.

Data ll e xample

The following examples show sample datafill for table LINEATTR and table XLAPLAN.

MAP display example for table LINEATTR (pre NA011)

```
LNATTIDX LCC CHGCLSS COST SCRNCL LTG STS PRTNM LCANAME
ZEROMPOS TRAFSNO MRSA
SFC LATANM MDI IXNAME DGCLNAME FANIDIGS RESINFO OPTIONS
-------------------------------------------------------
0 1FR NONE NT FR01 0 613 P621 L613 TSPS 10 NIL NILSFC
LATA1 0 NIL NIL 00 N $
```

XLAPLAN (end)

MAP display example for table LINEATTR (NA011 and up)

```
LNATTIDX LCC CHGCLSS COST LTG TRAFSNO SFC MDI IXNAME
DGCLNAME FANIDIGS DFLTXLP DFLTRA OPTIONS
_____________________________________________________
0 1FR NONE NT 0 10 NILSFC 0 NIL NIL 00 613_P621_0
L613_LATA1_0 $
```

MAP display example for table XLAPLAN (NA011 and up)

```
XLAPIDX   SCRNCL  HSTS  PRTNM  ZEROMPOS  RESINF  OPTIONS  ADMININF
_____________________________________________________________________
613_P621_0 FR01   613    P621     TSPS       N     SECDT         $
```

Table history

NA014

The LINEATTR Compression Tool feature (59017776) checks for duplicate tuples during the ADD, CHA, and REP commands. A warning message appears before the confirmation to provide an alert of a duplicate tuple. The message only generates with the OFCVAR table parameter XLAPLAN_RATEAREA_SERVORD_ENABLED (XRSE) set to MANDATORY_PROMPTS.

LWW0006

Feature 59010108, Line Data and SERVORD Fold-in, incorporated table XLAPLAN into DMS-100 Wireless.

Feature 59005842, Second Dial Tone for Wireless Services, added field OPTION.

NA011

Table XLAPLAN was introduced.

XLASPID

Table name

Translations Service Provider Identifier

Functional description

Table XLASPID refines a translations group by the originator AO SPID into a new group. That is, table XLASPID takes the XLAGRP as set in table TOPSTOPT and creates a new XLAGRP based on the SPID group of the originator as set in table SPIDDB against the SPID.

Data ll sequence and implications

The following tables must be datafilled before table XLASPID.

- XLAGRP
- SPIDGRP

Table size

0 to 8M words

Data ll

The following table lists datafill for table XLASPID.

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
GRPKEY		see subfields	Group key. This field is the key field and consists of subfields XLAGRP and SPIDGRP.
	XLAGRP	name from table XLAGRP	Translations group. Enter a translations group name defined in table XLAGRP.
	SPIDGRP	name from table SPIDGRP	Translations group. Enter a SPID group name defined in table SPIDGRP. Translation and screening uses this group.
NEWXLGRP		name from table XLAGRP	New translations group. Enter a translations group name defined in table XLAGRP. This new group is a part of the XLAGRP that contains only SPIDs in the SPIDGRP.

Data ll e xample

The following example shows sample datafill for table XLASPID.

XLASPID (end)

MAP display example for table XLASPID

```
GRPKEY              NEWXLGRP
-------------------------------------------------------
TRK1   ILECXLA      TRK1ILEC
TRK1   CLECXLA      TRK1CLEC
TRK2   ILECXLA      TRK2ILEC
```

Table history

TOPS09

Initial release by feature AF7159 in functionality Translations and Routing, UNBN0003

XPMIPGWY

Table name

Extended peripheral module internet protocol gateway

Functional description

This table provides gateway router datafill for an ethernet equipped SXO5 XPM to configure its gateway router list.

This table does not interact with or provide functionality for the 7X07 Gateway Card.

The following datafill rules apply to this table:

- Changes to a gateway index are only allowed when the corresponding XPM datafilled in table XPMIPMAP, which references the gateway index, is not inservice.
- Deletion of a gateway index is not allowed if it is referenced in table XPMIPMAP.

Data ll sequence and meaning

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

Table size

0 to 256 tuples

XPMIPGWY (continued)

Data II

The table that follows lists datafill for table XPMIPGWY.

Field descriptions

Field	Subfield	Entry	Explanation and action
GWINDEX		0 to 255	Gateway index. This field is the index to the table.
DESTADDR		0 0 0 0 - 247 255 255 255	Destination address. The IP address of a possible destination. 0 0 0 0 indicates default routing. 255 255 255 255 indicates that the address specified in field DESTADDR is a host address. NOTE: 127 X X X is a special set of IP addresses used for loop back testing. It is recommended that these IP addresses not be used.
RTEMASK		0 0 0 0 - 255 255 255 255	Route mask. The subnet mask for this route entry. 0 0 0 0 indicates default routing. 255 255 255 255 indicates that the address specified in field DESTADDR is a host address.
GWIPADDR		0 0 0 0 - 247 255 255 255	Gateway IP address. The IP address of the gateway router. NOTE: 127 X X X is a special set of IP addresses used for loop back testing. It is recommended that these IP addresses not be used.
METRIC		0 - 9	The number of hops required to reach the gateway. 0 indicates a direct route. Otherwise, this field indicates a remote gateway This field is not currently used.

Data II e xample

The figure that follows shows sample datafill for table XPMIPGWY.

MAP display example for table XPMIPGWY

```
GWINDEX  DESTADDR         RTEMASK              GWIPADDR          METRIC
-------------------------------------------------------------------------
0        47 239 68 0      255 255 240 0        47 192 3 40       1
1        0 0 0 0          0 0 0 0              47 192 3 112      1
2        47 192 3 114     255 255 255 255      47 192 3 60       2
3        0 0 0 0         0 0 0 0            47 192 4 177    1
```

Table history

TOPS13

Initial release by feature A59007541 in functionality TOPS IP Evolution, OSB00001.

Additional information

None.

XPMIPMAP

Table name

Extended peripheral module internet protocol map

Functional description

This table defines IP characteristics for SX05 equipped XPMs.

This table is used to configure the XPM's IP stack. That datafill is downloaded when the XPM is RTSed. If the datafill is incorrect or inaccurate, it can cause an XPM to fail to RTS. The datafill cannot be cross-checked before download because the IP stack is located on each individual XPM as opposed to the CM.

Datafill rules for this table are as follows::

- Only XPMs datafilled in LTCINV with a PECCODE of SX05AA, SX05CA, or SX05DA are allowed to be added to this table.
- A new tuple may be added to an in-service XPM but that datafill is not downloaded until the next RTS. In addition, the XPM is marked as having a static data mismatch by the standard CM/XPM audit checks.
- Changes to fields are only allowed when the referenced XPM is not in-service with the following exceptions:
  - — Field GWINDEX is allowed to be changed. Adding or deleting a gateway index results in the referenced XPM going to ISTb when the standard CM/XPM audit checks static data between the XPM and CM. Static data download of the changes to field GWINDEX do NOT take effect until the next RTS.
  - — DNS related fields DNSINFO, DNSNAME, and SRVADDRS are allowed to be changed. These changes result in the referenced XPM going to ISTb when the standard CM/XPM audit checks static data between the XPM and CM. Static data download of the changes to the fields does NOT take effect until the next RTS.
- Deletion is not allowed if the XPM is referenced in table IPCOMID or the XPM is in-service.
- Deletion from table LTCINV is not allowed if the XPM is referenced by table XPMIPMAP. Also, if the XPM is datafilled in XPMIPMAP, the processor type in unit 0 and unit 1 cannot be changed to a non-powerpc type.

Data ll sequence and meaning

Enter datafill into tables LTCINV and XPMIPGWY before table XPMIPMAP..

Table size

0 to 256 tuples

Data II

The table that follows lists datafill for table XPMIPMAP.

Field descriptions (Sheet 1 of 4)

Field	Subfield	Entry	Explanation and action
XPMNAME		see subfields	Name of the extended peripheral module. This field is the key to the table. This field consists of subfields XPMTYPE and XPMNO.
	XPMTYPE	DTC or PDTC	Type of extended peripheral module. Currently, only DTC and PDTC are datafillable. But, only DTC is officially supported in the TOPS13 timeframe. Allowing PDTC to be datafilled is only a place-holder for future functionality.
	XPMNO	0 - 255	XPM number.
AUTONEG		10BT or AUTO	Automatic negotiation. This field indicates to the XPM whether to run at 10BaseT ethernet speeds or automatically determine whether to run at 10BaseT or 100BaseT. If 10BT is selected, the XPM always runs at 10BT. If AUTO is datafilled, the XPM determines what ethernet speed to run at after negotiation with the network.
SUBNMASK		0 0 0 - 255 255 255 255	Subnet mask.

XPMIPMAP (continued)

Field descriptions (Sheet 2 of 4)

Field	Subfield	Entry	Explanation and action
IPCONFIG		CM, BOOTP, or DHCP	IP Configuration. This field ndicates whether the XPM is configured by CM datafill, by the network from the bootstrap protocol (BOOTP), or by the domain host configuration protocol (DHCP). When BOOTP or DHCP is specified, then the XPM is responsible for its configuration. When CM is entered, datafill subfields ACTADDR, INADDR, UNIT0, UNIT1, GWINDEX, and DNSINFO. When BOOTP or DHCP is entered, no further datafill is required.
	ACTADDR	0 0 0 0 - 247 255 255 255	Active Address. The IP address of the active XPM units. This address must be evenly divisible by 4. For example 47 142 225 40 would be valid while 47 142 225 41 would be invalid. NOTE: 127 X X X is a special set of IP addresses used for loop back testing. It is recommended that these IP addresses not be used.
	INADDR	0 0 0 0 - 247 255 255 255	Inactive Address. The IP address of the inactive XPM unit. The inactive address is always ACTADDR+1. NOTE: 127 X X X is a special set of IP addresses used for loop back testing. It is recommended that these IP addresses not be used.
	UNIT0	0 0 0 0 - 247 255 255 255	The IP address of the XPM unit 0. The UNIT0 address is always ACTADDR+2. NOTE: 127 X X X is a special set of IP addresses used for loop back testing. It is recommended that these IP addresses not be used.

XPMIPMAP (continued)

Field descriptions (Sheet 3 of 4)

Field	Subfield	Entry	Explanation and action
	UNIT1	0 0 0 0 - 247 255 255 255	The IP address of the XPM unit 1. The UNIT1 address is always ACTADDR+3. NOTE: 127 X X X is a special set of IP addresses used for loop back testing. It is recommended that these IP addresses not be used.
	GWINDEX	0 - 255	Gateway Index. The index into table XPMIPGWY. This field can contain up to 10 gateway indexes. Note the same gateway index is allowed to be entered more than once for a single tuple. A “$” alone indicates no gateway router is needed. Multiple XPMIPMAP tuples may point to the same gateway index.
	DNSINFO	see subfield DNSINFO	Domain name service. This field consists of subfield DNSINFO and refinements.
	DNSINFO	Y or N	Domain name service. Value Y indicates that a DNS name as well as at least a single DNS server IP address is datafilled. If Y is entered, datafill subfields DNSNAME and SRVADDRS. If Y is entered, datafill subfields DNSNAME and SRVADDRS. If N is entered, no further datafill is required. This field is currently not used.

XPMIPMAP (continued)

Field descriptions (Sheet 4 of 4)

Field	Subfield	Entry	Explanation and action
	DNSNAME	up to 64 characters	Domain name service name. This field appears if field DNSINFO = Y. Enter the domain name. The allowable characters are alphanumerics, dash, and a period [‘A...Z’, ‘0..9’, ‘-’, ‘.’] The name should be entered with single quotes to assure the name is accepted by table control. A domain name greater than 64 characters is either not accepted as input or truncated at 64 characters. This field is currently not used.
	SRVADDRS	A list from 1 to 5 IP addresses (0 0 0 0 - 247 255 255 255)	Service addresses. This field appears if field DNSINFO = Y. The IP addresses of the DNS servers. Note, the same IP address is allowed to be entered more than once. NOTE: 127 X X X is a special set of IP addresses used for loop back testing. It is recommended that these IP addresses not be used. This field is currently not used.

Data ll e xample

The figure that follows shows sample datafill for table XPMIPMAP.

MAP display example for table XPMIPMAP

```
XPMNAME   AUTONEG   SUBMASK          IPCONFIG
_____________________________________________________________________

DTC 19    10BT      255 255 255 0    CM  47 192 3 24     47 192 3 25
                                         47 192 3 26     47 192 3 27
                                         (1)(2)$    Y NORTEL.COM
                                        (47 195 6 116)$
DTC 20    10BT      255 255 255 0    CM  47 192 3 112    47 192 3 113
                                         47 192 3 114    47 192 3 115
                                         (0)(1)$    N
DTC 21    10BT      255 255 255 0    CM  47 193 4 120    47 192 4 121
                                         47 192 4 122    47 192 4 123
                                         (3) $ Y NORTEL.COM
                                         (47 195 6 116) (47 195 7 118)$
```

Table history

TOPS13

Initial release by feature A59007541 in functionality TOPS IP Evolution, OSB00001.

Additional information

None

XPMLFP

Table name

XPM Loadfile Patching Table

Functional description

Table XPMLFP stores data used by the computing module (CM) to automatically schedule loadfile patching. Table XPMLFP sets up parameters for extended multiprocessor system (XMS)-based peripheral module (XPM) loadfile patching for each CM.

Data II sequence and implications

Table PMLOADS must be datafilled before table XPMLFP.

Table size

1 tuple

Data II

The following table lists datafill for table XPMLFP.

Field descriptions (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
XLFPKEY		XPMLFP	*Key to table XPMLFP* Enter XPMLFP.
SOAK		1 to 365	*Soak* Enter the number of days a patch is applied to an XPM before it is applied to the loadfile. The default value for this field is 12 (12 days).
TIME		see subfields	*Time* This field consists of subfields HOUR and MINUTE.
	HOUR	0 to 23	*Hour* Enter the hour at which loadfile patching begins. The default value for this field is 3 (3:00 a.m.).

Field descriptions (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
	MINUTE	0 to 59	*Minute* Enter the minute after the hour specified in field HOUR at which loadfile patching begins. The default value for this field is 15 (15 min).
WORKVOL		alphanumeric (up to 16 characters)	*Workspace volume* Indicate in this field which volume to use for workspace. Enter the set of disk drive unit (DDU) volumes and system load module (SLM) disks that are available to the CM. ***Note:*** Working files associated with XPM loadfile patching are deleted when XPM loadfile patching completes or aborts. The default value for this field is UNKNOWN.

Data ll e xample

The following example shows sample datafill for table XPMLFP.

MAP display example for table XPMLFP

```
XLFPKEY SOAK  TIME          WORKVOL
_____________________________________________________________

 XPMLFP   12  3 15          UNKNOWN
```

Table history

BCS36

Table XPMLFP was introduced (in accordance with feature AF5004).

XSGDEF

Table name

X.25/X.75 Services Group Definition Table

Functional description

Table XSGDEF contains service information for all X.25/X.75 link interface units (XLIU). Each XSGDEF tuple provides a unique interface between the hardware entity and the service entity in an XLIU. Each X.25/X.75 services group (XSG) is assigned to a unique XLIU at its datafill time.

Note: A problem occurs when engineering the channel bus (C-bus) on the link peripheral processor (LPP). XLIUs are provisioned on LPP shelves. There is a limit of 120 channels between the XLIU and the C-bus which are provisioned in table XSGDEF. The table defines the X.25/X.75 Service Groups (XSG). If all 120 channels are reserved and channelized access or other applications need to be added, then the XSG must be deleted or readded using fewer channels. There is a 120-channel limit for the XLIU and its associated bus. Field CHANNELS in table XSGDEF controls the assignment of channels to the XLIU.

Data II sequence and implications

Table LIUINV must be datafilled before table XSGDEF.

The number of tuples in table XSGDEF must not exceed the number of XLIU tuples in table LIUINV.

0 to 750 tuples

Data II

The following table lists datafill for table XSGDEF.

Field descriptions (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
XSGNO		see subfield	*X 25/X.75 services group number* This field consists of subfield XSG_EXT_NO.
	XSG_EXT_NO	0 to 749	*X 25/X.75 services group external number* Enter the X.25/X.75 services group (XSG) external index number.
HOST		see subfield	*Host controller* This field consists of subfield CONTROL.

Field descriptions (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
	CONTROL	LIM or MS	*LIU host controller* Enter the host peripheral module (PM) of the XSG/XLIU. Enter LIM for link interface module and datafill refinement LIMNUM. Enter MS for the message switch and datafill refinements MSCARD and MSPORT.
	LIMNUM	0 to 16	*Link interface module number* If the entry in subfield CONTROL is LIM, datafill this refinement. Enter the LIM number. Go to field SHELF.
	MSCARD	5 to 23	*Message switch card* If the entry in subfield CONTROL is MS, datafill this refinement. Enter the MS card number.
	MSPORT	0 to 3	*Message switch port* If the entry in subfield CONTROL is MS, datafill this refinement. Enter the MS port number.
SHELF		0 to 3	*Shelf* Enter the shelf of the XLIU that is associated with the XSG.
CHANNELS		1 to 31	*Channels* Enter the number of channels to configure on the XSG. The recommended value is 20. This entry allows other channels to be assigned as required.
ARA		Y or N	*Automatic Resource Assignments* Enter Y to allow use of ARA to assign new B-channel packet services automatically to XSG.

Data ll e xample

The following example shows sample datafill for table XSGDEF.

XSGDEF (end)

MAP display example for table XSGDEF

```
XSGNO   HOST       SHELF   CHANNELS   ARA
_____________________________________________________________

10       LIM  4       2       20        Y
```

Table history

CCM07

Field ARA was added.

BCS36

Subfield XSG_EXT_NO was added.

BCS34

Table XSGDEF was introduced.

ZENITH

Table name

Traffic Operator Position System Zenith Number Table

Functional description

Table ZENITH stores five-digit Zenith numbers, their associated calling point set data, and forward destination directory numbers (DN).

Zenith numbers that are checked by the Traffic Operator Position System (TOPS) operator require a corresponding calling point set name and a forward destination number.

The calling point set name, which must exist in table CLGSET, is associated with checking information for the calling number. This set of data includes the local calling area, the serving numbering plan area (SNPA), and the calling NXXs of the calling subscribers.

One or more Zenith numbers can share the same calling point set name.

For related information, refer to table CLGSET.

Data II sequence and implications

Table CLGSET must be datafilled before table ZENITH.

Table size

0 to 5120 tuples

Data II

The following table lists datafill for table ZENITH.

Field descriptions (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
ZENKEY		see subfields	Zenith key. This field consists of subfields ZENNO and CLGKEY. This field is the key to the table.
	ZENNO	numeric (00000 to 99999)	Zenith number. Enter the five-digit Zenith number. Any entry outside the range indicated for this field is invalid.

ZENITH (end)

Field descriptions (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
	CLGKEY	alphanumeric (1 to 16 characters)	Calling point set name. Enter the calling point set name. This name must exist in table CLGSET.
FWDDN		numeric (10 digits)	Forward destination number. Enter the forwarding directory number of the Zenith subscriber on which the Zenith call is to terminate. This number must consist of an serving numbering plan area (SNPA) followed by seven digits in the format NXXXXXX (where N = 2 to 9 and X = 0 to 9). Prior to BCS36, the range of values for the SNPA was 200 to 219, 300 to 319, 400 to 419, 500 to 519, 600 to 619, 700 to 719, 800 to 819, and 900 to 919. As of BCS36, the SNPA has a range of 200 to 999. Any entry outside the range indicated for this field is invalid.

Data ll e xample

The following example shows sample datafill for table ZENITH.

MAP display example for table ZENITH

```
ZENKEY              FWDDN
_____________________________________________________________

38000   NEWYORK     2122201111
```

Table history

BCS36

The range of the SNPA for field FWDDN was changed to 200 to 999.

ZONEFOR

Table name

Zone foreign

Functional description

Table ZONEFOR assigns a zone to an international (or overseas) number. It is used for called party numbers.

Data II sequence and implications

Table TOPSZONE must be datafilled before table ZONEFOR.

Table size

0 to (see note)

Note: Table ZONEFOR is a digilator table, so the amount of memory used varies according to datafill. Therefore, use tool DMSMON command DBLOCKS to determine the number of digit blocks used and allocated. Then, the number of digit blocks available can be calculated.

If memory conservation is important, band tuples to reduce memory requirements.

Data II

The following table lists datafill for table ZONEFOR.

Field descriptions (Sheet 1 of 2)

Field	Subfield or refinement	Entry	Explanation and action
KEY		see subfields	Key. This field is the key to the table and consists of subfields FROMDIGS and TODIGS. This field indicates the B number's region, which begins with the country code and ends with a portion of the called party's international number. This field is a digilator, similar to subtable STDPRTCT.STDPRT. Therefore, it is not possible to datafill two tuples that begin with the same digits and have different digit lengths. For example, tuples 23 23 and 231 231 cannot be used in the same table.
	FROMDIG	up to 18 digits	From digits. Enter the starting number of the range of the called digits.

ZONEFOR (continued)

Field descriptions (Sheet 2 of 2)

Field	Subfield or refinement	Entry	Explanation and action
	TODIG	up to 18 digits	To digits. Enter the ending number of the range of the called digits.
TOPSZONE		name from TOPSZONE	TOPS zone. Enter the called number's zone defined in table TOPSZONE to be associated with the called digits (KEY) in this table.

Data ll e xample

The following example shows sample datafill for table ZONEFOR.

MAP display example for table ZONEFOR

```
KEY                    TOPSZONE
-------------------------------------------------------
180913 180913          CARIBBEAN
180921 180922          CARIBBEAN
180945 180955          CARIBBEAN
180956 180956          BARBADOS
1809610 1809610        JAMAICA
508 508                HAITI
```

Table history

TOPS12

Feature LATA Screening Alternative (59006827) modifies the FROMDIG and TODIGS subfields to hold directory numbers (DNs) up to 18 digits in OSB Table LATA Expansion, OSB00001. Before this feature, these fields could hold up to seven digits.

This feature also expands the TOPSZONE field to allow for 2000 zones. Before this feature, the field only allowed for 256.

Even though design activities that related to the feature LATA Screening Alternative changed ZONEFOR, this feature does not actually use this table to function.

TOPS11

Table name TERMDIGS changed to ZONEFOR, field CLDDGTS is renamed to FORNUM, and field TERMZONE is renamed to TOPSZONE by feature AF7576 in functionality Global Competitive Access II, GOS00007.

TOPS08.1

This table was created by feature AF7021 in functionality Carrier Selection, ENSV0001.

ZONENAT

Table name

Zone national

Functional description

ZONENAT is a digilator table that assigns a zone to an originating number based on the calling party's digits. The table also assigns a zone to a national terminating number based on the called party's digits.

Subfields FROMDIG and TODIG specify a range of directory numbers (DNs). In order to minimize datafill, originating zones can instead be specified on a trunk group basis in table TOPEATRK.

Note: The TOPS12 release is moving the location of the table to make it available for global and North American markets.

Data ll sequence and meaning

Enter datafill into table TOPSZONE before table ZONENAT.

Table size

0 to (see note)

Note: Table ZONENAT is a digilator table, so the amount of memory used varies according to datafill. Therefore, use tool DMSMON command DBLOCKS to determine the number of digit blocks used and allocated. Then, the number of digit blocks available can be calculated.

If memory conservation is important, band tuples to reduce memory requirements.

Data fill

The table that follows lists datafill for table ZONENAT.

Field descriptions

Field	Subfield	Entry	Explanation and action
KEY		see subfields	Key. This field is the key to the table and consists of subfields FROMDIGS and TODIGS. This field distinguishes the called or calling number's region. It is a portion of the called or calling party's national number. This field is a digilator, similar to subtable STDPRTCT.STDPRT. Therefore, it is not possible to datafill two tuples that begin with the same digits and have different digit lengths. For example, tuples 23 23 and 231 231 cannot be used in the same table.
	FROMDIG	up to 18 digits	From digits. Enter the starting number of the range of the called or calling digits.
	TODIG	up to 18 digits	To digits. Enter the ending number of the range of the called or calling digits.
TOPSZONE		name from TOPSZONE	TOPS zone. Enter the called or calling number's zone to be associated with the called or calling digits. The zone must be defined in table TOPSZONE.

Data fill example

The figure that follows shows sample datafill for table ZONENAT.

MAP display example for table ZONENAT

```
KEY                TOPSZONE
-------------------------------------------------------
202 202             WASHDC
336 336             BURLNC
44 77               MIDWEST
8875551 8875558     HOTLINES
919 919             RALNC
```

ZONENAT (end)

Table history

TOPS12

Feature LATA Screening Alternative (59006827) increases the subfields FROMDIG and TODIG to hold up to 18 digits, in functionality OSB Table LATANAME Expansion, OSB00001. Before this feature, the subfields held up to seven digits.

TOPS11

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

ZONEORDR

Table name

Zone Order Table

Functional description

Outward wide area telephone service (OUTWATS) is a service designed to meet the needs of users who make substantial volumes of long distance calls. OUTWATS is provided on the basis of geographical regions called service areas or zones, with the subscriber purchasing as many lines for each zone as required. Coverage is arranged by numbering plan area (NPA) in concentric zones about the home numbering plan area (HNPA), with each zone including all contained zones of the same type.

The number of zones provided is 13, designated 0 to 9, A, B, and C. Zones A, B, and C are recorded on billing records as zones 10, 11, and 12 respectively.

In Canada, the zones are numbered from 1 to 7. Zone 1 is the HNPA. Zones 2 to 6 cover areas of increasing size and zone 7 covers the entire country.

In the USA, the zones are broken into two types. Zones 8, 9, and 0 are intrastate zones used for areas of increasing size within the home state. Zones 1 to 6 are interstate zones that cover the USA excluding the home state. Zones 1 to 5 cover increasingly larger areas of the contiguous 48 states plus Puerto Rico and the Virgin Islands. Zone 6 includes zone 5 plus Hawaii and Alaska.

International OUTWATS calls between Canada and the USA are not currently permitted.

If calls destined for a specific zone are required to use the facilities of a larger zone that contains this zone, the order of the zones must be known. Table ZONEORDR is used to determine the zone order. It is datafilled by the operating company with ordered vectors of OUTWATS zones and a key of serving NPA (not STS; see table HNPACONT for differences). Any zone not included in one of the vectors is assumed to be in a list of one zone.

For a plain ordinary telephone service (POTS) OUTWATS call, the line with feature OUTWT (OUTWATS) has a zone associated with it. When enough digits are collected, the switch accesses table OWATZONE to determine the zone of the called number. The switch then accesses table ZONEORDR to determine if the zone in table OWATZONE is included in the zone assigned to the line. If the destination zone is not allowed, the call is sent to the treatment specified in table LENFEAT.

ZONEORDR (continued)

For an Integrated Business Network (IBN) OUTWATS call, the switch determines the destination zone from table OWATZONE when enough digits have been collected. The actual zone (billing zone) of the call is determined as follows:

- For autoaccess (field OWATZONE in table IBNXLA datafilled with AUTO), the destination zone is the actual zone of the call. Table ZONEORDR is not required.
- For specified zone access (field OWATZONE in table IBNXLA datafilled with a zone number), the call is assigned a zone by table IBNXLA. This assignment depends on the access digits dialed.

The switch accesses table ZONEORDR to determine if the destination zone of the call is included in the zone assigned to the call by table IBNXLA. If the destination zone is not allowed, the call is sent to the flexible intercept number specified in table IBNXLA.

Data II sequence and implications

Table HNPACONT must be datafilled before table ZONEORDR.

The serving NPAs must be datafilled prior to table ZONEORDR.

Table size

0 to 16 tuples

Memory is dynamically allocated for table ZONEORDR.

Data fill

The following table lists datafill for table ZONEORDR.

Field descriptions

Field	Subfield or refinement	Entry	Explanation and action
SVGNPA		0 to 9 (3 digits)	*Serving numbering plan area* Enter the serving or home numbering plan area (NPA).
ZONESETS		0 to 9, A, B, or C	*Zone sets* This field defines the ordering of the outward wide area telephone service (OUTWATS) zones within the serving NPA. Enter up to 13 OUTWATS zones in ordered groups separated by spaces. Zones that precede a space are not included in the zone that follows the space. If less than 13 zones are required, end the list with a $ (dollar sign). For example, an entry of 123 45 means that zone 1 is included in zone 2, which is included in zone 3 (but not conversely) and zone 4 is included in zone 5 (but not conversely). The zone number must appear only once in this field for a specific serving NPA.

Data fill example

An example of datafill for table ZONEORDR is shown below. The example defines the zone order for serving NPA 613 in accordance with the following zone order requirements:

- Zone 7 includes zones 6, 5, 4, 3, 2, and 1. This means, for example, that zone 1 calls are valid on zone 7 lines, but not conversely.
- Zone 6 includes zones 5, 4, 3, 2, and 1.
- Zone 5 includes zones 4, 3, 2, and 1.
- Zone 4 includes zones 3, 2, and 1.
- Zone 3 includes zones 2 and 1.
- Zone 2 includes zone 1.
- Zone 8, zone 9, zone 0, and zone A are not ordered.

ZONEORDR (end)

MAP display example for table ZONEORDR

```
SVGNPA
ZONESETS

_____________________________________________________________________
613
(1234567) (8) (9) (0) (A) $
```

DMS-100 Family

North American DMS-100

Customer Data Schema Reference Manual

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Data Schema TRKGRP type OC-ZONEORDR

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