Option 11

Release Information
Generic X11 Release 16.87G

P0739169

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Meridian 1* (North America and International)

Description:

INTRODUCTION OF SOFTWARE GENERIC X11 16.87G - OPTION 11

Northern Telecom is pleased to introduce Generic X11 16.87G which provides Meridian 1 customers with an extensive range of software features. This new release includes features offered in Release 16 as well as additional features to Digital Trunk Interface (DTI) and ISDN capabilities for the Option 11.

Feature descriptions and implementation guidelines are provided in this document where required.

For additional details on the Meridian Mail Option, the Central Answering Position feature, the Autoconfiguration feature, Model Sets and Administration Sets as well as installation and operation, please refer to the Northern Telecom Publications (NTP) provided with the Option 11.

Note: Not all features described in this document are offered in all Countries. Please contact your local Northern Telecom Sales Representative for more information.

PLEASE READ ALL INCLUDED ADVISEMENTS, REQUIREMENTS AND ENHANCEMENTS PRIOR TO LOADING THIS SOFTWARE.

the Property Management System Interface (PMSI) to manage guest voice messaging and to coordinate the Message Waiting indications for both voice and text messaging.

Packaging

The capability to return DID answer supervision software option 223 is included on all Option 11 software cartridges offered in the United States.

Data Access Card

The Data Access Card is used in the Meridian 1 Communication System to provide connections for data terminal equipment (DTE) or data communications equipment (DCE) such as terminals, personal computers, modems, or mainframe host computers.

The Data Access Card (DAC) supports up to six (6) data ports, each port operating in either the RS232 mode or the RS422 mode. Each port requires a set of parameters that define its functional characteristics, based on the data equipment to be connected to that port and according to the needs of the customer. These parameters, once configured by a craftsperson, are stored in the Meridian* SL-1* database memory and downloaded to the card.

Typical applications for the DAC are:

- Modem Pooling,
- Direct connections of protocol converters, X.25 PADs, asynchronous hosts,
- Direct connections to Macintosh, ASCII terminals, and IBM PC/Compatibles and printers

The Data Access Card, order number NT7D16 comes equipped with the *Data Access Card Description and Operation* (PO735252). To order a DAC card, contact your Northern Telecom Sales Representative.

Note: Modem trunk hunting is not available to ports assigned to the Data Access Card. The Data Access Card will support the standard hunt chain for Meridian 1 systems.

SECTION II
FEATURE CONTENT

ISDN Features

General Networking Capabilities

___ Calling Line Identification (CLID)
___ Calling Line Identification in Call Detail Recording (CDR) Record
___ Basic Call Services
___ DTI with support of B8ZS and T1 Frame Slippage Auto recovery
___ Network Call Party Name Display (NCPND) with Meridian 1
___ Network Ring Again

Meridian 1 to Meridian 1 Connectivity

All of the General Networking Capabilities plus the following:
___ Meridian Link (CLID Inter networking)
___ ISDN Signaling Link (ISL) with Revert to conventional signaling
___ Back-up D-channel
___ Integrated Trunk Access (ITA)
___ Non-associated Signaling (nB+D)
___ ESN over Primary Rate Interface
___ 64 Kbps Clear Data Transport
___ Network Message Services (Message Center and Meridian Mail
___ Network Automatic Call Distribution (NACD)
___ Network Call Redirection
___ Trunk Optimization Before Answer

Meridian 1 to DMS-100, DMS-250 & Meridian 1 SL-100

All of the General Networking Capabilities plus the following:
___ Integrated Service Access (Call-by-Call service Selection/Dynamic Channel Assignment)
___ ESN over Primary Rate Interface (with DMS-100 only)
___ Network Call Redirection (via Centrex TIE lines)
___ Network Ring Again (via Centrex TIE lines)
___ Call Transfer (via Centrex TIE lines)
___ Private Network Hop-off
___ Private Network Overflow
___ Data Packet Network Access
___ 64 Kbps Clear Data Transport
___ In-Band ANI (DMS-250 only)

Calling Line Identification

Calling Line Identification (CLID) is a feature that delivers the calling party's telephone number to the called party's telephone set across the ISDN network. The CLID display lasts for the duration of the call.

CLID supports both outgoing and incoming calls:

Outgoing Calls A set's Prime Directory Number (PDN) is assembled and sent out with the call SETUP message on the D-channel. For private network calls in a NARS network, the calling party number is the PDN which consists of the Home Location Code (HLOC) plus the 4 digit directory number. In a Coordinated Dialing Plan (CDP) Network, the CLID is the CDP number. For public network calls, the CLID is the 10-digit (E.163) Northern American Standard Number.

The Listed Directory Number (LDN) for a customer is sent instead of the Prime Directory Number (PDN) if the set has the LDN class of service assigned in the set data block (see Module 6-Feature Implementation for details).

Incoming Calls For incoming calls across the ISDN network, the CLID received over the D-channel is displayed instead of the trunk route access code and trunk member number.

The following devices, if equipped with a digit display, can receive and display a CLID number:

- Attendant Consoles
- Digital sets and SL-1 sets equipped with digit display
- SL-1 type Display phones (set can reside on Option 11)
- ASCII terminals with data adapter such as ADM or programmable data adapter.

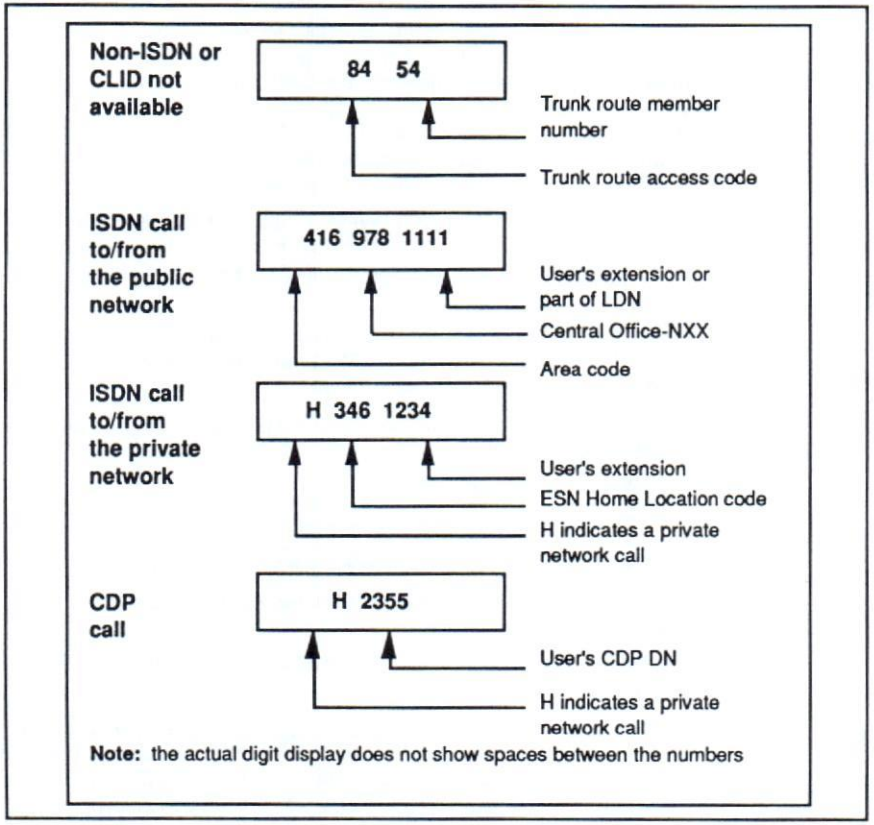
The digit display contents are summarized in Figure 1-1 and described below:

- If the CLID display is unavailable because the call was not routed on ISDN routes, the trunk route access code and the trunk route member number are displayed. Note that Dialed Number Identification Service (DNIS) digits may be displayed as well if proper software is equipped.
- For public networks, the CLID displays the Standard North American Numbering Plan 10-digit number.
- For a private network (with NARS), the CLID display is preceded by the letter "H" followed by the ESN Home Location Code and the user's

extension number (or the customer's Listed Directory Number, see Module 6 for details).

- For a private network (with CDP), the CLID display is preceded by the letter "H" followed by the user's CDP directory number.(or the customer's Listed Directory Number, see Module 6 for details)

Figure 1-9: Digit Display format for CLID



Feature Requirements

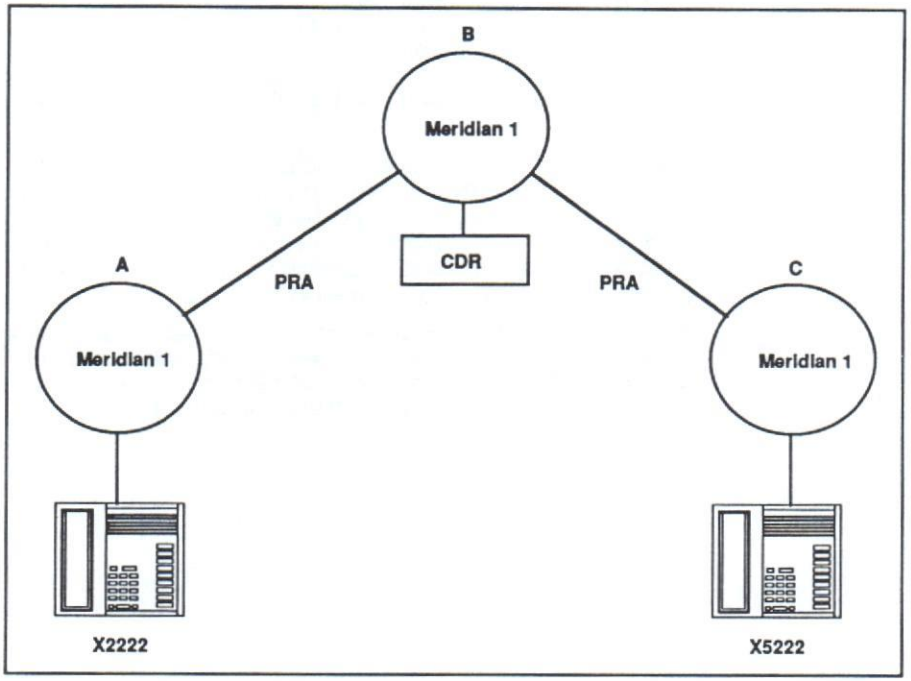
ISDN	option 145
PRI	option 146 (or ISL option 147)
Digit Display	option 19

Calling Line Identification in Call Detail Records (CCDR)

This service provides the addition of a Calling Line Identification (CLID) field in the Call Detail Record (CDR). The addition of the CLID field will allow customers to charge back the calling party for services rendered in connection with their incoming calls. For example, call placed to a service center may be charged back to departments receiving the service, or calls placed to a consultant for the time spent with the client.

Another use of CLID in CDR feature is to capture the actual calling DN at the tandem PBX. In a three Meridian 1 system configuration, when a user on PBX "A" calls PBX "C" through PBX "B", the callers CLID from PBX"A" can be captured on the CDR at PBX "B" (see Figure 1-10).

Figure 1-10: Using CDR



In this example DN 2222 on PBX A is calling DN 5222 on PBX C where PBX B is used as a tandem PBX. PBX B's CDR captures the actual extension (X2222) of the caller. Previously, only the trunk route and member number of the incoming TIE at PBX B could be captured.

Feature Requirements

The display of CLID in CDR requires the following options:

ISDN	option 145
PRI	option 146 (or ISL option 147)
CLID in CDR	option 118 is only required at the collecting
location	(i.e. site B)

Basic Call Service

The ISDN basic call service permits the transmission of the ISDN call. The basic call service consists of call progress signaling and voice and data transmission. Three types of numbering plans are supported. The basic call service is supported for the following switch configurations:

- Meridian 1 Option 11 to Meridian 1/SL-1
- Meridian 1 Option 11 to SL-100
- Meridian 1 Option 11 to DMS-100
- Meridian 1 Option 11 to DMS-250
- Meridian 1 Option 11 to DMS Centrex
- Meridian 1 Option 11 to AT&T #4ESS
- Meridian 1 Option 11 to AT&T #5ESS

Call Progress Signaling

PRI supports 64 Kbps out-of-band signaling (on the D-channel) for:

-call set-up

-call tear down

-feature activation

-local busy and reorder tones

Messages to generate tones are transmitted on the D-channel. Both out-of-band messages and in-band tones are provided for ring back.

Voice and Data transmission

High speed voice and data are transmitted on the B-channel and assigned on a per call basis. The following modes of transport are available:

-56 Kbps circuit switched data transmission

-64 Kbps circuit switched voice and data transmission

-64 Kbps packet data transmission

Numbering plans

Three numbering plans are supported:

- Coordinated Dialing Plan (CDP) of 3 to 10 digits

- North American 10-digit numbering plan

-Uniform Dialing Plan (UDP) which includes the Electronic Switched Network (ESN) 7-digit private numbering plan.

Typically, the numbering plan for a customer's private network consists of a 3-digit location code (such as the ESN number) and a 4-digit extension. This allows the same extension to be used for private networks and for Direct Inward Dialing (DID) from the public network.

Package Requirements

ISDN	option 145
PRI	option 146 or ISL option 147

ESN on PRI/ISL

Generic X11 Release 16 provides most of the current ESN services over ISDN DTI/PRI with the exception of the Network Call Transfer (NXFER), the Coordinated Call Back Queuing (CCBQ), the CBQ to Conventional Main (CBQCM) and Off-Hook Queuing (OHQ) features.

Generic X11 Release 16 provides Network Class of Service (NCOS) information which extends ESN functionality to DTI/PRI facilities. NCOS is an ESN software capability which provides the means to control:

a) User access to routes

b) Eligibility of queuing for a user

c) Eligibility for a user to receive Expensive Route Warning Tone (ERWT)

d) Eligibility to access Network Speed Call (NSC)

A NCOS is assigned to every user on the Meridian 1 PBX. Depending on the NCOS assigned, users are either allowed or denied to place local, long distance and/or International calls. During a tandem call, DTI/PRI sends the NCOS of the user across the DTI/PRI link with the dialed number to the other Meridian 1. The caller now has the same calling privileges from this location as they did when calling from the originating location.

Northern Telecom's ISDN/PRI networking feature development is based on the signaling and functionality within the Network Automatic Route

Selection (NARS) and/or Coordinated Dialing Plan (CDP) features. The NARS feature provides the sophistication to distinguish between private and public network calls within the first 2 to 3 digits dialed. This allows the NARS equipped switch to process the call immediately upon dialing the last digit thus resulting in instantaneous cut-through. CDP uses Distant Steering Codes (DSC) and Trunk Steering Codes (TSC). DSC codes are recognized in software and also provide instantaneous cut-through. However, TSC and the number that follows varies in length, therefore end of dialing timers are used.

ISDN with CDP or NARS also provides the exact display of the CLID across the network. However, when connecting a number of switches with some switches using CDP and the other switches using NARS, the correct display of the CLID may not make sense because the NARS switches will be sending the location code plus the extension number, whereas the CDP switches will be sending only the CDP number. In some networks, the CDP number does not contain enough information to be able to dial back the calling number if necessary.

Option 148 (Advanced Network Features) is the option that provides Network Ring Again (NRAG). Because of NRAG and other features planned in future X11 software releases; as well as the complexity of inserting and deleting digits in the number dialed in an all CDP or NARS or combination CDP/NARS network, Northern Telecom requires that every switch in the network be equipped with either NARS or CDP software.

With the CDP Expansion enhancement, X11 Release 15 and later ISDN networks may now support up to a 10 digit Coordinated Dialing Plan (CDP). Prior to X11 Release 15, up to a 6 digit ISDN CDP was supported.

The Access Code 1 (AC1) / Access Code 2 (AC2) enhancement provides greater flexibility in designing network numbering plans. This enhancement allows either AC1 or AC2 to be used as the access code for private network and long distance calls. Previously only AC1 could be used for these types of calls.

Implementation of the ESN on DTI/PRI feature requires the following options:

ISDN	Option 145
PRA	Option 146 and/or ISL Option 147
NARS	Option 58 and/or CDP Option 59 and NSIG Option 37 or Multi-Site 1 or 2 (see details on Multi-Site packaging 1 or
2	at the end of this module).

ISDN Signaling Link (ISL)

This feature provides out of band ISDN D-channel signaling capability to enhance both digital and analog conventional in-band trunk signaling. TIE trunk types (including DTI) are supported in Release 12 to 16 for **Meridian 1 to Meridian 1 Connectivity only.**

This link provides ISDN Feature Networking Services to locations in a customer's network where a DTI/PRI link (T1 span) is not available or not economically justified.

The ISL uses a dedicated channel at speeds between 2.4 and 64Kbps to establish the ISDN "D" channel for transmission of the ISDN Q.931 signaling protocol. The D-channel information is transported to the far end using one of the following methods:

- a PRI channel in the case of ISL shared mode (in the same manner as PRI).
- a data adapter or modem in the case of ISL dedicated mode.

The associated voice or data is sent via the existing conventional analog or digital trunks.

Note: Auto recovery for ISL tie trunks to revert back to in-band signaling upon failure of the D-Channel Handler is available in X11 Release 14 for Meridian 1 Option 21-71 systems and later releases. Also please note that this capability requires that the Meridian 1 option 21-71 D-Channel Handler (DCHI) circuit pack must be a QPC757 vintage D or later.

This feature implementation requires the following Options:

ISDN Option 145; and ISL, Option 147.

DTI (pkg. 75) software or the NTAK09 (DTI/PRI circuit pack) is not required to implement ISL unless a DS-0 or DTI facility is utilized.

Network Call Party Name Display (NCPND)

Network Call Party Name Display (NCPND) offers a network-wide visual display of the Calling Party and Called Party Name on the telephone sets with Alpha-Numeric Display.

Across the ISDN DTI/PRI network, the NCPND feature displays the following:

- the calling party's name on the terminating set

- the called party's name on the originating set

If equipped, each Meridian 1 PBX in the network can contain the name and number of each user on that particular PBX. During the call set-up message, the originating PBX will send the CLID and calling party name to the terminating PBX. When the call is answered, the terminating PBX will send back the connected number and name.

For call redirections, an option can be selected via a service change which would provide a display of the redirecting name instead of the calling name for the set which is answering the redirected call, not the originating set..

The NCPND feature may only be used for private network applications that support the Meridian 1 to Meridian 1 connection. The name and number display for the called party is visible for the duration of the call.

The following sets support the NCPND feature:

- M2250 Attendant Console
- Meridian Modular Telephones

Please consult the telephone User's Guides to determine the exact display for each particular set.

Feature Requirements

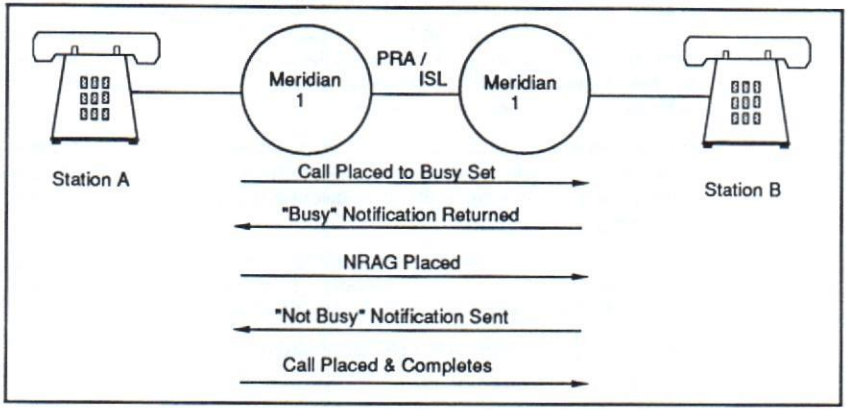
ISDN	option 145
PRI	option 146
or ISL	option 147
CPND	option 95
DDSP	option 19

In addition, the appropriate digital set options (Telset package 88, 89 and 91 or 170) must be equipped to support the M3000, M2317 and Meridian Modular telephones.

Network Ring Again

This extension of Meridian 1 Ring Again operates on STATIONS called over the ISDN PRI/ISL network. This feature allows a caller (station "A") encountering a busy destination (station "B") anywhere in the ISDN network to be notified when the busy destination ("B") becomes available. After notification, when user "A" accepts this recall, a normal call setup is then placed to destination "B" without user "A" re-dialing the called number.

Figure 1-11 : Network Ring Again



Network Ring Again (NRAG) can be originated by a station in the Make Set Busy mode, and it is also allowed to be activated against a station in the Make Set Busy Mode.

NRAG is supported in UDP and CDP networks. Network Ring Again is only supported if the CLID uses the prime DN. For Meridian 1 Option s 21-71, X11 Releases 15 and later support up to a 10 digit CDP with the DNXP package equipped. Option 11 systems support up to a 10 digit CDP.

Feature Requirements

ISDN	option 145
PRI	option 146
or ISL	option 147
NTWK	option 148

Network Call Redirection (NCRD)

Network Call Redirection allows calls to be redirected across the ISDN network as a result of Hunting, Call Forward All Calls and Call Forward No Answer (these features, with the exception of call forward all calls, used to be limited to the called sets PBX). Network Call Redirection has been introduced in two phases:

Phase I (X11 Rls 14) on Meridian 1 Option 21-71 introduced Network Call Forward All Calls and Network Call Forward No Answer (NCFAC & NCFNA).

Phase II (X11 Rls 16) includes the functionality of Network Call Redirection Phase 1 (Call Forward All Calls/No Answer) and introduces Network Hunting (NHNT). In addition, CLID and NCPND has been enhanced to as part of NCRD.

The enhancements provide an update of information for both the calling and the called set's display for CLID and Network Call Party Name Display (NCPND) when the call is redirected. The enhancement enables the display of the calling party to show the connected number when the called number is redirected to another number in the ISDN network. If Network Calling Party Name Display (NCPND) is optioned, the calling party's set also displays the connected party's name. If a call is forwarded more than once, the calling party's set displays only the first re-direct number and name with the connected name and number.

This feature also enables the terminating set to display the CLID from across the DTI/PRI network as well as the forwarded set's number. If NCPND is optioned, the calling party's name and number as well as the originally called party number is displayed at the terminating set. In addition, the calling and terminating party sets will display the redirection reason (CFWD or CFNA).

Network Call Redirection also allows the customer to either block calls from being redirected over the network, or limit the number of redirections from 1-5 times per call.

Network Hunt

X11 Release 16 and the Network Call Redirection Phase II feature extends the current capabilities of Hunt to network wide functionality using a Meridian 1 Network connected via either ISDN Primary Rate Interface (PRI), or ISDN Signaling Link (ISL). Also, the displays for the originating and terminating sets of a call that is redirected are updated to correctly present information to the connected parties and the reason for redirection (Hunt).

For example, in a three Meridian 1 ISDN Network, when a user on site "A" calls a user on site "B" but is forwarded to site "C", site "A" and site "C" set displays are updated. Site "A's" set shows; the originally dialed number, the connected number (site "C" number), and the reason for redirection, i.e., Busy. Site "C" set shows; the calling number and name, the originally called number (site "B" number), and the reason for redirection.

Network Call Transfer and Attendant Extended Calls

With X11 Release 16, Network Call Transfer and Attendant Extended Calls now display the calling party name and number to the "Transferred to"/"extended to" party across the network. Also the calling party's display is updated to show the connected party's name (if NCPND is optioned) and number.

Note: Network Call Transfer DOES NOT provide the ESN capability that verifies if double trunking is being utilized; i.e., Network Transfer now allows calls to be blind transferred across the ISDN network.

Call Pick-Up

If an incoming ISDN call is answered using the Call Pick-Up Feature and X11 Release 16 software is loaded, the displays for the originating and terminating sets will be updated to indicate the correct connected parties as well as the reason for redirection.

Call Forward All Calls/No Answer

Generic X11 Release 14 introduced these features on Meridian 1 Option 21-71 which enabled callers to Manually forward or forward on a no answer to any other station on the ISDN network. The receiving location is provided with the dialed number, the calling number/name (if optioned) plus the reason for the redirection. The caller's display is also updated to show the name and number of the person the call was redirected to plus the reason for the redirection.

This feature is applicable to the following sets for Name and Number display:

- M1250 Attendant Console and M2250
- (M1250 is not supported on Option 11)
- Meridian Telephones equipped with digit display
  - M3000 Touch phone
  - M2317
  - M2008
  - M2616
  - M2216

The display of NCPND requires the following Options:

ISDN	Option 145;
PRI	Option 146 or ISL, Option 147
Digit Display	Option 19
Calling Party Name Display	Option 95.

Feature Requirements

The Network Call Redirection Phase I and II feature is included in the Base ISDN Software Option 145. Option 19 is required for Digit Display. Option 95 is required for Name Display.

Note: Network Call Redirection Phase II assumes that an ISDN Primary Rate Interface (PRI) or ISDN Signaling Link (ISL) network is in place between the systems. Alpha-numeric display telephone sets are required to receive the originating, redirected or connected numbers and the reason for redirection.

Network ACD (NACD)

Network ACD provides call centers with multiple locations with the ability to solve the problem of fluctuating call traffic. The Network ACD feature uses the Integrated Services Digital Network (ISDN) to efficiently and quickly route calls to available agents within a network of Meridian 1 systems. Using the timed overflow routing tables associated with ACD, customers can specify ACD-DNs within the Meridian 1 network to which calls should be directed.

NACD is cost effective because calls remain in queue at their original source queue while waiting for an agent to become available in either the source queue or one of the target queues located throughout the network. Only when an agent becomes available in a remote queue (a different Meridian 1) will the call actually be sent over an ISDN voice channel. Prior to the call being sent, communication between locations is handled via the ISDN D-channel.

Management report information on package C reflects the changes introduced by the NACD feature.

ACD-MAX Release 3 supports the NACD feature. Three new reports and three additional management displays are provided to allow customers to determine call traffic pattern and service levels throughout the network. Centralization of this information will be provided with the introduction of the Network Administration Center. Network Administration Center requires an ACD-MAX in each network location and provides reports and displays on the entire NACD environment.

NACD is not supported on Package D, 11 - Generic 9000 software.

At the present time NACD supports only a UDP numbering plan (CDP will be supported at a later date). It is important to note that the system regular users can operate using one dialing plan (i.e. CDP or UDP) while the NACD operates using another numbering scheme (i.e. UDP with location codes).

This feature implementation requires X11 Release 15 or later at all sites and the following Options: 14, 19, 28, 32, 37, 40, 41, 45, 57, 58 or 59, 61, 75, 111, 145, 146 or 147, 148, 178, 207.

Option 11 systems only support Meridian MAX.

Network Message Services

Network Message Service - Message Center

Network Message Services-Message Center was introduced in X11 Release 15 at all sites to extend the Message Center function to permit remote locations in a customer's network to be served by a single message center. Software messages are transported among Meridian 1 PBXs, via ISDN Primary Rate Interface or ISDN Signaling Link,. These permit a caller to a station on one Meridian 1, to leave a message with a Message Center located on another Meridian 1 in the network. All existing Message Center types--message attendant, SL-1 set, and ACD sets are supported.

Network Message Services-Message Center was developed to be transparent to end-users. Callers using sets without displays to a busy or unanswered station will not be aware that their call is being answered by a message center at another PBX location. The message center sends an indication of a message waiting to the user's station using the same mechanisms as are in place today. Users can call and retrieve their messages by simply pressing the Message Waiting Key on their telephone sets.

Feature Requirements

This feature implementation requires the following options:

NMS	Option 175
ISDN	Option 145
PRA	Option 146 or ISL Option 147
NTWK	Option 148

If an ACD type message center is used, then ACD-A, Option 45 is required. NMS Option 175 is required at all sites.

Network Message Services - Meridian Mail

Generic X11 Release 16 at all sites and Meridian Mail Release 7 extends the Network Message Services capability by supporting the use of a single Meridian Mail voice processing system for multiple network sites. Network Message Services, in conjunction with the extended network call redirection capabilities offered in Release 16, offers Meridian 1 ISDN network users complete call coverage regardless of their location in the customer's ISDN network. Users at any location in the network, may access the Meridian Mail system as easily as if it were at their own locations.

Access to Meridian Mail features is unchanged, regardless of whether Meridian Mail is being accessed by a user at the same location as Meridian Mail or by a user at a different location from the Meridian Mail system. For example, with Network Message Services, an unanswered call to a user is forwarded across the ISDN network to Meridian Mail, which plays the user's mailbox greeting and takes the message. Meridian Mail then directs the Meridian 1 serving the user to check the status of the user's message waiting light and turn the light on if necessary (message waiting indication for users of 500/2500 sets is supported as well). The user accesses Meridian Mail and retrieves messages as usual. Meridian Mail uses its unique link with Meridian 1 to match calling and called number information to user mailbox information as appropriate. Customers can centralize administration of Meridian Mail resources while still offering voice messaging to users throughout the network. Network Message Services enables customers to offer voice messaging to smaller network locations that might not be able to justify the purchase of a dedicated Meridian Mail system. All users have complete feature functionality including message waiting indication and personal verification across the network.

Network Message Services complements other Meridian Mail options such as Meridian Mail networking, allowing customers maximum flexibility in providing voice messaging services to network users. Network locations which have a high need for voice messaging service or have a need for specialized voice processing functions (e.g. auto attendant) can continue to be served by a dedicated Meridian Mail system. Other locations requiring access to voice messaging but lacking enough users to justify purchase of a dedicated system can be served by a shared Meridian Mail system. Furthermore, shared and dedicated Meridian Mail systems can be linked via Meridian Mail networking[1]`` providing complete voice messaging access for all users on the network.

Network Message Services extends the value of ISDN Primary Rate Interface and ISDN Signaling Link networks by using the intelligence in these networks to enable shared access to Meridian Mail resources, better using these resources and offering additional services to network users.

Option 11 systems may utilize this feature; however, only as an originating remote site, not as the location which actually possesses the Meridian Mail hardware.

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[1] Meridian Mail Networking - This is networking between Meridian Mail sites where there is a Meridian Mail system at each site. A Meridian Mail Network can link up to 500 Meridian Mail sites through long distance network, Direct Distance Dialing, Tie trunks or digital trunks. Networking allows Meridian Mail to send, receive, reply and forward voice messages to users located at remote Meridian Mail sites.

Future developments on the Option 11 system will remove this restriction.

Feature Requirements

Generic X11 Release 15 offers NMS-Message Center only and Generic X11 Release 16 offers both the Message Center and Meridian Mail capabilities.

Meridian 1 requirements for NMS-Meridian Mail vary slightly, depending on whether the Meridian 1 originates calls to the Meridian Mail location (i.e., is an "originating node"), terminates calls to the Meridian Mail location (i.e., is a "terminating node"), or simply serves as a "tandem node" in the network, passing information between "originating nodes" and "terminating nodes".

Note that all three switches must be equipped with minimum X11 release 16 software and the packages listed on the next two pages.

"Originating" node requirements are as follows:

- ISDN Primary Rate Access or ISDN Signaling Link (Option 145/146 or 145/147) and associated prerequisites
- Advanced ISDN features (Option 148)
- Network Message Services (Option 175)
- Message Center (Options 40, 45, 46)
- End-to-end signaling (Option 10)

"Tandem" node requirements are as follows:

- ISDN Primary Rate Access or ISDN Signaling Link (Option 145/146 or 145/147), and associated prerequisites.
- Advanced ISDN features (Option 148)
- End-to-End signaling (Option 10)

"Terminating" node requirements are as follows:

- ISDN Primary Rate Access or ISDN Signaling Link (Option 145/146 or 145/147), and associated prerequisites.
- Advanced ISDN features (Option 148)
- Network Message Services (Option 175)
- End-to-end signaling (Option 10)

Meridian Mail prerequisites:

- Auxiliary Processor Link (Option 109)

- IVMS Link (option 35)
- Meridian Mail Link (Options 77, 85)
- Basic ACD Features (Options 40, 45, 83)
- Message Center (Option 46)

Meridian Mail must be equipped with Release 7 software and the Network Message Services software option package. The Meridian Mail system should also be engineered to support the total number of users expected to be served throughout the network. Generic X11 Release 16 is a prerequisite.

Backup D-Channel

In order to increase the reliability of the D-Channel and enhance the serviceability of the Primary Rate Interface, a second or "backup" D-channel has been implemented.

The Backup D-channel feature provides redundancy for the D-channel Handler Interface (DCHI) daughter board, NTAK93AA. The D-channel Handler Interface provides the signaling and protocol for call set-up, tear down and feature activation. The B-channels can either be PRI B-channels or virtual B-channels using analog or digital trunks with the ISDN Signaling Link (ISL) feature. Because the DCHI is so important to customers trunking requirements, an additional D-channel Handler Interface can now be configured so that automatic switch over from one DCHI to a back-up can be achieved in case of failure. This configuration requires CO-ordination with the far end to ensure that Back-Up D-channel is also configured.

When Back-up D-channel is configured, one D-channel is active and the other one acts as a backup. Should the active D-channel fails, the auto-recovery software first attempts to recover the primary D-channel. If the recovery is successful, then the D-channel goes back in operation. However, if this recovery does not take place, then the Meridian 1 software switches the D-channel processing to the backup D-channel on another link. If the active back-up D-channel fails after the problem with the primary D-channel has been resolved, the auto recovery software will automatically switch back to the primary D-channel. During the switch over procedure, active calls will remain intact; however, transient calls may be dropped.

As a service changeable option, when the primary D-channel is brought up from the "released" to the "established" state, the automatic changeover back to the primary D-channel may be activated.

The Backup D-channel is an actual hardware configuration reproduction of the primary D-channel requiring a separate NTAK93 Daughter board (DCHI), and a NTAK09 Circuit Pack (it must have its own T1). For analog ISL applications a separate NTAK02 circuit pack, modem and NTAK19BA cable are required.

The Back-Up D-channel feature is only between Meridian 1s. The Back-Up D-channel can be configured for either ISL or PRI applications.

Package Requirements

This feature implementation requires the following Options:

ISDN Option 145;

PRI Option 146

ISL Option 147.

64 KBPS Clear Data Transport

ISDN PRI supports a clear 64 Kbps for data transmission on each B-channel. Connections from a Meridian 1 Option 21-71 tandeming through a Meridian 1 Option 11 to another Meridian 1 Option 21-71, or a DMS-100, are supported over 64K clear transmission.

Package Requirements

This feature implementation requires the following Options: ISDN, Option 145; and PRI, Option 146; and DTI, Option 75.

Integrated Trunk Access (ITA)

Integrated Trunk Access is a Meridian 1 capability allowing a T-1 facility to include both ISDN out-of-band signaled trunks as well as 'A' and 'B' bit signaling trunks. This capability has applications with ISDN multiplexers and digital cross-connects. In addition, applications such as Centralized Attendant Service (CAS) using Release Link Trunks (RLT) may be defined using ITA (since RLTs are only supported as out-of-band A&B bit signaling).

CAS is not supported on Option 11.

Package Requirements

This feature implementation requires the following Options: ISDN, Option 145; PRI, Option 146; and DTI, Option 75.

Meridian 1 PRI to DMS-100

Connection to the Central Office can be accomplished using three methods:

1) **Dedicated channels** (similar to Digital Trunking-DTI) but with Calling Line Identification--CLID, speed of call setup and out-of-band signaling.

2) In a **Call by Call** "pool" which would ultimately provide blockage to some routes

3) **Dynamically allocating** trunk types on a call by call basis but managed with minimum and maximum settings for each trunk type

Note that a combination of options is also possible, i.e. dynamically allocate some channels, while providing a number of dedicated channels per customer's request (all on the same link).

Availability

The availability of the above options will be dependent upon Telco service offerings. This offering on X11 release 16 is available on a controlled basis due to the complexity of the application.

Software implementation and feature activation coordination between the Central Office and Meridian 1 PBX personnel is very critical and must be achieved during initial installation and on an ongoing basis.

Considerations

Configuration of this link requires consideration in recognizing the constraints of the software in its initial implementation on X11 release 16. X11 release 17 will provide several enhancements to this feature. Some of these considerations are listed below:

- Only one incoming WATS route at any time may be configured on this link. Work-arounds are possible using TIE routes and must be arranged with the C.O..
- Only one incoming COT or incoming DID route can be configured. The link can only support DID or DOD but not both. Again work-arounds are possible using TIE route and must be arranged with the C.O..

A Meridian 1 PRI to a DMS-100 interconnection requires a Uniform (UDP) or Coordinated (CDP) Dialing Plan plus ISDN if you are in a private network environment.

Package Requirements

This feature implementation requires the following Options: NARS Option 58 or CDP Option 59, Release 16, ISDN, Option 145 and PRI, Option 146. Dynamic Channel Assignment and Call by Call Connectivity requires Option 117 (CBC). When connecting to Centrex systems via tie lines, Option 148 (NTWK) is required to allow network feature functionality.

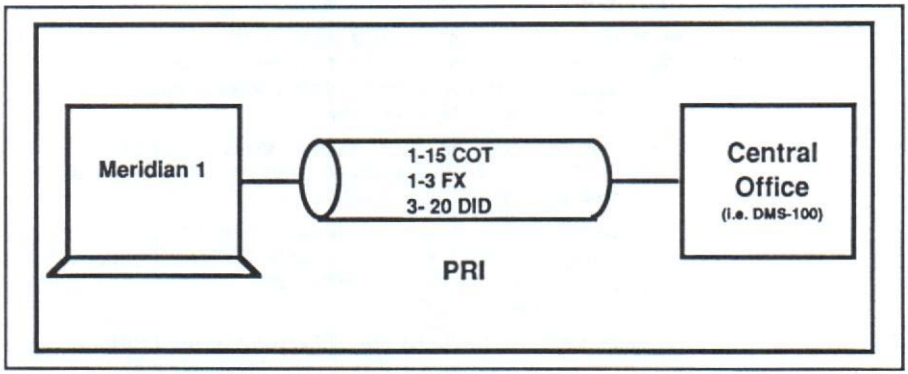
Integrated Service Access (ISA) (Call by Call Service and Dynamic Channel Assignment)

ISA = CBC = DCA (3 names for the same feature).

By using various call set-up messages, the Meridian 1 can designate to the network which service is desired on a call-by-call basis. Similarly, the network can indicate to a Meridian 1 on a call-by-call basis, the service for the incoming call. The selection of a B-channel is on a call-by-call basis as specified by the call types, which specify the attributes of the call.

ISA eliminates the need for dedicated 'B' channels for each service (no need for fixed number of CO, WATS, FX trunks but rather have shared trunks for the various services). However, dedicated 'B' channels could be provided if the customer requires them.

ISA allows a flexible connection to the Central Office which offers more efficient trunk utilization based on the calling patterns of the customer. Channels are utilized on a Call by Call basis determined by the minimum and maximum numbers specified on the Meridian 1.



Package Requirements

This feature implementation requires the following Options: NARS Option 58 or CDP Option 59, Release 16, ISDN, Option 145, PRI, Option 146 and CBC, Option 117. When connecting to Centrex systems, via tie lines, Option 148 (NTWK) is required to allow network feature functionality.

Non-Associated Signaling Channels (nB+D)

The D-channel has the capability of supporting multiple PRIs (up to 16) in an nB+D environment with a minimum of 23 to a maximum of 382 B-channels. The 382 B-channel restriction is derived from the calculation of 16 (PRIs) x 24 (B-channels per PRI) minus 2 D-channels. This enhancement allows a PRI to consist of 24 B-channels, while the D-channel controlling these B-channels is being shared with another PRI link.

Package Requirements

This feature implementation requires the following Options: ISDN, Option 145 and PRI, Option 146 or ISL, Option 147.

In-Band ANI (Automatic Number Identification)

In-Band ANI is a Northern Telecom Meridian 1 capability which allows an Inter-Exchange Carrier such as MCI or Sprint to send the Meridian 1 the calling parties 10 digit phone number (Area Code and 7 digit phone number) via standard digital trunks (T1). The Meridian 1 can then terminate the number to the following:

- The digit display of an auto terminating ACD set
- A Meridian Link connection
- A CDR record

Notes:

In-Band ANI is only supported via MCI using the DMS-250 Inter-exchange switch.

A three or four digit Dialed Number Identification Service (DNIS) can be delivered instead of the ANI digits if required.

Package Requirements

The In-Band ANI feature requires software options; 40, 98, 145, 146 and 149.

Data Packet Network Access X.25

PRI trunks may be configured to access a Public Data Packet Network (DPN - X25) via the DMS-100 ISDN node, provided that this service is made available by the serving Central Office. On a per call basis, any 'B' channel can be used to access the packet network.

No high-speed data available today.

Package Requirements

This feature implementation requires the following Options: ISDN, Option 145; and PRI, Option 146.

Manual Trunk Service

This service is not supported over ISDN facilities.

Private Line Service (PVR)

This service is not supported over ISDN facilities.

Called Party Disconnect Control

This feature is not supported over ISDN facilities. Once the call clearing procedure is invoked, the call is taken down completely.

Autovon

Autovon calls are not supported across the ISDN interface, but can be routed over Autovon trunks.

Centralized Attendant Service (CAS)

Centralized Attendant Service using Release Link Trunks (RLT) is not supported over ISDN. However, RLT may be defined for Integrated Trunk Access (ITA) type trunks with a mix of both ISDN B-Channels and "A"/"B" bit signaling channels on the same link.

CAS is NOT supported on the Option 11 system.

Direct Inward System Access (DISA)

Special dial tone is returned in-band only on the B-channel. Additional code digits are via in-band DTMF tones.

Automatic Trunk Maintenance (ATM)

This service is not applicable to ISDN facilities.

ATM is NOT supported on the Option 11 system.

Flexible Night Service

Night Service can only be used via the customer data block (NITE or NIT1, NIT2... prompts) since there is no NITE prompt in the ISDN ISA trunk data block (see ISA Feature Description earlier in this module).

Call Forward and Busy Status

The Call Forward and Busy Status (BFS) feature was designed for an environment where party A forward their calls to party B for screening.

By using the BFS key, party B can:

- monitor, activate or deactivate the Call Forward feature of party A
- override the Call Forward feature of party A, in order to place call to party A
- determine whether party A is busy on a call

The BFS lamp state of party B indicates whether party A is:

- forwarded and not busy
- forwarded and busy
- not forwarded and not busy
- not forwarded and busy

If party A has forward key denied Class of Service, party A's Call Forward key becomes inoperative. If party B presses the BFS key and if:

- party A has already been forwarded to another station by another BFS key, then party A remains forwarded to that station.
- party A has been forwarded to a DN by a remote Flexible Feature Code, then the call forward is overridden and all new calls are forwarded to party B.
- party A's calls were forwarded to party B, then party A's call forward is canceled.
- party A's call forward is not activated, then party A's calls are forwarded to party B and the CFW lamp on party A's set lights up.

Party A has forward key allowed Class of Service. If party B presses the BFS key and if:

- party A has already been forwarded to a station other than station B, then party A remains forwarded to that station.
- party A's calls are not forwarded, then party A's calls are forwarded to party B and the CFW lamp on party A's set lights up.
- party A's calls were forwarded to party B, then party A's call forward is canceled.

Note: If party B presses the BFS key while receiving dial tone or special dial tone, the BFS key then works as an Autodial key to party A.

Forced Camp-On/Priority Override

Forced Camp-On is similar to the regular station-to-station camp-on, except that it can be done with or without an internal or external call on hold. When used with Priority Override, the capability is called Enhanced Override. Forced Camp-on is activated automatically, (if Automatic Forced Camp-on is defined), or manually using the Enhanced Override (EOVR) key on BCS sets or the Enhanced Override Flexible Feature Code on PBX sets. If the EOVR key is pressed again or the Enhanced Override Flexible Feature Code is dialed again, Priority Override is activated.

Note: If Forced Camp-on is not equipped, the first depression of the EOVR key, or the first dialing of the Enhanced Override Flexible Feature Code (package 139) activates Priority Override.

Priority Override allows an established call to be broken-in to and another call presented to the desired party. Before break-in occurs, a warning tone is given to all parties involved in the established call. The set performing the override must have a priority level equal to or higher than the set being overridden. To activate Priority Override, the user of a PBX set dials the Override Flexible Feature Code, while the user of a BCS set presses the Override key (OVR). Priority Override can also be activated using the Enhanced Override Flexible Feature Code or the Enhanced Override key (EOVR).

Feature Requirements

Priority Override cannot be applied to telephones involved in any of the following:

- a non-established call
- a conference call
- an attendant call
- an ACD call
- a data call
- a parked call
- a call-waiting call
- a held call
- an operator call back or toll operator break-in call
- Make Set Busy active
- Do Not Disturb active

External trunks cannot perform priority override. They can be overridden only if they are the undesired call being broken-in to. Forced Camp-on is packaged under Option # 186 (POVR).

Multi-Party Operation

Call Join

The Call Join feature allows a user of a BCS telephone set to conference-in or transfer a third party to a party held on the user's set, without having to dial the third party. The user can then hang up.

The user's set must be equipped with a Conference 3/6 key, and at least one secondary DN or Call Waiting key. During an active call with a party (A) on any DN key, including the Call Waiting key, the user presses the Conference 3/6 key to place party (A) on hold. Special dial tone is returned. The user can now dial another party (B) and conference-in to party (A).

If the user has another held party (C) on another DN, the user can consult with that party by pressing the DN on which party (C) is held, while receiving special dial tone. This causes party (C) to be moved to the Conference key.

Note: This processing may not be displayed on M2317/M3000 soft keys.

The user can then consult with part (C). To establish a conference between the user, party (A) and party (C), the user presses the Conference key again. The conference is established on the DN on which party (A) was being held. If the user disconnects from the conference, party (C) is transferred to party (A).

If the telephone set is equipped with a Conference 6 key, additional parties may be conferenced-in.

Three-party Service for 500/2500 Telephones

The Three-party Service feature allows a user of a 500/2500 set to toggle between an active party and a held party, with the option of forming a conference between them, or releasing the active party and reconnecting to the held party.

During an active call, the user can place the call on hold, by performing a switch hook flash (or also known as a recall), and make another call. After the second call is established, the user can dial a programmable control digit to either create a conference between the parties (conference control digit), toggle between the active and held parties (toggle control digit), or release the active party and re-connect to the held party (disconnect control digit). Depending on the Class of Service a switch hook flash may have to be performed before the control digit is dialed.

If the user dials any other control digit, the user is connected to the active party and the held party remains on hold.

Note: In the first case, neither party can use Call Transfer, Three Party Service or Conference-3, unless the user has Conference-6 allowed Class of Service. In the second case, the user cannot make any other calls. In the third case, either party can initiate another consultation or conference connection.

Conference-6 for 500/2500 Telephones

The Conference-6 feature is an extension of Three-party service, allowing users of 500/2500 telephones the added capability of establishing a conference of up to six parties. The functionality is the same as the Conference-3 capability.

Recovery of Misoperation of Call Transfer

The Recovery of Misoperation of Call Transfer feature prevents external calls from being dropped due to misoperation of the Call Transfer feature. If misoperation is detected by the Meridian 1 system, the call is automatically routed to an attendant, as an attendant no-answer recall or an inter-attendant call, depending on the state of the third party. An option allows external parties, transferred in the ringing state, to be routed to an attendant if not answered within a specified period of time.

There are a number of options which apply to both internal and external calls transferred in the ringing state. A ring timer may be applied to the transferred station. When time-out occurs, the transferring station is rung back for a predefined number of times with an optional ring cadence. If the transferring station does not answer during this period of time. the call is optionally forwarded to an attendant or the night DN, or disconnected.

When a switchhook flash from a 500/2500 telephone is detected by the Meridian 1 system, all signals received during a period of 256 ms are ignored by the system. This prevents a hook-switch contact bounce from being interpreted as a switchhook flash followed by an on-hook, thereby causing unintended transfer to an attendant and other types of misoperation.

Recovery of Misoperation on the Attendant Console

The Recovery of Misoperation on the Attendant Console feature provides a safeguard in the Meridian 1 software that prevents calls from being inadvertently disconnected from an attendant console. Specifically, the safeguard prevents misoperation on the RELEASE, LOOP, and RELEASE SOURCE/RELEASE DESTINATION keys. This feature is comprised of the following capabilities:

- Misoperation of RELEASE key and LOOP keys
- Misoperation of Autohold on LOOP key
- Misoperation of RELEASE SOURCE key/RELEASE DESTINATION key

Misoperation of Release key and LOOP keys

In the following cases, pressing the Release key or the LOOP key is ignored.

- extending a call to a vacant number.
- extending a call to restricted station or trunk
- extending to a station restricted by Trunk Barring

  Note: Intercept treatment is returned for the above conditions.

- extending to a partially-dialed number.
- extending a network-blocked call.
- extending a station in the Do Not Disturb mode.
- extending to a station in the Make Set Busy mode.
- extending to a station in the Maintenance-busy mode.
- extending to a station in the Line Lockout state.
- extending to a busy extension without Camp-on or Call Waiting.
- extending to a station restricted by Trunk-to-Trunk Connection Restriction
- Releasing from a conference connection - the attendant is prevented from releasing a conference connection, established on the source side, by pressing the Release key or a LOOP key in the following cases:
  - if there is no destination. Pressing either the RELEASE key of a LOOP key places the active loop on hold, rather than releasing it. The conference can be released by pressing the RELEASE SOURCE key.

- if the attempt to extend the call to the destination was not successful. The conference can be released by pressing the RELEASE DESTINATION key.
- if there is another party already connected as a destination. Pressing the HOLD key, RELEASE key or another LOOP key puts the active loop on hold, rather than releasing it. The destination side can be released by pressing the RELEASE DESTINATION key. The source side can be released by pressing the RELEASE SOURCE key. If an established conference connection cannot be released due to Trunk-to-Trunk Connection Restriction, pressing the RELEASE SOURCE key causes the conference to be released from the console and the trunks disconnected.

Note: Busy tone or overflow tone is returned for the above conditions.

Misoperation of AUTOHOLD on the LOOP key

On a console that is equipped with the AUTOHOLD on LOOP key option, if the attendant is on a call that has terminated properly and presses the LOOP key while switching to another call, the active loop is placed on hold rather than being released. Besides preventing the inadvertent release of the caller, this option allows the attendant to toggle between any number of held calls by having to press only one key. If the attendant is on a call that cannot be terminated properly, pressing the RELEASE key or the LOOP key places the call on hold rather than releasing it.

- extending to a busy extension without Camp-on or Call Waiting
- extending to a station restricted by Trunk-to-Trunk Connection Restriction

Misoperation of the Release Source/Release Destination key

This option allows the Meridian 1 system to ignore the pressing of the RELEASE SOURCE or RELEASE DESTINATION key, preventing the release of either the excluded source or destination party, or a conference call connection. The source or destination party involved in a talking connection with the attendant may still be released by pressing the RELEASE SOURCE or RELEASE DESTINATION key, as appropriate. In a lockout situation, where both source and destination parties are excluded, the attendant may use either the RELEASE SOURCE or RELEASE DESTINATION key to disconnect both parties, since the attendant is not able to re-enter the connection.

Limited Access to Overlays

Limited Access to Overlays (LAPW) allows password control to limit access to a configured database. The LAPW feature adds more passwords defined within the Configuration Record (LD17). Up to 100 of these additional passwords can be defined for any one system. Of the 100 possible passwords defined (0-99), only the highest level password users - Level 2 or PWD2 - can configure or change access for other passwords. These users are the Administrators.

Each password can access up to 32 customer-tenance combinations. Each combination is defined by a number designator that includes the customer number (0-99), and the tenant number (0-511). More than one tenant for the same customer must be entered separately.

Log on attempts are monitored for security. Failed attempts with invalid passwords are counted and the tally is compared with a pre-defined threshold. If the threshold is met or passed, the entry point (TTY or terminal) is locked out for a pre-determined time set in service change (and password protected). Access from that point is ignored by the system for the lock-out timer defined. Lock-out conditions are reported to all maintenance terminals when they occur, with a special report to the next system administrator who logs on.

An Audit Trail is built by the administrator to record log on information:

- date and time
- password used
- software loads (LDs) entered
- invalid attempts and lock-outs

Only system administrators can access the Audit Trail.

Implementing and using the LAPW feature does not interfere with the use of any existing passwords in the system. For a complete listing of the passwords currently used, refer to the *X11 input/output guide* (553-3001-400).

System administrators using PWD1 and PWD2 in LD17 define access to LDs with this feature. They may also define certain command use levels within a given LD. For instance, the administrator can specify *print only* access in the Configuration record (LD17). Any other requests generate the following system message:

SCH8836 PASSWORD HAS PRINT ONLY CLASS OF SERVICE.

After calling up a LD, certain commands may be restricted from use by the same password, if that password is properly defined. Trying to use those commands without the correct password is not successful -- access is denied.

Feature Requirements

The LAPW feature should only be enabled on a system with a completed Configuration record in LD17 - a Meridian 1 or SL-1 machine that is already up and running. All passwords defined within the feature must be unique. Users and administrators can not have more than one password defined for any one access configuration.

Each password configured must comply with the following guidelines:

- Only the LD numbers defined for each password can be accessed by users of that password.
- You must specify exactly what customer data can be modified by users of each password.
- Multi-Tenant Service customers must specify tenants numbers allowed per defined password.
- Access to Print routine LD20 must include access to the Speed Call lists.
- Access to the Configuration Record (CFN) LD17 can be restricted to changing a user's own password only, or full access to modify the system configuration, or no access at all to LD17.
- With the Print Only option defined, certain users are limited further.
  - access only to Service Change LDs with print commands
  - full access to all print routines: LD20-22 and LD81-83
  - can only use print commands in the database
- Line Load Control (LLC) commands are only available to those passwords with LLC allowed. The LLC feature only operates within an AUTOVON (DSN) environment.
- System commands in Traffic LD02 are accessible only to users with access to all customers. Customer defined commands are accessible according to the customer numbers defined for any given password.

Feature Interactions

This feature has no interactions with other feature packages.

Feature Packaging

Limited Access to Overlays (LAPW), package 164, must be enabled for this feature to operate.

Feature Implementation

Implementing the LAPW feature requires you to change the Configuration record (CFN), LD 17. You must respond to the following prompts in LD17.

LD17 - Define the passwords for LAPW access.

REQ	CHG, END	Change data or terminate overlay
TYPE	CFN	Configuration data block
PWD2	xxxx	Current Level 2 master password
_NPW1	xxxx	New level 1 Log-in password
_NPW2	xxxx	New level 2 master password
LAPW	0-99	LAPW password number
_PWnn	dd...d <cr>	New password for "nn" above No more changes to LAPW
_OVLA	xx xx ... xx, ALL, (XALL)	Add these overlays to the list accesses by password PWnn. Xnn removes the overlay.
_CUST	0--99, ALL, (XALL)	Customer number, all customers, (no customers)
_TEN	xx xx ... xx, ALL, (XALL)	Tenant list for the above customer for password access XALL removes tenant access for this password.
_OPT	aaaa	Password Options allowed
_LPWD	aaaa	Logon Password (Note)
_NLPW	xx ... x	New Password for LAPW users (Note)
_FLTH	0-(3)-7	Failed log-on attempt Threshold
_LOCK	0-(60)-270	Lock-out time in minutes
_AUDT	Yes, (No)	Audit Trail allowed (denied)
_SIZE	(50)-1000	Word size stored in the Audit Trail buffer
_INIT	(Yes), No	Reset ports locked out during manual INIT.

Note: LPWD and NLPW and prompted when <cr> is entered for the PWD2 prompt. The other LAPW password prompts are not given when this happens.

End-to-End Signaling

The End-to-End Signaling (EES) feature enables a station to send Digitone end-to-end signaling through an established outgoing connection. The signaling consists of digits in Dual Tone Multifrequency (DTMF) code. This means that each digit dialed on the calling station is sent through the trunk using DTMF code. An outgoing connection from an SL-1 or Meridian digital set is considered established after the end of dialing time is elapsed. Alternatively, an outgoing call can be established after the end of dialing time is elapsed, or can be established immediately by pressing an octothorpe (#) after the last digit is dialed.

Attendant End-to-End Signaling

The attendant can send DTMF signals using the EES key on the attendant console. Only one party may be connected to the active loop key (source or destination) and receive DTMF signals. The console must have one and only one party connected; however, if that one party is part of a conference, all connected parties receive DTMF signals.

Incoming calls to the attendant console will stay in the queue while the console is in AEES mode.

Feature Requirements

X11 release 5 and later software enables a telephone to send and receive DTMF codes, thereby extending the EES capability to internal PBX calls and incoming trunk calls.

EES was only applicable on established outgoing calls on X11 release 4 and earlier software.

EES and the X11 release 5 enhancement to the EES feature is only allowed on CO, FX WATS, TIE, CCSA, DID, CAMA, and AUTOVON trunk types.

EES is not available on 500 types sets.

There must be a conference loop and TDS slot available to perform Attendant End-to-End Signaling (AEES).

Any feature that allows or requires an active party on the loop key will terminate AEES operation when activated. If such a feature is already active, pressing the EES key will be ignored.

EES cannot be combined with Autodial, Speed Call or Network Speed Call. However, it can be initiated after a call has been set up by these features.

A call must be established. An outgoing call is considered established 14 seconds (DP trunk) or 4 seconds (2500-type set or Digitone trunk) after the last digit has been outpulsed. The length of this delay may be changed through service change. If the octothorpe(#) is dialed, end-to-end signaling may be initiated as soon as ringback is heard.

Feature Interactions

EES cannot be combined with Autodial, Speed Call or Network Speed Call.

Attendant End-to-End Signaling

Night Service/Position Busy/Centralized Attendant Service - These features work together with AEES. However, do not press one of these feature keys while using AEES, or the DTMF signals may be blocked.

Attendant Administration - While in the Attendant Administration mode, pressing the EES key is ignored.

Attendant features - Activating Automatic Wake-up, Call Park, Charge Account, Calling Party Number, Hold, Release, or another loop key will terminate AEES operation

Barge IN/Busy Verify - While in the Barge In/Busy Verify mode, the console cannot enter EES mode.

Conference - If the receiving party is part of a conference, all other connected parties receive DTMF signals. While in AEES mode, the receiving party may not initiate a conference call.

Digital Key (Meridian Hospitality Voice Services) - Attendant End-to-End Signaling and Digit Key are mutually exclusive. Being in AEES mode overrides the use of the Digit Key.

End-to-end signaling (station level) - The attendant console and the telephone receiving AEES cannot both activate EES simultaneously.

Interposition call - When an attendant is actively connected to another console using Interposition Attendant Call, AEES is blocked. However, during an Interposition Call Transfer, the console which is actively connected to a telephone can perform AEES, providing the party connected to the other attendant console is excluded.

Supervisory console - The supervisor can operate AEES if there is a call on the active loop key. An attendant in AEES mode can be monitored by the supervisor.

Trunk connection - On incoming ground start CO or DID trunks without Answer Supervision, you must press the Release (RLS) key on the console to exit AEES mode and drop the connection.

Feature Packaging

The option number for End-to-End Signaling is 10. The mnemonic is EES. No package dependencies exist.

Feature Implementation

LD15 - Enable Attendant End-to-End Signaling tone feedback.

TYPE	CDB	Customer Data Block
EEST	(NO) YES	EES tone feedback heard by attendant.

LD12 - Add Attendant End-to-End Signaling key to attendant console.

TYPE	2250	Attendant console type
KEY	n EES	Add EES key (n=key number)

Meridian Hospitality Voice Services

Meridian Hospitality Voice Services (MHVS) links the Meridian Mail system with the Property Management System (PMS) and the system for the hospitality environment. Meridian Mail uses information from the Property management System Interface (PMSI) to manage guest voice messaging and to coordinate the Message Waiting indications for both voice and text messaging.

New PMS message (from X11 release 16) are used to integrate the link. MHVS allows Meridian Mail to intercept messages over the PMS link and passes to the switch only those required. Should Meridian Mail ever fail, a bypass switch allows the switch to link directly with PMS.

Feature Requirements

The Night Number specified for the AP Recovery enhancement must be local to the system. It cannot be defined using Network ACD routing tables.

Attendant Consoles cannot be associated with mailboxes on Meridian Mail.

No Soft Key menus are provided for MHVS commands on M2317, M3000, and Meridian Modular telephones. Key pad entry of digits must be used to operate MHVS features.

When programming the Night DN associated with the customer and ACD queues, care should be taken to avoid configuring a loop-back of DNs for the ISDN/AP Recovery Night Call Forward DN enhancement. for example, if the Night Call Forward DN terminates on a console (directly or indirectly), then the attendant Night DN cannot terminate on the Meridian Mail virtual ACD-DN. If this configuration occurs, calls will remain ringing in the ACD queue until the attendant disengages Night Service, or until the AP link recovers from failure.

The use of IMS or IVMS is not supported with MHVS.

Feature Interactions

Attendant End-to-End Signaling (AEES) - AEES (which uses DTMF signaling) requires an additional attendant (EES) key.

Attendant Overflow Position (AOP) - Attendant Overflow allows unanswered calls to the attendant to be forwarded to a customer-defined DN after a defined time. With AOP equipped in X11 release 16, overflowed calls can be directed to Meridian Mail. The AOP DN must be defined as an ACD DN, and the ACD DN must be an ACD agent configured as a virtual VMS agent. A call may also be overflowed if all the attendants are in Position Busy.

Centralized Attendant Service (CAS) - The attendant must be located on the same switch as Meridian Mail for the attendant to use Meridian Mail features.

Digit Key Signaling (DKS) - With the DKS package (180 equipped, attendants may assist callers in operating Meridian Mail voice messaging service. The attendant enters the digits for Meridian Mail and extends the call to Meridian Mail. The caller may then access voice messaging. DKS is only supported from the attendant consoles local to Meridian Mail. The attendant may also place direct calls to Meridian Mail.

Digit Key Signaling at console (DKS) - With DKS equipped, attendants may assist callers in Meridian Mail activities. The attendant may extend source calls to Meridian Mail or direct calls to Meridian Mail.

Do not Disturb (DND) - Individual DND allows the attendant to place a DN in the Do Not Disturb mode. A DN in this mode is free to originate calls, but appears busy to incoming calls. With DND equipped in Release 16, callers can be redirected to Meridian Mail for voice mail services. A called set must have Hunting Allowed (HTA) class of service and the Customer Route Data Block must be set to "Yes" in LD15.

M2317, M3000, and Meridian Modular soft key menus - M2317, M3000, or Meridian Modular soft key menus will not be supported by MHVS. These three telephones with CCSA class of service will not be presented with the Meridian Mail soft key menus when connected to Meridian Mail.

Network ACD - The night number specified for the Automatic Call Distribution (ACD) involved in the ISDN/AP recovery operation must be local to the node.

PMSI, DKS, DND, and Message Waiting Indication - These operations are only supported when PMSI, Meridian Mail, and attendant room telephones are located on the same switch.

Pretranslation - Prior to MHVS, the setup of calls using the ISDN/AP was not supported from telephones using the Pretranslation feature. With MHVS equipped, call setup using the ISDN/AP is supported.

Stripping of CPND blanks - the maximum length of a CPND name sent from the PMSI/BGD terminal is 27 characters. When the full 27-character length is used, part of the CPND name may scroll of the screen. To avoid this problem, the PMSI/BGD software has been updated to strip all trailing blanks from the CPND name from the screen.

Feature Packaging

The MHVS package (179) requires the following packages to be equipped:

- The standard Meridian Mail packages must be equipped for the Pretranslation and Do Not Disturb functions to operate properly. These include:
  - Recorded Announcement (RAN) (7)
  - End-to-End Signaling (EES) (10)

- Make Set Busy (MSB) (17)
- Integrated Messaging System (IMS) (35)
- Basic Automatic Call Distribution (BACD) (40)
- Automatic Call Distribution Package A (ACDA) (45)
- Message Center (MWC) (46)
- Command and status Link (CSL) (77)
- CSL with Alpha Signaling (CSLA) (85)
- Auxiliary Processor Link (APL) (109)

_ The PMSI package requires the following packages:

- Controlled Class of Service (CCOS) (81)
- Background terminal (BGD) (99)
- Room Status (RMS) (100)
- Property Management System (PMSI) (103)

_ The Attendant Overflow (AOP) package (56) is required for AOP DN enhancement.

_ The DKS package (180) requires that the standard Meridian Mail packages, such as those listed under MHVS (179), are equipped.

_ The site may also require other packages such as MR (101) and AWU (102); however, these packages do not impact MHVS operations.

Feature Implementation

LD15 - Allow call redirection to Meridian Mail for voice messaging.

DNDH	Yes, (No)	Do Not Disturb Hunting

Note: MHVS package (179) must be equipped for this prompt to appear. LD21 will relect the DNDH option if MHVS is equipped.

LD23 - Define the AOP DN.

MWC	YES	ACD DN message center DN
CMS	YES	Command and status link

Automatic Wake-Up

The Automatic Wake-Up feature (AWU) provides an efficient and reliable wake-up service for the hospitality and health care environments. It relieves the console attendant from having to make wake-up calls by providing this service automatically for designated stations. At the requested time, the system automatically rings the room or extension and connects the called party upon answer to music followed by a recorded wake-up announcement.

If the wake-up call is answered within a customer-defined number of rings (2-5), the system recognizes a completed call and presents the station with the wake-up announcement or a few seconds of music (or tone) followed by the recorded wake-up announcement. The system disconnects the AWU call when the called party releases, or when the Recorded Announcement (RAN) cycle is completed.

The system allows for an optional Second RAN which can be used for evening wake-up calls or when the primary announcement is being updated. The secondary announcement can also replace the primary announcement at a customer-specified time period.

If the requester does not respond to the first wake-up call, the system places a customer-defined number of additional wake-up calls (1-3 in X11 release 16 and later software, otherwise 3) at five-minute intervals. If these are not answered, the attendant can be notified of the unanswered wake-up call through the Attendant Recall option.

The system balances the wake-up load over five minute intervals generating a maximum of 100 wake-up calls per five-minute period. (500 calls on NT, RT, XT machines and system options 11, 21, 51, 61, and 71 for X11 Release 15 and later software). The system processes one wake-up call every two seconds during peak periods, and one wake-up call every four seconds during lighter periods. A light load is defined as anything less than 60 wake-up call request.

A wake-up request is rejected by the system under the following conditions:

- The wake-up request (in units of 5-minute intervals) is less that one interval ahead of the current time interval. (See note.)
- The wake-up request (in units of 5-minute intervals) is less that five intervals before the current time interval. In other words, the wake-up request is more than 23 hours and eight intervals in advance.
- The interval requested contains 500 calls already for XT/NT/RT for release 15 and later software), 100 calls for other machine types.

  Note: The time interval = (hour x 12) + (minute/5). Always round down to the nearest five-minute interval.

If the interval requested already contains 100 (or 500) calls, the Meridian SL-1 system searches for the next available time interval in the following sequence:

- the five-minute interval before the requested time
- the five-minute interval after the requested time
- the first available five-minute interval within three hours before the requested time.

A Background Terminal (BGD) can also be used to enter Automatic Wake-Up information as well as provide the ability to monitor system operation and grade of service. One or more terminals may be assigned to access AWU data. All data retrieval may be carried out at a pre-selected time of day and may be directed to a hard copy terminal from screen terminals for hard copy output.

500 Wake-Up Calls, X11 release 15 and later software

Increases the number of Automatic Wake-Up calls in a five minute period to 500 calls for NT, RT, XT machines and system Options 21, 51, 61 and 71. The maximum remains the same (100) for all other systems.

The feature enhancement to 500 AWU calls in five minutes allows all users to define the number of rings for the call (2-5). If there is no answer after the defined number of rings, the AWU call will overflow to the next five-minute interval. The system tries three times to terminate the call before it is recalled to the attendant. In X11 release 16, the number of wake-up attempts can also be defined on a customer basis (1-3).

It is recommended that at any one time, no more than 25 500/2500 sets should be ringing. This in engineered in LD 15 (CDB) by setting the number of Rings for Wake-Up (NRWU prompt) properly so as not to exceed the maximum. The NRWU is two to five, with a default of five. Table 1 shows the recommended number of rings for different ringing cycles.

Table 1
Recommended number of rings per AWU call

Time on (seconds)	Time on (seconds)	Maximum number of rings
2*	4*	5*
3	3	2
2	1	5
1	2	5

* North American standards

Table 2
Machine requirements for AWU

Machine type	Maximum number of AWU in 5 minutes	Number of RANs (see note)
NT, 51, 61	500	3
RT	500	3
ST, 21	100	3
XT, 71	500	3

Note: Three basic RANs are provided. Refer to the X11 release 16 feature "Multi-Language Wake-Up" for language-specific RANs.

Only 500 AWU calls can be defined for the system, but up to 750 calls can actually be placed. Up to half of the programmed AWU calls unanswered can be carried over to the next five-minute block. so that any subsequent five-minute block can place 50 (for systems with 100 AWU calls allowed) to 250 (for systems with 500 AWU calls allowed) overflowed AWU calls in addition to the AWU calls set for that five-minute block. The carry-over from one block to the next is important in limiting the number of calls in the original programmed block.

Note: Conference loops are no longer need after X11 release 15.

For a complete description on programming AWU within BGD, please refer to Northern Telecom Publication *Background Terminal facility* (553-2311-316).

Guest Entry of Auto Wake-Up (GEWU) Calls, X11 release 16 and later software Provides guest entry of wake-up call. By using a key on the room set (the "Wake-Up" key or "WUK" key), hotel guests can program or cancel their own wake-up calls based on a 24-hour time format.

This new feature does not alter the operation of AWU, but adds a new option to AWU programming. Overall, unless otherwise specified, operating the wake-up feature is the same regardless of whether or not the set has digit display. The distinction is that with digit display, guests can query their own wake-up call requests. In addition, when programming a wake-up call, the system will search for an display the next available time should the time interval chosen for the wake-up call be full.

Without a digit display, the guest can still program and cancel the wake-up call. Requests must be made on a daily basis, however, since the wake-up time is automatically concealed after each use.

Operating the wake-up feature When the set is idle, the guest presses the WUK key on the room set. The WUK key lamp flashes and the set is

ready to receive the wake-up request time. On sets with digit display, a dash (-) will indicate that no time has been programmed. The guest enters the wake-up request time in 24-hour format (and three to four digits in length).

For example, a wake-up call at 6:00 p.m. is entered as 1800; a wake-up call at 7:00 a.m. is entered as 700 or 0700. The display then shows a dash followed by the 24-hour time (-1800). The WUK key lamp remains flashing. Pressing the WUK key again accepts the entry, and the display clears. The WUK key lamp remains steadily lit until the wake-up call is made.

When the set is idle, a guest may query a wake-up request by pressing the WUK key on a digit-display set. If a wake-up time exists, the existing wake-up time is displayed followed by a dash, and WUK key lamp flashes. If no wake-up time is programmed, the display will only show a dash (-). To end the query, the guest presses the WUK key a second time. The WUK key lamp darkens (when no wake-up time exists) or lights (when a wake-up time exists), and the display clears.

When the set is idle, a guest may cancel a wake-up request by pressing the WUK key while the lamp is lit. For sets with digit display, the wake-up time will display followed by a dash (-). The guest presses the pound key (#) which will display after the dash (-#). The guest then presses the WUK key a second time to confirm the canceled wake-up request time. The WUK key lamp darkens, and the display clears.

Digit display sets (only) If the time interval chosen for the wake-up call is full, the system will search for and display the next available time. If the system cannot find another time, the display shows four dashes (----), and the WUK key lamp remains flashing.

If the system finds another time, the guest has three options:

- to accept the new wake-up time:
  - the guest presses the WUK key
- to reject the new wake-up time and enter another one:
  - the guest enters the new wake-up time and presses the WUK key to validate the new time
- to abort the wake-up time:
  - the guest presses the primary DN key (PDN) or the Release (RLS) key

Note: In each scenario, the WUK key lamp lights and the display clears, except when the wake-up time is aborted and no wake-up time was programmed before the abort. In this case, the WUK key lamp remains dark. If a time was programmed before aborting, the previous wake-up time is restored, and the lamp is lit.

Automatic Wake-Up is only allowed on a set's Primary Directory Number (PDN). For telephones in a multiple-appearance arrangement, all sets are rung; however, only one wake-up time may be assigned against the primary DN. The system tries the wake-up call a customer-defined number of times (1-3), and then treats it as any other unanswered wake-up call. In a single-call arrangement, if any appearance of the DN is busy when the wake-up call is made, the wake-up call is not presented. In a multiple-call arrangement, the wake-up call is presented to all idle appearances.

The AWU key is only supported on Attendant Consoles. However, for X11 release 16 and later releases, an AWU time can be programmed on BCS sets (by means of the Guest Entry of Auto Wake Up feature and a WUK key configured on the set).

The AWU feature in mutually exclusive with Centralized Attendant Services (CAS).

Feature Interactions

The Attendant Administration feature does not support data entry or changes for the AWU feature.

Attendant Overflow Position - AWU recalls are not redirected to a customer-defined Attendant Overflow Position DN.

Coordinated Dialing Plan (CDP) - AWU supports CDP as long as an internal DN is used.

Do Not Disturb (DND) - When a set is configured for DND, a sake-up call may still be presented.

Manual Line or Private Line Services - AWU does not support these features; an AWU call cannot be programmed against a manual line or private line DN.

Night Service - Unanswered AWU calls going through Attendant Recall are discarded if the attendant console is in the Night Service mode. However, AWU may still be programmed when the attendant console is in Night Service.

Pretranslation - When the Pretranslation feature is equipped with AWU, the actual set DN, not the Pretranslation DN, should be used when programming the AWU call request.

Multi-Language Call Party Name Display (CPND) - Call Party Name Display provides the name of the calling party on the liquid crystal display (LCD) screen of a Meridian Modular digital international set when the set is rung. The name string is defined in the language chosen by the user (similar to MLWU) and is independent of the language used of MLWU. For example, the name string displayed on the screen of the set can be in French, while the Automatic Wake-Up call can be in Spanish.

Room status - When a guest checks in or out, the status of the room may change. If an AWU request is still active, it will be concealed if it is included as part of the Check In/Out option.

Feature Packaging

The package number of Automatic Wake-Up is 102. The mnemonic is AWU. (Guest Entry of Auto Wake-Up is an enhancement of AWU and is therefore a part of this package.) The Background Terminal Facility package (99), the Controlled Class of Service package (81) and the Recorded Announcement package (7) are required.

The package number for Multi-Language Wake-Up is 206. The mnemonic is MLWU. The AWU package is required of rMLWU. Refer to the package dependencies of AWU.

Feature Implementation

LD15 - Enable feature in Customer Data Block

AWU		Yes	Activate AWU for a customer
	ATRC	Yes, (No)	Attendant recall allowed or denied
	CONF	0-159	Conference loop number (see note below)
	RANF	0-511	Music RAN route number
	RAN1	0-511	Primary RAN route number
	RAN2	0-511	Secondary RAN route number
		<cr>	RAN2 not required if R2BN equals R2ED
LA11		0-511	Language 1 RAN route pair 1 x = remove language RAN route definition
LA12		0-511	Language 1, RAN route pair 2
LA21		0-511	Language 2, RAN route pair 1
LA22		0-511	Language 2, RAN route pair 2
LA31		0-511	Language 3, RAN route pair 1
LA32		0-511	Language 3, RAN route pair 2
LA41		0-511	Language 4, RAN route pair 1
LA42		0-511	Language 4, RAN route pair 2
LA51		0-511	Language 5, RAN route pair 1
LA52		0-511	Language 5, RAN route pair 2
R2BN		hhmm	RAN2 start time
R2ED		hhmm	RAN2 end time
	NRWU	n	Number of rings for a wake-up call (X11 release 15 and later software) n = 2 - (5) rings
	TAWU	n	Number of wake-up tries for an unanswered AWU call (in release 16 and later software) n = 1 - (3) tries

Note 1: Conference loops are required only for X11 release 14 and earlier release.

Note 2: RAN route number ranges from 0-511 apply to RT, NT and XT machines and 21, 51 and 61 only. Ranges from 0-127 apply to ST, 11, 21 and 21A. Enter "X" to remote a route.

LD16 - Define the correct route types for the feature

TKTP	AWR	AWU RAN route
RTYP	AUD	Audichron recorder

Note: Route 31 cannot be used for AWU on X11 release 13 and earlier software.

LD14 - Define the correct trunk types for the feature

TYPE	AWR	AWU RAN trunk

LD 10/11 - Allow Controlled Class of Service for 500/2500, SL-1 and Meridian digital sets.

CLS	CCSA	Controlled Class of Service allowed
KEY	xx WUK	Assign a WUK key on a BCS set. Must be a key/lamp pair. (X11 release 16 and later software)

LD12 - Allow access to AWU from attendant consoles.

KEY	0-9 AWU	Add an AWU key

LD10 - Allow a language number (0-5) to be assigned to a 500/2500 set.

LANG	(0)-5,x	Language number x - remove language blank = default (Language 0)

LD11 - Allow a language number (0-5) to be assigned to a BCS set.

LANG	(0)-5, x	Language number x - remove language blank = default (Language 0)

Public Switched Data Service

The Public Switched Data Service (PSDS) is a digital data feature that provides a pure 56 Kbps data call between the following:

- an SL-1 and the Central Office (CO)
- a tandem call from an SL-100 to an SL-1
- an SL-1 and other Public Switched Data Service-compatible switches. See Figure 1.

The customer may install a T1 link to different vendors and use the SL-1 data unit to initiate or receive a 56 Kbps digital data call. The digital data call then transports across the vendor's digital network to another SL-1 or SL-100.

The Public Switched Data Service supports DTI-type trunks, TIE and DID/DOD trunks, and Electronic Tie Network-compatible signaling (ETN).

Operation

The data selection (DSEL) in the route data block can be defined as voice calls only (VCE), data calls only (DTA), or voice or data calls (VOD). The call can be defined as voice calls, regular data calls, or Public Switched Data Service calls. Refer to *X11 input/output guide* (553-3001-400) to configure the route data block.

For direct access, the user dials the regular 7 or 10 digits DN. The translation will select the TIE or DID/DOD DTI trunks. If the normal public access trunks are analog trunks, then the data DN needs to be separated into an ESN special number so the user can access the digital DTI facility. For special route access, the user dials a route access code after hearing a dial tone. All the trunks in that route are one of TIE or DID/DOD DTI trunks.

Meridian 1 Data Access Card

Introduction

The NT7D16 Data Access card (DAC) is a data interface card that integrates the functionality of the QPC723A RILC and QPC430 AILC data cards. This combination allows the NT7D16 DAC to work with the RS-232-C, the RS-422 interface, or both.

The DAC supports up to six ports, each with the capability of operating in RS-232-C or RS-422 mode. Each supports its own parameters that, once configured and stored in the SL-1 database memory, are downloaded to the card.

Features

Light Emitting Diodes (LEDs) indicate the status of the connection, as well as indicating the mode (RS-232-C or RS-422) the DAC is operating in. A push button toggle switch allows you to scan all six ports and monitor each port's activity.

The Data Access Card (DAC) supports the following features:

___ Asynchronous and full duplex operation

___ Keyboard dialing

___ Hayes dialing

___ DTE/DCE mode selection

___ Terminal and host connectivity in DCE mode

___ Forced or Normal DTR

___ Hotline

___ Remote and local loopback testing

___ Virtual Leased Line mode

___ Inactivity time-out

___ Wire Test mode

___ Self diagnostics

___ Inbound modem pooling with any asynchronous modems

___ Outbound modem pooling using "dumb" modems

___ Outbound modem pooling using auto dialing modems'

Attendant Supervisory Console

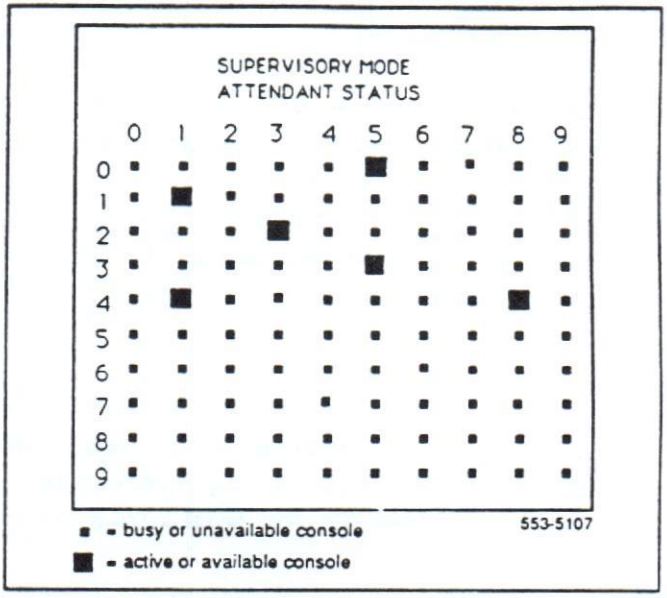
The Supervisory Console feature allows one attendant console in a customer group to function in a supervisory capacity when put into the Position Busy state. The elements of the Supervisory Console feature allow any of the following functions.

Attendant Status Display

The Supervisor, by monitoring the Attendant Status Display, can determine how many attendant positions are in service and able to receive calls.

M2250 console If 1 to 20 attendants are assigned within a customer group, the Supervisory Console can monitor their status using Trunk Group Busy keys. No add-on module is necessary.

Figure 1
Enhanced busy Lamp Field Supervisory mode



If an attendant calls the supervisor who at the time is not in supervisory mode and is handling a call, the supervisory attendant interposition ICI lamp flashes at 60 ipm. As soon as the supervisor is idle, the calling attendant is connected to an idle loop on the Supervisory Console.

Interposition calls can be made from any attendant in the customer group to any other attendant within the customer group. Only one interposition call can be terminated on a console at a given time.

Supervisor serving as attendant

When the supervisor decides to act as an attendant, the Supervisory Console is removed from Position Busy. The console is cleared of all supervisory information. The system presents calls to the Supervisory Console as if it were a normal attendant console. The Supervisory Console must be idle to change states from attendant to supervisor or supervisor to attendant.

Feature Requirements

The Supervisory Console and all attendant consoles (except M2250 attendant consoles) in the customer group must be assigned to QPC297 Attendant Console Monitor circuit packs. Their prime TN must be assigned to unit 0 and the secondary TN must be assigned to unit 1. Units 2 and 3 can be used for power, otherwise they must be left unassigned.

Note: M2250 digital attendant consoles must have the Attendant Supervisory Module (ASM) installed to allow supervision.

The Supervisory Console must be equipped with one of the following if it is a QCW-type console:

- QMT1 type 10 key/lamp expansion module (can display status of attendant s 1-15)
- QMT2 type 20 key/lamp expansion module (can display status of attendants 1-15)
- QMT3 type Lamp Field Array module (can display status of attendants 1-49)

The Supervisory Console must have a Digit Display.

Feature Implementation

LD15 - Enable feature for an attendant console.

OPT	ITG, XTG	consoles equipped or not equipped with key/lamp expansion module (i.e. trunk group busy field)
	ILF, XLF	consoles equipped/not equipped with lamp field array module
LFTN	111 s cc u	secondary TN of Supervisory Console (required when lamp filed array is equipped)
SPVC	1-63	attendant number for Supervisory Console
	0	no Supervisory Console
SBLF	YES, NO	supervisory lamp field array is/is not to be used to monitor other attendant consoles
ITH1	1-255	visual indication threshold 1 (TTH1 ≤ calls in queue ≤ ITH2)
ITH2	2-255	visual indication threshold 2 (ITH2 < calls in queue ≤ ITH3)
ITH3	3-255	visual indication threshold 3 (calls in queue > ITH3)

Supervisor Control of Queue Size

Supervisor Control of Queue Size allows ACD sites to return busy tone to selected call types. With this feature, an ACD DN can return busy tone to excess new calls instead of the standard Interflow treatment (see Figure 1). See Table 1 for impact of this feature on ACD operations.

This feature allows busy tone returned to calls instead of Interflow treatment providing all of the following conditions are met:

- no Interflow DN is designated
- the number of calls in the queue meets or exceeds the overflow threshold
- no overflow destinations are configured, or
  - the overflow destinations are busy, or
  - the overflow destinations are in Night Service
- busy tone is configured for the call origin

This feature allows busy tone treatment instead of Interflow treatment for calls from four possible origins:

- internal call s (including transferred and conferenced calls)
- attendant calls
- CO trunk calls (including WATS and FEX trunks)
- DID or Tie trunks

The treatment can be defined for each call type as busy tone or link in queue. The default for all call origins is link in queue. See *X11 input/output guide* (553-3001-400) LD23 to configure call treatment.

Figure 1
Flowchart for calls treated with Supervisor Control of Queue Size

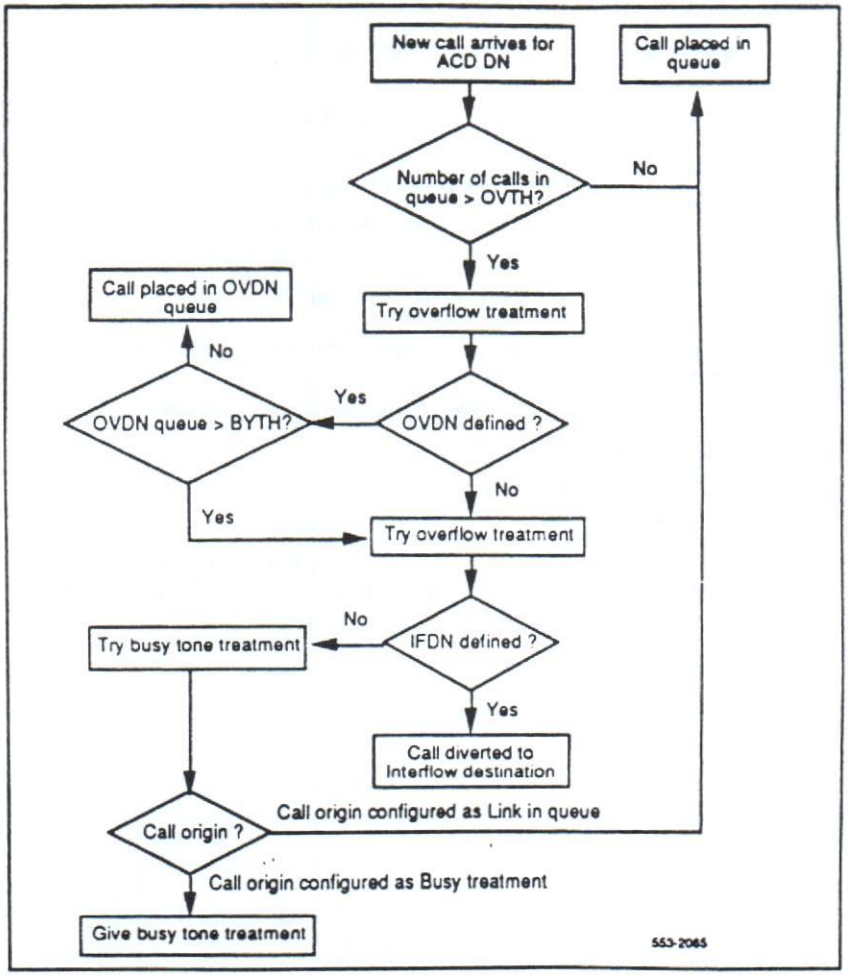


Table 1
Supervisor Control of queue Size Impact on ACD operations

Number of calls meets or exceeds the overflow thresholds	Interflow DN defined	Overflow destination defined and available	Call origin	ACD functionality
no	n/a	n/a	n/a	unchanged
yes	yes	n/a	n/a	unchanged
yes	no	yes	n/a	unchanged
yes	no	no	internal	busy tone or link in queue
yes	no	no	attendant	busy tone or link in queue
yes	no	no	CO (WATS/FEX)	busy tone or link in queue
yes	no	no	DID (Tie)	bus tone or link in queue

Operating Parameters

This feature is configured on an ACD DN basis.

This feature and Interflow treatment are mutually exclusive.

When busy tone is configured for CO trunk calls, either the calling or called party will be billed for the duration of the call. If these costs are not acceptable, configure this feature so that busy tone is not returned for CO, WATS, and FEX trunks.

When CO calls receive busy tone, the caller will hear at least 2 rings before busy tone is sent.

If Night Call Forward (NCFW) diverts a call to a DN that operates with this feature, a caller may hear the night RAN first, then receive a busy tone. It is recommended that a call not be forwarded to a Night DN with this feature enabled when the possibility exists that the RAN may be heard before the busy tone.

Feature Interactions

CAS If a call is extended to an ACD DN by the Centralized Attendant Service (CAS), the call is treated like an attendant type call.

Call Transfer When an ACD DN receives a conference call, the call is considered internal.

Interflow This feature and Interflow treatment are mutually exclusive. If an Interflow DN is configured, this feature is inactive. Conversely, if no Interflow DN is configured, this feature is activated.

Night Service If a call is received by an ACD DN and is forwarded to another ACD DN by Night Call Forward (NCFW), the destination DN treats it as a new call. The destination DN will treat the call as configured. If this feature is activated, the call will be treated as explained.

Call Forward No Answer (CFNA) If Call Forward No Answer (CFNA) redirects a call to a busy destination, the call continues to ring at the original destination set. The caller does not hear any busy tone.

Flexible Call Force

The Call Force feature provides a delay between the time an Agent disconnects from a call, and becomes available to receive another call.

An ACD call answered by Call Forcing can be terminated in one of the following ways:

- When the call is released, the Call Force timer waits the defined period (2 seconds before X11 release 16), and then automatically presents a new call to the Agent.
- Before X11 release 16, if the Agent presses the Incalls key immediately upon releasing the call, there is a 128 millisecond delay before the new call is automatically presented. 500 milliseconds later, the new call is force answered.
- With X11 release 16, if the Agent presses the Incalls key immediately upon call release, there is no time delay before call presentation.
- With Flexible Call Forcing, the new call is force answered 500 milliseconds after the Flexible Call force Timer expires.

X11 release 16 offers the customer the option of setting the Call Force timer for a delay between 0 and 30 seconds. The time delay is configured through LD23 and in Load Management. See *X11 input/output guide* (553-3001-400) and the *ACD load management commands* (553-2671-103).

This timer also acts when a call is sent through a Meridian Link ISDN/AP. By using this timer, the customer can define a delay time between the PCI message sent across the link, and the actual call presentation.

Feature Interactions

Priority Agent - Flexible Call Force interacts with the Priority Agent feature. If a call comes into a queue while the priority 1 Agent is still in delay state (the flexible Call Force timer has not expired), the priority 2 Agent receives the call. The priority 1 Agent is not returned to the idle Agent queue until the specified time is up. There fore an incoming call will be routed to the priority 2 Agent.

Headset and handset - Call Forcing can be used with Agent sets equipped with either a headset or a handset.

If an Agent is equipped with a headset or plug-in handset, the set remains off-hook as long as the headset or handset is plugged into the lower jack pair on the set. Call Forcing operates as just described. If the headset or handset is disabled or removed, the Agent is in Make Busy Mode.

As long as the built in handset remains off-hook, Call Forcing operates as described. If the handset is on-hook, the Agent is in Make Busy Mode.

Enable Call Force

The Call Force feature provides a time delay between when an agent disconnects a call and when the agent is placed in the idle agent queue. The standard time delay is two seconds. X11 release 16 introduces Flexible Call Force that allows the customer to define that delay time as 0 to 30 seconds (in intervals of 2). If ACD Package B is not enabled, than any attempt to enable the Call Force timer will result in an error message.

Note: ACD Package B must be enabled to use the FORC command.

The FORC command allows the load manager to enable or disable the Call Force feature. To **enable** the Call Force feature, give the following command:

FORC XXXXXXX no YES

where:

XXXXXXX = the applicable ACD DN (up to 7 digits)
no = output by the system meaning Call Force is currently disabled
YES = input by the user to indicate enable Call Force

Note: If a Carriage Return is entered, the feature will remain **disabled.**

To **disable** the Call Force feature, give the following command:

FORC XXXXXXX yes NO

where:

XXXXXXX = the applicable ACD DN (up to 7 digits)
yes = output by the system meaning Call Force is enabled
NO = input by the user to indicate disable Call Force

Note: If a Carriage Return is entered, the feature will remain **enabled.**

Enable Flexible Call Force

In X11 release 16, Flexible Call Force allows the customer to define the Call Force time delay. The time set can be from 0 to 30 seconds. The default is 2 seconds.

Note: ACD Package B must be enabled to implement the FCFT command. The FCFT command allows the delay timer to be set.

FCFT XXXXXXX nn NN

where:

XXXXXXX = the applicable ACD DN (up to 7 digits)
nn = output by the system indicating the current delay time
NN = input by the user to enter a new delay time

Note: If a Carriage Return is entered, the current time will remain.

The "reason for redirection" field shows why the call is redirected. The mnemonic displayed is assigned by the customer in LD95. Refer to *ISDN PRI administration* (553-2901-3000) for the procedure to program Network Call Redirection (NCRD). For a complete description of the prompts and responses available, refer to the *X11 input/output guide* (553-3001-400).

If the originally dialed party information is not available, the redirecting party DN is displayed in place of the originally dialed DN. For single call redirection, the originally dialed party is also the redirecting party. If a call is forwarded across the network by Call Forward All Calls (CFAC), the redirecting party is charged for the call.

In addition, NCRD uses Q.931 notification messages to indicate that a transfer has occurred. An extra message helps update set and station displays to show the reason for call redirection. Also, the displays for Attendant extended calls are complete to all call parties.

Terminating Party Notification

The Digit Display for a terminating party with CLID allowed shows the reason for call redirection. Figure 15 is an example of the format for a terminating party on an internal call redirection.

Figure 15
Display format for NCRD: Terminating party with CLID

Originating party DN	Originally called party DN	Reason for redirection	Originating party name

If the originating party information is not available, the redirecting party DN is displayed instead.

Tones on Redirection

Tones returned to the originating party are determined by the reason for call redirection. The following table lists which call redirections return a tone and which tone they return.

All the items in this table relate to Network Services only. Most of these features have similar or exact applications in the regular PBX network, without ISDN functionality.

A redirection counter is transmitted with the call forwarding information. When the count meets the redirection counter maximum, there are two possible scenarios:

1. Network Call Forward All Calls, (NCFAC)
2. Network Call Forward No Answer (NCFNA)

If all call redirections are due to NCFAC, then the calling party receives overflow tone. If one of the redirections is due to NCFNA, then an attempt is made to re-ring the set that initiated the NCFNA.

Reason for Redirection	Tone Returned	Conditions
Attendant Extended calls	Overflow (Fast Busy)	Invalid Call attempt
Busy (CFB)	Busy	Far-end has an active call in progress. See note below.
Call Forward No Answer (CFNA)	Ringing	Network CFNA tries again to ring the dialed DN
Call Pick up	1. Overflow	1. Invalid access code, or invalid Pickup DN
	2. Busy	2. Call already answered by another Pickup group member.
Call Transfer (XFER)	Overflow	1. Invalid call attempt.
		2. Transferring party without XFER allowed
Hunt	Busy	No answer to any Hunt DN and no attendant is available.
Overflow	Overflow (Fast Busy)	

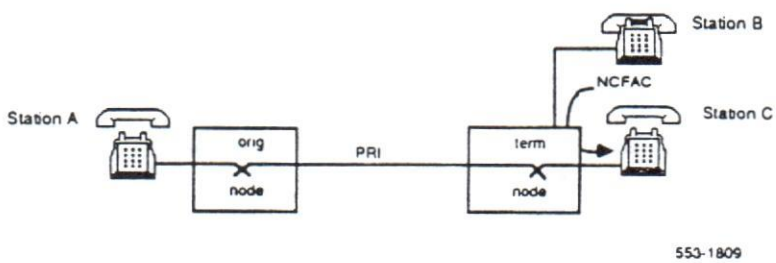
Note: Hunt overrides CFB. When busy stations with both features have calls forwarded to the Hunt DN. The originator receives overflow tone when the call is unable to terminate. The exception is when the "forward to" DN is busy and no redirections are allowed due to NCFNA.

Intranode NCFAC Redirection

The following sequence occurs in a NCFAC scenario. See Figure 17.

1. Station A calls Station B on another node. Station B has the Call Forwarding All Calls feature and forwards to Station C.
2. The call is then forwarded to Station C. Station C resides in the same terminating node as Station B.
3. The terminating node, Station C, sends the CLID display information to Station A. When Station C answers the call, a message is sent to the originating node, Station A.

Figure 17
Intranode NCFAC redirection



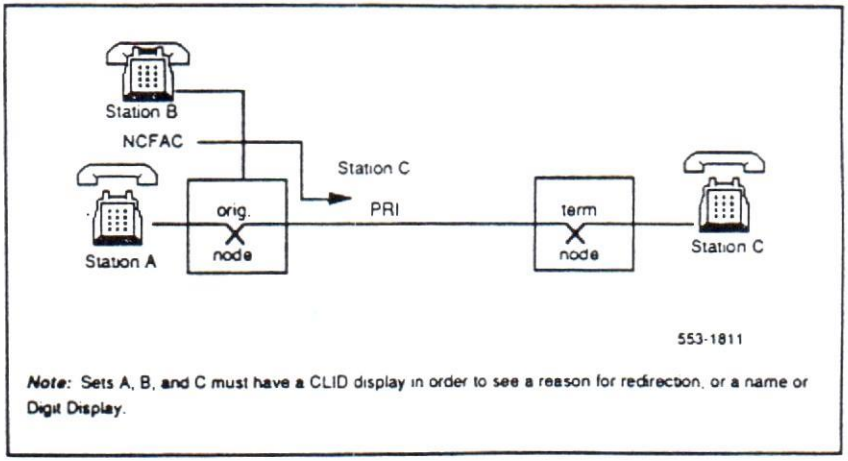
Note: Sets A, B, and C must have a CLID display in order to see a reason for redirection, or a name or Digit Display.

Internode NCFAC Redirection

The following occurs in an internode NCFAC redirection scenario. See Figure 18.

- Station A generates a call to Station B. Station B has the Call Forwarding All Calls feature and forwards to Station C. Station C is located on another switch, making this an internode call.
- A message that contains the called number, calling number, original called number, original redirection reason, and the redirection counter is sent with the call.
- When Station C answers the call, a message is sent to the originating node indicating this response.

Figure 18
Internode NCFAC



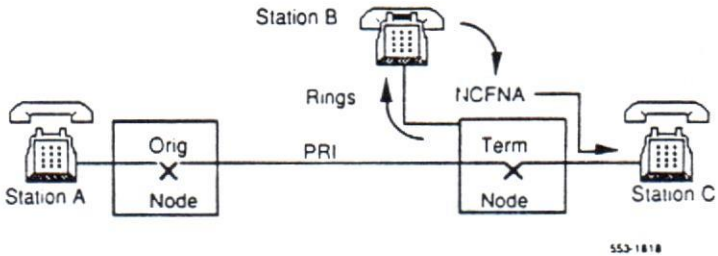
Note: Sets A, B, and C must have a CLID display in order to see a reason for redirection, or a name or Digit Display.

NCFNA Redirection

The following occurs in a NCFNA redirection scenario. See Figure 21.

- Station A generates an internode call to Station B which has the Call Forwarding No Answer feature and forwards to Station C.
- The call is transferred to Station C when the ringing (or alerting) phase times out.
- The terminating node sends a message to the originating node that contains the redirection number (Station C) and the redirection reason (NCFNA).
- When Station C answers the call, the terminating node generates a message to the originating node indicating this response.

Figure 21
NCFNA



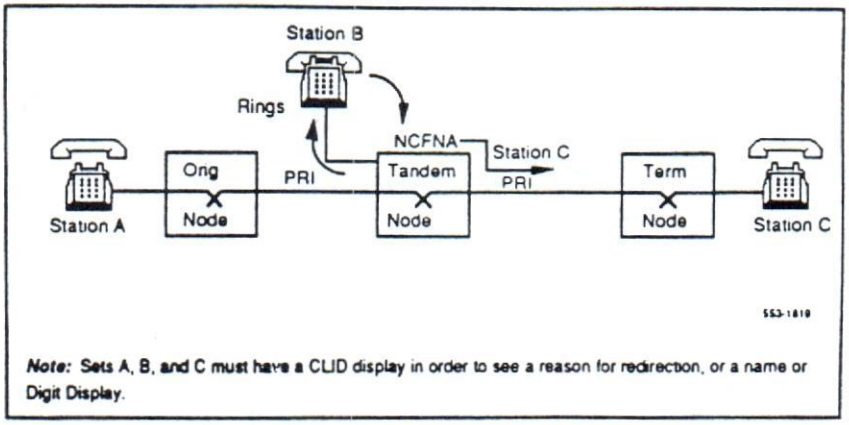
Note: Sets A, B, and C must have a CLID display in order to see a reason for redirection, or a name or Digit Display

Tandem NCFNA Redirection

The following occurs in a tandem NCFNA redirection scenario. See Figure 22.

- Station A generates an internode call to Station B which has the Call Forwarding No Answer feature and forwards to Station C.
- The call is transferred to Station C when the ringing (alerting) phase times out.
- The message sent to the terminating node contains the called number (Station C), calling number (Station A), original called number (Station B), original reason for redirection (NCFNA), and the redirection counter with a value of 1.
- The terminating node sends a message to the tandem node which relays the message to the originating node with the redirection number (Station C) and the reason for redirection.

Figure 22
Tandem NCFNA



Note: Sets A, B, and C must have a CLID display in order to see a reason for redirection, or a name or Digit Display.

Network Call transfer

The originally dialed party can transfer a call over ISDN using Network Call Transfer (NXFER). As with regular call transfers, the incoming call is automatically placed on Hold while the transfer is being set-up. When the redirection is complete, the originally dialed station is automatically released. Refer to the figures in this section for examples of different Network Call Transfer (NXFER) scenarios.

Internal call redirections, where all parties are local on the same switch, do not show a reason for redirection on the Digit Display.

Figure 23
NXFER Internode call

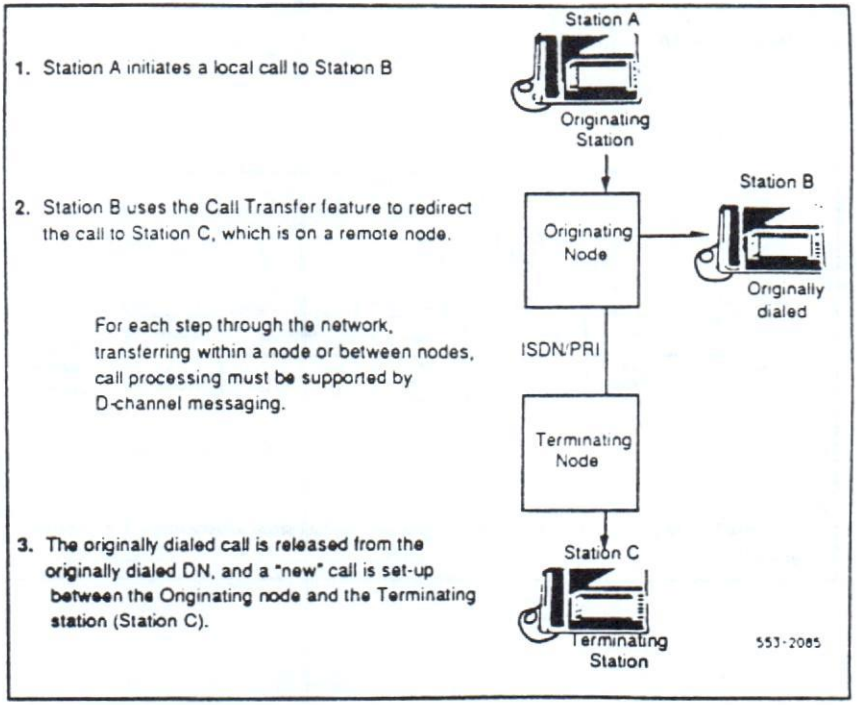


Figure 24
NXFER remote node call

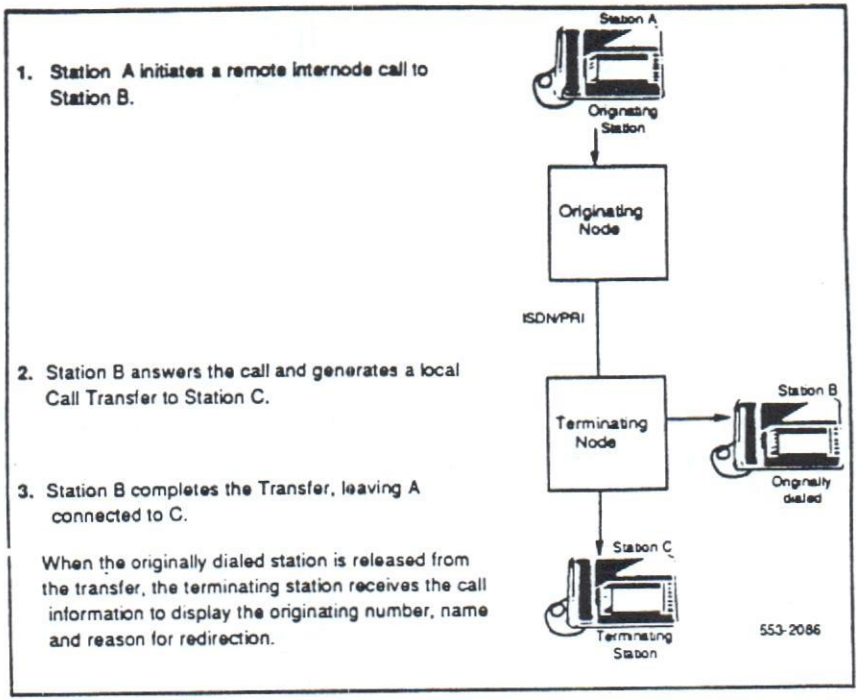


Figure 25
NXFER tandem node call

1. Station A initiates a remote internode call t Station B.

2. Station B, on a tandem node, transfers the call to Station C on another remote node.

3. The call transfer is completed to the terminating station, Station C.

   When the originally dialed station is released from the transfer, the terminating station receives the call information to display the originating number, name and reason for redirection.

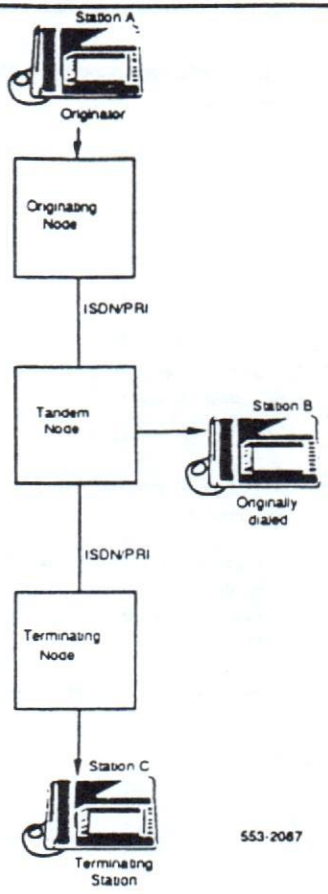


Figure 26
NXFER tandem node remote call

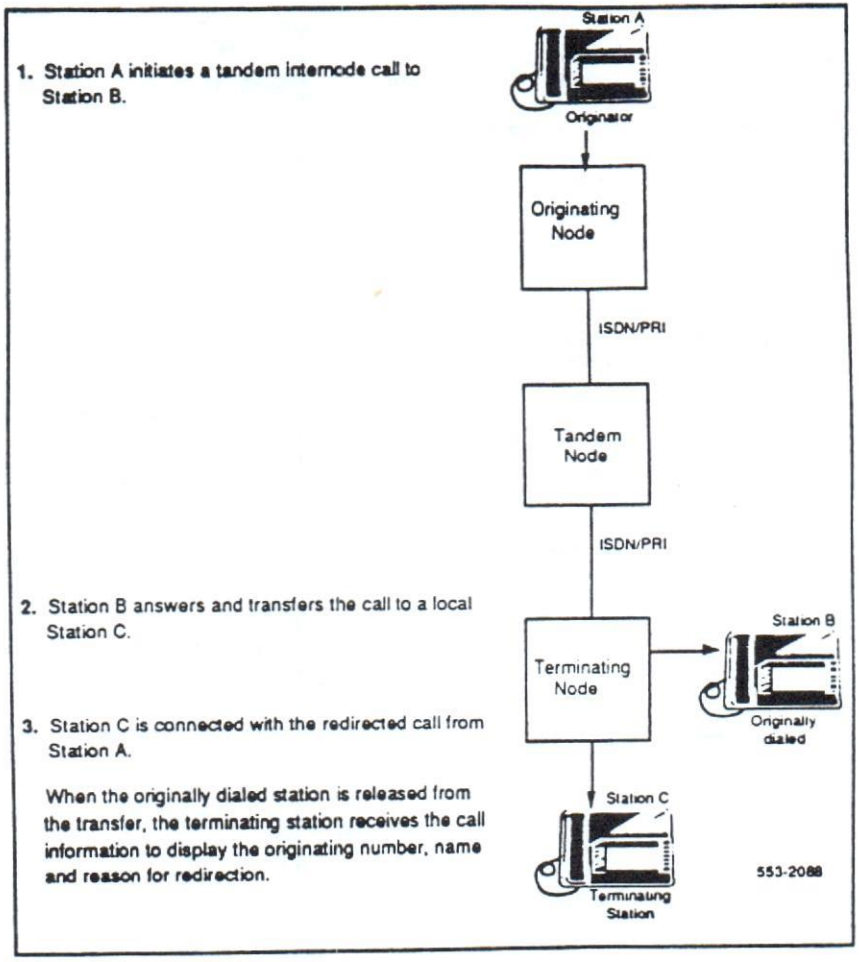


Figure 27
Remote NCFB and NHNT

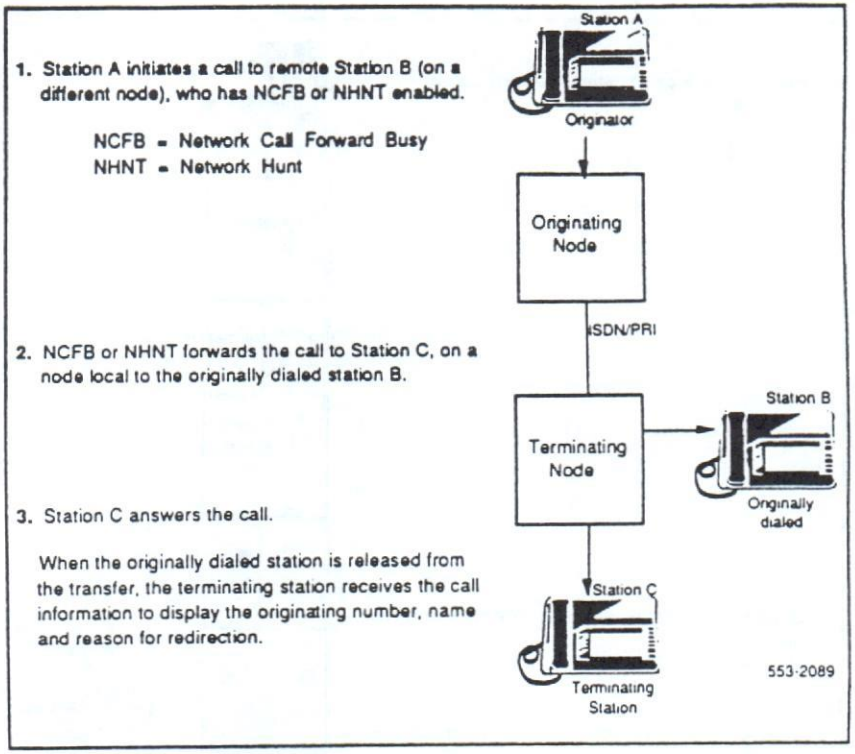


Figure 28
Internode Call Forward Busy and Internode Hunting

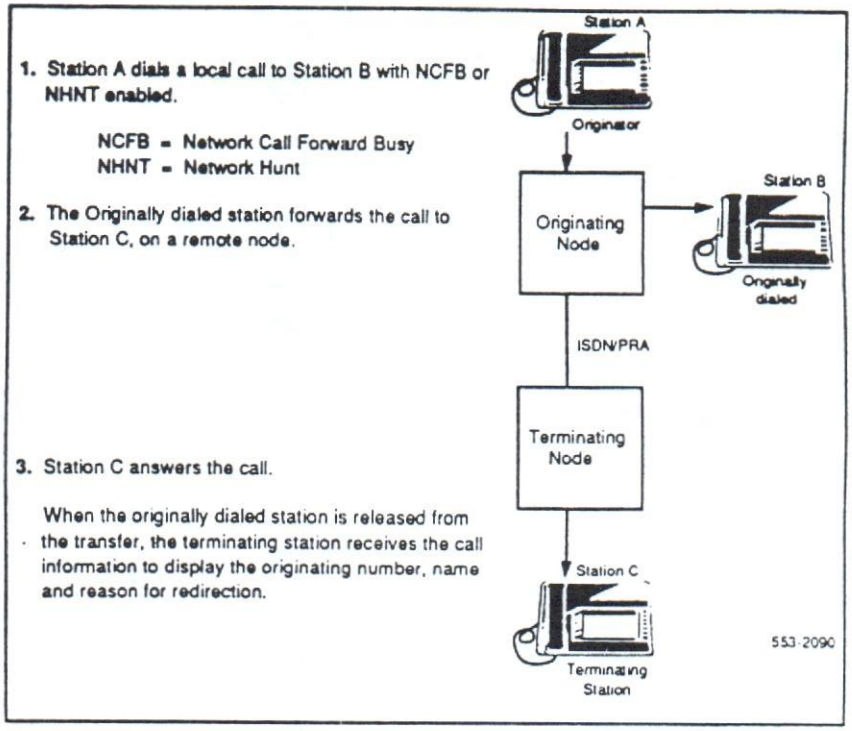


Figure 29
NCFB and NHNT through a tandem node

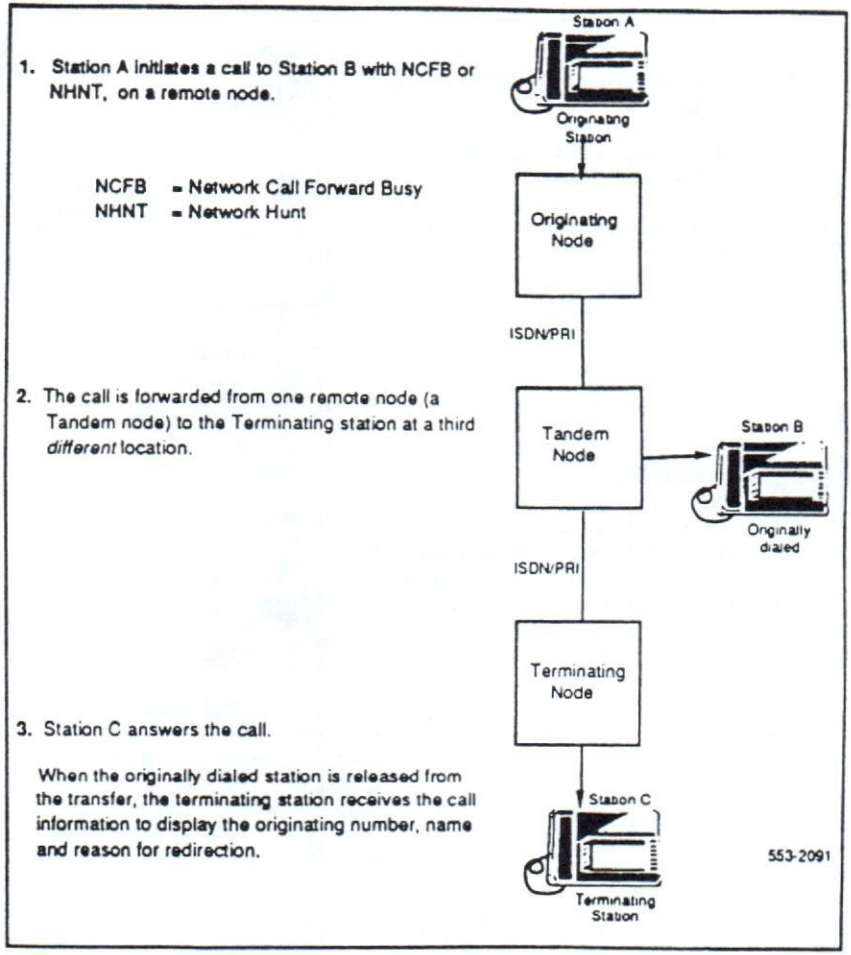


Figure 30
NCFB and NHNT through a tandem node

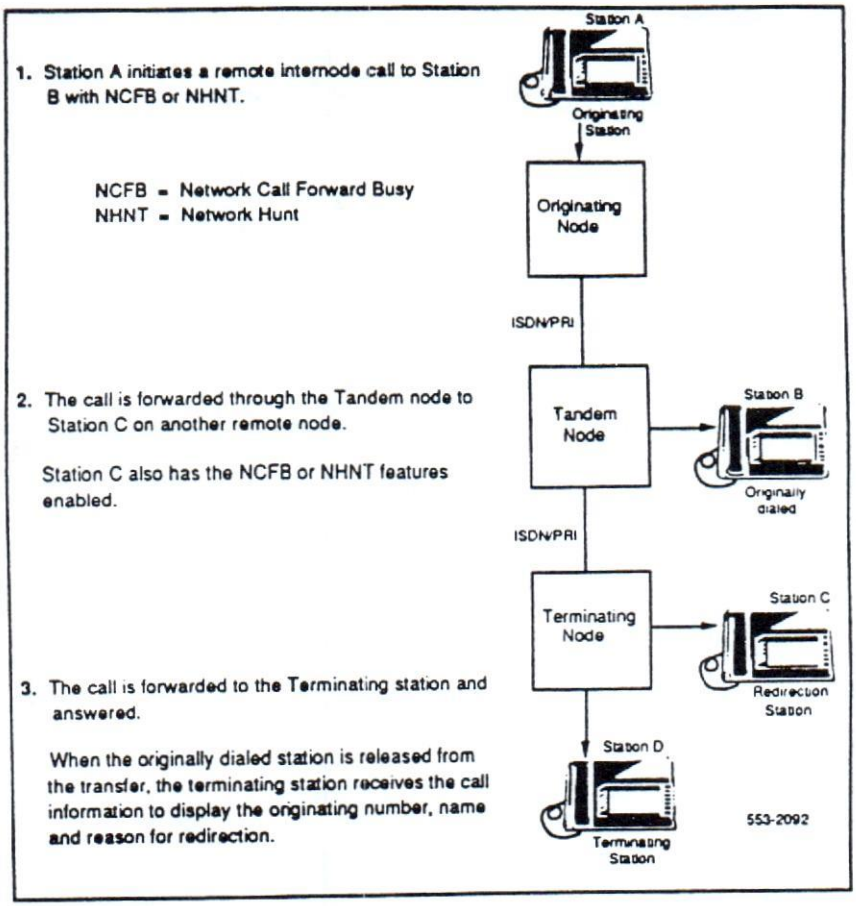
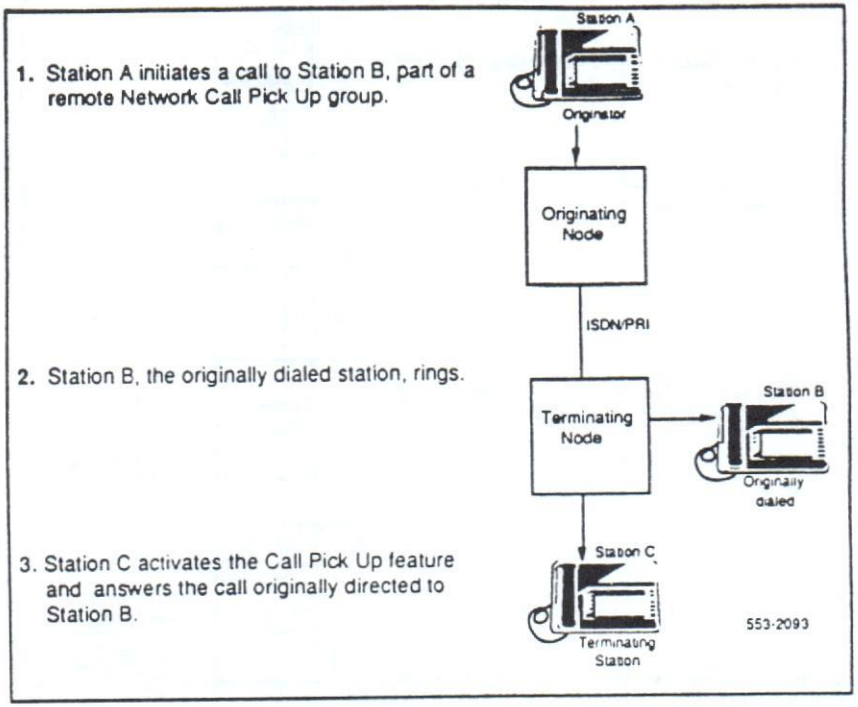


Figure 31
Network Call Pick up



Network Message Services (NMS)

Network Message Services (NMS) uses signaling capabilities from ISDN to provide messaging services over a network link. Networks with PRI or ISL can extend existing message services to any and all users within that network. Access to NMS and feature activation from the messaging system is transparent to the end user.

Network Message Services (NMS) is composed of two distinct applications:

- **Message Center** (X11 release 15)

  NMS-Message center (NMS-MC) supports manual message centers like those found on attendant consoles or some ACD stations.

- **Meridian Mail** (X11 release 16)

  NMS-Meridian Mail (NMS-MM) provides end user access to Meridian Mail services across the network.

Basic NMS functions common to both applications are described here, and details specific to each are described later in this section. There are some differences between Message center and Meridian Mail functions, which are described below.

Within NMS operations, there are direct message calls and indirect message calls. This refers to how the call can access the message facility across the network.

Direct calls - Direct calls are initiated by the user accessing the message center to receive messages. Access is allowed by dialing the message facility directly or using the Message Waiting Key (MWK).

Indirect calls - Indirect calls occur whenever a redirection feature transfers the call to a message center so the caller can leave a message.

An NMS call has two components: basic PRI call and transaction signaling. The PRI portion of the call is supported by ISDN PRI or ISL and Network Call redirection (NCRD) - subject to the requirements for PRI calls and the NCRD feature. Transaction signaling is always supported by NMS.

There are three types of network nodes supporting NMS transaction signaling messages:

- Originating node:

  For direct calls, the originating node is the switch where the calling party resides. For an indirect call, the originating node is where the originally dialed party resides.

- Tandem node:

  This switch can pass transaction signaling messages on to the next switch.

- Terminating node:

  This is the switch where the Message Center or Meridian Mail server resides, and where the call terminates.

Originating and terminating nodes require the NMS Package 175. Also, ISDN transport capability must be equipped at all switches within the network. This feature is supported by Coordinated Dialing Plans (CDP) and uniform dialing plans as prescribed for ISDN support.

Reference Publications

Network Message Services rely in part on the features developed and packages enabled for the end point switches acting as network nodes. Local feature operation on those switches at those end points is essentially unchanged. For a complete description of feature operations and interactions, please refer to the following documents:

SL-1 Telephones and add-on modules description (553-2001-110)

M2000 Digital Telephones (553-2201-110)

Meridian M2317 Digital Telephone (553-2201-115)

Meridian Modular Telephones (553-2201-116)

Message Center description and operation (553-2691-100)

Meridian Mail system administration guide (555-7001-300)

Meridian Mail system administration tools (555-7001-305)

Meridian Mail system administration utilities (555-7001-306)

Meridian Mail AdminPlus system administration guide (555-7001-310)

Meridian Mail Modular option site and installation planning (555-7041-200)

Meridian Mail Module option installation procedures (555-7041-210)

Meridian Mail Options site and installation planning (555-7041-200)

Meridian Mail Options installation procedures (555-7011-210)

For network applications, you should already have on hand the northern Telecom Publications (NTPs) supporting ISDN listed in the introduction to this document. Some message facilities may also require ACD documents in support:

ACD basic features description (553-2671-100)

ACD advanced features description (553-2671-101)

ACD load management commands (553-2671-102)

ACD load management commands (553-2671-103)

There are different sets of documents supporting the ACD D Package, and ACD-MAX applications. Consult with your Northern Telecom representative for a complete list of supporting Northern Telecom Publications.

NMS - Message Center (NMS-MC)

Network Message Services-Message Center (NMS-MC) was introduced in X11 release 15 as an extension of the Message Center feature. It allows connection between SL-1 switches on ISDN PRI and ISL networks, to carry networking capabilities for a caller to access the Message Center (MC). Network Message Services provides message center access and message waiting indication over ISDN PRI/ISL.

These message center configurations are supported:

- ACD Message Center
- DN Message Center
- Attendant Message Center

For these types of Message Centers (MCs), the Message Indication Key (MIK) is used to turn on message waiting indication at a user station. The Message Cancellation Key (MCK) is used to turn off message waiting indication. The NMS-MC supports direct and indirect MC access across SDN. Direct access is initiated by dialing the Message center DN or pressing the message Waiting Key. Indirect access occurs when a call is presented to the MC by any of the call redirection features supported over ISDN.

The Network Call redirection (NCRD) feature allows several different scenarios to redirect calls through network environments. All the different NCRD scenarios are described and illustrated in "NCRD configurations" of this document.

NMS - Meridian Mail (NMS-MM)

NMS-Meridian Mail (NMS-MM) enhances the NMS feature in X11 release 16 software. NMS-MM provides transparent access to the Meridian Mail system across the network. NMS-MM operates only between SL-1 machines supported by the same Meridian Mail server facility. Users on remote nodes configured as part of the NMS-MM server base have access to all the features available on the local switch.

Refer to the NCRD section when you consider the redirections which apply to your particular environment. Also, be aware that Message Center support is on a customer-by-customer basis, and you network should be configured accordingly.

In Meridian Mail applications, different network switches (nodes must be configured with the same Meridian Mail server for proper messaging support. See also the Meridian Mail suite of documents.

Direct calls for NMS-MM are initiated by dialing the message facility directly or pressing MWK on a properly programmed telephone set. Functionality mimics current operations, including Auto-log on with a user's password. Refer to the appropriate document listed above for description of call functions.

Indirect calls are presented to the Meridian Mail server from call redirection services. The NMS feature Meridian Mail application (NMS-MM) relies on Network Call redirection (NCRD) to provide the originally dialed and calling party numbers to the Meridian Mail server for message processing.

Also, NMS-MM supports Off-Net Access through direct dialing. You may have to enable some other feature packages to support this activity such as Direct Inward Dialing (DID) and Direct Inward System Access (DISA).

NMS Feature Requirements

The following list describes the NMS feature requirements and assumptions:

- Network Message Services (NMS) is not supported if non-ISDN PRI or ISL trunks are involved in a direct or indirect Message Center (MC) call.
- The NMS DN must be unique and still be reached by means of PRI or ISL from all NMS users in the network, and vice versa.
- The NMS feature supports SL-1 to SL-1 connections only.
- The local NMS-MM DN defined in each node must also be configured in the meridian Mail server database.
- In-band End-to-End Signaling (EES) is required for NMS-MM features at a remote switch.
- NMS-MM and NMS-MC require NCRD interworking to provide full service.
- NMS-MM requires the Meridian Hospitality Voice Services feature package to provide link recovery enhancements for Meridian Link ISDN/AP.
- Only one message center DN can be defined for a telephone set or station. Multiple message center types are not supported.
- The NMS does not support Trunk Steering Codes (TSCs).
- NMS, as with other ISDN services, requires that the digits dialed by the user be the same as the digits outpulsed by the SL-1. Therefore, NMS does not support Pretranslation.

NMS Feature Interactions

Because the NMS feature operates in conjunction with other feature packages, system administrators should be familiar with feature interactions for the other packages involved. At least, the administrators should have available supporting documentation for the feature requirements listed in this section, or in the introduction to this document.

Specifically, feature interactions for Meridian Mail and Message center normal operations are covered in those respective documents. Listed here are the differences in networking applications which may impact Network Message Services operations.

Network Call forward (NCRD)

Indirect access to the NMS-MM application is based on the NCRD feature package. Be sure to read the NCRD section of this publication to become familiar with those interactions.

Also, the NCRD section describes call scenarios and provides example graphics, which you should also review before implementing this feature.

Meridian Hospitality Voice Services

The NMS-MM feature also depends on the HVS package in X11 release 16 to provide Meridian Link ISDN/AP protocol recovery treatment, for link applications. All calls to the Meridian Mail server are directed to the ACD Night Call Forward (NCFW) DN for ACD queue involved. Call treatment in NMS-MM is identical to the NCFW treatment. Refer to the appropriate ACD document listed in this section.

NMS Packaging

Network Message Services are packaged separately as NMS Package 175. The NMS feature requires ISDN to operate, with all the packages necessary to support ISDN, and Package 148 as a minimum. The NMS-Message Center application requires the Message Center Package 46 for proper support. The NMS-MM application requires Integrated Message Services (IMS) Package 35 for support.

Message Services in the ACD environment require ACD option packages:

- _ ACD basic services Package 40
- _ ACD/A Package 45
- _ ACD/B Package 41
- _ ACD/C Package 42

Each switch needs to be brought to X11 release 15 (or later). Each node should have the feature packages described in this table:

Table 5
Required feature packages for each node

FEATURE PACKAGE			NODE		
Name	Mnem.	No.	Orig.	Tandem	Term.
End-to-End Signaling	EES	10	X	X	X
Integrated Message Service	IMS	35			X
Basic Automatic Call Distribution	BACD	40	X		X
Automatic Call Distribution Pkg A	ACDA	45	X		X
Message Center	MWC	46	X		X
Command and Status Link	CSL	77	X		X
ISDN Network Services	ISDN	148	X	X	X
(Be aware that this requires additional packages in support)					
Network Message Services	NMS	175	X		X
ACD CDR Queue Record	CDRQ	83			X
Auxiliary Processor Link	APL	109			X

SECTION III
DATA INPUT FORMS

OVERLAY 10
PBX Set Data Block

Input action (NOTE: 'x' = number of copies)	New, Out, Chg, Mov, Cpy 'x', End	REQ		
Input for PBX Set or Card Input for Model Definition	500 / CARD 500 M	TYPE		
Model Number	1-127	MODL		
Copy from Terminal Number	CC UU	CFTN		
Starting TN/DN to be copied	CC UU / XXXX..	SFMT		
Destination TN for copied set	CC UU	TN		
Directory Number for copied set	XXXXXXX	DN		
APL Server Associate Set	(NO) YES	AST		
ISDN/AP status msg. group	*(0) - 9*	*IAPG*		
Terminal Number (New, Chg)	CC UU	TN		
Move to Terminal Number	CC UU	TOTN		
Easy Change allowed	(NO), YES	ECHG		
Desired Overlay Mnemonic	XXXX	ITEM		
Card Density	(DD), 4D	CDEN		
1-6 character designator	XXXXXX	DES		
Customer number	0 - 31	CUST		
Dial Intercom Group / Member	0 - 2045; 0 - 99	DIG		
Station extension number	XXXXXXX	DN		
Basic Hunt extension	XXXXXXX	HUNT		
Trunk Group Access Restriction	(0) - 31	TGAR		
Departmental LDN	(NO), 0, 1, 2, 3	LDN		
Network Class of Service	0 - 99	NCOS		
Ringing Number Pick-up group	(0) - 4095	RNPG		
SAR Group Number	(0) - 999	SGRP		
Pretranslation group	(0) - 254	XLST		
Station Control password	XXXX	SCPW		
Code Restriction Block	0 - 7	CRCS		

OVERLAY 10
PBX Set Data Block

Electronic Lock Password	XX...XX	ELKP		
Secretarial Filtering	(NO), BOSS, SEC , <CR>	SFLT		
Secretarial Forward DN of Secretary Set	XXXXXXX			
Category Code for Outgoing CNI of MFC Trunks	(0) - 10	CAC		
500/2500 Set Configured as AST ACD Set	Yes, No	AACD		
Network Call Trace From This Telephone allowed/Denied	CLTA, CLTD	CLS		
Line Disconnect Tone Allowed/ Denied	LDTA, LDTD	CLS		
SEE TABLE 'A' FOR POSSIBLE CLASS OF SERVICE ENTRIES		CLS		
Terminal/Printer Number	0 - <NIPN>	ICT		
Last Number Redial size	0 - (16) - 32	LNRS		
Multi-Tenant number	1 - 511	TEN		
Priority Level	0 - (2) - 7	PLEV		
Station Category Index priority	(0) - 7	SCI		
Forced Charge Account	(NO), YES	FCAR		
Language choice for AWU	*(0) - 5*	*LANG*		
Supervisor position ID	*XXXX*	*SPID*		
Priority level for ACD Agent	*XXXX*	*PRI*		
500/2500 Set Features		FTR		
SEE TABLE 'B' FOR POSSIBLE FEATURE ASSIGNMENT ENTRIES		FTR		
		FTR		
		FTR		
		FTR		
		FTR		

OVERLAY 10
PBX Set Data Block

TABLE 'A'	
CLASS OF SERVICE	ENTRY
Restriction Levels	(UNR), TLD, SRE, FRE, CUN, CTD, FR1, FR2
Call Waiting	(CWD), CWA
Controlled Class of Service	(CCSD), CCSA
Outpulsing	(DIP), DTN, MNL
Enhanced Hotline	(EHTD), EHTA
Call Forward Busy	(FBD), FBA
Station Priority	(LPR), HPR
Hunting	(HTD), HTA
Last Number Redial	(LND), LNA
Message Waiting Lamp	(LPD), LPA
Conference-Six Party	(C6D), C6A
Second Level CFNA	(SFD), SFA
Message Waiting	(MWD), MWA
Ring Again	(XRD), XRA
Internal CDR	(ICDD), ICDA
Line Load Control	(LLCN), LLC1, LLC2, LLC3
Station Loop Preemption	(PRMD), PRMA
Precedence Hunting	(PHTD), PHTA
Precedence Call Waiting	(PCWD), PCWA
Trunk Verification	(TVD), TVA
Message Registration	(MRD), MRA
On / Off Premise Extension	(ONP), OPX
Call Pick-up	(PUA), PUD
Call Forward by Call Type	(CFTD), CFTA
Station-to-Station CWT	(SWD), SWA
Tenant Service	(TENA), TEND
Warning Tone	(WTA), WTD
Call Transfer	(XFD), XFA
Calling Line ID	(PDN), LDN
Call Number Information	(CNID) CNIA
Directory Number Pickup	(DPUD) DPUA
Group Pickup	(GPUD) GPUA
Call Forward External	(CFXA) CFXD
Call Forward No Answer	(FND) FNA
Control Pwd. Override	(OVRD) OVRA
ACD Services For 500/2500 Telephone Sets	(AGTD) AGTA
Audible Reminder of HeldCall	(ARHD) ARHA
Forced Camp-On from Another Ser	(CPFA) CPFD
Forced Camp-On to Another Set	(CPTA) CPTD
ICP Answering Machine	(IAMD) IAMA
Interrogation of Set for Intercept Computer	(IRGD) IRGA
Malicious Call Trace	(MCTD) MCTA
Mesage Interrupt	(MIND) MINA
Priority Call Pick-up Station	(PRSD) PRSA
Countinuous Ring	(CRD) CRA
Multipe Call Arrangement	(SCRA) MCRA
Override	(OVDD) OVDA
Call Transfer Restricted	XFR

TABLE 'B'	
SET FEATURE	ENTRY
Flexible Hotline DN	**HOT** nn XXXX (nn = number of digits - 1 - 31)
Flexible Hotline Direct	**HOT** D nn X....X
Flexible Hotline List	**HOT** L XXX
Call Forward No Answer	**FDN** XXXXXXX
CFNA External Calls	**EFD** XXXXXXX
Hunt DN External Calls	**EHT** XXXXXXX
Call Forward All Calls	**CFW** XX (4 - 23 digits
Call Party Name Display	**CPND**
Permanent Hold	**PHD**
Speed Call User	**SCU** 0 - 8190
Speed Call Controller	**SCC** 0 - 8190
System Speed Call User	**SSU** 0 - 4095
Stored Number Redial	**RDL** XX (1 - 31 digits
ACD DN; Agent ID	***ACD*** *xxxx yyyy*
Auto Dial	**ADL** nn XXXX
Flexible Call Forward No Answer DN	**FDN** XXXXXXX

Default values are in ( )

OVERLAY 10
PBX Set Data Block

Three-party Service	TSA
Exclusive Hold	**(XHD)** XHA
Restrict from Receiving DID Calls	**(UDI)** RDI
Restrict from Receiving Collect Calls	**(RCC)** UCC
Hunt by Call Type	**(HBTD)** HBTA
Exec. Distinctive Ringing	**(0)** EXR1 EXR2 EXR3 EXR4
Call Waiting Night Class Restriction	**(NRWD)** NRWA
Forced Camp-on Night Class Restriction	**(NRCD)** NRCA
Priority Override Night Class Restriction	**(NROD)** NROA
Hospitality Management	**(HSPD)** HSPA

OVERLAY 11

BCS Set Data Block

Input action (NOTE: 'x' = number of copies)	New, Out, Chg Mov, Cpy 'x', End	REQ		
Input for BCS/Digital set or Card Input for Model Set Input for Data Ports	2009,2112, 2016 2018,2317,3000 2006, 2008, 2616 2216, card 2009 M,2112 M 2016 M, 2018 M 2317 M,3000 M 2006 M, 2008 M 2216 M, 2616 M RS232, RS422	TYPE		
Model Number	1 - 127	MODL		
Copy from Terminal Number	CC UU	CFTN		
Starting TN/DN to be copied	CC UU / XXXX..	SFMT		
Destination TN for copied set	CC UU	TN		
Directory Number for copied set	XXXXXXX	DN		
Terminal Number (New, Chg)	CC UU	TN		
Move to Terminal Number	CC UU	TOTN		
Easy Change allowed	(NO) YES	ECHG		
Desired Overlay Mnemonic	XXXX	ITEM		
Card Density	(DD), 4D	CDEN		
1 - 6 Character Designator	XXXXXX	DES		
Customer Number	0 - 31	CUST		
Number of Key Lamp Strips	1 - 7	KLS		
Number of Add-on Modules	0 - 2	AOM		
Flexible Call Fwd No Ans. DN	XXXXXXX	FDN		
Last Hunt Key	XX, 0	LHK		
Trunk Group Access Restriction	(0) - 31	TGAR		
Departmental LDN	(NO), 0, 1, 2, 3	LDN		
Network Class of Service	0 - 99	NCOS		
Ringing Number Pick-up group	(0) - 4095	RNPG		

OVERLAY 11
BCS Set Data Block

System Speed Call list number	0 - 4095	SSU		
SAR Group Number	(0) - 999	SGRP		
Pretranslation group	(0) - 254	XLST		
Station Control Password	XXXX	SCPW		
Electronic Lock Password	XX...XX	ELKP		
Secretarial Filtering	(NO), BOSS, SEC , <CR>	SFLT		
Secretarial Forward DN of Secretary Set	XXXXXXX			
Category Code for Outgoing CNI of MFC Trunks	(0) - 10	CAC		
(REFER TO TABLE 'B' FOR CLS OPTIONS)		CLS		

OVERLAY 11
BCS Set Data Block

Terminal/Printer Number	0 - <NIPN>	ICT		
CFNA DN for EXTERNAL Calls	XXXXXXX	EFD		
Hunt DN for INTERNAL Calls	XXXXXXX	HUNT		
Hunt DN for EXTERNAL Calls	XXXXXXX	EHT		
Last Hunt Key for I/E Short Hunt)	XX	LHK		
Last Number Redial size	4 - (16) - 31	LNRS		
Multi-Tenant number	1 - 511	TEN		
Station Category number priority	(0) - 7	SCI		
Data Station type	ODS, IDS, IOS	DTYP		
All-Digital Connection Prefix	(NO) YES	ADCP		
Modem Pool Route Number	0 - 511 (NT,RT,XT) 0 - 127 (ST)	MPR		
Last key scan for Auto Line Pref.	XX	LPK		
Priority Level	0 - (2) - 7	PLEV		
Forced Charge Account	(NO) YES	FCAR		
Logical TN and AUX link number	1 - 253; 0 - 15	LTN		
Supervisor Position ID	XXXXXXX	SPID		
APL Associate Set Assignment	DN1 DN2	AST		
ISDN/AP status msg. group	*(0) - 9*	*IAPG*		
Agent Number Priority Services	(1) - 48 NT, RT,XT (1) - 32 ST	PRI		
Language choice for AWU	*(0) - 5*	*LANG*		

OVERLAY 11
BCS Set Data Block

(REFER TO TABLE 'A' FOR KEY ENTRY OPTIONS)				
Notes on Equipment	0	0	0	0
	1	1	1	1
	2	2	2	2
	3	3	3	3
	4	4	4	4
	5	5	5	5
	6	6	6	6
	7	7	7	7
	8	8	8	8
	9	9	9	9

OVERLAY 11
BCS Set Data Block

NOTE: THE FOLLOWING PROMPTS APPLY TO THE **DATA PORT** FOR **M2006,M2008,M2016S,M2216,M2616 sets.**

Time Out Value	0 (none), 1 (15 min), 2 (30 min), 3 (60 min)	**TOV**		
Operating Parameter change	(NO) YES	**OPE**		
Asynchronous or Synchronous	(ASYN) SYN	**TRAN**		
Parity	(spac),even,odd,mark	**PAR**		
Forced Digitone Receiver	(OFF) ON	**DTR**		
Duplex	(FULL) HALF	**DUP**		
Hotline	(OFF) ON	**HOT**		
Auto Answer	(OFF) ON	**AUT**		
Data Baud Rate (Default value is '7')	0 (110), 1 (150), 2 (300), 3 (600), 4 (1200), 5 (2400), 6 (4800), 7 (9600), 8 (19200),	**BAUD**		
Dynamic carrier detection	(ON) OFF	**DCD**		
Prompt (KBD Mode)	(ON) OFF	**PRM**		
Virtual Leased Line	(OFF) ON	**VLL**		
Modem	(NO) YES	**MOD**		
SL1/100 Interworking	(OFF) ON	**INT**		
Clock ON / OFF	(OFF) ON	**CLK**		
Data Equipment Mode	(DTE) DCE	**DEM**		
Data Port Language	(ENG) FRN	**DLNG**		
Keyboard Dialing	(OFF) ON	**KBD**		
	Data DN	**KEY**	0 SCR [DN]	
	Secondary Data DN	**KEY**	1 SCR [DN]	
	Call Transfer	**KEY**	2 TRN	
	Automatic Dial	**KEY**	3 ADL [number]	
	Ring Again	**KEY**	4 RGA	
	Speed Call Controller	**KEY**	5 SCC xxx	
	Display	**KEY**	6 DSP	
	Call Forward	**KEY**	7 CFW xxxx	

Default values are in ( )

OVERLAY 11
BCS Set Data Block

TABLE A

FEATURE	ENTRY	FEATURE	ENTRY
ACD Answer Agent	XX **AAG**	Automatic Answerback	XX **AAK**
ACD DN/Agent ID	0 **ACD** [DN ID]	Autodial/length/stored #	XX **ADL** [ll ss]
ACD Agent Key (Load Management)	XX **AGR**	ACD Agent/Agent ID Key	XX **AGT** [ID]
ACD Emergency Call	XX **AMG**	Three-party Conference	XX **AO3**
Six-party Conference	XX **AO6**	Attendant Recall	XX **ARC**
ACD Supervisor Call	XX **ASP**	ACD Calls Waiting	XX **AWC**
Centralized Attendant	XX **CAS**	Call Forward All Calls	XX **CFW** [4-23]
Charge Account	XX **CHG**	Controlled Class of Serivce	XX **COS**
Calling Party Number	XX **CPN**	Call Waiting	XX **CWT**
ACD Display Agents	XX **DAG**	Dial Intercom Group	XX **DIG** [gg mm R/V]
Digit Display	XX **DSP**	ACD Display Calls Waiting	XX **DWC** [DN]
ACD Emergency	XX **EMR**	ACD Enable Interflow	XX **ENI** [DN]...
AUTOVON Flash	XX **FLH**	AUTOVON Flash Override	XX **FOV**
AUTOVON Immediate	XX **IMM**	ACD Activity Code	XX **ACNT**
Group Call	XX **GRC** [0-99]	M2317 Language toggle	29 [ENG] FRN
One-way Hotline (List Entry) (y=Hotline List Number 0 - 999)	XX **HOT** L [y]	One-way Hotline (Direct Entry) (y=terminating DN up to 31 digits)	XX **HOT** D [y]
Two-way Hotline (List Entry (y=Hotline List Number; z=two-way DN)	XX **HOT** L [y z]	Two-way Hotline (Direct Entry) (nn=number of digits in target DN; y=terminating DN up to 31 digits; z=two-way DN)	XX **HOT** D nn [y z]
Room Status	XX **RMK**	Last Number Redial	XX **LNK**
Message Cancellation	XX **MCK**	Multiple Call Non-ring DN	XX **MCN** [DN]
Multiple Call Ring DN	XX **MCR** [DN]	Message Indication	XX **MIK**
Make Set Busy	XX **MSB**	Message Registration	XX **MRK**
Message Waiting	XX **MWK** [DN]	Not Ready	XX **NRD**
REMOVE FEATURE	XX **NUL**	ACD Observe Agent	XX **OBV**
Overflow Position Busy	XX **OVB**	*Override	XX **OVR**
Call Park	XX **PRK**	*Privacy Release	XX **PRS**
AUTOVON Priority	XX **PRY**	Private Line Non-ring DN	XX **PVN** [DN]
Private Line Ring DN	XX **PVR** [DN]	ACD Call Agent	XX **RAG**
Stored Number Redial	XX **RDL** [1-31]	Ring Again	XX **RGA**
*Release	XX **RLS**	*Ringing Number Pick-up	XX **RNP**
Speed Call Controller	XX **SCC** 0-8190	Single Call Non-ring DN	XX **SCN** [DN]
Single Call Ring DN	XX **SCR** [DN]	Speed Call User	XX **SCU** 0-8190
*Manual Signaling	XX **SIG** [DN]	System Speed Call Controller	XX **SSC** 0-4095
System Speed Call User	XX **SSU** 0-4095	Time and Date	XX **TAD**
*Malicious Call Trace	XX **TRC**	Call Transfer	XX **TRN**
Voice Call	XX **VCC** [DN]	User Status	XX **UST**
DN Pickup	XX **DPU**	Group Number Pickup	XX **GPU**
Night Service ACD-DN	XX **NSVC** XXXX	No Hold Conference/Autodial	XX **CA** 4 - (16) - 23 x...x
No Hold Conf./Direct Hotlline	XX **CH D** dd x..x	No Hold Conference/Hotline List	XX **CH L** yyy
No Hold Conf./Speed Call	XX **CS** zzz	DID Route Control	XX **DRC** xxx
No Hold Conference	XX **NHC**	Centrex Switchhook Flash	XX **THF**
Guest entry of AWU	XX **WUK**	ACD Call Waiting Time Indication	XX **ATW**
Busy Forward Status	XX **BFS** CC 00 00 UU	Group Hunt Deactivation	XX **GHD**
Hold	XX **HLD**	Associated Loudspeaker DN	XX **LSPK** xxxxxx
Ringing Change	XX **RCK** (0) - 7	Enhanced Override	XX **EOVR**
		Radio Paging Access Code	XX **RPAG** xxxx

Entries in [ ] indicates variable fields.
*** indicates that an associated LED is not required**

Default values are in ( )

OVERLAY 11
BCS Set Data Block

TABLE B

CLASS OF SERVICE	ENTRY	CLASS OF SERVICE	ENTRY
Unrestricted/Toll Deny/Semirestricted/	(UNR) TLD,	Exclusive Hold Deny/Allow	(XHD) XHA
Fully Restricted/Conditionally Toll	SRE, FRE,	Internal CDR Deny/Allow	(ICDD) ICDA
Deny/Conditionally Unrestricted/	CTD, CUN	Line Load Control OFF	(LLCN)
Fully Restricted 1 and 2	FR1, FR2	Line Load Control 1, 2, 3,	LLC1, 2, 3
Automatic Answerback Deny/Allow	(AAD) AAA	Message Registration Deny/Allow	(MRD) MRA
		Malicious Call Trace Deny/Allow	(MCTD) MCTA
No Digit Display	(NDD)	Station Loop Prem. Deny/Allow	(PRMD) PRMA
Automatic Digit Display	ADD	Precedence Hunting Deny/Allow	(PHTD) PHTA
Standard Digit Display	DDS	Precedence Call Wait Deny/Allow	(PCWD)PCWA
Touchphone Digit Display	TDD	Second Level CFNA Deny/Allow	(SFD) SFA
		Call Fwd Call Type Deny/Allow	(CFTD) CFTA
Deny/Allow Observation of Supervisor	(DOS) AOS	Tenant Service Allow/Deny	(TENA) TEND
Controlled Class of Service Deny/Allow	(CCSD) CCSA	Server Voice Message Deny/Allow	(VMD) VMA
Command Status Link Deny/Allow	(CMSD) CMSA	Warning Tone Allow/Deny	(WTA) WTD
Digital Set Distinctive Ring 1	(DRG1)	Call Party Name Display Deny/Allow	(CNDD) CNDA
Distinctive Ring 2	DRG2	Calling Line ID	(LDN) PDN
Distinctive Ring 3	DRG3	Deny/Allow Data port verification	(DDV) ADV
Distinctive Ring 4	DRG4	Call No. Information deny/allow	(CNID) CNIA
Data Service Access Deny/Allow	(DSX) DSI	DN Pickup deny/allow	(DPUD) DPUA
SL-1 Voice/Data/64kbps Terminal	(VCE) DTA, 64C	Group Pickup deny/allow	(GPUD) GPUA
Call Forward Busy Deny/Allow	(FBD) FBA	English or French for M2317	(ENG), FRN
Call Forward No Answer Deny/Allow	(FND) FNA	Dialed Name Display deny/allow	(DNDD) DNDA
Digital Set Handsfree Deny/Allow	(HFD) HFA	Call Forward External deny/allow	(CFXA) CFXD
Low/High Priority Station	(LPR) HPR	Flexible Incoming Tones deny/allow	(FITD) FITA
Hunting Deny/Allow	(HTD) HTA	Aud. Reminder held call deny/allow	(ARHD) ARHA
IMS Attendant Deny/Allow	(IMD) IMA	Ntwk ACD countdown deny/allow	(CNTD) CNTD
Incoming Ring Line Pref. Deny/Allow	(IRD) IRA	Automatic Hold deny/allow	(AHD) AHA
Last Number Redial Deny/Allow	(LND) LNA	Intercept Position deny/allow	(IPND) IPNA
Maintenance Set Deny/Allow	(MTD) MTA	Message Interrupt deny/allow	(MIND) MINA
Message Waiting Deny/Allow	(MWD) MWA	Priority Call Pick-up deny/allow	(PRSD) PRSA
Non-ring Incoming Line Pref. Deny/Allow	(NID) NIA	No Lock Directory Softkey	(ALDR) NLDR
Outgoing Line Pref. Deny/Allow	(OLD) OLA	Unrestricted from Rec. Collect Calls	(RCC) UCC
Optional Privacy Deny/Allow	(POD) POA	Forced Camp-On from Another Set	(CPFA) CPFD
Ringing Number Pick-up Allow/Deny	(PUA) PUD	Forced Camp-On to Another Set	(CPTA) CPTD
ACD Agent/Supervisor	(AGT) SPV	Unrestricted from Rec. DID Calls	(UDI) RDI
DN Display on Another Set	(DDGA) DDGD	Name Display on Another Set	(NAMA) NAMD
Distinctive Ringing on/off	(EXRO) EXR1	Call Waiting Night Class Restriction	(NRWD) NRWA
	EXR2 EXR3	Forced Camp-On Night Class Rest.	(NRCD) NRCA
	EXR4	Priority Override Night Class Rest.	(NROD) NROA
Hunt by Call Type deny/allow	(HBTD) HBTA	Hospitality Management deny/allow	(HSPD) HSPA
Station-to-Station Call Wait Deny/Allow	(SWD) SWA	Precedence Call Waiting Allowed	(PCWD) PCWA

Default values are in ( )

OVERLAY 12
Attendant Data Block

Input action	New,Out,Chg,End	REQ		
Input for Console or Power	ATT, 2250, PWR	TYPE		
Terninal Number	CC UU	TN		
Card Density	(DD)	CDEN		
Second Terminal Number	CC UU	SETN		
Card Density of SETN	(DD)	CDEN		
Customer Number	0 - 31	CUST		
Attendant Number	1 - 63	ANUM		
System Speed Call user list	0 - 4095	SSU		
Scheduled Access Restrictions Group Number	(0) - 999	SGRP		
Internal CDR deny or allow	(ICDD) ICDA	ICDR		
Atten. Alternate Answer DN	XXXXXXX	AADN		
Enhanced Busy Lamp Field	(BLFD) BLFA	EBLF		
Call Party Name Disp. deny/allow	(CNDD) CNDA	CPND		
Intercept Position	(NO) YES	ICP		
ICI Keys to have Presentation Status	0 - 19 0 - 19 ...	PRES		
(REFER TO TABLE 'A' FOR KEY OPTIONS)		KEY	0	0
			1	1
			2	2
			3	3
			4	4
			5	5
			6	6
			7	7
			8	8
			9	9

OVERLAY 12
Attendant Data Block

TABLE A

FEATURE	ENTRY
Auto Dial (up to 24 digits)	XX ADL XXX
Automatic Wake-up	XX AWU
Barge In (Must be Key One)	01 BIN
Break-in	XX BKI
Busy Verify (Must be Key Zero)	00 BVR
Charge Account	XX CHG
Controlled Class of Service	XX COS
Calling Party Number	XX CPN
Display Calls Waiting	XX DCW
Do-Not-Disturb	XX DDL
Display Date	XX DDT
Display Destination	XX DPD
Display Source	XX DPS
Display Time	XX DTM
Autovon Flash Call	XX FLH
Autovon Flash Override Call	XX FOV
Group Do-Not-Disturb (0 - 99)	XX GND XX
Autovon Immediate Call	XX IMM
Initialize	XX INT
Message Cancellation	XX MCK
Display/Change Date	XX MDT
Message Indication	XX MIK
Display/Change Time	XX MTM
Meter Key	XX MTR
Network Attendant Service	XX NAS
Remove Feature	XX NUL
Paging/Access Code	XX PAG XXXXXXX
Attendant Administration	XX PRG
Call Park	XX PRK
Autovon Priority Call	XX PRY
Stored Number Redial (31 digits)	XX RDL
Radio Page Access Code	XX RPAG
Routing Control (with NCOS)	XX RTC
Semi-Automatic Camp-On	XX SACP
Speed Call Controller (0 - 8190)	XX SCC XXXX
System Speed Call Cont. (0 - 4095)	XX SSC XXXX
Series Call	XX SECL
Malicious Call Trace	XX TRC
End-to-End Signaling	*XX EES*

OVERLAY 13
Digitone Receiver Data Block

Input action	New, Chg, Mov, Out	**REQ**		
Digitone Rec / Tone Detector	DTR, TDET, MFC, DTD, MFE	**TYPE**		
Terminal Number	CC UU	**TN**		
Polarity of LED Messages	(NORM) REV	**POLR**		
Card Density	DD	**CDEN**		
Move to Terminal Number	CC UU	**TOTN**		

Input action	New, Chg, Mov, Out	**REQ**		
Digitone Rec / Tone Detector	DTR, TDET, MFC, DTD, MFE	**TYPE**		
Terminal Number	CC UU	**TN**		
Polarity of LED Messages	(NORM) REV	**POLR**		
Card Density	DD	**CDEN**		
Move to Terminal Number	CC UU	**TOTN**		

Input action	New, Chg, Mov, Out	**REQ**		
Digitone Rec / Tone Detector	DTR, TDET, MFC, DTD, MFE	**TYPE**		
Terminal Number	CC UU	**TN**		
Polarity of LED Messages	(NORM) REV	**POLR**		
Card Density	DD	**CDEN**		
Move to Terminal Number	CC UU	**TOTN**		

Input action	New, Chg, Mov, Out	**REQ**		
Digitone Rec / Tone Detector	DTR, TDET, MFC, DTD, MFE	**TYPE**		
Terminal Number	CC UU	**TN**		
Polarity of LED Messages	(NORM) REV	**POLR**		
Card Density	DD	**CDEN**		
Move to Terminal Number	CC UU	**TOTN**		

Default values are in ( )
DTR

OVERLAY 14
Trunk Data Block

Input Action	new,out,chg,mov,end	**REQ**		
Trunk Type	adm,aid,atvn,awr,caa, cam,cot,csa,dic,did, fex,mdm,mus,pag, ran,rcd,rlm,rlr,tie, wat,awr,isa Note: The optional **"M"** entry following the Trunk Type is used to indicate that a model trunk is being define Example: COT M	**TYPE**		
Model Number	1 - 127	**MODL**		
Terminal Number or PRA loop/channel number	CC UU LL CH {1.544 MB DTI / PRI LL 0 - 9, CH 1 - 24} {2.048 MB DTI / PRI LL 0 - 9, CH 1 - 30/31}	**TN**		
Move to TN	CC UU	**TOTN**		
Card Density	(DD)	**CDEN**		
Trunk Card Type	XFEM, XUT, XDID, XEM, XCOT	**XTRK**		
Signalling Category Table (1) - 16	**SICA**			
Pad Category Table	(1) - 16	**PDCA**		
Channel to Operate in A/MU Law	MU, A	**PCML**		
DASS2/DPNSS D- Channel	0 - 31	**DDSL**		
DASS2/DPNSS Signalling Link	0 - 31	**DTSL**		
Level 3 Signalling	DPN, DAS, APNS	**SIGL**		
Customer number	0 - 31	**CUST**		
Digital FEX Trunks	(NO) YES	**SFEX**		
Network Class of Service	0 - 99	**NCOS**		
Route and Member Number	0 - 127; 1 - 254	**RTMB**		
Associate Cannel Numbers with Member Numbers	YES, (NO)	**INC**		

OVERLAY 14
Trunk Data Block

X or Y Priority Designations	(XHP), YLP	PRIO		
Channel ID for Trunk	1 - 382	CHID[2]		
TN of Modem	CC UU	MTN		
DN for PVR	XXXXXXX	PRDN		
Call Modification Allowed	(NO) YES	CMF		
DN for Release Link Trunk	XXXXXXX	RLDN		
Night Service Group Number	(0) - 9	NGRP		
DN for Night Service	XXXXXXX	NITE		
DN for Auto Terminated trunk	XXXXXXX	ATDN		
Trunk Group Access Restriction	(0) - 31	TGAR		
Signalling type	grd,lop,eam,ldr,oad, dx2,dx4,em4	SIGL		
Normal or Muted Outpulsing	NOR, (MUT)	XDIC		
4 - Wire E & M Type 1 or 2	TY1, (TY2)	EMTY		
Carrier Pad In or Out	CIN, (COUT)	CPAD		
Battery or Loop Outpulsing	BOP, (LOOP)	LDOP		
Termination impedance	(600), 900, 1200	TIMP		
Balance Impedance	600, (3COM)	BIMP		
Start Arrangement - Incoming	imm,wnk,ddl,owk	STRI		
Start Arrangement - Outgoing	imm,wnk,ddl,owk	STRO		
Automatic Guard Detection	YES, (NO)	SEIZ		
Multifrequency Digit Level	(0) - 15	MFL		
MFC/MFE - Pads In or Out	YES, (NO)	MFPD		
Trunk Identifier	nnnnnnn	TKID		
Digitone Receiver Attached Acknowledgement	YES, (NO)	DTRA		
Answer Supervision	(NO) YES	SUPN		

SEE TABLE 'A' FOR CLASS OF SERVICE ENTRIES		CLS		
Manual Directory Number	XXXXXXX	MNDN		
Restrict Forced Charge Account	(NO) YES	FCAR		
AIOD Trunk Identifier	XXXX	ADID		
Music Conference Loop[1]	XX	CFLP		

TABLE 'A'

CLASS OF SERVICE	ENTRY
Unrestricted/Toll Denied/Semirestricted/Fully Restricted	[UNR] TLD, SRE, FRE
Conditionally Unrestricted/Conditionally Toll Deny/ Fully Restricted 1/Fully Restricted 2	CUN, CTD, FR1, FR2
Calling Party (Denied) Allowed	[CND] CNA
Central Office Ringback (Not Provided) Provided	[CORX] CORP
DTR Pad Value (Denied) Allowed	[DRPA] DRPD
Hong Kong DTI (Denied) Allowed	[HKD] HKA
Japan DID/Japan CO Capabilities	JDID JCO
Multifrequency Compelled Signalling	MFC
Multifrrequency Signalling for Socotel	MFE
Reverse earpiece (Denied) Allowed	[XREP] RVEP
ACD Priority (Not Required) Required	[APN] APY
(Dial Pulse), Digitone, Multifrequency	[DIP] DTN, MFR
Echo Suppression (Denied) Allowed	[ECD] ECA
(Low) High Priority Station	[LPR] HPR
Manual Incoming (Denied) Allowed	[MID] MIA
(10) / 20 Pulses per Second	[P10] P12 P20
(Non-transmission compensated) Transmission Compensated; Via Net Loss	[NTC] TRC, VNL
Warning Tone (Allowed) Denied	[WTA] WTD
Centrex Switchhook Flash (Denied) Allowed	[THFD] THFA

[2] Channel ID must be set manually in coordination with support personnel at the receiving end PBX or CO.

[1] If the 'TYPE' is 'MUS', the conference loop number assigned must be physically located in the same network group as the trunk being assigned.

OVERLAY 15
Customer Data Block

New, Out, Chg, End	REQ		
CDB (Customer Data Block)	TYPE	CDB	CDB
Customer # 0 - 31	CUST		
To Customer # 0 - 31	TOCU		
[NO] YES (Department Listed Directory Number)	DLDN		
XXXXXXX (Department Listed Directory Number 0)	LDN0		
XX XX XX (LDN0 Dept. Att.: Range = 1 - 15; ALL)	LDA0		
XXXXXXX (Department Listed Directory Number 1)	LDN1		
XX XX XX (LDN1 Dept. Att's. ; Range = 1 - 15; ALL)	LDA1		
XXXXXXX (Department Listed Directory Number 2)	LDN2		
XX XX XX (LDN2 Dept. Att's.; Range = 1 - 15; ALL)	LDA2		
XXXXXXX (Department Listed Directory Number 3)	LDN3		
XX XX XX (LDN3 Dept. Att's. ;Range = 1 - 15; ALL)	LDA3		
0 - 2045 (Total Dial Intercom Groups)	DGRP		
[NO] YES (Turn on Distinctive Ring for Dial Intercom)	IRNG		
[1] - 4 (Number of digits dialed for Group Pickup)	PKND		
XXXXXXX (First Night Service DN by time of day)	NIT1		
hhmm (Hour and minute for first night service DN)	TIM1		
XXXXXXX (Second Night Service DN by time of day)	NIT2		
hhmm (Hour and minute for second night service DN)	TIM2		
XXXXXXX (Third Night Service DN by time of day)	NIT3		
hhmm (Hour and minute for third night service DN)	TIM3		
XXXXXXX (Fourth Night Serivce DN by time of day)	NIT4		
hhmm (Hour and minute for fourth night service DN)	TIM4		
[NO] YES (Enable Recall with Priority During Night Srv.)	RPNS		
[NO] YES (Test Line input request)	TSTL		
XXXXXXX (DN for '100' type test line)	T100		
XXXXXXX (DN for Reference Trunk 0)	REF0		
XXXXXXX (DN for Test Trunk 0)	TST0		

XXXXXXX (DN for Reference Trunk 1)	REF1		
XXXXXXX (DN for Test Trunk 1)	TST1		
XXXXXXX (DN for Reference Trunk 2)	REF2		
XXXXXXX (DN for Test Trunk 2)	TST2		
XXXXXXX (DN for Reference Trunk 3)	REF3		
XXXXXXX (DN for Test Trunk 3)	TST3		
XXXXXXX (Special Service Prefix Code)	SPRE		
XXXXXXX (Attendant DN)	ATDN		
0 - 99 (Network Class of Service)	NCOS		
[NO] YES (CAS requested for Customer)	CAS		
[NO] YES (CAS Main requested)	MAIN		
[NO] YES (CAS Default requested)	DFLT		
[NO] YES (Optional LDN Tone from CAS Remote)	LDNT		
XXXXXXX (Local Attendant DN)	LADN		
Release Link Trunk Route Number 0 - 127			
XXXXXXX (CAS Hold DN on CAS Remote)	CHDN		
XXX (CAS Hold Recall Timer 0-512 in 2 sec increments)	HRCL		
Customer Options (Complete Table 'B' for entries)	OPT		
XXXX (Value added Server port identification)	*VSID*		
[0] 1, 2, 3, 4 (assign status events to group 1)	*GRP1*		
[0] 1, 2, 3, 4 (assign status events to group 2)	*GRP2*		
[0] 1, 2, 3, 4 (assign status events to group 3)	*GRP3*		
[0] 1, 2, 3, 4 (assign status events to group 4)	*GRP4*		
[0] 1, 2, 3, 4 (assign status events to group 5)	*GRP5*		
[0] 1, 2, 3, 4 (assign status events to group 6)	*GRP6*		
[0] 1, 2, 3, 4 (assign status events to group 7)	*GRP7*		
[0] 1, 2, 3, 4 (assign status events to group 8)	*GRP8*		
[0] 1, 2, 3, 4 (assign status events to group 9)	*GRP9*		
[NO] YES (DNIS Link Option)	LINK		

XXXXXXX (First DN of lamp field array)	LFFD		
0 - 15 (Application Program Link for DNIS)	APL		
INTERCEPT TREATMENTS: YYY = ovf, atn, ran, nap, bsy, src1 - src8 ZZZ = RAN Route Number 0 - 127 (MS,ST,N) 0 - 511 (NT,RT,XN,XT)			
[NO] YES (Intercept Treatment Requested)	INTR		
YYY YYY YYY YYY (Access Denied Calls)	ACCD		
ZZZ (RAN Route Number)	RANR		
YYY YYY YYY YYY (Call to Vacant Number)	CTVN		
ZZZ (RAN Route Number)	RANR		
YYY YYY YYY YYY (Maintenance Busy / RPE Fail)	MBNR		
ZZZ (RAN Route Number)	RANR		
YYY YYY YYY YYY (Code/Toll Restricted Call)	CTRC		
ZZZ (RAN Route Number)	RANR		
YYY YYY YYY YYY (Calls to Listed Directory No.)	CLDN		
ZZZ (RAN Route Number)	RANR		
YYY YYY YYY YYY (Invalid NARS/BARS Call)	NINV		
ZZZ (RAN Route Number)	RANR		
YYY YYY YYY YYY (Invalid NARS/BARS Translation)	NITR		
ZZZ (RAN Route Number)	RANR		
YYY YYY YYY YYY (NARS/BARS Restricted Call)	NRES		
ZZZ (RAN Route Number)	RANR		
YYY YYY YYY YYY (NARS/BARS Blocked Call)	NBLK		
ZZZ (RAN Route Number)	RANR		
YYY..YYY..YYY..YYY..(MFC Call to Vacant Office)	MFVO		
ZZZ (RAN Route Number)	RANR		
YYY..YYY..YYY..YYY..(MFC Call to Vacant Number)	MFVN		
ZZZ (RAN Route Number)	RANR		
YYY..YYY..YYY..YYY..(MFC Congestion)	MFCG		
ZZZ (RAN Route Number)	RANR		

OVERLAY 15
Customer Data Block

YYY..YYY..YYY..YYY..(Call to a Lockout Set)	LCKT		
ZZZ (RAN Route Number)	RANR		
YYY..YYY..YYY..YYY..(Redirection Count Limit Exceeded as defined by TRCL)	RCLE		
ZZZ (RAN Route Number)	RANR		
AUTOVON INTERCEPT TREATMENTS: YYY = OVF, ATN, RAN, CPAS ZZZ = RAN Route Number 0 - 127 (MS, ST, N) 0 - 511 (NT, RT, XN, XT)			
[NO] YES (Autovon Inter. Treatments Requested)	PINT		
YYY YYY YYY YYY (Dial Precedence too high)	PHIP		
ZZZ (RAN Route Number)	RANR		
YYY YYY YYY YYY (Present call has higher Prcednce)	PBLK		
ZZZ (RAN Route Number)	RANR		
YYY YYY YYY YYY (Fail to answer Call Waiting)	PFAN		
ZZZ (RAN Route Number)	RANR		
YYY YYY YYY YYY (CFNA Timeout)	PFNA		
ZZZ (RAN Route Number)	RANR		
YYY YYY YYY YYY (Precedence call incompleted)	PICP		
ZZZ (RAN Route Number)	RANR		
XXXXXXX (CPAS Listed Directory Number)	CPAS		
XXXXXXX (ANI Attendant Number)	ANAT		
XXXXX (ANI Listed Directory Number)	ANLD		
LLL S CC UU (Lamp Field Array TN)	LFTN		
XXXXXXX..(Customer Calling Number Indicator DN (CNI) on Outgoing MFC Calls)	CNDN		
[NO] YES (Multiple Wake Up Daily Call	MWDC		
XX (Auto Dial Delay in Seconds)	ADLD		
XXXX (CNI Attendant DN on Outgoing MFC Calls)	CNAT		
XXXXXXX (Lamp Field Array first DN)	LFFD		
XX (1 or 2 digit AIOD Prefix)	APRF		
XXXX (AIOD Attendant Identifier)	AATT		

OVERLAY 15
Customer Data Block

XXXX XXXX XXXX (Recall Timers: Slow Answer 0 - 3066; Camp On 0 - 1022; Call Waiting 0 - 1022. Default = 30 seconds)	RTIM		
(0) - 126 [in 2 second intervals] Attendant Alternative Answering timer	ATIM		
[NO] YES (CDR for this Customer)	CDR		
[NO] YES (AUX ID for Multiple Appear. DN's)	AXID		
[NO] YES (Terminating Carriage Return)	TRCR		
[NO] YES (Calling Line ID in CDR)	CLID		
[NO] YES (Strip the DSC/TSC and replace with ACOD = NO; Prepend ACOD = YES)	CDPR		
[NO] YES (CDR-Provided, Based on Origionally Dialed Trunk route)	OTPR		
XX (CDR Port 0 - 15; CR to stop prompt)	PORT		
XX XXX (Incoming Call Indicators. Complete Table 'A' for entries)	ICI		
[NO] YES (Integrated Messaging System)	IMS		
[NO] YES (IMS Attendant Enabled)	IMA		
XX (0 - 15 Application Program Link for IMS)	APL		
[NO] YES (User Status Update Enabled)	UST		
XX (0 - 15 Application Program Link for UST)	APL		
[NO] YES (User to User Messaging Enabled)	UMG		
XX (0 - 15 Application Program Link)	APL		
[NO] YES (Intercept Computer is(is not) Available)	ICP		
XX (Number of IRG/IPN that can be configured)	NIPN		
XX (Auxillary Processor Link Number used for ICP)	APL		
[NO] YES (Intercept Position Cancelling Reply is (Is not) sent if transfer is cancelled from intercept computer)	ICCR		
X (Message Number Shown when Transfer is caused by a maintenance program)	ICMM		
XXXX (DN used for Intercept Transfer when the FDN and multi-tenant is not in Inercept Position - External Calls)	ECDN		

OVERLAY 15
Customer Data Block

XXXX (DN used for Intercept Transfer when the FDN and multi-tenant is not in Inercept Position - Internal Calls)	ICDN		
XXX (Tenant that Owns the Intercept Computer)	ICWN		
[CIR] COM (Type of Intercept Computer Printer Search)	ICPS		
XX (Printer Number)	ICPR		
XXX (Flash Timing 45 - 768; default = 45)	FLSH		
[NO] YES (Multi-Party Operations)	MPOP		
[NO] YES (Flexible Misoperation Options)	FMOP		
[NO] YES (Mandatory Recall is (is not) required prior to dialing control digits)	RALL		
XX (Control digit time-out)	CDTO		
[NO] YES (Switch-Hook flash signal from 500/2500 set is (is not) to be ignored)	IFLS		
[NO] YES (Manual Hold after inquiry is (is not) enabled	MHLD		
[NO] YES (Programming of control digits is (is not) required)	PCDS		
X (Control digit for Conference)	CNFD		
X (Control digit for Toggle)	TGLD		
X (Control digit for Disconnect)	DISD		
[NO] YES (Consultation Connection Disconnect Opt. alternative treatment is (is not) required	CCDO		
XXX YYY (Ringing No Answer treatment for internal (XXX) and external (YYY) calls	RGNA		
XXX YYY (Treatment for all other cases for internal (XXX) andexternal (YYY) calls	AOCS		
XX (Number of Ring Cycles before forwarding or disconnecting	RCY1		
XX (Number of Ring Cycles before forwarding to transferring station (Only valid for the RGNA Option))	RCY2		
[NO] YES (Automatic (Manual) Forced camp-On)	AFCO		
[NO] YES EXT (Attendant Clearing during Night Srv.)	ACNS		
XXXX (Signal Destination Flash Timing 384 - 2048)	SDFL		

OVERLAY 15
Customer Data Block

XX (Charge Account Length 0 or 'CHMN' - 23)	CHLN		
(0) 1 (No Pretranslation / Pretranslation feature)	PREO		
[NO] YES (Forced Charge Account Flag Status)	FCAF		
XX (Minimum Charge Account Length 1 to 'CHLN')	CHMN		
XXX..XX (Calling Group to Pretranslation List correlation)	XLAT		
XX (Forced Charge Account NCOS 0 - 3 CDP; 0 - 7 BARS/NFCR; 0 - 15 NARS	FCNC		
XXXX (Secure Data Password)	SPWD		
XXX..XX (Second Level Administartion Password)	PWD2		
[HNT] ATT / NO / FDN (Call Forward No Ans. DID)	FNAD		
[NO] HNT / ATT / FDN (CFNA External non-DID)	FNAT		
[NO] HNT / ATT / FDN (CFNA Internal calls)	FNAL		
[NO] YES (Call Forward to Trunk Access Code)	CFTA		
XX (Number of CFNA Ring Cycles 1 -[4]- 15)	CFNA		
XX (Number of CFNA Dist. Ring Cycles 1 - 15)	DFNA		
XX (Number of ring cycles before a DID call is routed to the attendant)	DFNR		
X (Total Redirection Count Limit)	TRCL		
XXX (Number of Seconds a DID call should wait on a set before being forwaded to the attendant)	FCWD		
XX (Perm. Hold Reminder Ring Timer 1 -[30]- 63)	PHDT		
XXX (Att. Queue Timing Threshold 1 -[30]- 255)	AQTT		
XXXXXXX (Attendant Overflow Position DN)	AODN		
XXXX (Set Relocation Security Code 0000 - 9999)	SRCD		
XXXX (Attendant Administration Access Code)	ATAC		
XXX..XX (Second Level Administartion Password)	PWD2		
XXXX (Recall to attendant (Denied) allowed, with option for queuing on busy)	RTSA		
[SNGL] ALL (Semi-Automatic Camp-On for all Camp-On occurrences, Option available for treatment on a per-call basis)	SACP		
[NO] YES (M2250 Call Waiting queue update)	CWUP		

OVERLAY 15
Customer Data Block

XXX XXX (Call Waiting Threshold for Number of Calls, lower and upper 0 - 255)	CWCL		
XXX XXX (Call Waiting Threshold for Waiting Time, lower and upper 0 - 511)	CWTM		
[NO] YES / [NO] YES (Call Waiting 2 second Buzz on Exceeding Upper Threshold / Buzz on First Call)	CWBZ		
XXXX (Efficiency Factor Loading Level)	EFLL		
[NO] YES (Visual Indication of DND on 500/2500)	DNDL		
[BST] ATT / RAN (Do Not Disturb intercept)	DNDT		
XXX (RAN Route Number)	RRT		
[NO] YES (Do Not Disturb Hunting (Denied) Allowed	DNDH		
XXX (Controlled Class of Service)	CCRS		
XXX (Enhanced Controlled Class of Service)	ECC1		
XXX (Enhanced Controlled Class of Service)	ECC2		
XXX ('DNDT' RAN Route 0 - 127; 0 - 544)	RRT		
[NO] YES (Message Waiting for DID Calls)	MDID		
[NO] YES (Message Waiting for Non-DID Calls)	NDID		
[NO] YES (Call Forward Busy to MCTR for DID)	MWFB		
[NO] YES (Message Center to include Attendants)	MATT		
XX (Supervisory Console Number 1 - 63)	SPVC		
[NO] YES (Supervisory Console Busy Lamp Field)	SBLF		
XXX (Visual Indication Threshold One 1 - 255)	ITH1		
XXX (Visual Indication Threshold Two 2 - 255)	ITH2		
XXX (Visual Indication Threshold Three 3 - 255)	ITH3		
XXX (First RAN Route for ROA 0 - 127; 0 - 544))	FRRT		
XXXX (Delay Time Threshold for 'FRRT' 0 - 2044)	FRT		
XXX (Second RAN Route for ROA 0 - 127; 0 - 544))	SRRT		
XXXX (Delay Time Threshold for 'SRRT' 2 - 2044)	SRT		
[RGB] MUS / SIL (Treatment During Waiting Time)	WAIT		
XXX (Music Route Number 0 - 127; 0 - 544)	MURT		

OVERLAY 15
Customer Data Block

XX XX XX.... (ICI Key Numbers Requiring ROA)	RICI		
[NO] YES (Enhanced Music for sets)	MUS		
[0] - 127 (Enhanced Music route for sets)	MUSR		
[OVFL] BUSY (Treatment for All Trunks Busy)	CONG		
[OVF] ATN / OFA (Flexible Line Lockout Treatment)	LLT		
[OVF] ATN / OFA (DISA Lockout Treatment)	DLT		
2 - [30] - 60 (Dial tone Interdigit timeout for 500 sets)	DIND		
2 - [15] - 60 (Dial tone interdigit timeout for 2500 sets)	DIDT		
(0) - 120 (Delay Answer Timer in Seconds - Internal Calls)	DLAT		
2 - [15] - 60 (Busy tone / Overflow tone timeout)	BOTO		
2 - [60] - 120 sec (Duration between Held call reminder)	DBRC		
[NO] YES (Activate New Flexible Code Rest.)	NFCR		
[NO] YES (Incoming Digit Conversion [not] allowed)	IDCA		
1-255 (Number of conversion tables per route)	DCMX		
XXX (Maximum Number of Trees 1 - 255)	MAXT		
[NO] yes (Incoming DID digits converted)	IDCA		
1 - 255 (Maximum number of conversion tables)	DCMX		
XXXX (All Digital Connection Prefix)	ADCP		
[NO] YES (End to End Signalling Tone feedback received (not received) by originating party)	EEST		
XX (Tone Table Number)	TTBL		
X (Station Control Password Length)	SCPL		
[NO] YES (Change number for end of dialing indicator in FFC)	FFCS		
XXX (Number of digits for end of dialing indicator in FFC)	STRL		
XXX (Actual string for end of dialing indicator in FFC)	STRG		
[NO] YES (Activate Automatic Wakeup)	AWU		
[NO] YES (Recall to Attendant after three attempts)	ATRC		
XXX (AWU Dedicated Conference Loop Number)	CONF		

OVERLAY 15
Customer Data Block

XXX (AWU Music Recorded RAN Route 0 - 127; 0 - 544)	**RANF**		
XXX (AWU Prime RAN Route 0 - 127; 0 - 544)	**RAN1**		
XXX (AWU Prime RAN Route 0 - 127; 0 - 544)	**RAN2**		
[0] - 5 (Language 1 primary RAN in AWU)	*LA11*		
[0] - 5 (Language 1 secondary RAN in AWU)	*LA12*		
[0] - 5 (Language 2 Primary RAN in AWU)	*LA21*		
[0] - 5 (Language 2 Secondary RAN in AWU)	*LA22*		
[0] - 5 (Language 3 Primary RAN in AWU)	*LA31*		
[0] - 5 (Language 3 Secondary RAN in AWU)	*LA32*		
[0] - 5 (Language 4 Primary RAN in AWU)	*LA41*		
[0] - 5 (Language 4 Secondary RAN in AWU)	*LA42*		
[0] - 5 (Language 5 Primary RAN in AWU)	*LA51*		
[0] - 5 (Language 5 Secondary RAN in AWU)	*LA52*		
HH MM (Start Hour/Min. to change to second RAN)	**R2BN**		
HH MM (Start Hour/Min. to change back to RAN1)	**R2ED**		
2 - [5] (number of rings for wake-up call)	**NRWU**		
1 - [3] (AWU retries before Attendant Recall)	*TAWU*		

OVERLAY 15
Customer Data Block

[NO] YES (Customer is/not equipped with ISDN-PRA	ISDN		
XXXXXXX (Network Message Center DN for M.Mail)	MCDN		
XXX (Private Network Identifier)	PNI		
XXXXX (Multi-Location Business Group)	MBG		
XXXXX (Business Sub Group Consult - Only)	BSGC		
XXXX (First element of calling party number)	PFX1		
XXXX (Second element of calling party number)	PFX2		
100-999 (Home Area code)	HNPA		
NPA, NXX, INTL, SPN, LOC	AC2		
100-999 (Home Central office exchange code)	HNXX		
100-9999 (Home Location code)	HLOC		
1-9999999 (Local Steering code)	LSC		
[NO] YES ((Don't Display) Display Trunk Group Reference Numbers)	TIDM		
XXXX (Enter the access code which is to be displayed before OLIs and TLIs received from the ISDN)	DASC		
1-9999999 (Local Steering code)	DASC		
[PDN] LDN (Default for Calling Line ID)	CNTP		
0 - [5] (Max. number of inter-node hops in call redirect)	RCNT		
1 - 15 (number of digits in Secure Lock password)	SCPL		
[NO] YES Limit the number of PSTNs allowed in the network)	PSTN		
XX (Number of tandem permitted in a network)	TNDM		
XX (Number of PCM conversions permitted in a network connection)	PCMC		
X (Number of satellite delays allowed in a network connection)	SATD		
[NO] YES (DID to TIE connections are allowed)	DITI		
[NO] YES ((Disable) Enable enhanced night service)	ENS		
[NO] YES ((Disable) Enable night call waiting tone)	NWT		
XXX (SCL number designated to be used as the night number table)	NNT		

X (Night service option number)	NSO		
XXX (Time interval that a call is presented to attendant before AFNA is attempted)	AFNT		
XXX (Time interval that the attendant is buzzed at full volume)	AFBT		
XX (Number of ring cycles that will determine when all DID/DOD and CO trunk calls in the ringing state will be disconnected)	NFNA		
XXX (Time all outgoing CO/DOD trunk calls in the waiting state, and all incoming CO/DID trunk calls in the answered state will be disconnected after)	NFNS		
X X (Alternative trunk Pad and conference Pad selection)	APAD		
XX (Attendant delay on hold timer in seconds)	ADHT		
[NO] YES (Additional PPM Prompts allowed (denied))	PPMD		
[NO] YES (Hotel/Motel environment)	HMTL		
(NO] YES (Additional three words in CDR Link tape records allowed (denied))	PCDL		
XXXX (PPM charge unit display)	UCST		
[NO] YES (Call charge to attendant display)	ATCH		
X (Printing scheduleof message registration and PPM)	SCDL		

OVERLAY 15
Customer Data Block

TABLE A
ATTENDANT CONSOLE ICI KEY ENTRIES

FEATURE	ENTRY	FEATURE	ENTRY
Route 0	R000	Listed Directory Number 0	LD0
Route 1	R001	Listed Directory Number 1	LD1
Route 2	R002	Listed Directory Number 2	LD2
Route 3	R003	Listed Directory Number 3	LD3
•		Dial 0 (Attendant)	DL0
•		Attendant Recall	RLL
Route 11	R011	Intercept to Attendant	INT
Route 12	R012	Call Forward Busy	CFB
Route 13	R013	Call Forward No Answer	CFN
Route 14	R014	Interattendant Call	IAT
•		Attendant Message Center	MWC
•		Autovon Precedence Call	PRC
Route 100	R100	Autovon Precedence Intercept	PIN
Route 101	R101	Line Lockout Intercept	LCT
Route 102	R102	Station Category Number	CAX (0 - 7)
Route 103	R103	Remove ICI Key	NUL
•		Dial 0 Fully Restricted	DF0
•		Meter Recall	MTR
•		RDI Intercept	RDI
•		Trunk types and local route numbers	TRK
•		Network DID trunk	NDID
•		Network CO trunk	NCO
•		Network TIE trunk	NTIE
•		Network FEX trunk	NFEX
•		Network WAT trunk	NWAT
Route 511	R511	Autovon Routine Call	RTN

ICI NUMBER	KEY ENTRY	ICI NUMBER	KEY ENTRY
0		10	
1		11	
2		12	
3		13	
4		14	
5		15	
6		16	
7		17	
8		18	
9		19	

OVERLAY 15
Customer Data Block

TABLE B
CUSTOMER OPTIONS

[CFO] CFF (Call Forward Originating)	OPT		
[CPD) CPA (Call Park Deny/Allow)	OPT		
(IC1] IC2 (10 or 20 Incoming Call Indicators)	OPT		
[XDP] IDP (Exclude/Include Digit Display)	OPT		
[IHD] IHA (Individual Hold Deny/Allow)	OPT		
[XLF] ILF (Exclude/Include Busy Lamp Field)	OPT		
[XTG] ITG (Exclude/Include Trunk Grp. Busy Indctrs)	OPT		
[LOD] LOA (Line Lockout Deny/Allow)	OPT		
[SBD] SBA (Flexible Incoming Tones for SL-1 sets)	OPT		
[DBD] DBA (Flexible Incoming Tones for Digital sets)	OPT		
[XBL] IBL (Exclude / Include Enhanced Busy Lamp)	OPT		
[RTD] RTA (CDP Route Enhancement deny / allow)	OPT		
[RTR] ROR (Term / Orig end determines cadence)	OPT		
[MCX] MCI (Exclude/Include Message Center)	OPT		
[ROX] ROI (Exclude/Include Recrd Ovfl Announce)	OPT		
[SYD] SYA (Secrecy Deny/Allow on Console)	OPT		
[DSX] DSI (Exclude/Include IS Data Services)	OPT		
[LRA] LRD (Last Number Redial Allow/Deny)	OPT		
[HTU] HTR (Unrestrict/Restrict Hotline Calls)	OPT		
[DNX] DNI (Exclude/Include ACD DNIS)	OPT		
[ABDD] ABDA (Attenant Busy Display)	OPT		
[AHD] AHA (Autohold on Loop Key)	OPT		
[BIXA] BIXD (Break-in to external call)	OPT		
[BIND] BBIN EBIN (Break-in indication, basic or extended)	OPT		
[BLA] BLD (Breal-in to line lockout set)	OPT		
[BOHA] BOHD (Position busy with calls on hold)	OPT		

OVERLAY 15
Customer Data Block

[CTD] CTA (Camp-on tone)	OPT		
[DNCA] DNCS (Disconnect DOD and CO/DID trunk calls after the timer/ring cycles have expired)	OPT		
[DRE] DRT (Queue thermometer REST)	OPT		
[FACD] FACA (Attendant call waiting thresholds expressed as a percentage of the active consoles)	OPT		
[FKD] FKA (Forward key)	OPT		
[MCTD] MCTA (Malicious call trace signal)	OPT		
[CUI] MTI (Multi-tenant service attendant console group information for incoming calls)	OPT		
[NCD] NCA (When attendant console group is in night service, redirection is allowed)	OPT		
[PSD] PSA (Presentation status selection allowed)	OPT		
[RECO] RECA (Attendant calls will be redirected when there is no presentation status to other consoles in the console presentation group)	OPT		
[REA] RED (release on exclusion)	OPT		
[RND] RNA (Ring-again no answer)	OPT		
[SDDE] SDAL (Single digit access)	OPT		
[SLD] SLA (Slow answer recall enhancement)	OPT		
[THPD] THPA (ACD threshold percentage)	OPT		
[DSTD] DSTA (Normal treatment to FBA/FBD class for the set)	OPT		
[COX] COP (COT Call Priority for RNP and GPU)	OPT		

OVERLAY 16
Route Data Block

New, Out, Chg, End	REQ		
RDB (Route Data Block)	TYPE	RDB	RDB
XXX (Default trunk model number)	DMODL		
0 - 31 Customer #	CUST		
0 - 127 Route #	ROUT		
XXX (Type aid, adm, atvn, awr, caa, cam, cot, wat, isa, csa, dic, did, fex, mdm, mus, pag, ran, rcd, rlm, tie, ida, rlr, tie atl, tie semi, tie auto, tie tone)	TKTP		
[NO] YES (Route is/is not a Private Line route)	PRIV		
[NO] YES (Route for Radio Page)	RPA		
[NO] YES (ESN Signalling)	ESN		
DPN, DAS, APNS (Level 3 Signalling)	SIGL		
[NO] YES (Route to Conventional Switch - TIE TRK)	CNVT		
XXX (DMI 0 - 255 NARS; 0 - 127 BARS)	DMI		
XXXXXXX (Attendant DN of Conventional Main.)	ATDN		
[NO] YES (Satellite Trunk Group)	SAT		
[EXT] INT (Class Mark Route as External / Internal)	RCLS		
[NO] YES (Digital Trunk Route)	DTRK		
[DTI] DTI2, PRI, PRI2 (Digital Trunk Type)	DGTP		
[NO] YES (ISDN option)	ISDN		
[D100], *ESS4*, *ESS5*, SL1, D250 (Interface machine)	IFC		
[ACC] SDN, M800, MEG, *IWAT*, *WATM*, *WATB* (Service type for ESS4 mach.)	SRVC		
[0] - 9 (Service parameter)	*SRPM*		
ISL, PRA, APN (ISDN route mode type)	MODE		
1 - 15 (DCHI port number)	DCHI		
XXX (Private Network ID)	PNI		
[D100], S100, D250, ESS4, ESS5, SL1, AXEA, SS12, 1TR6, AXES, NUME (Inerface machine type)	IFC		
[YES] NO (Network Call Name allowed)	NCNA		

OVERLAY 16
Route Data Block

[NO] YES (Network Call Redirection)	**NCRD**		
[NO] YES (Trunk optimization allowed for this route)	*TRO*		
[NO] YES (Recognition of DTI2 ABCD FALT signal)	**FALT**		
[NO] YES (Network service facility)	**NSF**		
0 - 127; 0 - 511 (CO route number)	**COTR**		
0 - 127; 0 - 511 (TIE route number)	**TIER**		
0 - 127; 0 - 511 (WATS route number)	**WATR**		
BCH, [ABCH] (Signaling type for B-Channel (BCH) or A/B bit signaling (ABCH) digital routes)	**CHTY**		
[UKWN] INTL, NPA, NXX, LOC, CDP, SPN (Call type)	**CTYP**		
[NO] YES (Allow NARS/BARS access code insertion)	**INAC**		
[NO] YES (Stepping to ISA is / is not allowed)	**ISAR**		
0-127 (Must select route # for any Configured ISA rte.)	**RTN**		
0-127 (Service ID for the route)	**SID**		
0-254 (Minimum # of reserved calls on the ISA route.	**MIN**		
1-254 (Maximum # of reserved calls on the ISA route)	**MAX**		
[YES] NO (ISA route class of use)	**PRIM**		
See Table A (Class-of service restriction for route)	**CLS**		
[0] - 31 (Trunk Group Access Restriction Level)	**TGAR**		
[NO] YES (Incoming Digit Conversion equipped)	**IDC**		
[0] - 254 (IDC Translation Table for DAY mode)	**DCNO**		
0 - 254 ((IDC Translation Table for NIGHT mode)	**NDNO**		
1-999 (Inter-exchange carrier ID	**IEC**		
[VOD] DTA, VCE (Voice/Data, Data only, Voice Only)	**DSEL**		
[NO] YES (Digit display option)	**DEXT**		
XXX (Port Type at Far End) Analog TIE: [ATT] AOT, AST	**PTYP**		
Digital TIE: [DTT] DCT, DST	**PTYP**		
Analog COT: [ACO] ATO	**PTYP**		
Digital COT: [DCO] DTO	**PTYP**		

OVERLAY 16
Route Data Block

1.5 Mb/s PRI TIE: [PRI] DTT, DCT, DST	PTYP		
1.5 Mb/s PRI CO: [PRI] DCO, DTO	PTYP		
[NO] YES (Auto-terminate Trunk Operation)	AUTO		
[NO] YES (Automatic Camp-on calls to busy auto) terminate line)	ACMP		
[NO] YES (ACD DNIS Route)	DNIS		
[NO] YES (In-Band ANI Route)	IANI		
3 or 4 (Number of DNIS Digits expected)	NDGT		
CAP, AUD, CK2 (Code-a-Phone Route Type)	RTYP		
1 - 15 (Number of Recording Repetitions)	REP		
DIS, ATT (Disconnect ; Route to ATT. after 'REP')	POST		
IMM, DDL (Connect Call Immediately ; Start of Rec)	STRT		
[NO] YES, CO (Supervision required on RAN Route; Supervision required on COT Route)	ASUP		
BEL, NT4, NT5 (Signaling Interface for CAMA)	SIGL		
M1A, M2B, M3C (Signaling Fornat for CAMA)	FORM		
IAO, ICT, OGT (Incoming/Outgoing Trunk Route)	ICOG		
[NO] YES (Autovon preemptable route)	PREM		
[NO] YES (Autovon Routine Route)	ATVR		
(LIN) RRB (Linear / Round Robin Hunting)	SRCH		
XXX (Alternate Trunk Route 0 - 127; 0 - 511)	STEP		
XXXXXXX (Trunk Route Access Code)	ACOD		
[NO] YES (Pseudo answer is to be sent)	PANS		
[0] - 60 (ADM Trunk Guard timer in 2 sec. increments)	ATGT		
1 - [2] - 15 (ADM Trunk ring cycles for call step forward)	ASTP		
XX XX.... (Trunk Access Restriction Groups; 1 - 31)	TARG		
0 - 999 (SAR group number)	SGRP		
[NO] YES (ADM/Modem pair route)	MDMP		
5 - 30 (Modem ring-again timer)	MRAT		
[IOP] IDP, ODP (Data type)	DTYP		

OVERLAY 16
Route Data Block

[NO] YES (Use all digital connection prefix)	ADCP		
0 - 127 (Outbound modem pool)	OAMP		
0 - 127 (Inbound modem pool)	IAMP		
0 - 7 (Priority level)	PLEV		
X X X... (Outgoing Digits to Absorb; range 0 - 9)	OABS		
[0] - 3 (Number of Incoming Digits to Absorb)	IABS		
[0] - 9 (Identification Digit for CAMA Routes)	ID		
00 - 99 (CAMA Route Category Digits)	CAT		
0 - 9 (Number of digits to insert on incoming DID)	INST		
XXXXXXX (ANI Identification Number)	ANTK		
ESN5, ESN3, ESN2, ETN, STD (Signal Arrangement)	SIGO		
[NO] YES (Call number indicator)	CCNI		
[NO] YES (Changes to Controls or Timers)	CNTL		
ATO 128 -[4922]- 65408 (ANI timeout Timer)	TIMR		
AAD [384]- 2048 (Address acknowledge delay timer)	TIMR		
DDL 0 -[70]- 511 (Dial Delay Timer)	TIMR		
DSI 128 -[34944]- 499200 (Disconnect Supervision)	TIMR		
EOD 128 -[13942]- 32640 (End of Dial Timer)	TIMR		
FDG [768] - 1664 (Far end Disconnect Control Timer)	TIMR		
FLH 256 -[512]- 1536 (Centrex SH Flash Timer)	TIMR		
GLA 0 -[48]- 2000 (Glare Timer for Autovon Trunks)	TIMR		
GRD 0 -[896]- 32640 (Guard Timer)	TIMR		
GRI 128 -[896]- 32640 (Incoming Guard Timer)	TIMR		
GRO 128 -[896]- 32640 (Outgoing Guard Timer)	TIMR		
ICF 0 -[512]- 32640 (Incoming Flash Timer)	TIMR		
ICF [640] - 32640 (Incoming Flash Timer Autovon)	TIMR		
LCT [128] - 32640 (Loop calling detection timer)	TIMR		
MAD 0 - [500] - 32640 (Minimum answer delay timer)	TIMR		

OVERLAY 16
Route Data Block

MFC 128 - [12032] - 65408 (MFC timer)	TIMR		
MFK 128 - [4992] - 16256 (First backward signal awaiting time)	TIMR		
MFI 128 - [14976] - 32640 (Interdigital timer)	TIMR		
MFO [0] - 16256 (MFC Transmit timer)	TIMR		
MFR 128 - [2048] - 16256 (Reception timer)	TIMR		
MFX 128 - [4096] - 16256 (Transmission time)	TIMR		
NDG [640)]- 1536 (Nearend Disconnect Guard Timer)	TIMR		
NRD 128 -[10112]- 32640 (No Ring Detect Change)	TIMR		
ODT 256 -[8192]- 16128 (End of Dial Timer)	TIMR		
OBA 2 - [120] - 510 (Wait time for B-answer)	TIMR		
OGF 0 -[512]- 32640 (Outgoing Flash Timer)	TIMR		
OGF [640] - 32640 (Outgoing Flash Timer Autovon)	TIMR		
RGV 128 -[640]- 1920 Ring Validation Timer)	TIMR		
STK [5120] - 30208 (Stuck Sender Timer for Autovon)	TIMR		
NBS 128 -[2048]- 32640 (Short end of block dialing)	TIMR		
NBL 128-[4096]-32640 (Long end of block dialing)	TIMR		
NRAG [30] - 60 (Network Ring Again timer)	TIMR		
TFD 0 - 3600 (Time Force Disconnect timer in 30 second intervals)	TIMR		
RMA 128 - 32640 (RMA timer)	TIMR		
SRM 128 - 32640 (SRM timer)	TIMR		
RAS 128 - 32640 (RAS timer)	TIMR		
XX Y (Seizure Supervisor Timer for Autovon Trunks; xx = 1 - 15 seconds ; y = 0 - 7 seconds)	SST		
[ORG] ETH (Near end Disconnect Control)	NEDC		
[ORG] ETH, FEC, JNT (Far end Disconnect Control)	FEDC		
[NO] YES (SL-1 Controlling Party on Incoming Calls)	CPDC		
[IMM] DLY (Speech path control)	SPCT		
[NO] YES (Distinctive Ringing for Incoming Calls)	DRNG		

OVERLAY 16
Route Data Block

[NO] YES (Provide Dial Tone to far end when trunk accessed from far end)	DLTN		
[NO] YES (ANI Dial Tone to be supplied)	ANDT		
II DD TT (Failure to Hold counter; default 2 2 40)	HOLD		
II DD (Failure to Seize counter; default 2 2)	SEIZ		
II DD (Failure to Ring counter; default 2 2)	RGFL		
II DD (Illegal Ring counter; default 2 2)	ILLR		
II DD (Supervision Failure counter; default 2 2)	SVFL		
[NO] YES (External operator assigned)	OPCB		
[NO] YES (Immediate break-in to be performed)	IMBI		
[NO] YES (Immediate call backto be performed)	IMCB		
[NO] YES (Busy tone to calling party)	BTCG		
2 - [30] - 62 (Set hold to an incoming trunk timer)	IHT		
0 - [30] - 62 (Outgoing CGPC disconnect timer)	OHT		
1 - [30] - 1023 (Outgoing CDPC hold timer)	SRT		
[NO] YES (Calling party control on incoming calls)	CGPC		
[NO] YES (Called party contol on incoming calls)	CDCT		
[NO] YES (Delay digits outpulsing)	DDO		
[NO] YES (North American distinctive ringing)	DRNG		
[0] - 4 (Network DRNG index)	NDRI		
[NO] YES (Dial tone detection)	DTD		
1 - [5] - 31 (Minimum dial tone detection delay)	MDTD		
1 - [2] - 15 1 - [2] - 15 (Dial fail threshold)	DTDF		
[NO] YES (Secondary dial tone to be used)	SCDT		
0 - 31 (Flexible dial tone detection table number)	TABL		
33, [50] First stage dial tone detection frequency range)	DFQ		
[NO] YES (Japan distinctive ringing)	DRNG		
[NO] YES (Block transfer of unanswered call)	BTUA		
[NO] YES (CDR Trunk Route)	CDR		

OVERLAY 16
Route Data Block

[NO] YES (CDR on Incoming Calls)	**INC**		
[NO] YES (CDR Queue records)	**QREC**		

OVERLAY 16
Route Data Block

[NO] YES (CDR on Outgoing Calls)	OAL		
[NO] YES (CDR on Outgoing Toll Calls)	OTL		
[NO] YES (Answer Supervision for answered calls)	AIA		
[YES] NO (CDR on ALL answered outgoing calls)	OAN		
[YES] NO (North American Toll Scheme)	NATL		
X X X X... (List of Toll Digits if NATL = NO)	TDG		
1 - 15 Special service list number)	SSL		
[NO] YES (Apply call forward restriction)	CFWR		
[NO] YES (Call detail reporting for internal calls)	IDOP		
[NO] YES (Outpulsed digits in CDR)	OPD		
INC 1 - 32 (Number of printed digits) EXC 1 - 32 (Suppress the last 1 - 32 digits)	NDP		
[NO] YES (Select route for monitoring)	MON		
[NO] YES (Generate CDR (CDAS) record for PPM)	OPA		
[NO] YES (Printing of CDR for no PPM or AOC count)	CCO		
[NO] YES (Music on Hold for this Route)	MUS		
0 - 127; 0 - 511 (Music Route Number)	MRT		
[NO] YES (Message Registration for this Route)	MR		
[0] 1 - 251 (Real time PPM)	RPPM		
0 - 9999 (Route unit cost)	RUCS		
0 - [1] - 9999 (Route unit conversion factor)	RUCF		
[NO] YES (Route traffic information in ACD reports)	RACD		
[NO] YES (Dial tone required from public exchange for outgoing DASS trunk)	DTOS		
XXXX YYYY (Trunk Identity)	TIDY		
[NO] YES (Manual Outgoing Route)	MANO		
0 - 7 / 0 - 254 (FRL / NFCR Tree Number for this Route)	FRL		
[NO] YES (Off hook Queuing)	OHQ		
[0] - 63 (Off hook Queuing Threshold)	OHQT		

OVERLAY 16
Route Data Block

[NO] YES (CCBQ allowed on Route)	CBQ		
[2] - 10 (Digits in numbering Plan at Conventional Main)	NDIG		
[NO] YES (Authcode on incoming NARS / BARS)	AUTH		
[NO] YES (Tone Detector Required)	TDET		
[0] - 31 (Tone table number)	TTBL		
[NO] YES (Off hook timer delay)	OHTD		
[NO] YES (Outpulsing route)	OPR		
[NO] YES BSY (Partial dial timing is equipped	PRDL		
[NO] YES BSY (End of selection signal)	EOS		
[0] - 7 (Number of digits expected on DID route)	DNSZ		
[NO] ATT (Manual service recall)	RCAL		
[NO] YES (Send digit "!" when malicious call trace enabled)	MCTS		
[NO] YES (Called party control enabled with MCT)	CDPC		
[NO] YES (Alarm sounded on incoming call with MCT)	ALRM		
[NO] YES (Request MFC call number identification)	CNIT		
2 - [30] - 254 (Lenght of busy/overflow to be returned)	BTT		
[NO] YES (Seizure acknowledgement signal)	ACKW		
[NO] YES (Send periodic clearing signal)	PECL		
[NO] YES (Trunk ring/hold/call park disconnect timer)	DCTI		
[NO] YES (No-answer disconnect timer)	NADT		

TABLE 'A'

CLASS OF SERVICE	ENTRY	CLASS OF SERVICE	ENTRY
Unrestricted	UNR	Conditionally unrestricted	CUN
Semirestricted	SRE	Conditionally toll denied	CTD
Toll denied	TLD	Fully restricted 1	FR1
Fully Restricted	FRE	Fully restricted 2	FR2

OVERLAY 16
Route Data Block

THE FOLLOWING PROMPTS ARE GIVEN WHEN THE RESPONSE TO 'TYPE' IS SCH.			
HH (Hour to perform Test 0 - 23)	HOUR		
0 - 127 (Route Number)	ROUT		
[0] - 8064 (Outpulsing delay)	OPDL		

THE FOLLOWING PROMPTS ARE GIVEN WHEN THE RESPONSE TO 'TYPE' IS ATM.			
0 - 127 (Route Number)	ROUT		
XX.....XX (2 - 10 digits for T100 Test Line DN)	T100		
0 - 63 (Pad Factor for T100 Test Line)	PADT		
[YES] NO (Is Test Line a standard T100 Line?)	STND		
27 - 90 (Noise maintenance limit in dBrn)	NMNL		
27 - 90 (Noise out of service limit in dBrn)	NOUT		
[YES] NO (Perform near to far end measurement?)	NTOF		
XX.....XX (2 - 10 digit for reference loop-around DN)	REF		
XX.....XX (2 - 10 digit for test loop-around DN)	TST		
0 - 63 (Pad factor for loop-around in dB)	PADL		
0 - 15 (Expected measured loss in dB)	EML		
0 - 15 (Loss deviation maintenance limit in dB)	LMNL		
0 - 15 (Loss deviation out of service limit in dB)	LOUT		
0 - 100 (Percentage of trunks to be disabled if loss or noise reaches the out of service limit)	DSBL		
0 -[5]- 15 (Maximum time in seconds to wait for the far end to connect to the test line)	MXTI		

OVERLAY 17
Configuration Record Data Block

Chg, End	REQ		
CFN (Configuration Record)	TYPE	CFN	
[NO] YES (Digital private network signalling)	DPNS		
XXXX Password (Current Level 2)	PWD2		
XXXX Password (New Level 1)	NPW1		
XXXX Password (New Level 2)	NPW2		
XXXX Password (Mini-CDR Password)	NPWC		
0 - 99 (Limited access to overlay password number)	LAPW		
XXX..XX (Limited access to overlay password number nn)	PWnn		
XX XX ... (List of overlay programs to be accessible by this password)	OVLA		
0 - 99 (Customer to be accessible by this password)	CUST		
XXX XXX ... (Tenants (1-511) to be accessible by this password)	TEN		
XXXX (Password options: CFPA, LLCA, RDBA, PROD, PSCD)	OPT		
XXX..XX (Log on password)	LPWD		
XXX..XX (New user password for LAPW)	NLPW		
[0] - 7 (Failed login attempt threshold)	FLTH		
0 - [60] - 270 (Locked out port reestablish timer)	LOCK		
[NO] YES (Activate audit trail for password usage)	AUDT		
[50] - 1000 (Size of audit trail buffer)	SIZE		
[NO] YES (Manual initialize to reset locked out TTY/port)	INIT		
NO, YES (ISA package equipped)	ISDN		
0-15 (DCHI port number. Only odd numbers allowed)	DCHI		
X (Card on which DCHI is to be configured)	CDNO		
1, 3 (ESDI port number. If to be configured on PRI or PRI2, then must equal "1")	PORT		
0 - 15 (BCHI port number)	BCHI		
X (Card on which DCHI is to be configured)	CDNO		

OVERLAY 17
Configuration Record Data Block

1, 3 (ESDI port number. If to be configured on PRI or PRI2, then must equal "1")	PORT		
0 - 9 (PRI card number for DCHI)	DCHL		
0 - 9 (PRI card number for BCHI)	BCHL		
1 - [16] - 127 ((Number of ouput request buffers)	OTBF		
56K = 56 Kbps (D-channel transmission rate)	DRAT		
64KC = 64kbps clear (default when PRI is ESF)	DRAT		
64KI = 64kbps inverted HDLC (default when PRI is not ESF))	DRAT		
C NN (C = PRI card number 0-9; NN = PRI interface ID 2 - 15)	PRI		
[NO] YES (Netwaork attendant service signalling on D-channel)	NASA		
[NO] YES (Number of ISL trunks controlled by D-Chan)	MBGA		
PRA, ESL, SHA (D-channel mode - pra / esl / shared)	USR		
0 - 100 (Maximum number of VNS channels over the D-channel)	VNSM		
0 - 31 (Virtual network services customer number associated with the D-channel)	VNSC		
0 - 32700 (PNI for the far end customer)	VNSP		
[NO] YES (Network call party name display on this D-channel)	VCNA		
[NO] YES (Network call redirection available on this D-channel)	VCRD		
[NO] YES (Recovery to PRI D-channel option)	RCVP		
XXXXX (Number of ISL trunks controlled on D-channel)	ISLM		
DMS1, ESS4, SL1, S100, D250 (Interface type)	IFC		
[USR] NET, MAS, SLAV (SL-1 node type)	SIDE		
1 2 (Channel negotiation option for outgoing calls)	CNEG		
xx (Release ID for D-channel)	RLS		
[NO] YES (Overlap receiving)	OVLR		
[0] - 15 (Number of lead digits to delete from DID trunks)			

OVERLAY 17
Configuration Record Data Block

[NO] YES (Overlap sending)	OVLS		
[0] - 8 (Overlap timer)	OVLT		
[EXT] INT (D-channel clock type)	CLOK		
[NO] YES (LAPD parameters)	LAPD		
1 - [20] - 31 (Interface guard timer. Entry in .5 sec unit)	T23		
2 - [3] - 40 (Retransmission time. Entry in .5 sec unit)	T200		
1 - [3] - 8 (Maximum number of retransmissions)	N200		
4 - [260] (Max. number of octets in information field)	N201		
2 - [10] - 40 (Maximum time allowed without frames being exchanged)	N203		
1 - [3] - 32 (Maximum number of outstanding frames)	K		
[NO] YES (Change to Parameters)	PARM		
96-1000 (Low Priority Input Buffer)	LPIB		
16-1000 (High Priority Input Buffer)	HPIB		
16-1000 (500 Set, trunk, Digital set Output Buffer)	500B		
32-1000 (SL1 / Att. Output Buffer)	SL1B		
[35] - 1000 (IDA trunk input buffers)	DTIB		
[35] - 1000 (IDA trunk output buffers)	DTOB		
26-1544 (Number of Call Registers)	NCR		
1 or [2] (Number of CPUs)	NCPU	1	
[MU] A (System PCM law)	PCML		
20 - 255 (Number Display messages required)	NDIS		
[NO] YES (Display Minor Alarms)	ALRM		
ERR BUG AUD (Print Software Messages)	ERRM		
50, 60, 70, 100. (Digitone Burst Time)	DTRB		
[128] 96 (Length of cadence increments)	TMRK		
[NO] YES (16 tone DTMF operation)	ABCD		
[NO] YES (Priority to CDR)	PCDR		
[NO] YES (Allow MADN across loops)	MLDN		

OVERLAY 17
Configuration Record Data Block

[NO] YES (CDR call duration calculated with 0.5 second accuracy)	DUR5		
[NO] YES (New Distinctive Ringing)	NRDG		
[NO] YES (Change to Common Equipment)	CEQU		
[SD] / DD / 4D (Maximum PE Density)	MPED		
1-31 Loop Number (SD Local Terminal Loops)	TERM		
1-31 Loop Number (SD Remote Term. Loops)	REMO		
1-31 Loop Number (DD Local Term. Loops)	TERD		
1-31 Loop Number (DD Remote Term. Loops)	REMD		
1-31 Loop Number (4D Local Term. Loops)	TERQ		
1-31 Loop Number (4D Remote Term. Loops)	REMQ		
1 - 9 Loop Number (DPNSS/DASS Hardware)	DDCS		
1 - 9 Loop Number (Tone & Digit Switch Loops)	TDS	ADD	REMOVE
29, 30, 31 Loop Number (Conference Loops)	CONF	ADD	REMOVE
1 - 9 Loop Number (ANI MF Sender Loops)	MFSD	ADD	REMOVE
1 - 9 / 0 - [24] / D2 [D3] (Digital Trunk Loop / Max number of data calls on loop / Framing format)	DLOP	ADD	REMOVE
TRK, LINK (Mode for DTI Hardware)	MODE		
[B8S] AMI (Line coding method)	LCMT		
FDL, DG2 (Yellow alarm method)	YALM		
XX (DTI Threshold Set in OVL73)	TRSH		
0 - 159 (Starting Loop occupied by DTI card)	DTIC	ADD	REMOVE
[0] - 5 (Enter synchronization mode)	SYNM		
0 - 159 (Enter number of the DSTL used for main synchronization)	MSDT		
0 - 159 (Enter the number of the DSTL used for standby synchronization)	SSDT		
1 - 9 (2 Mb/s PRI card number)	PRI2		
1 - 9 (Analog private network loop for virtual TN)	APVL		
1 - 9 (2 Mb/s DTI card number)	DTI2		
0 - 4 / sbe / 3pe (CPU 0 extenders to network)	EXTO		

OVERLAY 17
Configuration Record Data Block

0 - 4 / sbe / 3pe (CPU 1 extenders to network)	EXT1		
0, 128, 192, 512, 768 (Memory Card Type)	MTYP		
0, 1, 2, 4, 5, 6 (Memory Modules)	MEM		
[NO] YES (Segmented Bus Ext. Equipped SL-1 S/MS)	SBE		
[NO] YES (Change to Overlay Tasks)	OVLY		
XXXX (System ID Number)	SID		
XX XX XX...(Background Overlay Tasks)	BKGD		
HH 0 - 23 (Hour to perform msg. wtg. lamp test)	PBXH		
0 - 23 (Time of Daily Routines)	TODR		
XX XX XX...(Daily Routine Overlay Tasks)	DROL		
[NO] YES (Changes to Logical Units)	IOTB		
[0] - 65534 (History File Buffer Length)	HIST		
New, Out, Chg / Tap / 0 - 3 (Action / Tape / Number)	ADAN		
New, Out, Chg / Prt / 0 - 15 (Action / Printer / Number)	ADAN		
New, Out, Chg / TTY / 0 - 15 (Action / TTY / Number)	ADAN		
New, Out, Chg / HST (Action / History File)	ADAN		
New, Out, Chg / HDK / 0 (Action / Hard Disk / Unit 0)	ADAN		
New, Out, Chg / FDK / 0 - 3 (Action / Floppy Disk / Unit)	ADAN		
[2] 1 (Number of floppy disk drives)	NUMD		
[5] 3.5 (3.5 or 5.25 inch floppy disk drives)	FTYP		
[YES] NO (Does this port use an ESDI card?)	ESDI		
1- 10 (SDI card number)	CDNO		
0 - 1/0 - 3 (Port number on card to be configured)	PORT		
[NO] YES (Synchronous Mode)	SYNC		
[FULL] HALF (Duplex Mode)	DUPX		
XXXXX (Data Rate; default = 4800)	BPS		
[8] 5 6 7 (Data bit length)	BITL		
[1] 1.5 2 (Number of stop bits)	STOP		
[NONE] ODD EVEN (Parity)	PRTY		

OVERLAY 17
Configuration Record Data Block

[NONE] XON CTS (Flow control)	FLOW		
[INT] EXT (Clocking Mode; Internal or External)	CLOK		
0 -[1]- 255 (Data Link individual address)	IADR		
0 -[3]- 255 (Data Link Remote individual address)	RADR		
[YES] NO (Modify link control system parameters)	LCTL		
2 -[3]- 20 (Timer of retransmission in units of .5 sec)	T1		
[0] - 255 (Max. time station will be allowed without a frame being exchanged)	T2		
2 -[10]- 255 (Timer for initial link set-up)	T3		
32, 64, [128] (Maximum octets per I frame)	N1		
4 -[8]- 16 (Maximum number of retransmissions)	N2		
1 -[2]- 7 (Maximum number of outstanding frames)	K		
[YES] NO (Modify link performance thresholds)	LTHR		
1 -[5]- 20 (% of retransmissions in 15 minutes before out of service is enforced; in units of 5%)	RXMT		
1 -[10]- 20 (% of CRC errors detected in 15 minutes before an out of service is enforced; in units of 5%)	CRC		
1 -[5]- 255 (Number of overrun/underrun in 15 minutes before an out of service is enforced; in units of 1)	ORUR		
1 -[5]- 255 (Number of aborts in 15 minutes before an out of service is enforced; in units of 1)	ABOR		
ACD, APL, BGD, BUG, CDL, CMC, CMS, CSC, CTY, HSL, ICP, LSL, MTC, NOO, PMS, SCH, TRF (output msg types)	USER		
[NO] YES (SDI port for system monitor)	XSM		
0 - 31 (Customer number)	CUST		
ISDN (User application type)	APPL		
[NO] YES (Security for ISDN/AP link)	SECU		
1 - 12 (Lenght of time interval in 5 sec. increments)	INTL		
5 - 100000 (Threshold value for number of messages allowed per time interval)	MCNT		
NEW, CHG, OUT (Change to Value Added Server)	VAS		
0 - 15 (Server Identifier)	VSID		

OVERLAY 17
Configuration Record Data Block

XXX XXX... (DTI Loops associated with server)	DLOP		
0 - 15 (ESDI port used for the CSL)	CMS		
DIR, IND (Direct or Indirect link configuration)	CONF		
LLL S CC U (TN of SADM associated with IND CSL)	SATN		
XXX (DTI Loop used for Indirect CSL)	IDLP		
[20]- 255 (Max. number of call registers for CSL input)	CSQI		
[20]- 255 (Max. number of call registers for CSL output)	CSQO		
0-31 (Customer Number for ACD)	CUST		
[NO] YES (Senior Supervisor)	SSUP		
[NO] YES (ACD Printer)	APRT		
20-255 (AUX Input Queue Size)	AXQI		
20-255 (AUX Output Queue Size)	AXQO		
QLFR, NEFR (FRE Access - Incoming Calls)	FRPT		
(PMS1) PMS2 / PMS3 (Property Mgmt Interface)	MANU		
[NO] YES (Calling Line ID in CDR)	CLID		
26-1213 (Message Call Registers)	MGCR		
0 - 5 (ACD-ADS Customers)	DCUS		
0-999 (Maximum ACD Agents)	MAGT		
NO TDS EXT (Source for dial tone detector test)	DTDT		
X XX XX XX (Hex code for access to a flexable TDS table for a test tone)	CODE		
CC UU (Terminal number that when accessed returns a test tone)	TN		
[NO] YES (Save call forward on SYSLOAD and reactivate on completion)	CFWS		
0 - 8190 (Maximum number of Speed Call/Hotline Lists: Individual, Group, and System)	MSCL		

Note: The initial Configuration Data Block is prepared by NTI. The intent of this data sheet is to record changes to the system configuration as required.

OVERLAY 17
Configuration Record Data Block

The following parameters apply to sets only

[NO] YES (Change to Transmission Parameters)	**ATRN**		
X (Codec Coding Law **note 1**)	**CODE**		
Y (Sidetone Objective Loudness rating **note 2**)	**SOLR**		
Z (Receive Objective Loudness rating **note 3**)	**ROLR**		
Z (Transmit Objective Loudness rating **note 3**)	**TOLR**		
[NO] YES (Automatic gain control)	**AGCD**		
[NO] YES (Handset volume reset)	**VOLR**		
[0] - 8 32 - 54 (Handsfree receive objective loadness rating)	**HRLR**		
[0] - 11 32 - 54 (Handsfree transmit objective loudness rating)	**HTLR**		

Note 1 The input values for **X** are:
0 = MU law (default)
1 = A law
2 = A law, even bit interleaved

Note 2 The input values for **Y** are:
0 = 7 dB
1 = 12 dB
2 = 17 dB
3 = 22 dB
4 = SOLR disabled

Note 3 The input values for **Z** are:

OVERLAY 18
Speed Call / Group Call / Hotline Data Block

Input action	New,Out,Chg,Mov, End	REQ		
Speed Call, System Speed Call, Group Call, Hotline List, Pretrans	SCL, SSC, GRP, HTL, SSL, ABCD, PRE, GHT	TYPE		
Customer Number	0 - 99 (NT,RT,XN,XT)	CUST		

The following prompts are given when TYPE= SCL, GRP, SSC, GHT or HTL:

List number (nnnn<MSCL)	0 - nnnn	LSNO		
Customer Number	0 - 99 (NT,RT,XN,XT)	CUST		
Pilot DN	xxxxxxx	PLDN		
Post -trans. call. grp and spd call #	1-254, 0-8191	PLAT		
Group number for Group Call	0 - 63	GRNO		
Group call originator control	[YES], NO	GRPC		
Network class of service	0 - 99	NCOS		
Move to List number	0 - 8190	TOLS		
Move to Group number	0 - 63	TOGR		
Maximum length of DN per entry	4- (16) - 31	DNSZ		
Maximum number of entries	1 - 1000	SIZE		
Data is correct; can be updated	(YES) NO	WRT		
List / Group entry number and DN	XXXX YYYYY.....	STOR		
Data is correct; can be updated	[NO] YES	WRT		

The following prompts are given when TYPE = PRE:

Customer number	0-99	CUST		
Calling group # /end prompt grp.	0-254, <cr>	XLAT		
Speed call list number, pre trans	0-8190	PRE		
Speed call list number, post trans	0-8190	PST		
Spd call list #, single digit access	0-8190	SDA		

OVERLAY 18
Speed Call / Group Call / Hotline Data Block

The following prompts are given when TYPE = SSL:

Special service list #/ to remove	1-15, X1-X15	SSL		
1-4 digit special service #/ to rem.	nnnn, X0-X9999	SSDG		
Callled party control enabled	[NO] YES	CDPC		
The SSDG is a toll number	[NO] YES	TOLL		
Alarm is enabled	[NO] YES	ALRM		
Send MFCH tandem signal	[NO] YES	TNDMN		
Repeats until 100 or <cr>	<cr>	SSDG		

The following prompts are given when TYPE = ABCD:

The # of the ABCD table	1-254	TBNO		
The # of the default function table	1-254	DFLT		
Function table to be changed for pre-dial	[NO] YES	PRED		
FFC mnemonic for function Autodial, x...x is autodial # PAG key and radio paging code Lave button with no function Use default mnemonic	aaaa ADLx...x PAGx...x NUL <cr>	A		
FFC mnemonic for function Autodial, x...x is autodial # PAG key and radio paging code Leave button with no function Use default mnemonic	aaaa ADLx...x PAGx...x NUL <cr>	B		
FFC mnemonic for function Autodial, x...x is autodial # PAG key and radio paging code Leave button with no function Use default mnemonic	aaaa ADLx...x PAGx...x NUL <cr>	C		
FFC mnemonic for function Autodial, x...x is autodial # PAG key and radio paging code Leave button with no function Use default mnemonic	aaaa ADLx...x PAGx...x NUL <cr>	D		
FFC mnemonic for function Autodial, x...x is autodial # PAG key and radio paging code Leave button with no function Use default mnemonic	aaaa ADLx...x PAGx...x NUL <cr>	*		

OVERLAY 18

Speed Call / Group Call / Hotline Data Block

FFC mnemonic for function Autodial, x...x is autodial # PAG key and radio paging code Leave button with no function Use default mnemonic	aaaa ADLx...x PAGx...x NUL <cr>	#		
Autodial, x...x is autodial # Leave button with no function	ADLx...x NUL	RCAL		
Funct. table changes for post-dial	[NO] YES	POST		
FFC mnemonic for function Autodial, x...x is autodial # PAG key and radio paging code Leave button with no function Use default mnemonic	aaaa ADLx...x PAGx...x NUL <cr>	A		
FFC mnemonic for function Autodial, x...x is autodial # PAG key and radio paging code Leave button with no function Use default mnemonic	aaaa ADLx...x PAGx...x NUL <cr>	B		
FFC mnemonic for function Autodial, x...x is autodial # PAG key and radio paging code Leave button with no function Use default mnemonic	aaaa ADLx...x PAGx...x NUL <cr>	C		
FFC mnemonic for function Autodial, x...x is autodial # PAG key and radio paging code Leave button with no function Use default mnemonic	aaaa ADLx...x PAGx...x NUL <cr>	D		
FFC mnemonic for function Autodial, x...x is autodial # PAG key and radio paging code Leave button with no function Use default mnemonic	aaaa ADLx...x PAGx...x NUL <cr>	*		
FFC mnemonic for function Autodial, x...x is autodial # PAG key and radio paging code Leave button with no function Use default mnemonic	aaaa ADLx...x PAGx...x NUL <cr>	#		
Funct. table changed for control mode	[NO] YES	CONT		
Control mnemonic for function Leave button with no function Use default mnemonic	aaaa NUL <cr>	A		
Controlle mnemonic for function Leave button with no function Use default mnemonic	aaaa NUL <cr>	B		

OVERLAY 18
Speed Call / Group Call / Hotline Data Block

Control mnemonic for function Leave button with no function Use default mnemonic	aaaa NUL <cr>	C		
Control mnemonic for function Leave button with no function Use default mnemonic	aaaa NUL <cr>	D		
Control mnemonic for function Leave button with no function Use default mnemonic	aaaa NUL <cr>	*		
Control mnemonic for function Leave button with no function Use default mnemonic	aaaa NUL <cr>	#		

OVERLAY 19
Code Restriction Data Block

DESCRIPTION	RESPONSE	PROMPT	ENTRY	ENTRY
Input action	New,Chg,Out,Mov End	REQ		
Code Restriction data block	CRB	TYPE	CRB	CRB
Customer number	0 - 31 (ST) 0 - 99 (NT,RT,XT)	CUST		
Trunk Route number	0 - 127 (ST,) 0 - 511 (NT,RT,XT)	ROUT		
Move to Route Number	0 - 127; 0 - 511	TORT		
Clear to Allow / Deny all Codes	Deny, Alow	CLR		
NNX or NPA codes allowed	200 - 999	ALOW		
NNX or NPA codes denied	200 - 999	DENY		

ENTER	ENTER	ENTER	ENTER	ENTER	ENTER	ENTER	ENTER

Default values are in ( )

OVERLAY 23
ACD Data Block

RESPONSE	PROMPT	ENTRY	ENTRY
New, Out, Chg, Prt, End	REQ		
ACD, NACD (ACD, Network ACD Data Block)	TYPE		
0 - 99 (NT,RT,XN,XT) (Customer #)	CUST		
D, N (Day or Night Table)	TABL		
XXXX, XXXX...(Table entries to be removed)	OUTS		
XXXX, tt (New Target entry ID and Timer)	TRGT		
XXXXXXX (ACD Directory Number)	ACDN		
[NO] YES (ACD Message Center)	MWC		
[NO] YES (Service controlled Associated Set)	AST		
[NO] YES (Server IS/data service access code)	DSAC		
0 - 15 (VAS ID of VAS providing IS/Data Services)	VSID		
[NO] YES (Primary DSAC)	PRIM		
[NO] YES (IMS Message Center)	IMS		
[NO] YES (Command and Status Link)	CMS		
[NO] YES (ACD-DN for IMS)	IMA		
[NO] YES (Voice Message System)	IVMS		
[NO] YES (Dialed Number Identification Service)	DNIS		
0 - 15 (VAS ID)	VSID		
[NO] YES (End to End Signalling)	EES		
0 - 15 (Aux Processor Link)	APL		
[NO] YES (User Status Update)	UST		
0 - 15 (VAS ID of VAS providing VMS)	VSID		
[NO] YES (User-to-User Messaging)	UMG		
0 - 127 (ST) 0 - 511 (NT,RT,XT) (RAN Route)	RAN		
2 - [6] -15 (User Messaging Time in seconds)	UMT		
[NO] YES (ACD MC Used for Intercept Printer)	ICP		
[CIR] COM (Intercept Computer Printer Search)	ICPS		
0-<NIPN> (Printer Number (for ICPS=COM))	ICPR		

OVERLAY 23
ACD Data Block

RESPONSE	PROMPT	ENTRY	ENTRY
1-240 ST; 1 - 1200 NT, RT, XT (Maximum number of ACD Positions)	MAXP		
[NO] YES (Block secondary DN calls when active)	SDNB		
[NO] YES (Block secondary DN calls on Walkaway)	BSCW		
[NO] YES (ACD Messages Sent Across ISDN/AP Link)	ISAP		
0-15 (VAS ID of VAS Providing VMS)	VSID		
[NO] YES (Provide automatic login for agents with DN OSAC and CMS only)	ALOG		
[NO] YES (Ring Again for internal calls)	RGAI		
0 - 127; 0 - 511 (First RAN Route)	FRRT		
0-2044 (First RAN Time)	FRT		
0 - 127; 0 - 511 (Second RAN Route)	SRRT		
0-2044 (Second RAN Time)	SRT		
0 - 127; 0 - 511 ACD Night RAN Route)	NRRT		
[NO] YES (First RAN on Arrival)	FROA		
XX XX (1-23 digit directory # for ACD Night CI fwd DN)	NCFW		
[NO] YES (Force Night Call Forward to Busy ACD DN)	FNCF		
0-[40]-63 (ACD Call Waiting Threshold Time Value)	CWTT		
NO [YES] (Hold Make Set Busy)	HMSB		
[NO] YES (ACD Answer Call Priority Queue)	ACPQ		
[NO] YES (Call Forcing Option)	FORC		
0 - [2] - 30 (Flexible Call Force Timer)	FCFT		
[0]-15 (Force Answer Delay Timer)	FADT		
[0]-15 (Force Answer Del. Timer for Ringback Cadence)	FADR		
[NO] YES (Indication for PCP from DCP)	SPCP		
[NO] AGT, ALL (Observe Warning Tone)	OBTN		
xxxx (Default Activity Code-# and * not allowed)	ACNT		
0 - [1] - 2047 (Call Waiting Threshold)	CWTH		

OVERLAY 23
ACD Data Block

RESPONSE	PROMPT	ENTRY	ENTRY
[NO] YES (New Call Wait Lamp settings allowed)	NCWL		
1 - 255 (Call Waiting Lamp Flash Threshold)	CWLF		
1 - 255 (Call Waiting Lamp Wink Threshold)	CWLW		
0 - 2047 (Busy Queue Threshold)	BYTH		
0 - [2047] (Overflow Queue Threshold)	OVTH		
2-1800 (Timed Overflow Timer)	TOFT		
[NO] YES (High Priority Queue)	HPQ		
[NO] YES (Accept Oldest Call in Network)	OCN		
XXXXXXX XXXXXXX XXXXXXX (Queue Overflow DN's)	OVDN		
0-23 digit directory # (Queue Interflow DN)	IFDN		
aaa bbb ccc ddd (Ovfl Bust treatment - internal calls)	OVBU		
aaa bbb ccc ddd (Interflow Treatment Different Orig)	BUSY		
[NO] YES (Automatic Enable Interflow)	AENI		
0 - 127; 0 - 511 (Emergency Recorder Trunk Route)	EMRT		
0 - 127; 0 - 511 (Music Route Number)	MURT		
[NO] YES (SAGP Load Management Command)	RTPC		
XX XX XX (0-15 - - TTY's for Status Report)	STIO		
[NO] YES (Data Agent Login via MSB key	DAL		
0 - 510 (Service Factor Threshold)	TSFT		
[YES] NO (Headset / Handset Log Out)	HOML		
[YES] NO (Restrict DN Keys)	RDNA		
1 - [15] - 30 seconds (Reserve Agent Timer)	RAGT		
15 - [30] - 45 Minutes (Duration Timer)	DURT		
[4] - 15 seconds (Message Resend Timer)	RSND		
10 - [20] - 100 (Flow Control Backpressure threshold)	FCTH		
0, [20]-255 (Call Request Queue Size)	CRQS		
[NO] YES (Delay Night RAN Treatment)	DNRT		

OVERLAY 23
ACD Data Block

RESPONSE	PROMPT	ENTRY	ENTRY
THE FOLLOWING PROMPTS ARE GIVEN IF 'TYPE' IS SCB			
New, Chg, Out, Prt, End	REQ		
Report Schedule Data Block	TYPE	SCB	SCB
0 - 31; 0 - 99 (Customer Number)	CUST		
mm dd mm dd (Start and End Dates)	CPRD		
0-23 (Start hour-Daily Schedule)	SHR		
0-23 (End hour-Daily Schedule)	EHR		
X X X...X (1-7) (Days of Week Schedule)	DOW		
0-7 (Reporting Frequency)	RFRQ		
1-2 (Status Reporting Frequency)	SFRQ		
X X X X (1-4) (Reporting Options)	ROPT		
XX XX XX (0-15) TTYs for Report Outputs)	PRIO		
[NO] YES (Start at the Top of a New Page)	PAGE		
[NO] YES (Agent ID Mode)	AID		
1-9999 (Agen ID Lower Bound)	IDLB		
IDLB-9999 (Agent ID Upper Bound)	IDUB		
0-999 Max. Agents to Log In	LOG		
[NO] YES (Short Report Option)	SRPT		
NO YES (ACD Daily Total Report)	TOT4		

THE FOLLOWING PROMPTS ARE GIVEN IF 'TYPE' IS ADS			
New, Out, Chg, Prt, End	REQ		
Agent ID Data Block	TYPE	ADS	ADS
0-31; 0 - 99 (Customer Number)	CUST		
[NO] YES (Agent ID Mode)	AID		
0-999 (Max. Agents to Log In)	LOG		
1-9999 (Agent ID Lower Bound)	IDLB		
IDLB-9999 (Agent ID Upper Bound)	IDUB		

OVERLAY 24
Direct Inward System Access Data Block

RESPONSE	PROMPT	ENTRY	ENTRY
New, Out, Chg, Prt, End	REQ		
DIS (DISA Data Block)	TYPE	DIS	DIS
0 - 99 (ST,RT,XN,XT) (Customer #)	CUST		
XXXX (Secure Data Password - defined in CDB)	SPWD		
XXXXXXX (DISA Directory Number)	DN		
XXXXXXXX (1 - 8 digit Security Code)	SCOD		
[NO] YES (Authorization Code required)	AUTR		
[0]- 31 (Trunk Group Access Restriction Code)	TGAR		
[0]- 99 (Network Class of Service)	NCOS		
[UNR] CUN, CTD, TLD, SRE, FR1, FR2, FRE	COS		
XXX (NFCR Code Restriction Class of Service)	CRCS		

New, Out, Chg, Prt, End	REQ		
DIS (DISA Data Block)	TYPE	DIS	DIS
0 - 99 (NT,RT,XN,XT) (Customer #)	CUST		
XXXX (Secure Data Password - defined in CDB)	SPWD		
XXXXXXX (DISA Directory Number)	DN		
XXXXXXXX (1 - 8 digit Security Code)	SCOD		
[NO] YES (Authorization Code required)	AUTR		
[0]- 31 (Trunk Group Access Restriction Code)	TGAR		
[0]- 99 (Network Class of Service)	NCOS		
[UNR] CUN, CTD, TLD, SRE, FR1, FR2, FRE	COS		
XXX (NFCR Code Restriction Class of Service)	CRCS		

OVERLAY 26

Individual / Group Do Not Disturb Data Block

RESPONSE	PROMPT	ENTRY	ENTRY
New, Out, Chg, Prt, Rem, Mov, Mrg, End	REQ		
DND (Do-Not-Disturb Data Block)	TYPE	DND	DND
0 - 99 (NT,RT,XN,XT) (Customer #)	CUST		
0 - 99 (Group Number)	GPNO		
0 - 99 (Move to Group Number)	TOGP		
0 - 99 (Number of First Group to be Merged)	GRP1		
0 - 99 (Number of Next Group to be Merged)	GRPn		
XXXXXXX / 0 - 99 (DN or Group Number to store)	STOR		
XXXXXXX / 0 - 99 (DN or Group Number to store)	STOR		
XXXXXXX / 0 - 99 (DN or Group Number to store)	STOR		
XXXXXXX / 0 - 99 (DN or Group Number to store)	STOR		
XXXXXXX / 0 - 99 (DN or Group Number to store)	STOR		
XXXXXXX / 0 - 99 (DN or Group Number to store)	STOR		
XXXXXXX / 0 - 99 (DN or Group Number to Remove)	RMOV		
XXXXXXX / 0 - 99 (DN or Group Number to Remove)	RMOV		
XXXXXXX / 0 - 99 (DN or Group Number to Remove)	RMOV		
XXXXXXX / 0 - 99 (DN or Group Number to Remove)	RMOV		
XXXXXXX / 0 - 99 (DN or Group Number to Remove)	RMOV		
XXXXXXX / 0 - 99 (DN or Group Number to Remove)	RMOV		

OVERLAY 28
Route Selection ANI Data Block

RESPONSE	PROMPT	ENTRY	ENTRY
New, Out, Chg, Prt, End	REQ		
RSA (Route Selection for ANI)	TYPE	RSA	RSA
0 - 99 (NT,RT,XN,XT) (Customer #)	CUST		
XXXX (RS-ANI access code digits)	RSAC		
XXXXXXX (Route access code for 0 - calls)	0-RT		
XXXXXXX (Route access code for 0+ calls)	0+RT		
XXXXXXX (Route access code for 1+ or IDDD calls)	1RT		
XXXXXXX (Route access code for local calls)	CORT		

New, Out, Chg, Prt, End	REQ		
RSA (Route Selection for ANI)	TYPE	RSA	RSA
0 - 99 (NT,RT,XN,XT) (Customer #)	CUST		
XXXX (RS-ANI access code digits)	RSAC		
XXXXXXX (Route access code for 0 - calls)	0-RT		
XXXXXXX (Route access code for 0+ calls)	0+RT		
XXXXXXX (Route access code for 1+ or IDDD calls)	1RT		
XXXXXXX (Route access code for local calls)	CORT		

New, Out, Chg, Prt, End	REQ		
RSA (Route Selection for ANI)	TYPE	RSA	RSA
0 - 99 (NT,RT,XN,XT) (Customer #)	CUST		
XXXX (RS-ANI access code digits)	RSAC		
XXXXXXX (Route access code for 0 - calls)	0-RT		
XXXXXXX (Route access code for 0+ calls)	0+RT		
XXXXXXX (Route access code for 1+ or IDDD calls)	1RT		
XXXXXXX (Route access code for local calls)	CORT		

OVERLAY 49

New Flexible Code Restriction Data Block

NEW, CHG, MOV, PRT, RLS, RPL, OUT, END	REQ		
FCR (New Flexible Code Restriction)	TYPE		
IDC (Incoming DID digit conversion tables)	TYPE		
0-99 0-256 (Source Customer and Tree Number)	FROM		
0-99 0-256 (Destination Customer and Tree Number)	TO		
0 - 99 (NT,RT,XN,XT) (Customer #)	CUST		
0-254 (IDC tree number)	DCNO		
[NO] YES (Hospitality IDC Table)	HOSP		
[NO] YES (Expand DN Length)	XPDN		
[NO] YES (Send Calling party ID)	SDID		
0-9999 (DN or range of DNs to be converted)	IDGT		
xxxx (Authcode for DID Directory # Printed)	AUTH		
0 - 256 (Code Restriction Tree Number)	CRNO		
ALOW, DENY (Specify digit string to allow / deny)	INIT		
XXXX (Digits to be unconditionally allowed)	ALOW		
XXXX Y...Y (Digits to be conditionally allowed / maximum digits that can follow)	ALOW		
[YES] NO (Update tree with digit sequence input)	UPDT		
XXXX (Digits to be denied)	DENY		
[YES] NO (Update tree with digit sequence input)	UPDT		
[NO] YES (Data to be stored even if portions of existing code restriction tree are lost)	FRCE		
XXXX (Digit sequence to bypass)	BYPS		
[YES] NO (Update tree with digit sequence input)	UPDT		

OVERLAY 50
Call Park Data Block

RESPONSE	PROMPT	ENTRY	ENTRY
New, Out, Chg, Prt, End	REQ		
CPK (Call Park data Block)	TYPE	CPK	CPK
0 - 99 (NT,RT,XN,XT) (Customer #)	CUST		
30 - [45] - 240 (CPK recall time in seconds)	CPTM		
[NO] YES (Recall the Parking Set or the Attendant)	RECA		
XX YYYYYYY (Number of system park DNs and first DN)	SPDN		
0 - 127 (ST) 0 - 511 (NT,RT,XT) Music Rt. #	MURT		

New, Out, Chg, Prt, End	REQ		
CPK (Call Park data Block)	TYPE	CPK	CPK
0 - 99 (NT,RT,XN,XT) (Customer #)	CUST		
30 - [45] - 240 (CPK recall time in seconds)	CPTM		
[NO] YES (Recall the Parking Set or the Attendant)	RECA		
XX YYYYYYY (Number of system park DNs and first DN)	SPDN		
0 - 127 (ST) 0 - 511 (NT,RT,XT) Music Rt. #	MURT		

New, Out, Chg, Prt, End	REQ		
CPK (Call Park data Block)	TYPE	CPK	CPK
0 - 99 (NT,RT,XN,XT) (Customer #)	CUST		
30 - [45] - 240 (CPK recall time in seconds)	CPTM		
[NO] YES (Recall the Parking Set or the Attendant)	RECA		
XX YYYYYYY (Number of system park DNs and first DN)	SPDN		
0 - 127 (ST) 0 - 511 (NT,RT,XT) Music Rt. #	MURT		

OVERLAY 50
Call Park Data Block

RESPONSE	PROMPT	ENTRY	ENTRY
New, Out, Chg, Prt, End	REQ		
CPK (Call Park data Block)	TYPE	CPK	CPK
0 - 99 (NT,RT,XN,XT) (Customer #)	CUST		
30 - [45] - 240 (CPK recall time in seconds)	CPTM		
[NO] YES (Recall the Parking Set or the Attendant)	RECA		
XX YYYYYYY (Number of system park DNs and first DN)	SPDN		
0 - 127 (ST) 0 - 511 (NT,RT,XT) Music Rt. #	MURT		

OVERLAY 57
Flexible Feature Codes Data Block

New, Chg, Prt, Out, End	REQ		
FFC (Flexible Feature Codes)	TYPE	FFC	FFC
0 - 99 (RT, NT, XN,XT) (Customer Number)	CUST		
[NO] YES (FFC Confirmation Tone Allowed)	FFCT		
[NO] YES (CEPT Defaults defined **International Market only**)	CEPT		
X (Single Character replacement for CEPT; <cr> to create defaults only)	REP		
[NO] YES (Remove all FFCs)	ALL		
XXXX, ALL (Specific FFC or prompt for all codes; See **Table A** for inputs)	CODE		

OVERLAY 57
Flexible Feature Codes Data Block

TABLE A

FEATURE	ENTRY	FEATURE	ENTRY
Set -Based Admin. Sequence	ADMN xxxx	Automatic Set Removal Code	AREM xxxx
Automatic Set Relocation	ASRC xxxx	Autovon Flash Override Precedence	ATFO xxxx
Auto Dial Activated	ATDA xxx	Auto Dial Deactivated	ATDD xxxx
Autovon Flash Precedence	ATVF xxxx	Autovon Immediate Precedence	ATVI xxxx
Autovon Priority Precedence	ATVP xxxx	Authorization Code	AUTH xxxx
Automatic Wakeup activate	AWUA xxxx	Automatic Wakeup deactivate	AWUD xxxx
Automatic Wakeup verify	AWUV xxxx	CDR Charge Account	CDRC xxxx
Call Forward All Calls activate	CFWA xxxx	Call Forward All Calls deactivate	CFWD xxxx
Call Forward All Calls verify	CFWV xxxx	Conference Diagnostics	COND xxxx
Call Park activate	CPRK xxxx	Call Park access	CPAC xxxx
Centrex Switchhook Flash	CSHF xxxx	Data Port Verification	DPVS xxxx
Call Waiting Activated	CWGA xxxx	Cal l Waiting Deactivated	CWGD xxxx
Conference Call 6 Party	C6DS xxxx	Ring Again/Call Forward deactivate (500/2500 sets only)	DEAF xxxx
Electronic Lock activate	ELKA xxxx	Electronic Lock deactivate	ELKD xxxx
Enhanced Override	EOVR xxxx	Group Hunt Termination Allowed	GHTA xxxx
Group Hunt Termination Disallowed	GHTD xxxx	Group Hunt Pilot DN	GRHP xxxx
Group Call	GRPF xxxx	Group Call List Number	GRCL xxxx
Hospitality Identification	HIDN xxxx	Hospitality Relocation	HREL xxxx
Permanent Hold	HOLD xxxx	Integrated Message System access	IMS xxxx
Intercept Computer Interface Activate Code	ICPA xxxx	Intercept Computer Interface Deactivate Code	ICPD xxxx
Intercept Computer Interface Override Code	ICPO xxxx	Intercept Computer Interface Print Code	ICPP xxxx
Multi-Language IO	MLIO xxxx	Enter Set Based Maintenance Sequence	MNT xxxx
Make Set Busy Activated	MSBA xxxx	Make Set Busy Deactivated	MSBD xxxx
Maintenance access	MNTC xxxx	Malicious Call Trace	MTRC xxxx
Multiple Wake-Up Activated	MWUA xxxx	Repeat Multiple Wake-Up Activated	MWRA xxxx
Multiple Wake-Up Deactivated	MWUD xxxx		
Override	OVRD xxxx	Call Pickup - DN	PUDN xxxx
Answer Parallel Paging Code	PGAP xxxx	Inityiate Parallel Paging Code	PGIP xxxx
Initiate Serial Paging Code	PGSP xxxx	Pilot DN	PLDN xxxx
Initiate Group Hunting	USE xxxx	Prompt when PLdn Not Definned	LSNO
Linear Hunting	HYTP [LIN] RRB	Terminate or Skip Idle when CFW Active	CFWI YES [NO]
Limit to Calls Queued	MQUE 0,1[ALL]		
Call Pickup - Group	PUGR xxxx	Call Pickup - Ringing Number	PURN xxxx
Remote Call Forward activate	RCFA xxxx	Remote Call Forward deactivate	RCFD xxxx
Remote Call Forward verify	RCFV xxxx	Last Number Redial	RDLN xxxx
Stored Number Redial erase	RDNE xxxx	Stored Number Redial activate	RDSN xxxx
Store Last Number Dialed	RDST xxxx	Ring Again activate	RGAA xxxx
Ring Again deactivate	RGAD xxxx	Ring Again verify	RGAV xxxx
Room Status	RMST xxxx		
Station Control Password change	SCPC xxxx	Access Radio Paging	RPAX xxxx
Answering the Radio Paging Call	RPAN xxxx	Flex. Feature Code to Disable SAR	SADS xxxx
Flex. Feat. Code to Enable SAR	SAEN xxxx	Flex. Feature Code to Lock SAR	SALK xxxx
Flex. Feat. Code to Unlock SAR	SAUN xxxx	Speed Call Erase Code	SPCE xxxx
Speed Call Controller	SPCC xxxx	Speed Call User	SPCU xxxx
System Speed Call User	SSPU xxxx	Trunk Answer from Any Station	TFAS xxxx
Terminal Diagnostics	TRMD xxxx	Trunk Verification	TRVS xxxx
User Status	USTA xxxx	*ACD 500/2500 set Log In/Log Out*	*LILO xxxx*
Secretarial Filtering Access FFC	SFAC xxxx	*ACD 500/2500 set Not Ready status*	*NRDY xxxx*

xxxx = Feature Code

Default values are in [ ]

OVERLAY 73
Digital Trunk Interface Data Block

New, Out, Chg, Prt, End	REQ		
DDB, DTI2, JDMI, PRI2, DTI, PRI	TYPE		

The following prompts are given when TYPE = DDB:

YES, NO (Clock Controller is / is not equipped)	CEQP		
1-9, X1-X9 (Add, Remove Clock Controller)	CLKN		
0 - 159 (Primary Reference source for Clock Synch. Controller - <cr> = Free Run Mode)	PREF		
0 - 159 (Secondary Reference source for Clock Synch. Controller - <cr> = Free Run Mode)	SREF		
0 - 15 (Modify DTI thresholds set)	TRSH		
1 -[3]- 128 (Remote alarm/clear threshold)	RALM		
0 [2]- 128 (Bipolar Violation counter)	BIPC		
0 -[3]- 128 (Loss of Frame Alignment counter)	LFAC		
1 -[3]- 4 / 1 -[2]- 4 (Bipolar violation monitoring maintenance and out of service thresholds)	BIPV		
1 -[5]- 24 / 1 [30]- 3600 (Tracking slip rate monitoring maintenance and out of service thresholds)	SRTK		
1 -[15]- 1024 / 1 -[3]- 1024 (Non-tracking slip rate monitoring maintenance and out of service thresholds)	SRNT		
1 -[17]- 10240 / 1 -[511]- 10240 (Loss of frame alignment monitoring and out of service thresholds)	LFAL		
[1] - 127 (Slip Rate improvement timer in minutes)	SRIM		
1 - [2] - 127 (Slip rate to exceede maint limit while waiting for slip rate improvement)	SRMM		

The following promt is given when TYPE = DTI2:

ABCD (Digital signaling category) PAD (Digital pad category) LPTI (Digital loop timers and signals) SYTI (Digital system timers and counter)	FEAT		

The following promts are given when TYPE = ABCD:

2-16 (Signaling category 1 (Req = PRT then input 1 to print default table)	SICA		
[NO] YES (List of trunk TNs using SICA tables printed)	TNLS		
[1]-16 (Default signaling category for default values)	DFLT		

OVERLAY 73
Digital Trunk Interface Data Block

Incoming /Outgoing Calls:

abcd ((send) idle signal bits)	IDLE(S)		
abcd ((receive) idle signal bits)	IDLE(R)		
abcd ((send)bits. DTI out of service N if FALT(send) signal not required)	FALT(S)		
abcd ((receive) bits. DTI out of service N if FALT (service) signal not required	FALT(R)		

Incoming Calls:

abcd (Seize signal from or to a non-SL-1))	SEZ(R)		
abcd (Seize a signal for data calls between SL-1s N if SEZD(R) signal not required)	SEZD(R)		
abcd (Seize signal for voice calls N if SEZV(R) signals not required)	SEZV(R)		
abcd (receive) signal sent during seizeby incoming CO)	PCALL(R)		
ON, OFF (Length of pulse time on, and time off	TIME		
abcd (Seize sinal a cknowledge ment (send) N if SEZA(S) signal not required)	SEZA(S)		
50-80-90-[150]-800 (Delay prior to sending SZACK)	TIME		
abcd , N (Wink Start, WNKS(S) signal not required)	PWNKS(S)		
10-[220]-630 (Time for WNKS(S) signal)	TIME		
abcd, N ((receive) decadic pulses, DIGT(R) not req.)	PDIGT(R)		
abcd, N (number received signal (send), Sig. not req	NRCV(S)		
abcd, N (End of selection free (send))	PEOSF(S)		
[100]-150 (Time for EOSF(S))	TIME		
abcd, N (End of selection busy (send))	PEOSB(S)		
[100]-150 (Time for EOSB(S)	TIME		
abcd, N (Operator calling time (receive) signal	POPCA(R)		
64-[128]-192 (Time of OPCA(R) pulse)	TIME		
[1]-5 (Number of OPCA(R) pulses	REPT		
abcd (Connect Send)	CONN(S)		
abcd (Connect Receive)	CONN(R)		
abcd ,N (Register recall (send) signal)	PRRC(S)		

Default values are in [ ]

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Digital Trunk Interface Data Block

10 - [100]-150 (Time of RRC(S) signal)	TIME		
abcd, N (Bring up receiver (send))	PBURS(S)		
abcd, N (Bring up receiver (receive))	PBURS(R)		
64-[128]-192 (Length of BURS(R) pulse)	TIME		
abcd , N (Clearback (send) signal)	CLRB(S)		
abcd, N (Release Control (send) signal)	PRCTL(S)		
100-[150]-300 (Time value is stored in multiples of 10)	TIME		
abcd, N (Release control originating party disconnect)	RCOD(S)		
150 (Timer value in milliseconds is fixed)	TIME		
abcd, N (Operator (receive) manual recall signal)	POPRS(R)		
xxx yyy (minimum and max. time range for OPRS(R))	TIME		
abcd, N (Network transfer signal (send) pulse)	PNXFR(S)		
abcd, N (ESN wink signal (send) pulse)	PESNW(S)		
abcd, N (Centalized attendant signal (send) pulse)	PCAS(S)		
abcd, N (Clear forward (receive))	CLRF(R)		
abcd,(N) (Special operator signal defined, N undefined)	SOS		

Outgoing Calls:

abcd (Seize voice or data from or to a non SL-1 switch)	SEZ(S)		
abcd , N (Seize data (send) signal, SEZD(S) not req.)	SEZD(S)		
abcd, N (Seize voice (send) signal)	SEZV(S)		
abcd ,N (Seize acknowledgement (receive) signal)	SEZA(R)		
50,80,90,[150],800 (Delay time for the SEZA signal)	TIME		
abcd, N (Wink start pulsed seize acknowledgement (receive signal)	PWNKS(R)		
20-(140)-500, 20-(290)-500 (Min. & max. length of WNKS(R) pulse)	TIME		
abcd, N (End of selection (receive) signal)	PEOS(R)		
[64]-320, 64-(256)-320 (Length of EOS(R) pulse)	TIME		
abcd (Connect Send)	CONN(S)		

Default values are in [ ]

OVERLAY 73
Digital Trunk Interface Data Block

abcd (Connect receive)	**CONN(R)**		
abcd, N (Operator recall signal for special services)	**POPRC(R)**		
abcd, N (Bring up receiver (send) for L1 networking)	**PBURS(S)**		
abcd, N (Bring up receiver (receive) fo L1 networking)	**PBURS(R)**		
64-[128]-192 (Length of BURS(R) pulse)	**TIME**		
abcd, N (Clear Back)	**CLRB(R)**		
abcd, N (Release control, RCTL(R) not required)	**PRCTL(R)**		
96-[128]-320 96-[256]-320 (Time value stored in multiple of 8 ms)	**TIME**		
abcd, N (Network transfer)	**PNXFR(R)**		
abcd, N (ESN wink signal)	**PESNW(R)**		
abcd, N (Centalized attendant service signal)	**PCAS(R)**		
abcd, N (Clear forward)	**CLRF(S)**		
[0] (800 miliseconds)	**TIME**		
abcd, [N] (Special operator signal defined [undefined])	**SOS**		

The following prompts are given when FEAT = PAD:

1-16 (Pad category table)	**PDCA**		
[NO] YES (PRT control for trunk TNS)	**TNLS**		
[1]-16 (Default pad category)	**DFLT**		

The following 18 prompts and assiciated responses identify the pad codes (x for receive and y for transmit):

x y <cr> (On premises extension, initial values)	**ONP**		
x y (Meridian digital set)	**DSET**		
x y (Off premises extension)	**OPX**		
x y (Digital TIE trunks)	**DTT**		
x y (Digital satellite TIE trunks)	**SDTT**		
x y (Digital COT, FEX, WAT, and DID trunks)	**DCO**		
x y (1.5 Mb/s DTI/PRI digital TOLL office trunks	**DTO**		
x y (Non-transmission compensated)	**NTC**		

x y (Tranmission compensated)	TRC		
x (Pad value whil;e DTR is connected (receive only))	DTR		
x y (Via Net Loss. Anolog Tie)	VNL		
x y (Anolog satellite TIE trunks)	SATT		
x y (Anolog COT and WATS trunks)	ACO		
x y (Anolog TOLL office trunks)	ATO		
x y (1.5 Mb/s PRI/DTI trunk)	PRI		
x y (2.0 Mb/s PRI/DTI trunk)	PRI2		
x y (Xcaliber anolog CO trunk)	XUT		
x y (Xcaliber anolog TIE trunk)	XEM		

The following prompts are given for PRI2 when FEAT = LPTI:

C (PRI2 or DTI2 card slot)	LOOP		
CRC [AFF] (Multiframe format, Alterbative frame format)	MFF		
ALT, [REG] (Alternate or default alarm handler)	FIRM		
mc mt oc ot (mc = Maintenance threshold slip count (1-[5]-255)) (mt = Maintenance threshold time (default=24H)) (oc = (Out of service threshold slip count (1-[30]-255)) (ot = Out of service threshold time (default = 1H)	SLP		
[NO], YES (THhe grade-of -service feat)	NOOS		
n1 n2 (Bipolar violation thresholds (1-255) default n1=128, n2=122)	BPV		
nn (# of seconds firmware has to check & validate error rate condition. Range 1-[10]-15 seconds)	RATS		
n1 n2 (Cyclic redundancy threshold (1-255) Default n1=201, n2=97)	CRC		
n1 n2 (Frame alignment threshold (1-255) Default n1=28, n2=1)	FAP		
T2 mt dt ct ot (Group 2 error thresholds) T2=error count values 1-[20-]255 mt=maintenance threshold time, default =100S dt = no new data calls threshold time, default=12S ct= no new calls threshold time, default=12S ot=out of service threshold time, default=4S	GP2		

OVERLAY 73
Digital Trunk Interface Data Block

nnnM (Maintenance guard time group1 default=15M)	MNG1		
nnnM (No new calls guard time group1 default=15M)	NCG1		
nnnM (Out of service guard time group1 default=15M)	OSG1		
nnnS (Maintenance guard time group 2 default=15S)	MNG2		
nnnS (No new calls guard time group 2 default =15S)	NCG2		
nnnS (Out of service guard time group 2 default=15S)	OSG2		
0-[50]-254 (Gr. 2 persistence and clearance timers)	PERS		
0-[5]-127 (Out of service counter)	OOSC		

The following prompts are given for DTI2 when FEAT = LPTI:

lll (DTI loop number)	LOOP		
abcd, N ((send) Digit pulse timing from TDS)	PDIGT(S)		
abcd, N (Metering (receive))	PMETR(R)		
0 (PPM bit counted when changed from 1 to 0) 1 (PPM bit counted when changed from 0 to 1)	EDGE		
40-[240]-480 (Maximum time METR signal can be on)	TIME		
0-[1920]-8064 (Seize acknowledge supervision period) DTI2 default=1920, JDMI default=4992)	SASU		
YES, NO (DTI card will/will not set bit 3 of timeslot 0 if loss of MFAS occurs) defaults: DTI2=NO, JDMI=YES	MFAO		
[NO] YES (PSTN incoming seizure during lockout of MFAS and far end fault states allowed)	SZNI		
	LCLB		
	UCFS		
[NO] YES (Toggle reserves bits in frame 0, timeslot 0)	TGLR		
CRC, [AFF] (Multiframe or alternative format)	MFF		
NC mt dt ct ot (Cyclic redundancy check error counts) NC= error count values range 1-[205]-255 mt=Maintenance threshold time, default=10S dt=No new data calls threshold time, default=3S ct=No new calls threshold time, default=3S ot-Out of service threshold time, default =1S	CRC		
NB mt dt ct ot (Bipolar violation error counts) defaults:1-[205]-255, 10S, 3S, 3S, 1S	BVP		

OVERLAY 73
Digital Trunk Interface Data Block

NF mt dt ct ot (Frame alignment problem thresholds) defaults:1-[32]-255, 4S, 1S, 1S, 100T	FAP		
NS mt dt ct ot (Maintenance threshold slip count) defaults: 1-[20]-255, 30S, 10S, 6S	SLP		
T2 mt dt ct ot (Group 2 error thresholds) defaults: 1-[20]-255, 100S, 12S, 12S, 4S	GP2		
[NO] YES (DTI2 loop equipped with firmware for France)	FRFW		

The following prompts are given when FEAT = SYTI:

0-[15]-1440 (Maintenance guard time in minutes)	MAND		
0-[15]-1440, 1S-59S (New call suppression guard time)	NCSD		
0-[15]-1440 (Out of service guard time)	OSGD		
0-[5]-127 (Out of service occurrences since midnight)	OOSC		
0-[100]-254 (Persistence timer for far end problems)	PERS		
[10]-32 (Debounce timer)	DBNC		
1-9 (Clock controller slot number) <cr>, X (no default changes, to remove data)	CLKN		
IIII (Primary reference for clock controller zero) <cr> (Primary reference remains at current setting) X (Primary reference reverts to free run mode)	PREFCK0		
III , <cr>, X (Secondary reference for clock controller 0)	SREFCK0		
III,<cr>, X (Primary reference for clock controller 1	PREFCK1		
III,<cr>,X (Secondary reference for clock controller 1)	SREFCK1		
0-[15]-1440 (Clock controlller free run guard time)	CCGD		
0-[15] (Clock controller audit rate)	CCAR		
[NO], YES (Fast clock switching allowed (denied))	EFCS		

OVERLAY 86
ESN Data Block

New, Out, Chg, Prt, End	REQ	
0 - 99 (NT,RT,XN,XT) (Customer number)	CUST	
ESN (Feature)	FEAT	ESN
0 - 999 (Maximum number of Location Codes)	MXLC	
0 - 255 BARS; 0 - 511 NARS (Maximum number of SDR Tables)	MXSD	
0 - 127 BARS; 0 - 255 NARS (Maximum number of ITGE Tables)	MXIX	
0 - 32 CDP; 0 - 255 BARS/NARS (Maximum number of DMI Tables)	MXDM	
0 - 127 CDP/BARS; 0 - 255 NARS (Maximum number of RLI Tables)	MXRL	
0 - 31 BARS; 0 - 255 NARS (Maximum number of FCAS Tables)	MXFC	
[YES] NO (Coordinated Dialing Plan enabled)	CDP	
0 - 10,000 (Maximum number of Steering Codes)	MXSC	
3 - 7 (without DNXP); 3 - 10 (with DNXP) (Number of CDP Digits)	NCDP	
0 - 7 (Maximum number of entries for SCC data table)	MSCC	
XX (BARS/NARS Access Code One)	AC1	
XX (NARS Access Code Two)	AC2	
[YES] NO (Dial Tone after Access Code)	DLTN	
[YES] NO (Expensive Route Warning Tone provided)	ERWT	
0 - [6] - 10 seconds (Expensive Route Warning Tone Delay)	ERDT	
0 - 1 BARS/CDP; 0 - 7 NARS (Time of Day Schedules) Format: s aa bb cc dd where: s = schedule number aa = starting hour 0 - 23 bb = starting minute 00 - 59 cc = ending hour 0 - 23 dd = ending minute 00 - 59 Default: 0 00 00 23 59	TODS TODS TODS TODS TODS TODS TODS TODS	
[DIS] YES (Routing Control Disabled or Active)	RTCL	

OVERLAY 86
ESN Data Block

0 - 99; 0 - 99 (NCOS Mapping old value; new value)	NMAP	
X X X X X X X (Day of the week TOD applies: 1 = Sunday, 7 = Saturday)	ETOD	
[NO] YES (Check for Trunk Group Access Restrictions)	TGAR	

The following prompts apply to Digit Manipulation Tables:

DGT (Digit Manipulation Table)	FEAT	DGT
1 - MXDN (Digit Manipulation Table Number)	DMI	
0 - 15 (Number of leading digits to be deleted)	DEL	
0 - 20 (Leading digits to insert)	INST	
0 - 7 (Entry to SCC Table)	SCCI	
[NCHG] INTL, NPA, NXX, LOC, CDP, SPN, UKWN (Call Type)	CTYP	

The following prompts apply to Route List Index Blocks:

RLB (Route List Block)	FEAT	RLB
0 - MXRL (Route List Index Number)	RLI	
0 - 6 CDP; 0 - 63 BARS/NARS (Route List Entry Number)	ENTR	
0 - 127 (ST) 0 - 511 (NT,RT,XN,XT) (Route Number)	ROUT	
[NO] YES (Skip Conventional Signaling)	SCNV	
[NO] YES (Tone Detector)	TDET	
[CC1] CC2, TIE (Type)	TYPE	
[SCC] DIAL (SCC or Regular Dial Tone)	TONE	
0 - 1 BARS/CDP; 0 - 7 NARS (Turn on Time of Day Schedule)	TOD	
[NO] YES (Convert LOC to LDN)	CNV	
[NO] YES (Expensive Route)	EXP	
0 - 7 (Minimum FRL required for access)	FRL	
0 - MXDM (Digit Manipulation Index Number)	DMI	
[NO] YES (Entry is (is Not) a VNS Route)	VNS	
1-15 (VNS D-Channel Number)	VDCH	

OVERLAY 86
ESN Data Block

xxx, 1-255 (NARS/BARS) , 1-31(CDP), [0] (VNS Digit Manipulation)	VDMI	
1-[20]-100 (Maximum Number of VNS Trunks to be Used)	VTRK	
[0]-100 (VNS Trunks to Hold)	VTTH	
[0]-30 (Number of Minutes to Hold VNS Trunk for Reuse)	HOLD	
0 - MXFC (Free Calling Area Screening Index Number)	FCI	
[0]-1-255 (Free Special Number Screening Index)	FSNS	
[DBA] DBI (Drop Back Busy)	IDBB	
[NO] YES (ISDN Off-Hook Queuing Option)	IOHQ	
[NO] YES (Off Hook Queuing)	OHQ	
[NO] YES (Call Back Queuing)	CBQ	
[0]-32 (Number of Entries in Initial Set for NARS/BARS)	ISET	
[MIN], 0-7 (Minimum FRL)	MFRL	
[0]-16 (Minimum Overlap Digit Length)	OVLL	
0 - 6 CDP; 0 - 31 BARS/NARS (Route List Entry Number)	ENTR	
0 - 127 (ST) 0 - 511 (NT,RT,XN,XT) (Route Number)	ROUT	
[NO] YES (Skip Conventional Signaling)	SCNV	
[NO] YES (Tone Detector)	TDET	
[CC1] CC2, TIE (Type)	TYPE	
[SCC] DIAL (SCC or Regular Dial Tone)	TONE	
0 - 1 BARS/CDP; 0 - 7 NARS (Turn on Time of Day Schedule)	TOD	
[NO] YES (Convert LOC to LDN)	CNV	
[NO] YES (Expensive Route)	EXP	
0 - 7 (Minimum FRL required for access)	FRL	
0 - MXDM (Digit Manipulation Index Number)	DMI	
[NO] YES (Entry is (is Not) a VNS Route)	VNS	
1-15 (VNS D-Channel Number)	VDCH	
xxx, 1-255 (NARS/BARS) , 1-31(CDP), [0] (VNS Digit Manipulation)	VDMI	

OVERLAY 86
ESN Data Block

1-[20]-100 (Maximum Number of VNS Trunks to be Used)	**VTRK**	
[0]-100 (VNS Trunks to Hold)	**VTTH**	
[0]-30 (Number of Minutes to Hold VNS Trunk for Reuse)	**HOLD**	
0 - MXFC (Free Calling Area Screening Index Number)	**FCI**	
[0]-1-255 (Free Special Number Screening Index)	**FSNS**	
[DBA] DBI (Drop Back Busy)	**IDBB**	
[NO] YES (ISDN Off-Hook Queuing Option)	**IOHQ**	
[NO] YES (Off Hook Queuing)	**OHQ**	
[NO] YES (Call Back Queuing)	**CBQ**	
[0]-32 (Number of Entries in Initial Set for NARS/BARS)	**ISET**	
[MIN], 0-7 (Minimum FRL)	**MFRL**	
[0]-16 (Minimum Overlap Digit Length)	**OVLL**	

The following prompts apply to ITGE Index Tables:

ITGE (Incoming Trunk Group Exclusion)	**FEAT**	
1 - MXIX (ITGE Index)	**ITEI**	
0 - 127 (ST) 0 - 511 (NT,RT,XT) (Route Number)	**RTNO**	
0 - 127 (ST) 0 - 511 (NT,RT,XT) (Route Number)	**RTNO**	
0 - 127 (ST) 0 - 511 (NT,RT,XT) (Route Number)	**RTNO**	
0 - 127 (ST) 0 - 511 (NT,RT,XT) (Route Number)	**RTNO**	
0 - 127 (ST) 0 - 511 (NT,RT,XT) (Route Number)	**RTNO**	
0 - 127 (ST) 0 - 511 (NT,RT,XT) (Route Number)	**RTNO**	
0 - 127 (ST) 0 - 511 (NT,RT,XT) (Route Number)	**RTNO**	
0 - 127 (ST) 0 - 511 (NT,RT,XT) (Route Number)	**RTNO**	
0 - 127 (ST) 0 - 511 (NT,RT,XT) (Route Number)	**RTNO**	
0 - 127 (ST) 0 - 511 (NT,RT,XT) (Route Number)	**RTNO**	
0 - 127 (ST) 0 - 511 (NT,RT,XT) (Route Number)	**RTNO**	
0 - 127 (ST) 0 - 511 (NT,RT,XT) (Route Number)	**RTNO**	

Default values are in [ ]

OVERLAY 86
ESN Data Block

The following prompts apply to Network Attendant Services:

[0]-63 (NAS Routing Table)	TBL	
1-7 (Attendant Alternative Number), X1-X7 (Clear Alt. #)	ALT	
x...x (Digits Dialed to reach a Remote Attendant)	ID	
1-31, 0, X1-X31, X0 (Scheduled period change, Catch-all period, Remove the Period, Remove all alternatives)	TODS	
hh mm hh mm (Start and Stop Times for the Scheduled Period)	PER	
1-7...1-7, X1- X7...X1- X7 (Days to be Assigned, #s of Days Inactive)	DAYS	
1-7 1-7 1-7 1-7 , X1-X7 X1-X7 X1-X7 X1-X7 (Attendant Alternatives Remove Alternatives)	ALST	
Y/N Y/N Y/N Y/N (Drop Back Busy Option allowed/denied)	DBK	
Y/N Y/N Y/N Y/N (Queuing to a Route allowed/denied)	QUE	

The following prompts can appear when FEAT = SCC and NARS, BARS, or CDP is active:

[0]-7 (Special common carrier index)	SCCI	
[0]-23 (Number of digits in SCC type 2 LDN	LDN2	
[0]-30 (Ringback tone delay time in seconds for SCC)	RBTD	

OVERLAY 87
ESN Data Block

New, Out, Chg, Prt, End	REQ	
0 - 99 (NT,RT,XN,XT) (Customer Number)	CUST	
NCTL (Network Control)	FEAT	NCTL
0 - 7 (Traveling Off Hook Queue Eligibility; up to eight entries)	TOHQ	
[NO] YES (Off Hook Queuing option)	SOHQ	
2 - [10] - 60 (Off Hook Queue Timer)	OHTL	
[NO] YES (Call Back Queuing option)	SCBQ	
10 - [20] - 30 (Call Back Queue Timer)	CBTL	
0 - 127 (ST) 0 - 511 (NT,RT,XT) (Call Back Queue RAN Route)	RANE	
0 - 127; 0 - 511 (Call Back Queue RAN Route for Conventional Main)	RANC	
0 - 99; 1 - 99 (Starting/Ending number for NCOS printing)	NRNG	
0 - 99 (Network Class Of Service)	NCOS	
[NO] YES (Associate Equal Access with this NCOS Group)	EQA	
0 - 7 (Facility Restriction Level)	FRL	
[NO] YES (Expensive Route Warning Tone)	RWTA	
[NO] YES (Network Speed Call Access allowed)	NSC	
0 - 4095 (Network Speed Call List Number)	LIST	
[NO] YES (Off Hook Queuing)	OHQ	
[YES] NO (Call Back Queuing)	CBQ	
[I] A (Call Back Queuing on Initial or Extended set)	ROUT	
0 - 30 (Extended Route Advance Timing)	RADT	
0 - 3 (Starting Priority of user in Call Back Queue)	SPRI	
0 - 3 (Maximum attainable Priority)	MPRI	
0 - 30 (Queue Priority Promotion Timing)	PROM	

OVERLAY 87
ESN Data Block

The following prompts apply to Free Calling Area Screening:

FCAS (Free Calling Area Screening)	FEAT	FCAS
1 - MXFC (Free Calling Index number)	FCI	
XXX (Number Plan Area: 15 code entires NARS; 7 code entries BARS)	NPA	
DENY or ALOW (NXX Codes to be denied or allowed)	NXX	

The following prompts apply to Coordinated Dialing Plan:

CDP (Coordinated Dialing Plan)	FEAT	CDP
LSC, DSC, TSC, FSNS	TYPE	
XXXXXXX (Local Steering Code)	LSC	
0-31 (Digit Manipulation Index for LSC)	DMI	
0 - 7 / 0 - 4 (Number of digits to be deleted with / without DNXP)	DEL	
XXXXXXX (Distant Steering Code)	DSC	
LSC, HLOC, DN (local steering code,home location code, DN for CLID)	DSP	
[NO] YES (Remote Radio Paging FFC used or not)	RRPA	
0 - MXRL (Route List Index entry)	RLI	
[0]-10 (Flexible number of digits)	FLEN	
XXXX (Trunk Steering Code)	TSC	
0 - MXRL (Route List Index entry)	RLI	
[0]-10 (Flexible number of digits)	FLEN	
1-255 (Free Special Number Screening Index)	FSNS	
x...x (1-11 digit special number code to be screened)	SPN	
DENY, ALLOW (Routing codes to be denied or allowed)	XXX	

OVERLAY 88
Authorization Code Data Block

Input action	New,Out,Chg,Prt End	REQ		
Input for Authcode data block or Authcodes	AUB, RAUB, AUT RAUT, SAR	TYPE		
Customer Number	0 - 99 (NT,RT,XT)	CUST		
Secure Data Password	XXXX	SPWD		

The following prompts appear when TYPE is AUB or RAUB

Number of digits in authcodes	1 - 14	ALEN		
Activate CDR for authcodes	(NO) YES	ACDR		
RAN route for authcode last	0 - 127; 0 - 511	RANR		
Classcode value	0 - 115	CLAS		
Class of service	(UNR), CTD, CUN, IPNA, IPGA, FRE, FR1, FR2, SRE, TLD	COS		
Trunk Group Access restriction	(0) - 31	TGAR		
Network Class of Service	(0) - 99	NCOS		
Automatically generate codes	NO, YES	AUTO		
Security password	0000 - 9999	SECR		
Nmbr of codes to auto generate	1 - 50000	NMBR		
Classcode to be auto assigned	0 - 115	CLAS		

The following prompts appear when TYPE is AUT

Authcode entry	XXXXXXXXXXXXXX	CODE		
Code to be a SAR code or not	NO, YES	SARC		
SAR service functions for SARC	ENA, END LKA, LKD DSA, DSD UNA, UND	SERV		
SGRP number	0-999	SGRP		
Classcode assigned to authcode	0 - 115	CLAS		
Security password	0000 - 9999	SECR		

Default values are in ( )

OVERLAY 88

Authorization Code Data Block

Authcode entry	XXXXXXXXXXXXXXX	CODE		
Code to be a SAR code or not	NO, YES	SARC		
SAR service functions for SARC	ENA, END LKA, LKD DSA, DSD UNA, UND	SERV		
SGRP number	0-999	SGRP		
Classcode assigned to authcode	0 - 115	CLAS		
Security password	0000 - 9999	SECR		
Authcode entry	XXXXXXXXXXXXXXX	CODE		
Code to be a SAR code or not	NO, YES	SARC		
SAR service functions for SARC	ENA, END LKA, LKD DSA, DSD UNA, UND	SERV		
SGRP number	0-999	SGRP		
Classcode assigned to authcode	0 - 115	CLAS		
Security password	0000 - 9999	SECR		
Authcode entry	XXXXXXXXXXXXXXX	CODE		
Code to be a SAR code or not	NO, YES	SARC		
SAR service functions for SARC	ENA, END LKA, LKD DSA, DSD UNA, UND	SERV		
SGRP number	0-999	SGRP		
Classcode assigned to authcode	0 - 115	CLAS		
Security password	0000 - 9999	SECR		

Default values are in ( )

OVERLAY 88
Authorization Code Data Block

The following prompts are given when TYPE=SAR

SAR group number	0-999	SGRP		
Off-Horn Period Number	1-8	OFFP		
Current start time printed after prompt	hh mm	STARhh mm		
Currnet stop time printed after prompt	hh mm	STOPhh mm		
Current enabled days printed after prompt	dd ...d	DAYS(d,d ...d)		
Class of service	(UNR), CUN, CTD TLD, SRE, FRE, FR1, FR2	COS		
Trunk Group Access Restriction	[0]-15	TGAR		
Network COS Group Number	[0]-15 (NARS/NSIG) [0]-3 (CDP) [0]-7 (BARS/NFCR)	NCOS		
Incoming calls restricted or not	[NO] YES	ICR		
Lock Period	[1]-8	LOCK		

OVERLAY 90
Network Translation Data Block

Input action	New, Out, Chg, Prt, End	**REQ**		
Customer number	0 - 99 (NT,RT,XN,XT)	**CUST**		
Network Translation table	NET	**FEAT**		
NARS/BARS access code 1; NARS access code 2; summary	AC1, AC2, SUM	**TRAN**		
ESN Location code ESN Home Location code Numbering Plan Area code Home NPA code Central Office code Special code Network Speed Call list	LOC HLOC NPA HNPA NXX SPN NSCL	**TYPE**		

The following prompts appear when TYPE is LOC (NARS only)

Location code	3 - 7 digits	**LOC**		
Route List Index	0 - 255	**RLI**		
Flexible # of Digits for Location	[0]-10	**FLEN**		
Incoming Trk. Grp. exclusion indx.	0 - 255	**ITEI**		
Listed Directory Number	XXXXXXXXXX	**LDN**		
This location arranged for DID	(NO) YES	**DID**		
Multiple NXX codes and ranges	(NO) YES	**MNXX**		
Number of trailing digits to save	1 - 4	**SAVE**		
NXX of the DID number	XXX	**OFFC**		
Lower/upper range of DID nos.	0 - 9999; 0 - 9999	**RNGE**		

The following prompts appear when TYPE is HLOC (NARS only)

Home Location code	3 - 7 digits	**HLOC**		
Digit Manipulation table index	1 - MXDM (0 = no DMI)	**DMI**		

OVERLAY 90
Network Translation Data Block

The following prompts appear when TYPE is NPA

Area code translation	3 - 10 digits	**NPA**		
1+ dial (space btwn NPA NXX)	(1+) 4 - 11 digits	**NPA**		
Route List index	0 - 127 BARS 0 - 255 NARS	**RLI**		
Restricted codes Recognized local DID codes Recognized local DDD codes Recognized remote DID codes Recognized remote DDD codes Incoming Trk Grp Exclusion digits	DENY LDID LDDD DID DDD ITED	**SDRR**		
Digit Manipulation Table Index	1-255	**DMI**		
Number to deny within NPA	XXXXXXXXXX	**DENY**		
Local DID to be recognized	XXXXXXXXXX	**LDID**		
Local DDD to be recognized	XXXXXXXXXX	**LDDD**		
Remote DID to be recognized	XXXXXXXXXX	**DID**		
Remote DDD to be recognized	XXXXXXXXXX	**DDD**		
Number to be restricted within NPA for excluded trunk group	XXXXXX	**ITED**		
Incoming Trk Grp exclusion index	0 - 127 BARS 0 - 255 NARS	**ITEI**		

The following prompts appear if TYPE is HNPA

Home NPA	XXX	**HNPA**		
1+ dialing Home NPA	1XXX	**HNPA**		

OVERLAY 90
Network Translation Data Block

The following prompts appear if TYPE is NXX

Office code translation 1+ dial (space btwn NXX xxxx)	XXXXXXXX	**NXX**		
Route List index	0 - 127 BARS 0 - 255 NARS	**RLI**		
Restricted codes Recognized local DID codes Recognized local DDD codes Recognized remote DID codes Recognized remote DDD codes Incoming Trk Grp Exclusion digits	DENY LDID LDDD DID DDD ITED	**SDRR**		
Digit Manipulation Table Index	1-255	**DMI**		
Number to deny within NXX	XXXXXXXXXXX	**DENY**		
Local DID to be recognized	XXXXXXXXXXX	**LDID**		
Local DDD to be recognized	XXXXXXXXXXX	**LDDD**		
Remote DID to be recognized	XXXXXXXXXXX	**DID**		
Remote DDD to be recognized	XXXXXXXXXXX	**DDD**		
Number to be restricted within NXX for excluded trunk group	XXXXXXX	**ITED**		
Incoming Trk Grp exclusion index	0 - 127 BARS 0 - 255 NARS	**ITEI**		

OVERLAY 90
Network Translation Data Block

The following prompts appear if TYPE is SPN

Special number translation	xxxx xxx xxxx	SPN		
Route List index	0 - 127 BARS 0 - 255 NARS	RLI		
Flexible # of Digits for Location	[0]-16	FLEN		
Restricted codes Recognized local DID codes Recognized local DDD codes Recognized remote DID codes Recognized remote DDD codes Incoming Trk Grp Exclusion digits	DENY LDID LDDD DID DDD ITED	SDRR		
Digit Manipulation Table Index	1-255, 0	DMI		
Number to deny within SPN	XXXXXXX	DENY		
Local DID to be recognized	XXXXXXX	LDID		
Local DDD to be recognized	XXXXXXX	LDDD		
Remote DID to be recognized	XXXXXXX	DID		
Remote DDD to be recognized	XXXXXXX	DDD		
Number to be restricted within SPN for excluded trunk group	XXX	ITED		
Alternate Routing Remote #	x x	ARRN		
Alternative Route List Index	0-255	ARLI		
Incoming Trk Grp exclusion index	0 - 127 BARS 0 - 255 NARS	ITEI		

The following prompts appear if TYPE is NSCL

Ntwk Speed Call access code	1 - 3 digits	NSCC		
System Speed Call list number	0 - 4095	SSCL		

OVERLAY 93
Multi-tenant Service Data Block

New, Out, Chg, End,Prt	REQ		
TENS, TACC, RACC, ACG, CPG, CPGP, TACG, RACG, RCPG, TCPG, TGEN	TYPE		
0 - 99 (NT,RT,XN,XT) (Customer #)	CUST		
1-63 (Console presentation group data block)	CPG		
[NO] YES (enable CPG Level Services)	CPGS		
0 - 127 (ST) 0 - 511 (NT,RT,XN,XT) (Route #)	ROUT		
1 - 511 (Tenant Number)	TEN		
[0]-65535 (Multi-location business group subgroup #)	MBGS		
[0]-999 (SAR group number)	SGRP		
nnnn (DN to intercept transfer of external calls)	ECDN		
xxxx (Default DN for intercept transfer)	ICDN		
[CIR] COM (Intercept computer printer search)	ICPS		
0-<NIPN> (Printer Number)	ICPR		
DENY; ALOW (Access to Tenants Denied or Allowed)	ACC		
1 - 511 or ALL (Tenant numbers to Deny)	DENY		
1 - 511 or ALL (Tenant numbers to Allow)	ALOW		
0-63 (Attendant Console Group Number)	AGNO		
[0]-63 (NAS Routing Table)	NTBL		
1-15 1-15 .(Add attendant console numbers) 1-63 1-63 . (Add attendant console numbers) X1-X15 X1-X15. (Remove attendant console numbers) X1-X63 X1-X63 (Remove attendant console numbers)	ANUM		
0-63 (Night Attendant Console Group)	NAGN		
XXXX (Listed Directory Number 0)	LDN0		
XXXX (Listed Directory Number 1)	LDN1		
XXXX (Listed Directory Number 2)	LDN2		
XXXX (Listed Directory Number 3)	LDN3		
XXXX (Nite Directory Number 1)	NIT1		
XX XX (NIT1's associated time, hour / minute)	TIM1		

OVERLAY 93
Multi-tenant Service Data Block

XXXX (Nite Directory Number 2)	NIT2		
XX XX (NIT2's associated time, hour / minute)	TIM2		
XXXX (Nite Directory Number 3)	NIT3		
XX XX (NIT3's associated time, hour / minute)	TIM3		
XXXX (Nite Directory Number 4)	NIT4		
XX XX (NIT4's associated time, hour / minute)	TIM4		
XX call type (xx = ICI key 0 - 19; for call type, see 'Table A' in Overlay 15)	ICI		

The following prompts appear if the Attendant Overflow Position package is enabled:

1 - [30] - 255 (Att. queue timing threshold, in seconds)	AQTT		
XXXXXXX (Attendant Overflow DN)	AODN		
0 - 255 / 0 - 255 (Call Wait. number of calls thresholds)	CWCL		
0 - 511 / 0 - 511 (Call Wait wait time thresholds)	CWTM		
yes / [no] yes / [no] (Call Wait 2-sec buzz on exceeding upper threshold.; first call in queue)	CWBZ		
yy, [0[(Efficiency Factor Loading Level)	EFLL		

The following prompts appear if Recorded Overflow Announcement is enabled for the customer:

XXX (First RAN route number)	FRRT		
0 - 2044 (delay time for first RAN, in seconds)	FRT		
XXX (Second RAN route number)	SRRT		
0 - 2044 (delay time for second RAN, in seconds)	SRT		
(RGB), MUS, SIL (Treatment during ringback)	WAIT		
XXX (Music route number, if MUS specified for WAIT)	MURT		
XX XX XX XX (Provide ROA on ICI keys XX)	RICI		

OVERLAY 95

Call Party Name Display Data Block

The following prompts are given when REQ = NEW or CHG, and TYPE = CPND:

New or Chg	REQ		
CPND	TYPE	CPDN	CPDN
0 - 99 (NT,RT,XN,XT) (Customer #)	CUST		
[ALON] REMO, LOCL (Change configuration)	CNFG		
5 - [17] - 27 (Max CPND Name Length)	MXLN		
[NO] YES (Static allocation of name storage)	STAL		
5 - MXLN (Average name length in characters)	DFLN		
[NO] YES (Append Designator for MADN's)	DES		
[NO] YES (Display reason for call redirection)	RESN		
XXXX (Mnemonic for Call Fwd All Calls)	CFWD		
XXXX (Mnemonic for Call Fwd No Answer)	CFNA		
XXXX (Mnemonic for Hunt / Call Fwd Busy)	HUNT		
XXXX (Mnemonic for Call Pickup)	PKUP		
XXXX (Mnemonic for NCRD Call Transfer)	XFER		
XXXX (Mnemonic for Att. Alternative Answering)	AAA		

The following prompts are given when REQ = PRT and TYPE = CPND:

Prt	REQ		
CPND	TYPE	CPND	CPND
0 - 99 (NT,RT,XN,XT) (Customer #)	CUST		
[NO] YES (Page Headers and #s Printed or Not)	PAGE		
0-2915 ,0-99, ALL (Existing DIG and member number)	DIG		
[NO] YES (Printed Long Form or One-line Format)	SHRT		
XXXXXXX (Existing DN)	DN		
[NO] YES (Print One or Several DNs per Single Line)	SHRT		

OVERLAY 95
Call Party Name Display Data Block

The following prompts are given when REQ = NEW and TYPE = NAME:

New	REQ		
NAME	TYPE	NAME	NAME
0 - 99 (NT,RT,XN,XT) (Customer #)	CUST		
0 - 2915 / 0 - 99 (Existing DIG and member number)	DIG		
[ROM], KAT, ALL (Language Choice)	LANG		
XXX....X (CPND name in ASCII characters)	NAME		
XX (Expected Name Length - Default=DFLN)	XPLN		
XXXXXXX (Existing DN)	DN		
[ROM], KAT, ALL (Language Choice)	LANG		
XXX....X (CPND name in ASCII characters)	NAME		
XX (Expected Name Length - Default=DFLN)	XPLN		

The following prompts are given when REQ = CHG, and TYPE = NAME:

CHG	REQ		
NAME (CPND name string predefined in data block)	TYPE	NAME	NAME
0 - 99 (NT,RT,XN,XT) (Customer #)	CUST		
0 - 2915 / 0 - 99 (Existing DIG and member number)	DIG		
XXX....X (CPND name in ASCII characters)	NAME		
XXXXXXX (Existing DN)	DN		
a..a (CPND name in ASCII characters)	NAME		

The following prompts are given when REQ = OUT:

OUT	REQ		
NAME (CPND name entry)	TYPE	NAME	NAME
0 - 99 (NT,RT,XN,XT) (Customer #)	CUST		
0 - 2915 / 0 - 99 (Existing DIG and member number)	DIG		
XXXXXXX (Existing DN)	DN		

OVERLAY 97

Configuration Record 2 Data Block

New, Chg, Prt, Out, End	REQ		
SYSP, XPE, SUPL, XCTP, XNPD	TYPE		
The following prompts appear for type SYSP (System Parameters)			
[NO] YES (Companding law - yes=A; No = Mu)	INTN		
[0] - 3 (Quite code is used by Network Card firmware)	CODE		
1 - 32767 (Maintenance threshold for number of continuity faults per timeslot)	CONT		
1 - 32767 (Maintenance threshold for number of CRC failures per cable)	CRCF		
[120] - 768 (Switchhook flash timing in ms. for PBX sets)	FLSH		
	P10R		
	P12R		
	P20R		
	INSO		
	DEFS		
XXX (Default Model number for a M2006 set)	DEF 2006		
XXX (Default Model number for a M2008 set)	DEF 2008		
XXX (Default Model number for a M2216 set)	DEF 2216		
XXX (Default Model number for a M2616 set)	DEF 2616		
XXX (Default Model number for a M2000 set) Note: This category represents the 2009, 2317, 2018, M3000, 2112)	DEF 2000		
XXX (Default Model number for a 500/2500 set)	DEF 500		
XXXX (First number in the numbering plan)	FNUM		
[NO] YES (Incremental software management)	ISM		
0 - 1000 (Number of Terminal Numbers)	TNS		
0 - 1000 (Number of ACD Agents)	AGNT		
0 - 100 (Number of ACD Directory Numbers)	ACDN		
0 - 100 (Number of Associated Sets)	AST		
0 1 2 (Meridian Mail Option: 0 - None, 1 - MHVS, 2 - Networking)	MOPT		

OVERLAY 97
Configuration Record 2 Data Block

XXXXXXXX (Digits 1-8 of the security keyword)	KEY1		
XXXXXXXX (Digits 9-16 of the security keyword)	KEY2		
XXXXXXXX (Digits 17-24 of the security keyword)	KEY3		
p1, p2, p3, p4 (Peripheral Software Download option)	FDLC		
0 - [2] - 3 (Multifrequency minimum receiver level)	MFRL		
The following prompts appear for type XPE (Controller number and card location)			
[0] - 95 (Assign Peripheral Controller numbers)	XPEC		
XXXXXX (Location code for Peripheral Controller)	LOC		
[cop] (Connection media to Peripheral Controller)	MED		
The following prompts appear for type SUPL (Superloops)			
0 - 156 (Superloop number in multiples of 4)	SUPL		
[NO] YES (System Option 21)	ST21		
[L] R (Network Card is in Left or Right slot)	SLOT		
X Y Z (Peripheral Controller number, starting segment, and ending segment)	XPE0		
X Y Z (Peripheral Controller number, starting segment, and ending segment)	XPE1		

OVERLAY 97

Configuration Record 2 Data Block

The following prompts appear for type XCTP (Conference/TDS/MF Sender parameters)			
[0] 1 (PAD values for conference; 0 = software, 1 = switch settings)	**CPAD**		
0 - [14] - 255 (Tone table index of the first DTMF digit)	**DTMF**		
[NO] YES (Insert intrusion tone in conferences)	**INTU**		
0 - [30] - 255 (Tone table index for primary 10 pulses per second digit)	**P10P**		
0 - [31] - 255 (Tone table index for secondary 10 pulses per second digit)	**S10P**		
0 - [32] - 255 (Tone table index for 20 pulses per second digit)	**20PP**		
The following prompts appear for type XNPD (Network/Digitone Receiver card)			
28 (Network loop number for XNPD card)	**XNPD**		
[0] - 95 (Peripheral Controller Number)	**XPEC**		