

450-1021-312

Network Operations Systems

## **Business Network Management**

DNC-100: Administration      NSR32 and up

DMSCCM04

Standard 32.01

August 1995

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DNC-100: Administration

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# Introduction

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## This manual

This Northern Telecom Practice (NTP) explains how to use the administrative features of the Business Network Management (BNM) application on a DNC-100.

## Related practices

For an introduction to BNM and a general description of its features, see NTP 450-1021-102 (for DNC-100 users and DNC-500 end-users) or 450-1021-101 (for telephone operating companies). For lists of all the practices that describe aspects of BNM, see NTP 450-1021-002 (DNC-100) or 450-1021-001 (DNC-500).

## Notational conventions

The following conventions are used in this document:

- The names of "hardkeys" (keys that are labeled on the keyboard and always perform the same function) are shown in uppercase. Some examples of hardkeys are ENTER and RETURN.
- The names of "softkeys" (keys that perform different functions depending on the screen display) are shown in mixed case and bracketed with carets. Some example of softkeys are <Exit>, <Add>, <Delete>, and <Change>.
- The result of an action is indicated by an arrow: ==>

## Change history

This document now includes only the administrative features of BNM on a DNC-100. The end-user features that were previously explained in this document are now explained in the BNM User Guide.

### 32.01

The following changes have been made to this document from SMDR Modification for International Direct Distance Dialing feature, specifically supporting the following requirements:

- upissued document from 28.32 to 32.01 release to correspond to patch NSR32 activity (SMDR Modification for International Direct Distance Dialing)
- an increase in the number for international direct distance dialing (IDDD)

from 12 to 15 digits, in accordance with International Telecommunications Union (ITU) requirements

- an increase in the length of the long SMDR record (D3) and the long network evaluation, reporting and verification (NERVE) call detail recording (CDR) SMDR record (D4)
- multiple DMS nodes with pre-NA004 and NA004 software releases or subsequent software releases to customer and customer premise equipment (CPE)
- data spooling support, based on the Centrex customer requirement of receiving the former SMDR format (that is, 12 IDDD and 78 characters in the D3 and D4 call records) or the expanded international SMDR format (that is, 15 IDDD and 84 characters in the D3 and D4 records), regardless of the DMS operating software release. (By default, the end user customer receives the former SMDR format. BNM Customer Table must be datafilled to activate the expanded international SMDR format.)
- added field 15IDDD Activated? to Node Table

### **NSR28**

The changes and additions to this document to support the NSR28 version of BNM are:

- A description of the DNC Disk Monitoring Table has been added.
- A description of the DNC Processor Monitoring Table has been added.
- The description of the Node table has been changed to include the support for the new Switch/PBX Poller (SPP) feature of BNM. (See 450-1021-131 for more information about SPP.)

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# BNM administration

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This chapter explains how to use the following DNC-100 administrative facilities:

*Note:* The two features Network Class of Service Changes, and Routing Plan Changes, can only be accessed through the Remote DNC Application Access feature.

- (a) **Trunk Translation Table Merging.** This feature provides a quick and easy way for the DNC-100 user to load in a new trunk translation table, or update an existing translation table with new data provided by the operating company.
- (b) **Network Class of Service Changes.** This feature allows DNC-100 administrators to change the Network Class of Service (NCOS) values for their dedicated trunk facilities. Values can be changed to any that are allowed by the telephone company.
- (c) **Routing Plan Changes.** This feature allows DNC-100 administrators to change the alternative routing plans for destinations. Alternative plans can be changed to any that are allowed by the operating company.
- (d) **Saving and Restoring Data.** Datafill Save and Restore facilities are used to load the partitioned trunk translation files provided by the telephone company for the Table Merging feature.
- (e) **The DNC Processor Monitoring table.** This table shows how busy selected processors' central processing units (CPUs) are and how much memory they have available.
- (f) **The DNC Disk Monitoring Table.** This table shows how many files are being stored on selected disks and what percentage of space on each disk is full.
- (g) **Continuous Data Collection.** This feature allows DNC-100 administrators to start and stop the continuous transfer of feature data from the telephone company's DNC-500 to the DNC-100.
- (h) **Remote DNC File Recovery.** In most cases, a DNC-500 transmits data files to a DNC-100 continuously once a DNC-100 administrator has initiated the "continuous collection" process. However, DNC-100 users may occasionally wish to retrieve individual data files that for some reason have not been transmitted or need to be retransmitted.

- (i) **Remote DNC Application Access.** This feature allows a DNC-100 user to log on to a DNC-500, or a DNC-500 user to log on to a DNC-100, through a window on the users terminal. This capability is controlled by the owner of the DNC that is being accessed.

## Trunk translation table merging

Trunk Translation Table Merging (see Figure 2-1) simplifies the process of creating or updating trunk translation tables for a DNC-100. At the DNC-500, the Partitioning feature searches for trunk translations for a particular customer and inserts them into a file. The file is then written onto a tape using Datafill Save and Restore. At the DNC-100, the file is loaded using Save and Restore, then merged into the existing trunk translations using the Table Merging feature.

The file for a customer can be seen in Save and Restore as a file with the naming convention

[ ] :local:<customer\_name>:table\_service:<telco\_name>

**Required Information.** The only requirement is to know the name of the file to be merged. This name is selected from a list.

### Menu access

From the BNM main menu,

- (1) Select BNM Tables and then press ENTER.  
==> The BNM Tables Main Menu screen appears.
- (2) Move the cursor to Trunks Ownership and then press <Merge Table>.  
==> The Table Merging menu appears.

### Merging

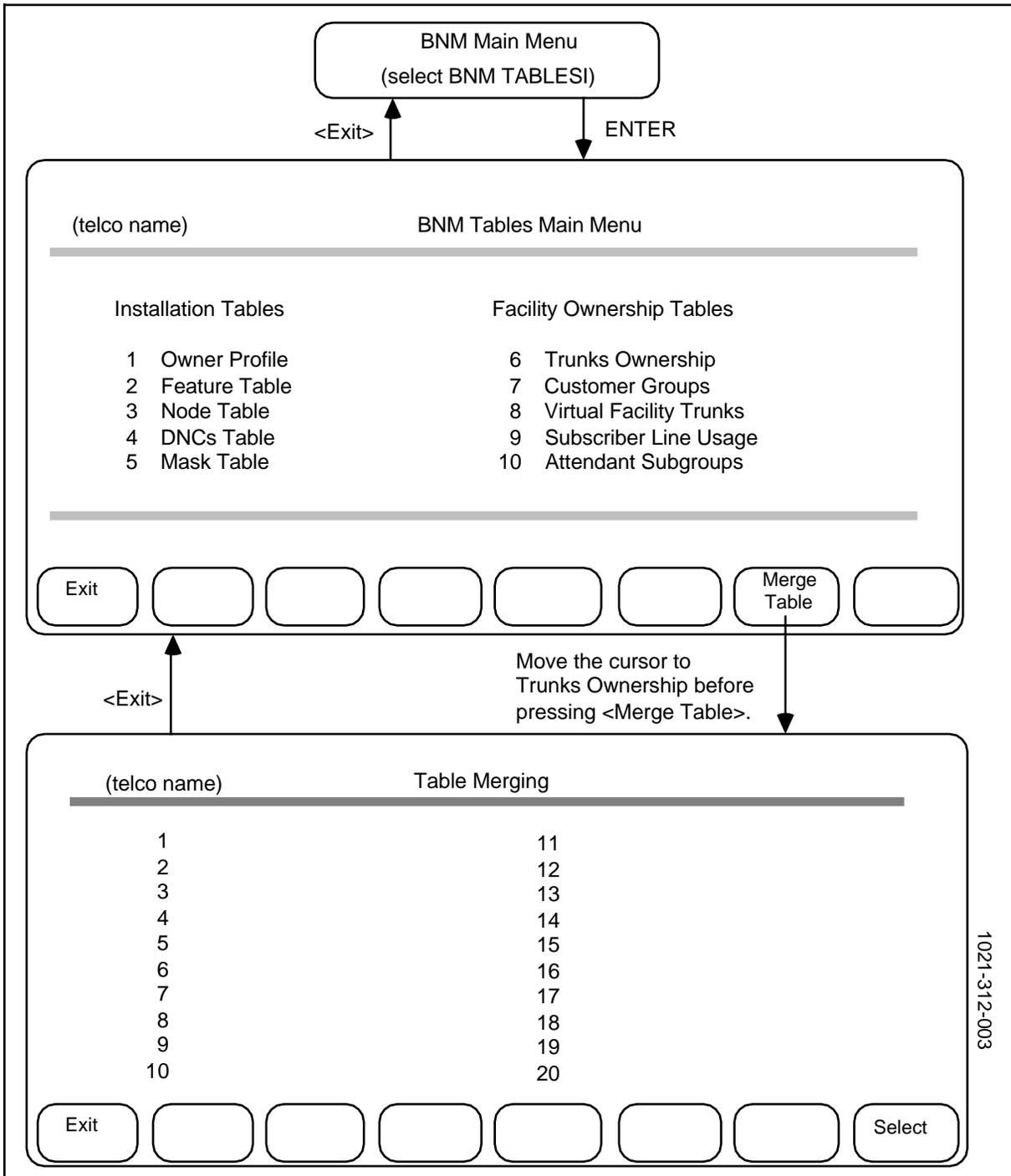
The Merging menu shows a list of all the DNC-500s that had files restored to this DNC-100 from tape.

- (1) Use the arrow keys to select a DNC-500, then press <Select>.  
==> A message indicates when all files from the DNC-500 have been merged.

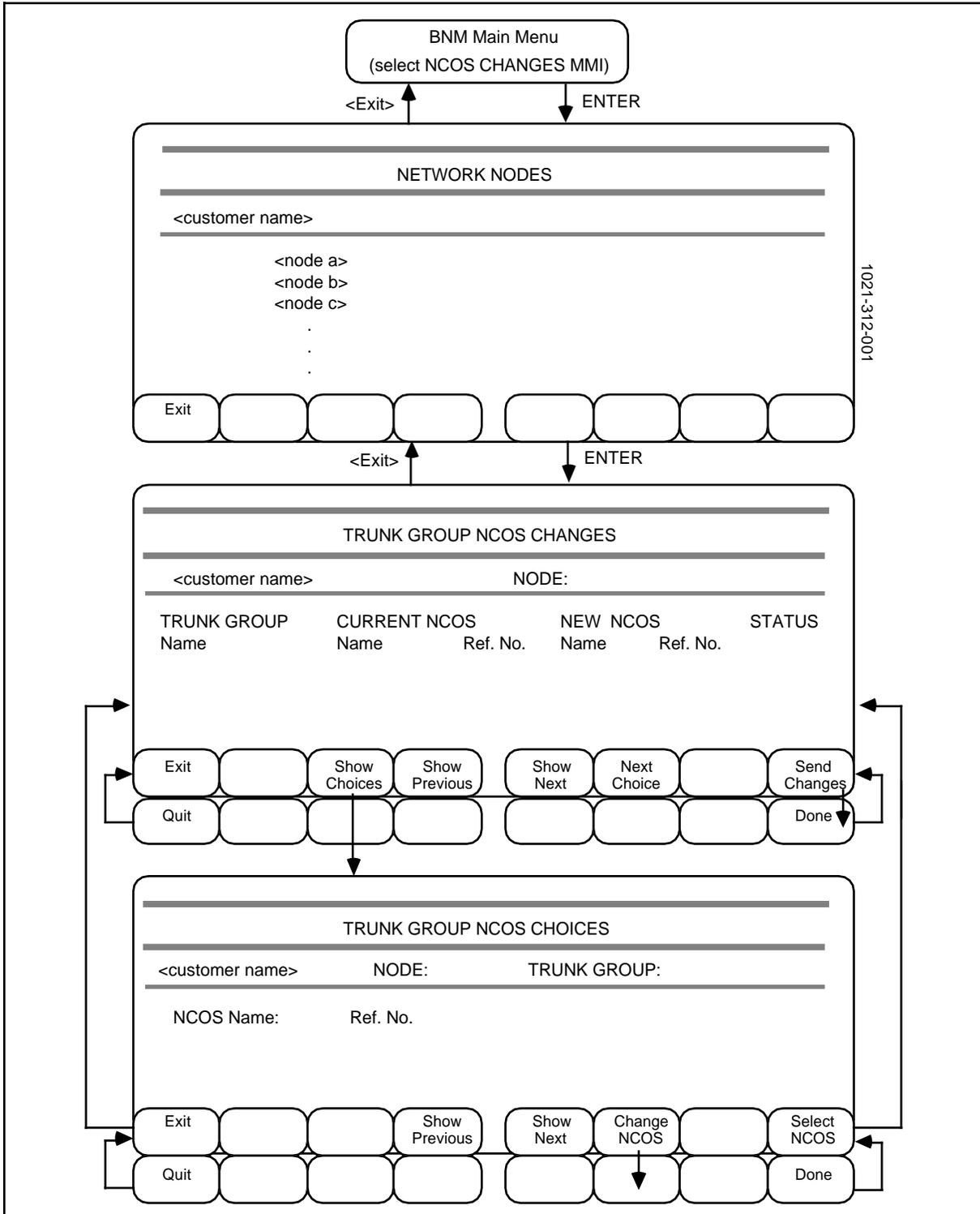
### Menu exit

Press the <Exit> key repeatedly. The menu screens appear in the reverse order from how they were accessed.

**Figure 2-1**  
**Trunk translation table merging**



**Figure 2-2**  
**Trunk group NCOS changes**



## Network class of service changes - trunks

A network class of service (NCOS) number is a code used by DMS nodes to identify a particular set of capabilities and restrictions that can be assigned to a trunk group or other facility. Your telephone operating company normally defines NCOS numbers and assigns them to trunk groups for you.

Business Network Management's NCOS Changes feature allows you to select NCOS numbers from a list provided by the operating company and assign them to your Meridian Digital Centrex trunk groups yourself. The DNC sends your requests to the DMS nodes and advises you on whether or not they have been carried out. You can change NCOS numbers for incoming trunk groups and the incoming sides of two-way trunk groups.

**Note:** You can use BNM's Station Administration feature to change NCOS assignments for stations. Station Administration is explained in a separate practice numbered Appendix 1 to 450-1021-312.

The operating company may choose to assign a name to each NCOS number so that you can recognize it more easily. You can also assign and change NCOS names. These names are local to the DNC; they are not used by DMS nodes.

### Assigning NCOS numbers to trunk groups

The following steps explain how to assign or change a trunk group's NCOS number (Figure 2-2).

- (1) On the BNM main menu, select NCOS Changes MMI and then press ENTER.  
==> A list of the DMS nodes in your Meridian Digital Centrex network appears on the Network Nodes screen.
- (2) Select the appropriate node and then press ENTER.  
==> The Trunk Group NCOS Changes screen appears. This screen shows the NCOS reference numbers and names that are currently associated with each trunk group at the specified node. On the right is space for new NCOS numbers to be entered. If the list of trunk groups is too long to fit on one screen, the <Show Previous> and <Show Next> softkeys are displayed. Press them to see other parts of the list.
- (3) Select a trunk group (by using the arrow keys and the <Show Next> and <Show Previous> keys), then use one of the following methods to select a new NCOS for that trunk group:
  - (a) Press <Next Choice>.  
==> In the New NCOS column, the next available choice for an NCOS appears. Press <Next Choice> repeatedly until you find the choice you wish to use.

- (b) Press <Show Choices>.  
==> The Trunk Group NCOS Choices screen appears. This screen displays a list of all the NCOS numbers that the telephone operating company has made available to you.
- Select a choice from the list on this screen and then press <Select NCOS>.  
==> The Changes screen reappears and the message "A new NCOS is selected" is displayed.

You can use these two methods to select new NCOS numbers for any number of trunk groups. Once you have finished selecting NCOS numbers, continue with Step 4 to send the changes to the DMS node.

- (4) Press <Send Changes>.  
==> A message requests confirmation and new softkeys (<Quit> and <Done>) appear.
- (5) Press <Done> to send the changes, or press <Quit> to ignore them.  
==> If you press <Quit>, the first set of softkeys reappears and the message "Send Cancelled" is displayed. No changes are sent to the node.
- ==> If you press <Done>, all changes in the New NCOS column are sent to the node, including any that have a status of "Fail" from previous unsuccessful attempts. "Pend" appears in the Status column beside the trunk groups that are being changed and various messages are displayed on the message line. When "Pend" is replaced by "Def" and the new NCOS is shifted to the Current NCOS column, the update has been processed successfully. If "Fail" appears in the status column, the change has not been made. Check the log messages in the Logs and Alarms subsystem to find the reason for the failure.
- (6) Press <Exit> on each screen in turn to return to previous screens.

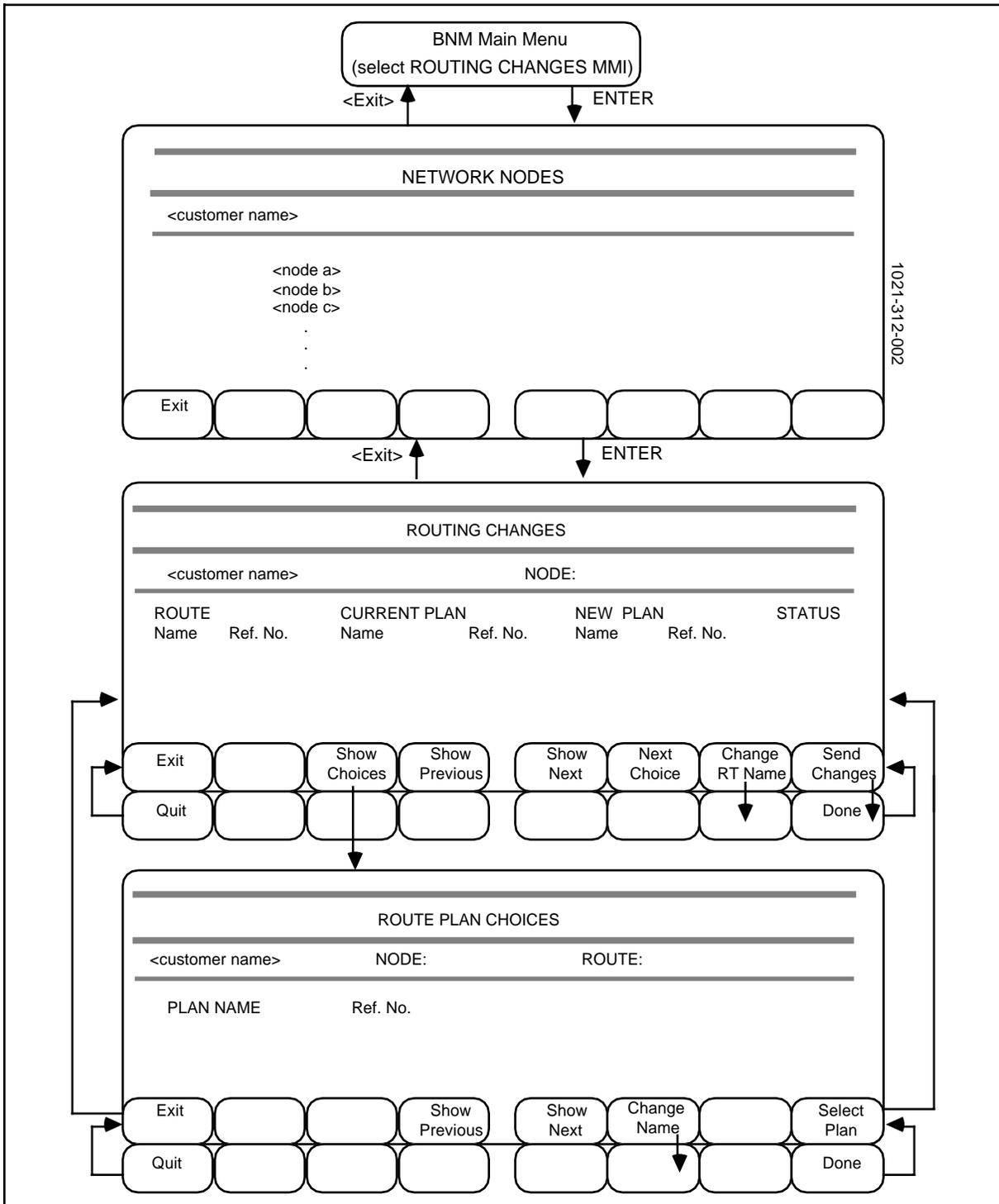
## Changing an NCOS name

To change an NCOS name, follow these steps:

- (1) On the BNM main menu, select NCOS Changes MMI and then press ENTER.  
==> A list of the DMS nodes in your Meridian Digital Centrex network appears on the Network Nodes screen.
- (2) Select the appropriate node and then press ENTER.  
==> The Trunk Group NCOS Changes screen appears. This screen shows the NCOS reference numbers and names that are currently associated with each trunk group at the specified node. If the list of trunk groups is too long to fit on one screen, the <Show Previous> and <Show Next> softkeys are displayed. Press them to see other parts of the list.
- (3) Press <Show Choices>.  
==> The Trunk Group NCOS Choices screen appears. This screen displays a list of all the NCOS numbers that the telephone operating company has made available to you. It also shows the corresponding NCOS name for each number.
- (4) Select the entry you want to change, then press <Change NCOS>.  
==> New softkeys appear and you are prompted to make the change.

- (5) Make the required changes to the Name and Ref. No. fields, using the RETURN key to move between them.
- (6) Press <Done> to keep the changes, or press <Quit> to ignore them.  
==> The original softkeys reappear and the message "Changes Made" or "Changes Cancelled" is displayed.
- (7) You can repeat steps 4, 5, and 6 as many times as necessary. When you have finished, press <Exit> on each screen in turn to return to previous screens.

**Figure 2-3**  
**Routing plan changes**



## Routing plan changes

The Routing Plan feature allows you to select, from a list of routing plans defined by the operating company, a routing plan to be used for switching calls to a given destination. The selected plan is in force on a given node.

**Required Information.** The following information is required to use this feature:

- (a) **Route Name.** This is a descriptor that can be changed at any time. It identifies the destination.
- (b) **Route Reference Number.** (up to 4 digits) This number corresponds to a route list index in the DMS-100 node table IBNRTE. It indirectly identifies the route plan list associated with the route.
- (c) **Current Plan Name.** This is a descriptor that can be changed at any time. It describes the current choice of alternative route plan.
- (d) **Current Plan Reference Number.** (up to 4 digits) This number corresponds to a route list index in the DMS-100 node table IBNRTE. It identifies the route list to be used as a first- choice alternative route in reaching the associated destination.

## Assigning plans to routes

The following steps explain how to assign a plan to a route (Figure 2-3).

- (1) On the BNM main menu, select Routing Changes MMI and then press ENTER.  
==> A list of the DMS nodes in your Meridian Digital Centrex network appears on the Network Nodes screen.
- (2) Select the appropriate node and then press ENTER.  
==> The Routing Changes screen appears. This screen shows the plan reference numbers and names that are currently associated with each route at the specified node. On the right is space for new plans to be entered. If the list of routes is too long to fit on one screen, use the <Show Previous> and <Show Next> softkeys to see other parts of the list.
- (3) Select a route (by using the arrow keys and the <Show Next> and <Show Previous> keys), then use one of the following methods to select a new plan for that route:
  - (a) Press <Next Choice>.  
==> In the New Plan column, the next available choice appears. Press <Next Choice> repeatedly until you find the choice you wish to use.
  - (b) Press <Show Choices>.  
==> The Routing Plan Choices screen appears.
  - (c) Select a choice from the list on this screen and then press <Select Plan>.  
==> The Changes screen reappears and the message "A new plan is selected" is displayed.

You can use these two methods to select new plans for any number of routes. Once you have finished selecting plans, continue with Step 4 to send the changes to the DMS node.
- (4) Press <Send Changes>.  
==> A message requests confirmation and new softkeys (<Quit> and

<Done>) appear.

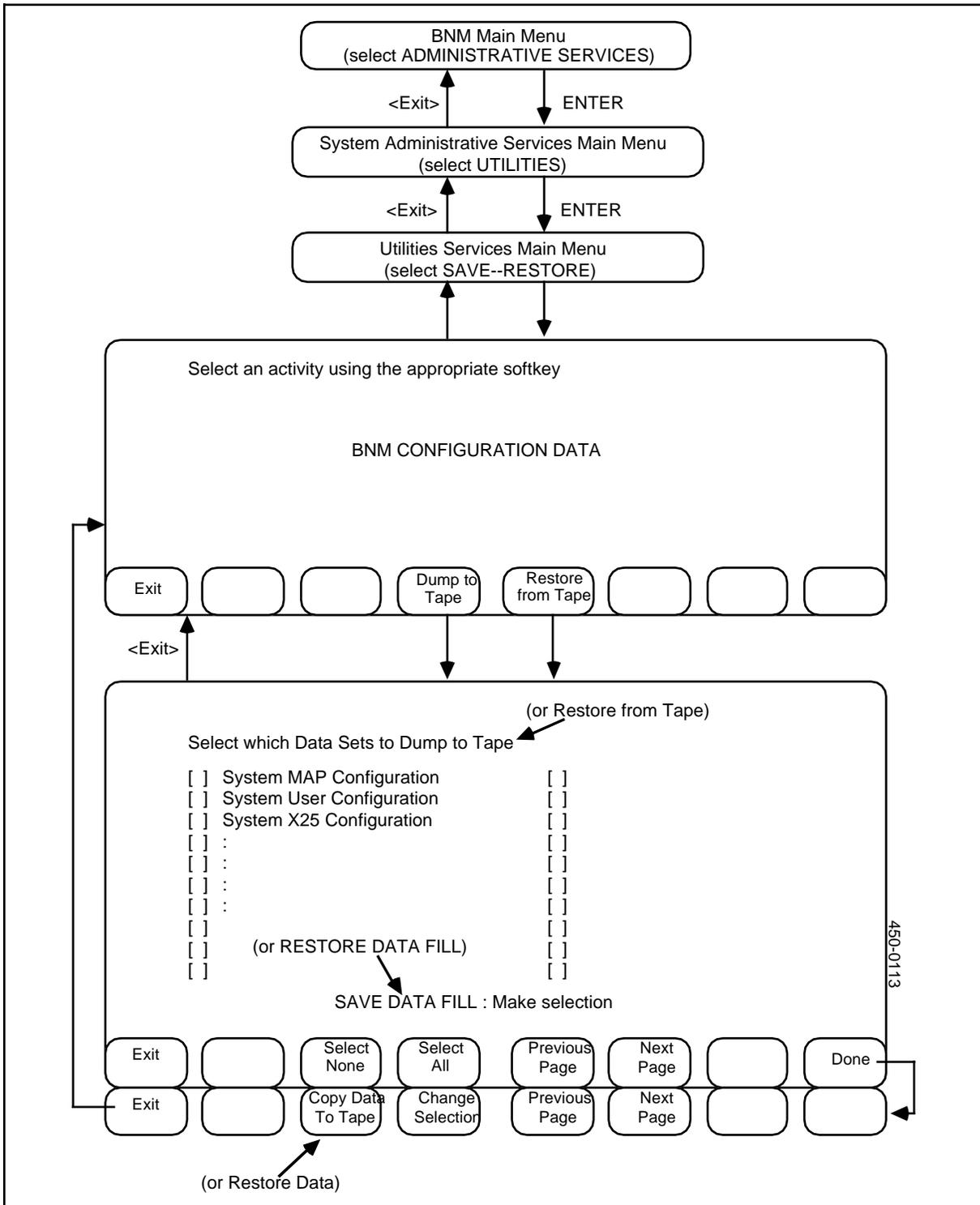
- (5) Press <Done> to send the changes, or press <Quit> to ignore them.  
==> If you press <Quit>, the first set of softkeys reappears and the message "Send Cancelled" is displayed. No changes are sent to the node.  
  
==> If you press <Done>, all changes in the New Plan column are sent to the node, including any that have a status of "Fail" from previous unsuccessful attempts. "Pend" appears in the Status column beside the routes that are being changed and various messages are displayed on the message line. When "Pend" is replaced by "Def" (defined) and the new plan is shifted to the Current Plan column, the update has been processed successfully. If "Fail" appears in the status column, the change has not been made. Check the log messages in the Logs and Alarms subsystem to find the reason for the failure.
- (6) Press <Exit> on each screen in turn to return to previous screens.

### Changing a route plan's name

To change a route plan's name, follow these steps:

- (1) On the BNM main menu, select Routing Changes MMI and then press ENTER.  
==> A list of the DMS nodes in your Meridian Digital Centrex network appears on the Network Nodes screen.
- (2) Select the appropriate node and then press ENTER.  
==> The Routing Changes screen appears. This screen shows the plan reference numbers and names that are currently associated with each route at the specified node. If the list of routes is too long to fit on one screen, the <Show Previous> and <Show Next> softkeys are displayed. Press them to see other parts of the list.
- (3) Press <Show Choices>.  
==> The Route Plan Choices screen appears. This screen displays a list of all the plans that the telephone operating company has made available to you. It also shows the corresponding name for each plan number.
- (4) Select the entry you want to change, then press <Change Name>.  
==> New softkeys appear and you are prompted to make the change.
- (5) Type the new name.
- (6) Press <Done> to keep the change, or press <Quit> to ignore it.  
==> The original softkeys reappear and the message "Changes Made" or "Changes Cancelled" is displayed.
- (7) You can repeat steps 4, 5, and 6 as many times as necessary. When you have finished, press <Exit> on each screen in turn to return to previous screens.

**Figure 2-4**  
**Saving and restoring data**



## Saving and restoring data

This procedure explains how to save BNM data on tape cartridges and how to restore the data from the tapes. Use this procedure as part of the installation procedures, or to perform a regular backup to guard against a hard disk failure.

*Note:* This procedure must be performed by a system administrator. See NTP 450-1011-301 for more information about system administration.

The types of data that can be saved and restored are:

- the DNC configuration files and BNM table files
- Station Administration databases
- SMDR, OM, KT, and ATT data that has been collected from DMS nodes

The screens used for saving and restoring data are shown in Figure 2-4.

### Preparation

Perform the following steps before you begin to save or restore data:

- (1) Clean the read/write head of the system's Storage SRU. This step is important because many errors are caused by dirty tape heads.
- (2) Collect the necessary tapes. To restore data, you need the tapes on which the data was saved. To save data, you need one or more empty tapes, or tapes that can be overwritten. The number of tapes you need depends on which data you want to save:
  - The System MAP Configuration, System User Configuration, and System X.25 Configuration files fill one tape. These files must always be saved and restored together.
  - All Station Administration databases fit on one tape, provided the combined size of the databases does not exceed 10,000 stations.
  - All SMDR data fits on one tape.
  - All OM, KT, and ATT data fits on one tape.
- (3) Turn the arrow pointer on each tape's safety lock away from the "Safe" position.

### Menu access

To access Save and Restore,

- (1) Sign on to BNM as a system administrator.
- (2) If you intend to restore files, shut down data collection, all jobs, and all other users. Data collection will fail if it is running while files are being restored. (It is not necessary to shut down data collection before saving files.)
- (3) If you intend to restore the System MAP Configuration, System User Configuration, and System X.25 Configuration files, perform a system reboot. If you intend to restore INIT files, "courtesy down" the affected PRUs.

## Saving data

Each tapeload of data must be saved as a separate procedure; you cannot save data on several tapes as one continuous job. The procedure for saving one tapeload worth of data is:

- (1) On the BNM main menu, select Administrative Services, then press ENTER.  
==> The System Administrative Services Main Menu appears.
- (2) Select Utilities, then press ENTER.  
==> The Utilities Services Main Menu appears.
- (3) Select Save-Restore, then press ENTER.  
==> The BNM Configuration Data screen appears with a prompt that asks you to select an activity.
- (4) Insert a blank tape cartridge into the system's Storage SRU.
- (5) Press the <Dump to Tape> softkey.  
==> A list of BNM files appears. The files have names such as CS:ROINIT (an initialization file) and COME1 SMDR ALL (a file of SMDR data from the node COME1).
- (6) Use the arrow keys, the SPACE BAR, and the appropriate softkeys to select the files to be dumped to tape.

### -CAUTION-

Remember that the System MAP Configuration, System User Configuration, and System X.25 Configuration files must be saved together.

### -CAUTION-

Do not select more files than can fit on one tape. (Follow the guidelines given in the Preparation section of this procedure.)

- Use the arrow keys to move the cursor from file to file.
  - To select or deselect a file, move the cursor to the file, then press the SPACE BAR to insert or remove a check mark in the box beside the file.
  - To select all the files on the screen, use the <Select All> softkey. To deselect all the files on the screen, use <Select None>.
  - If the list of files continues on more than one screen, use <Next Page> and <Previous Page> to move from screen to screen.
- (7) When the required files are marked by a check mark, press <Done>.  
==> New softkeys appear.
  - (8) Check the file selection. If it is not correct, press <Change Selection> and repeat steps 6 and 7. Otherwise, press <Copy Data to Tape>.  
==> Messages appear to indicate the progress of the dumping operation.
  - (9) When the system has finished copying the selected files, remove the tape cartridge from the Storage SRU.

- (10) Press <Exit> to return to the BNM Configuration Data screen. From there you can exit back to the BNM main menu, or repeat steps 4 through 10 to save another tapeload worth of data.

### Restoring data

Each tapeload of data must be restored as a separate procedure; you cannot restore data from several tapes as one continuous job.

**-CAUTION-**

Shut down data collection before beginning to restore files. Data collection will fail if it is running while files are being restored.

The procedure for restoring one tapeload worth of data is:

- (1) On the BNM main menu, select "Administrative Services", then press ENTER.  
==> The System Administrative Services Main Menu appears.
- (2) Select Utilities, then press ENTER.  
==> The Utilities Services Main Menu appears.
- (3) Select Save-Restore, then press ENTER.  
==> The BNM Configuration Data screen appears with a prompt that asks you to select an activity.
- (4) Insert the tape cartridge that contains the required files into the system's Storage SRU.
- (5) Press the <Restore from Tape> softkey.  
==> A list of the BNM files that are stored on that tape appears. The files have names such as CS:ROINIT (an initialization file) and COME1 SMDR ALL (a file of SMDR data from the node COME1).

- (6) Use the arrow keys, the SPACE BAR, and the appropriate softkeys to select the files that are to be restored from the tape to the system's hard disk:

**-CAUTION-**

Remember that the System MAP Configuration, System User Configuration, and System X.25 Configuration files must be restored together.

- Use the arrow keys to move the cursor from file to file.
  - To select or deselect a file, move the cursor to the file, then press the SPACE BAR to insert or remove a check mark in the box beside the file.
  - To select all the files on the screen, use the <Select All> softkey. To deselect all the files on the screen, use <Select None>.
  - If the list of files continues on more than one screen, use <Next Page> and <Previous Page> to move from screen to screen.
- (7) When the required files are marked by a check mark, press <Done>. ==> New softkeys appear.
- (8) Check the file selection. If it is not correct, press <Change Selection> and repeat steps 7 and 8. Otherwise, press <Restore Data>. ==> Messages appear to indicate the progress of the restoration.
- (9) When the system has finished copying the selected files from the tape to the hard disk, remove the tape cartridge from the Storage SRU.
- (10) Press <Exit> to return to the BNM Configuration Data screen. From there you can exit back to the BNM main menu, or repeat steps 4 through 10 to restore another tapeload worth of data.

## The DNC processor monitoring table

The DNC Processor Monitoring table shows how busy selected processors' central processing units (CPUs) are and how much memory they have available. To display this table, select DNC Processor Monitoring on the BNM main menu and then press ENTER.

==> The DNC Processor Monitoring table appears (Figure 2-5). Each line on this table displays the following information about a processor:

Num	a number that the DNC uses to keep track of the processor
CC/SS/LL/PP	numbers that identify the location of the processor by cabinet (CC), slot (SS), line (LL), and port (PP)
Interval	the length of time, in seconds, that the processor is monitored before this screen is updated
Average-busy	the percentage of time that the processor's CPU was busy during the last monitoring interval
Memory Available	the number of kilobytes of memory that the processor currently has available
Peak-busy	the percentage of time that the CPU was at peak business during the last monitoring interval
Peak-time	the month (MTH), day (DD), hour (HH), and minute (MM) that peak CPU usage occurred

### Selecting processors

By default, the Processor Monitoring table displays information about each processor that is listed in a Service Data Manager (SDM) table called MXMCP-UD. You can add or delete processors from this list. See Using SDM Tables in 450-1011-301 for instructions on editing SDM tables.

You can also add or delete processors while the Processor Monitoring table is being displayed:

- (1) Press <Add> or <Delete>, or type Add, Delete, A, or D.  
==> The system prompts you for the name of the processor you want to add or delete.
- (2) Type the name of a processor, then press ENTER.  
==> The system updates the screen to add or remove information about that processor.

### Exiting from the table

To exit from the Processor Monitoring screen and return to the BNM main menu, press <Exit>, or type Exit or E.



## The DNC disk monitoring table

The DNC Disk Monitoring table shows how many files are being stored on selected disks and what percentage of space on each disk is full. To display this table, select DNC Disk Monitoring on the BNM main menu and then press ENTER.

==> The DNC Disk Monitoring table appears (Figure 2-6). Each line on this table displays the following information about a disk:

Server Name	name of the disk
Total Blocks	total no. of blocks on disk (1 block = 1 Kbyte)
Blocks Used	number and percentage of blocks currently used
After Audit	number and percentage of blocks that were being used at the end of the last audit
Last Audit	day, hour, and minute the last audit took place
Peak Usage	highest percentage of disk space in use between audits (i.e., highest ever) and the time this happened
Intvl	length of time, in seconds, that the disk is monitored before this screen is updated
Total Files	total number of files on the disk at the end of the last audit. If an audit is running, it is the number of files found so far during the audit.

### Selecting disks

By default, the Disk Monitoring table displays information about each processor that is listed in a Service Data Manager (SDM) table called MXDISK-UD. You can add or delete disks from this list, and you can also change the monitoring intervals. See Using SDM Tables in 450-1011-301 for instructions on editing SDM tables.

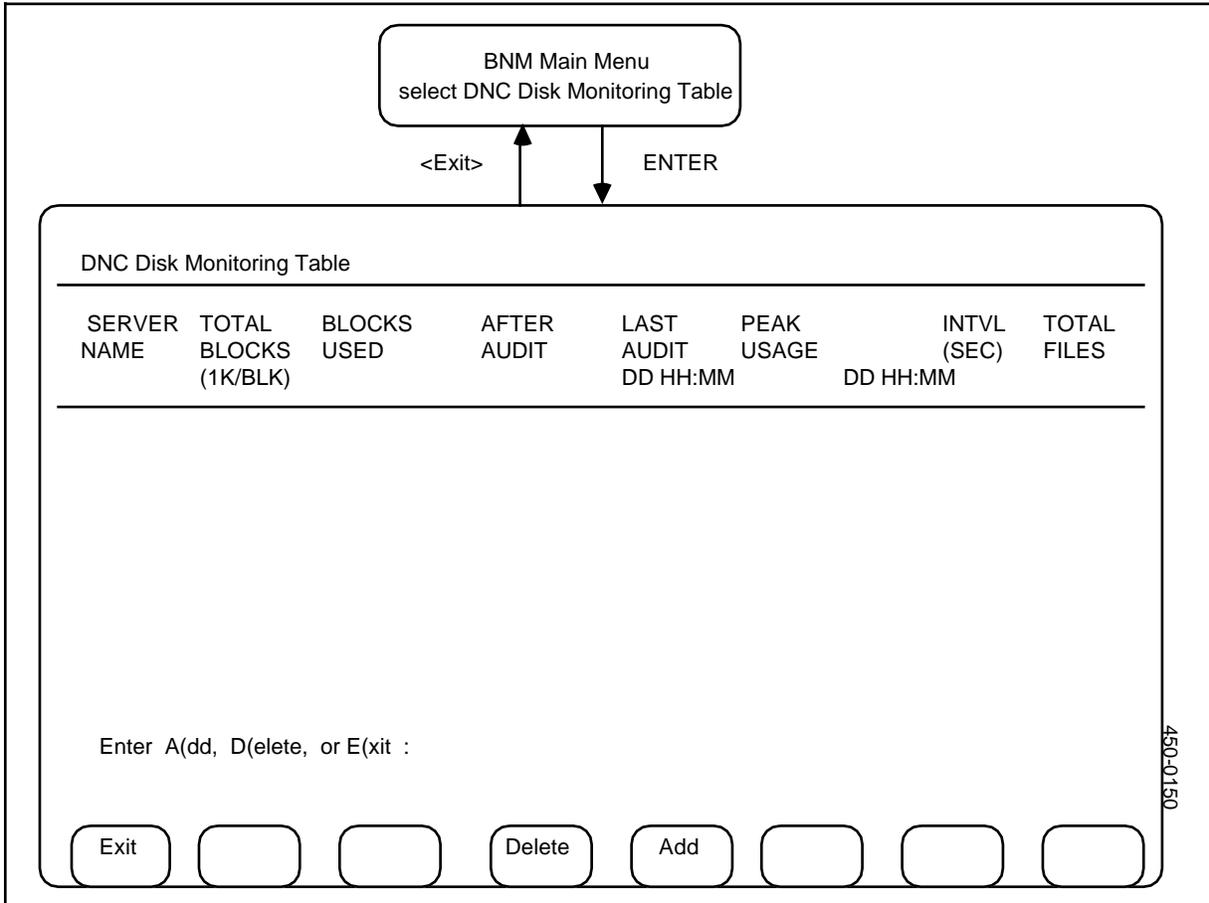
You can also add or delete disks while the Disk Monitoring table is being displayed:

- (1) Press <Add> or <Delete>, or type Add, Delete, A, or D.  
==> The system prompts you for the name of the disk you want to add or delete.
- (2) Type the name of a disk, then press ENTER.  
==> The system updates the screen to add or remove information about that disk.

### Exiting from the table

To exit from the Disk Monitoring screen and return to the BNM main menu, press <Exit>, or type Exit or E.

**Figure 2-6**  
**The DNC disk monitoring table**



## Administering continuous data collection

This procedure explains how to start and stop the continuous transfer of feature data from the telephone company's DNC-500 to the DNC-100. The required screens are shown in Figure 2-7.

### Required information

The following information is required to perform this task:

- (a) **Node:** This identifies the node from which the data was collected by the DNC-500.
- (b) **Feature Type.** Listed under Feature Type are two items - Administration and Network Data. Administration consists of the transaction channel. Network Data includes the KT, OM, and SMDR data. Before network data can be collected, the status of both Administration and Network Data must be "Available."
- (c) **Current Status:** This can be one of:
  - **Available:** Data is not being sent but can be sent if requested.
  - **Unavailable:** Data cannot be sent at this time.
  - **Collect:** The data is currently in a state of continuous collection.

**Note:** If the user is already at one of the menus given in the procedure, it can be started from that point.

### Menu access

After signing on to the system, which results in the main menu display,

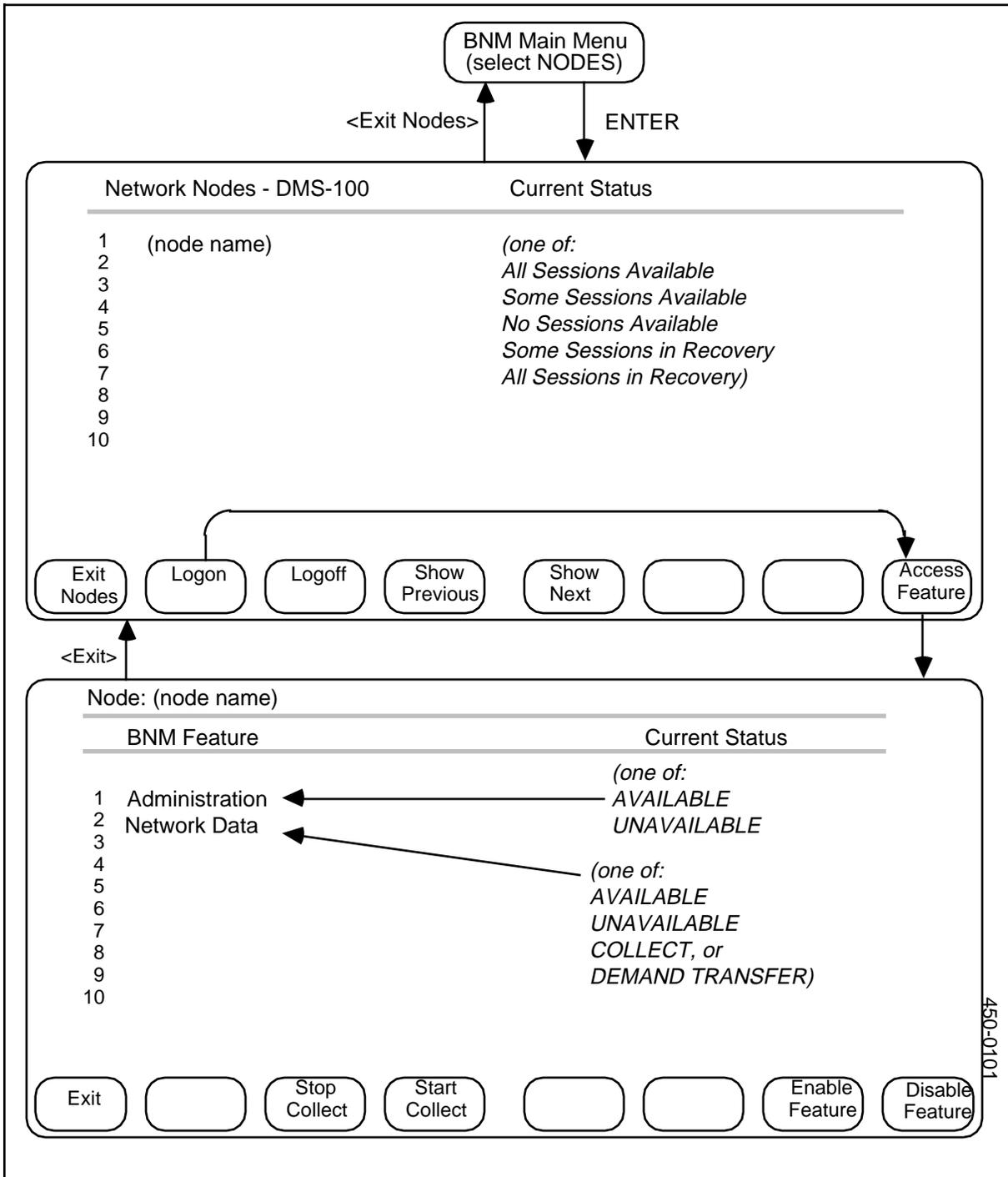
- (1) Select Nodes and press ENTER.  
==> A list of node locations appears.
- (2) Use arrow keys to select the node for which data files are to be collected and press <Logon>.  
==> A message indicates initiation and success or failure of logon.

### To start collection

If the logon above is successful,

- (1) Press <Access Feature>.  
==> The Feature-Status table appears, giving the types and status of each channel.  
  
Use the arrow keys to select Network Data and press <Start Collect>.  
==> The status becomes "collect" when data collection is started.
- (3) Press <Exit>.  
==> The node menu appears.

**Figure 2-7**  
**The nodes (continuous collection) screens**



### To stop collection

From the Feature-Status table,

- (1) Select Network Data and press <Stop Collect>.  
==> The Network Data status becomes AVAILABLE.
- (2) Press <Exit>.  
==> The node menu appears.

### To stop collection and clear channel(s)

From the Feature-Status table,

- (1) Select Network Data and press <Disable Feature>.  
==> Data collection stops. After a short time, the status becomes UNAVAILABLE.
- (2) Press <Exit>.  
==> The node menu appears.

*Note:* Pressing <Logoff> twice while continuous collection is in progress causes the system to stop all feature data collection and log off all channels.

### To reopen a channel and restart collection

From the Feature-Status table,

- (1) Select Network Data and press <Enable Feature>.  
==> The system reinstates the channel and its status becomes AVAILABLE.
- (2) Press <Start Collect>.  
==> Data collection is restarted.
- (3) Press <Exit>.  
==> The node menu appears.

### Menu exit

To return to the main menu,

- (1) Press <Exit>.  
==> The nodes list appears.
- (2) Press <Exit Nodes>.  
==> The main menu appears.

*Note:* When starting data collection, do not log off from the node, as this will cause collection to stop. However, you can sign off as a user from the DNC system, and this will not cause data collection to stop.

Perform other tasks or sign off.

## Retrieving files from a remote DNC

In most cases, a DNC-500 transmits data files to a DNC-100 continuously once a DNC-100 user has initiated the "continuous collection" process (see Nodes - Continuous Collection). However, DNC-100 users may occasionally wish to retrieve individual data files that for some reason have not been transmitted or need to be retransmitted. This procedure (see also Figure 2-8) explains how a DNC-100 user can retrieve files on demand from a DNC-500.

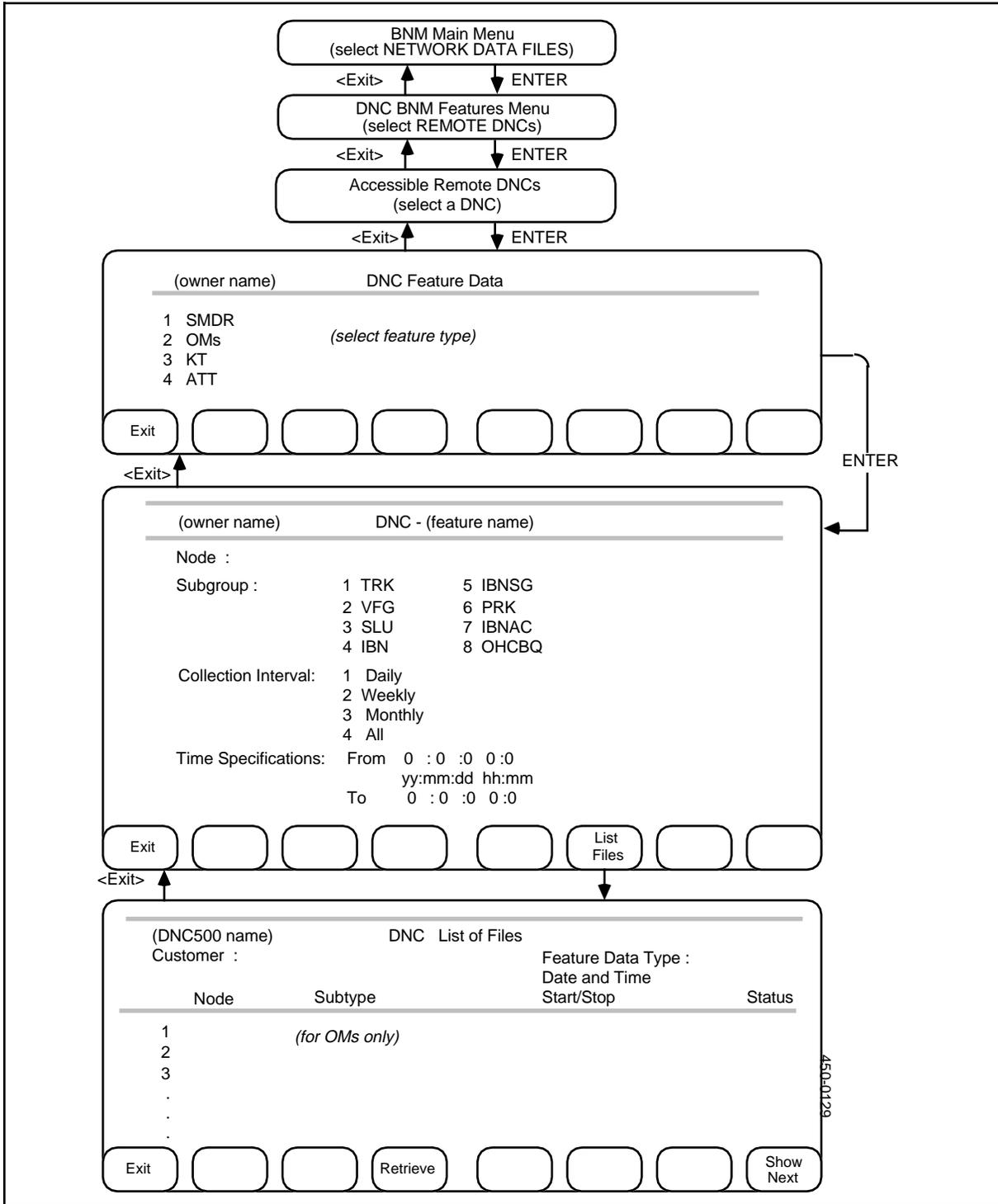
### Required information

The following information is required:

- (a) **Remote DNC Name:** the name of the remote DNC-500 to which access is required. You select the name from a list of accessible remote DNCs.
- (b) **Feature Data Type:** the type of data file to be listed. You choose the type from a list of the available types, which may include ATT (automated trunk testing), KT (killer trunk), OM (operational measurements), and SMDR (station message detail recording).
- (c) **Subtype.** the subtype of OM data. This value applies only to OM data. You select the subtype from the following list:
 

IBN	Meridian Digital Centrex features
IBNAC	Attendant Consoles
IBNSG	Attendant Subgroups
OHCBQ	Off-hook Queuing and Call-back Queuing usage
PRK	Call Park usage
SLU	Subscriber Line Usage
TRK	Trunk Group Usage
VFG	Virtual Facility Groups
- (d) **Node:** the name of the DMS switch from which the data files were collected. This entry is optional. If you leave it blank, data files from all nodes are assembled.
- (e) **Collection Interval:** the type of interval over which the data was originally collected by the node. You select one of the following values: daily, weekly, monthly, or all.
- (f) **Timespec:** (optional) FROM and TO times and dates that give a time range of files to be assembled. If you leave this blank, all data files are assembled.

**Figure 2-8**  
Remote DNC file recovery



### Logging on to a node

You must be logged on to a node before you can collect data files that came from that node.

- (1) Select Nodes on the BNM main menu and press ENTER  
==> A list of nodes appears.
- (2) Select the node and press <Logon>.  
==> A message indicates logon pending, then success or failure.
- (3) Return to the main menu by pressing <Exit>.

### Logging on to a remote DNC

From the main menu,

- (1) Select Network Data Files and then press ENTER.  
==> The DNC BNM Features menu appears (Figure 2-8).
- (2) Select Remote DNCs and then press ENTER.  
==> A list of the remote DNCs to which you have access appears.
- (3) Select the appropriate remote DNC from the list and then press ENTER.  
==> Messages confirm the success or failure of the logon to the remote DNC. If the logon is successful, the Feature Data menu appears.

### Listing the data files on the remote DNC

From the Feature Data menu:

- (1) Select one of the kinds of data on the Feature Data menu, then press ENTER.  
==> A specification screen appears with the cursor in the Node field. The fields on this screen are used to enter the remaining information that will be used to select files.
- (2) Fill in the fields on the specification screen, using the RETURN key or the TAB key to move from field to field. In the Subgroup field (if present) and the Collection Interval field, use the arrow keys to select a value. In the Timespec fields, fill in a year (last two digits), month (1-12), day (1-31), hours (0-23), and minutes (0-59), or leave the fields blank to specify all files of the appropriate type, node, and collection interval.
- (3) Press <List Files>.  
==> The List of Files screen appears.

### Retrieving a file

From the list of files:

- (1) Use the arrow keys to select the file you want to retrieve and then press <Retrieve>.  
==> A message confirms that the file has been retrieved.

### **Logging off from a remote DNC**

From the list of files:

- (1) Press <Exit>.  
==> The specification form reappears.

### **Exiting**

To exit and return to previous screens, press <Exit> on each screen in turn.

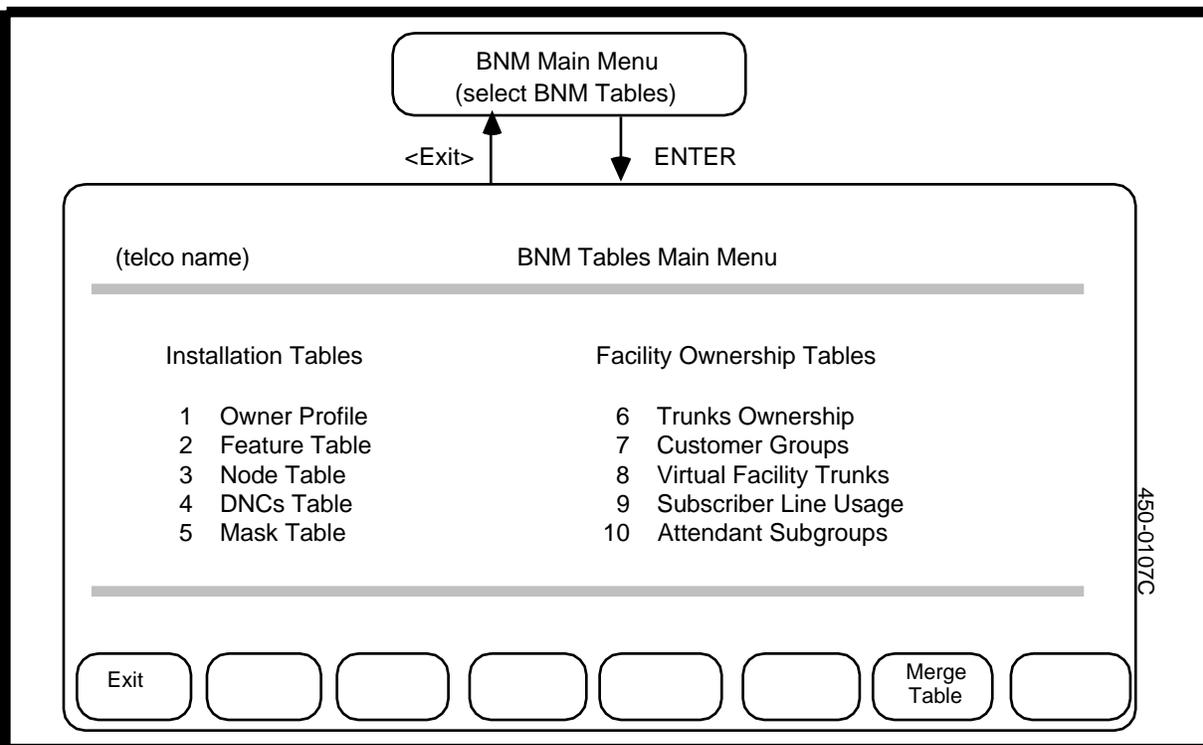
# BNM datafill

## Overview

This part explains how to administer the information in your DNC-100's BNM data tables. These tables record such things as the names of the trunks and the nodes in your telephone network. The DNC-100 uses this information to communicate with the DNC-500 and to process the data it receives.

The BNM data tables are filled in for you when the DNC-100 is installed. You can display all the tables and make changes when necessary by using the BNM Tables option on the BNM main menu. Figure 3-1 shows the BNM Tables menu.

**Figure 3-1**  
**The BNM tables menu**



### Installation tables

The Installation tables are the tables that the DNC relies on for information about the nodes your network uses and the features that it uses on each node. There are five installation tables:

- (a) **Owner Profile.** This table registers the owner of the DNC-100. The owner has access to all functions of the DNC-100 and to the data transferred to that DNC-100 from the operating company's DNC-500.
- (b) **Feature Table.** This table registers the types of feature data (such as SMDR and ATT) that the DNC-100 collects from each node. Each combination of feature and node requires a separate entry in this table.
- (c) **Node Table.** This table lists the nodes on which your network has dedicated facilities, and lists the attributes of those nodes.
- (d) **DNC Table.** This table identifies the DNC-500s to which this DNC-100 is connected. It also lists the DNC-100 itself.
- (e) **Mask Table.** The Mask table is a list of telephone numbers that identify stations for which called numbers are masked on Station Message Detail (SMDR) records.

### Facility ownership tables

The Facility Ownership tables identify to the DNC which facilities on DMS nodes are used by your network. There are five facility ownership tables:

- (a) Attendant Subgroups Table
- (b) Customer Groups Table
- (c) Subscriber Line Usage Table
- (d) Trunk Ownership Table
- (e) Virtual Facility Trunks Table

---

## Facility ownership - attendant subgroups

If attendants are arranged into subgroups in your Meridian Digital Centrex network, the subgroups are identified in the DNC-100's Attendant Subgroup Table (Figure 3-2). This table contains the following information:

- (a) **Attendant Subgroup.** This is the name of an attendant subgroup that is registered to you on a DMS switch.
- (b) **Customer Name.** This is the name by which your network is recognized on DMS switches.
- (c) **User-defined Name.** This is the your own name for the attendant subgroup. This is the name that will appear on reports.
- (d) **User Reference.** This is a shorter version of the user-defined name that the system uses when formatting spooled SMDR data.

The table can contain a maximum of 100 attendant subgroups.

### Displaying the table

To display the entries in the Attendant Subgroup table, follow these steps:

- (1) From the BNM main menu, select BNM Tables and then press ENTER.  
==> The BNM Tables Main Menu appears.
- (2) Select Attendant Subgroups and then press ENTER.  
==> The Attendant Subgroup table appears. If there are too many entries to be displayed on one screen, you can use the <Show Next> and <Show Previous> softkeys to move to different sections of the table.

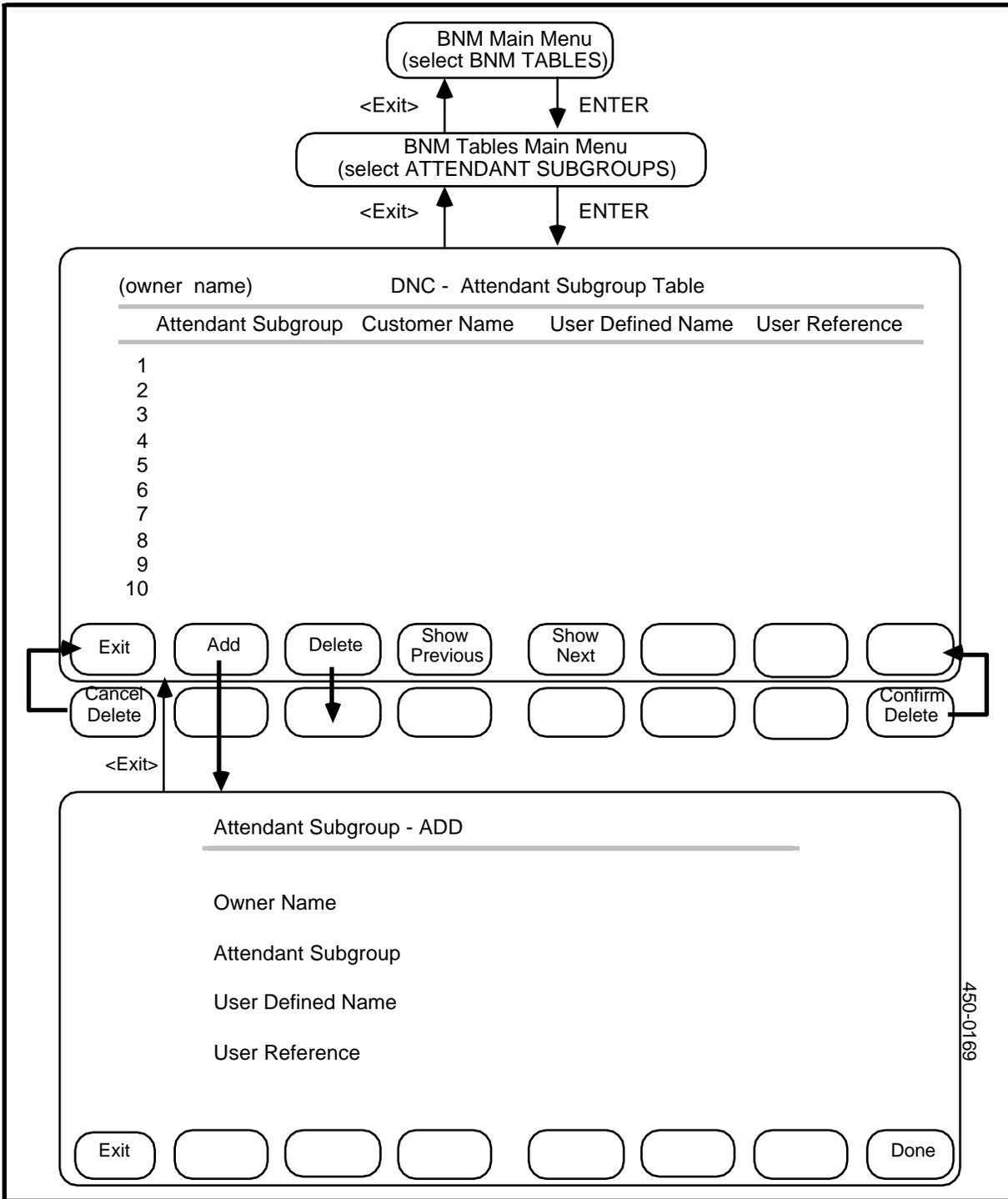
### Adding an entry

To add a new entry to the table, follow these steps:

- (1) On the Attendant Subgroups screen, press <Add>.  
==> The Attendant Subgroup-Add screen appears.
- (2) Fill in the fields on this screen, using the RETURN or TAB key to move between fields. When all the fields are correct, press <Done>.  
==> A message indicates that the entry has been added.

**Note:** To leave this screen without creating a new entry, press <Exit>.

**Figure 3-2**  
**Facility ownership - attendant subgroups**



**Deleting an entry**

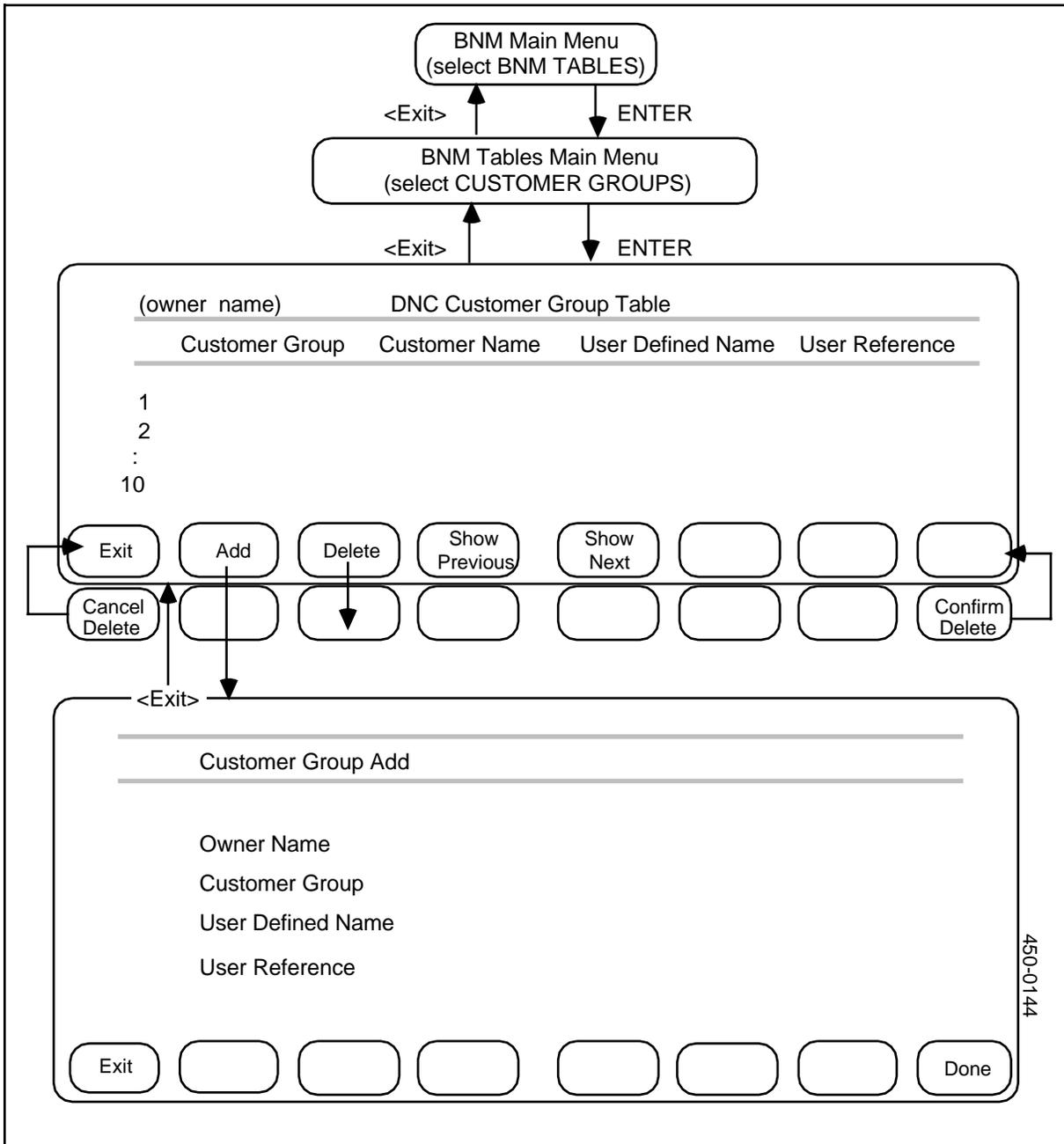
To delete an entry from the Attendant Subgroup table, use the arrow keys to select the entry you want to delete, then:

- (1) Press <Delete>.  
==> A message requests confirmation, and new softkeys appear.
- (2) Press <Confirm Delete>.  
==> The list reappears with the entry deleted.

**Exiting**

To leave the Attendant Subgroup screens and return to previous screens, press <Exit> on each screen in turn.

**Figure 3-3**  
**Facility ownership - customer groups**



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## Facility ownership - customer groups

If customer groups are used in your Meridian Digital Centrex network, they are identified in the DNC-100's Customer Group Table (Figure 3-3). The table can contain a maximum of 150 customer groups. It contains the following information:

- (a) **Customer Group.** This is the name of a customer group that is registered to you on a DMS switch.
- (b) **Customer Name.** This is the name by which your network is recognized on DMS switches.
- (c) **User-defined Name.** This is your own name for the customer group. This is the name that will appear on reports.
- (d) **User Reference.** This is a shorter version of the user-defined name that the system uses when formatting spooled SMDR data.

### Displaying the table

To display the entries in the table, follow these steps:

- (1) From the BNM main menu, select BNM Tables and then press ENTER.  
==> The BNM Tables Main Menu appears.
- (2) Select Customer Groups and then press ENTER.  
==> The Customer Group table appears. If there are too many entries to be displayed on one screen, you can use the <Show Next> and <Show Previous> softkeys to move to different sections of the table.

### Adding an entry

To add a new entry to the table, follow these steps:

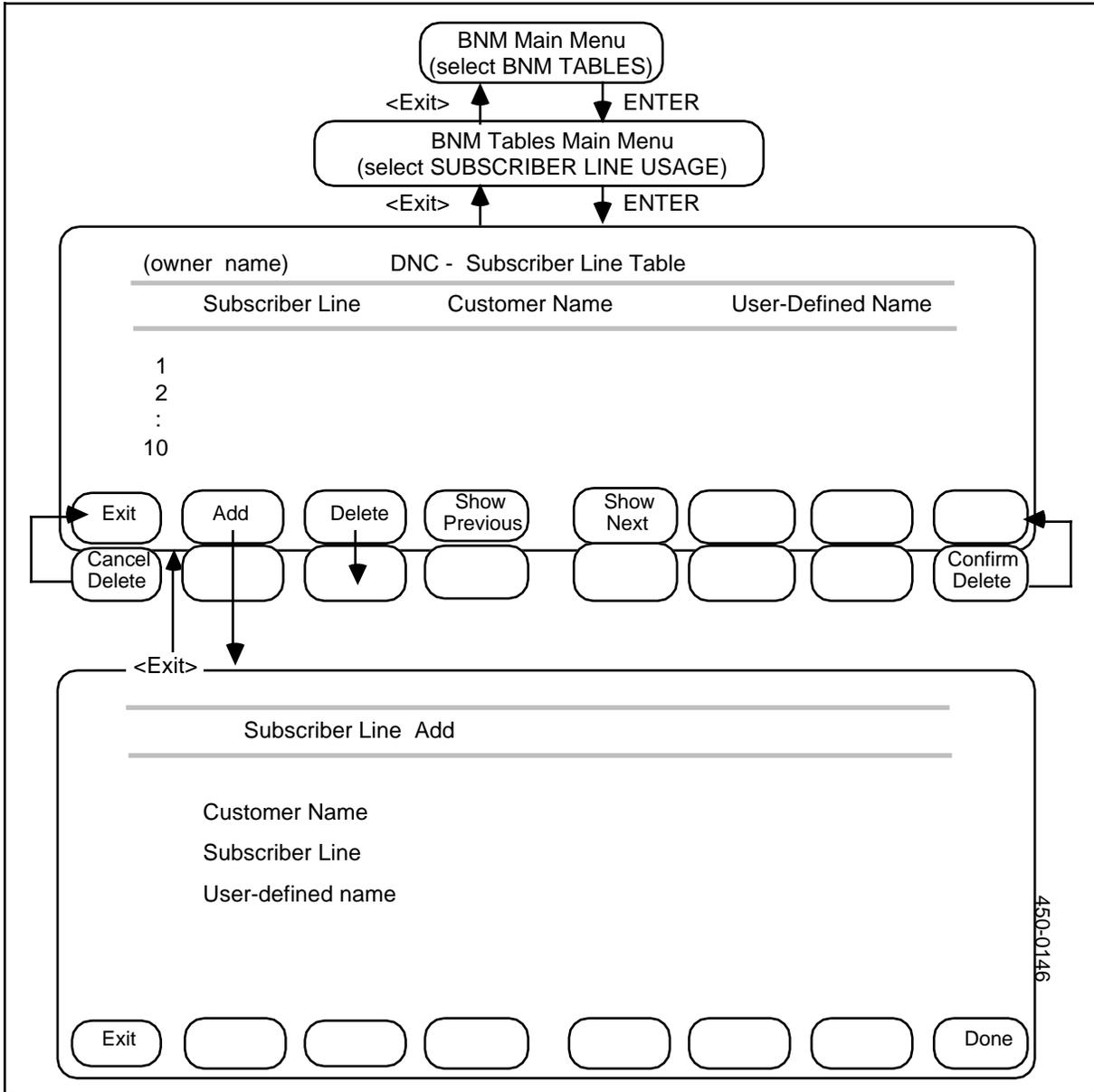
- (1) Press <Add>.  
==> The Customer Group Add screen appears.
- (2) Fill in the fields on this screen, pressing RETURN or TAB to change fields. When all fields are correct, press <Done>.  
==> A message indicates that the entry has been added.

### Deleting an entry

To delete an entry, use the arrow keys to select the entry you want to delete, then:

- (1) Press <Delete>.  
==> A message requests confirmation, and new softkeys appear.
- (2) Press <Confirm Delete>.  
==> The list reappears with the entry deleted.

**Figure 3-4**  
**Facility ownership - subscriber line usage**



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## Facility ownership - subscriber line usage

The Subscriber Line Usage Table (Figure 3-4) identifies the lines that your network uses at various DMS nodes. This table contains the following information:

- (a) **Subscriber Line.** This is the name of a line that is used by your network on a DMS switch.
- (b) **Customer Name.** This is the name by which your network is recognized on DMS switches.
- (c) **User-defined Name.** This is your own name for the subscriber line. This is the name that will appear on reports.

The table can contain a maximum of 100 subscriber lines.

To examine the entries in the Subscriber Line table, follow these steps:

- (1) From the BNM main menu, select BNM Tables and then press ENTER.  
==> The BNM Tables Main Menu appears.
- (2) Select Subscriber Line Usage and then press ENTER.  
==> The Subscriber Line table appears. If there are too many entries to be displayed on one screen, you can use the <Show Next> and <Show Previous> softkeys to move to different sections of the table.

### Adding an entry

To add a new entry to the table, follow these steps:

- (1) Press <Add>.  
==> The Subscriber Line Add screen appears.
- (2) Enter data in each field, pressing RETURN or TAB to change fields. When all fields are correct, press <Done>.  
==> A message indicates that the entry has been added.

### Deleting an entry

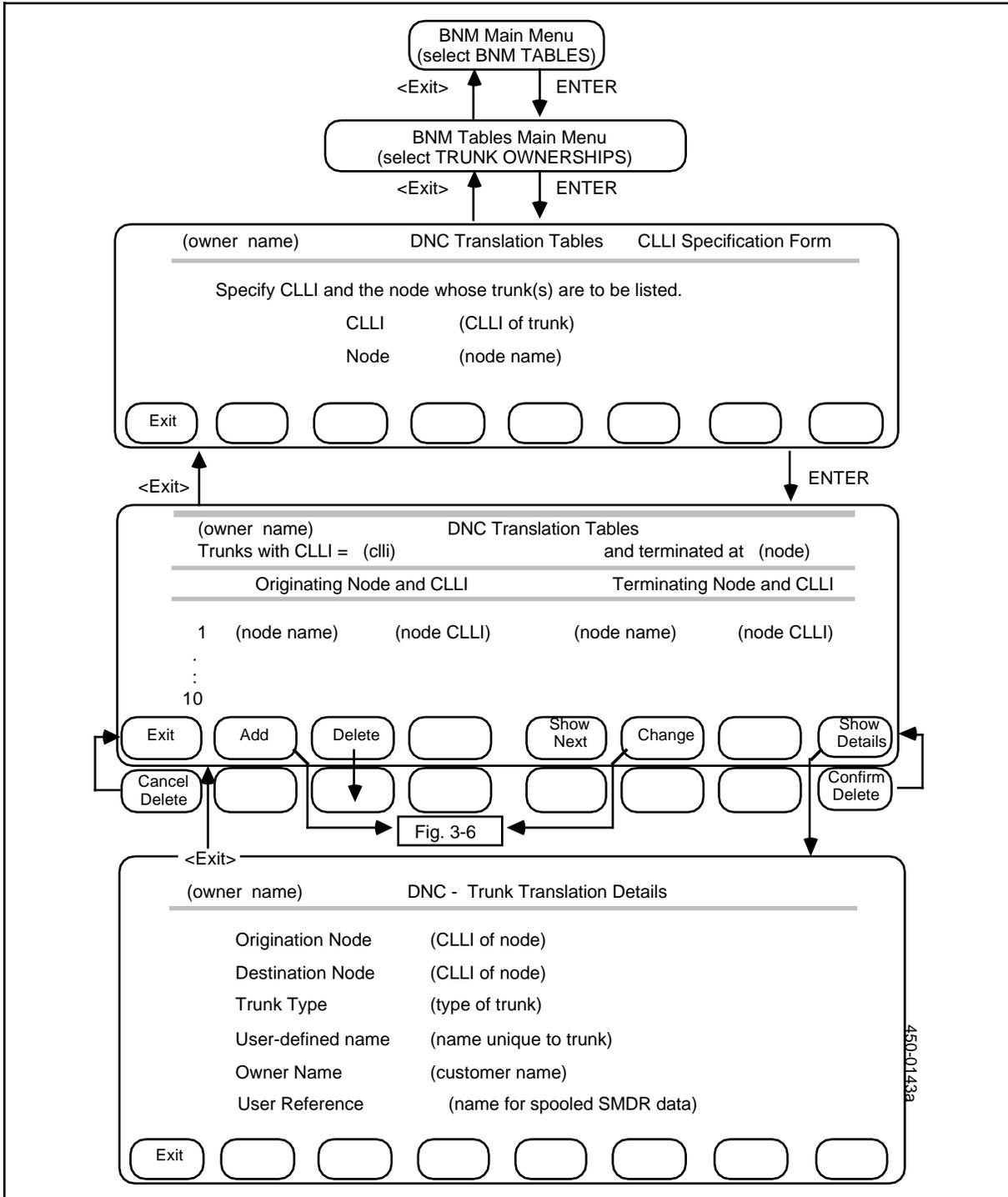
To delete an entry, select the entry you wish to delete, then:

- (1) Press <Delete>.  
==> A message requests confirmation, and new softkeys appear.
- (2) Press <Confirm Delete>.  
==> The list reappears with the entry deleted.

### Exiting

To leave the table and return to previous screens, press <Exit> on each screen in turn.

**Figure 3-5**  
**Facility ownership - trunk table (trunk translations)**



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## Facility ownership - trunk table (trunk translations)

The Trunk tables (Figure 3-5) show which trunks your network uses. There can be a maximum of 2000 trunks. The Trunk tables contain the following information:

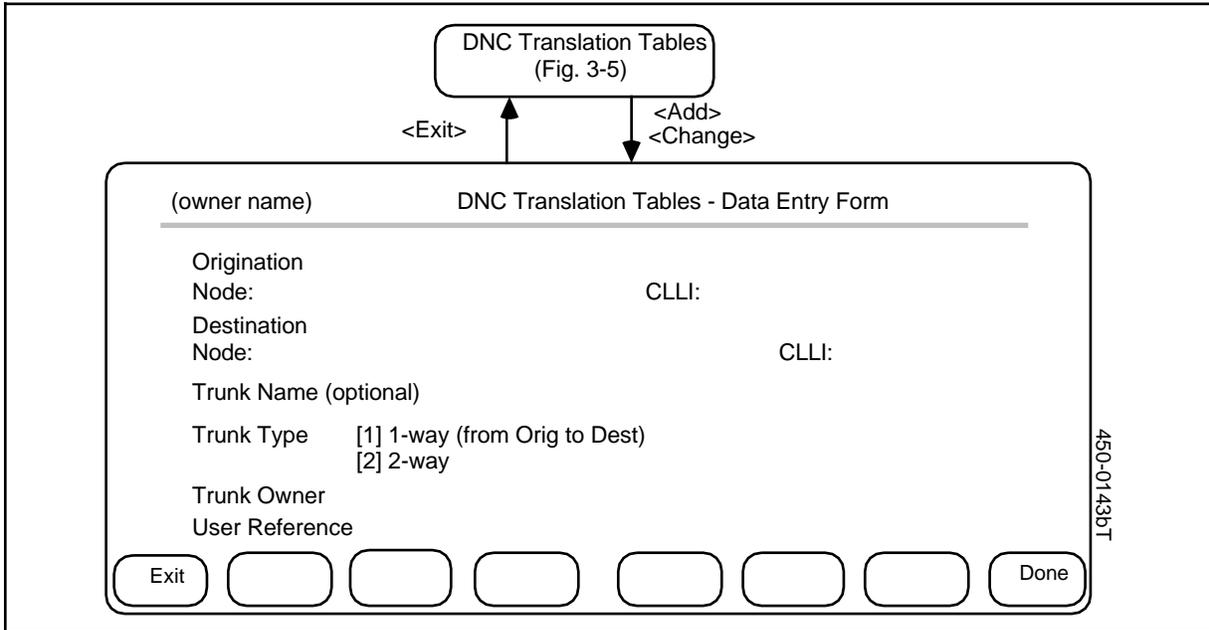
- (a) **Originating Node Name and CLLI.** This is the name, as recognized by the DMS, and common language location identifier (CLLI) for the node at which the trunk originates.
- (b) **Destination Node Name and CLLI.** This is the name, as recognized by the DMS, and common language location identifier (CLLI) of the node at which the trunk terminates.
- (c) **Trunk Type.** This shows whether the trunk is 1-way or 2-way.
- (d) **User-defined Name.** This is your own name for the trunk. This is the name that will appear on reports.
- (e) **Owner Name.** This is the name by which your network is recognized on DMS switches.

### Displaying the table

To examine the entries in the Trunk tables, follow these steps:

- (1) From the BNM main menu, select BNM Tables and then press ENTER.  
==> The BNM Tables Main Menu appears.
- (2) Select Trunk Ownerships and then press ENTER.  
==> The Translation Tables CLLI Specification form appears.
- (3) If you want to list all trunks with a particular node CLLI, type the CLLI and press RETURN. If you want to list all entries, leave the field blank and press RETURN.  
==> The cursor moves to the Node field.
- (4) Specify the trunks you want to list by filling in the CLLI and Node fields. In the Node field, type a particular node name to list trunks from that node, or leave the field blank to list trunks from all nodes. In the CLLI field, fill in the CLLI of a particular trunk to list that trunk, or leave the field blank to list all trunks from the specified node or nodes. Use the RETURN key to move between the fields. When you have finished, press ENTER.  
==> The Translation Tables screen appears with a list of the trunks that meet the specifications you entered. If there are too many entries to be displayed on one screen, you can use the <Show Next> softkey to display more entries.

**Figure 3-6**  
**Trunk translation add/change form**



**Displaying details of a trunk**

To display more details about a particular trunk that is displayed on the Translation Tables screen, use the arrow keys to select the trunk and then press <Show Details>.  
 ==> The Trunk Translation Details screen appears. To leave the Details screen and return to previous screens, press <Exit> on each screen in turn.

**Adding or changing an entry**

To add or change a trunk, first display the Trunk Translation Tables screen, then follow these steps:

- (1) Press <Add> or <Change> as required.  
 ==> The DNC Translation Table - Data Entry Form appears (Figure 3-6).
- (2) At each field, enter the new data over the old, pressing RETURN or TAB to change fields. When all fields are correct, press <Done>.  
 ==> A message indicates that the entry has been added.

**Note:** To leave this screen without creating a new entry, press <Exit>.

**Deleting an entry**

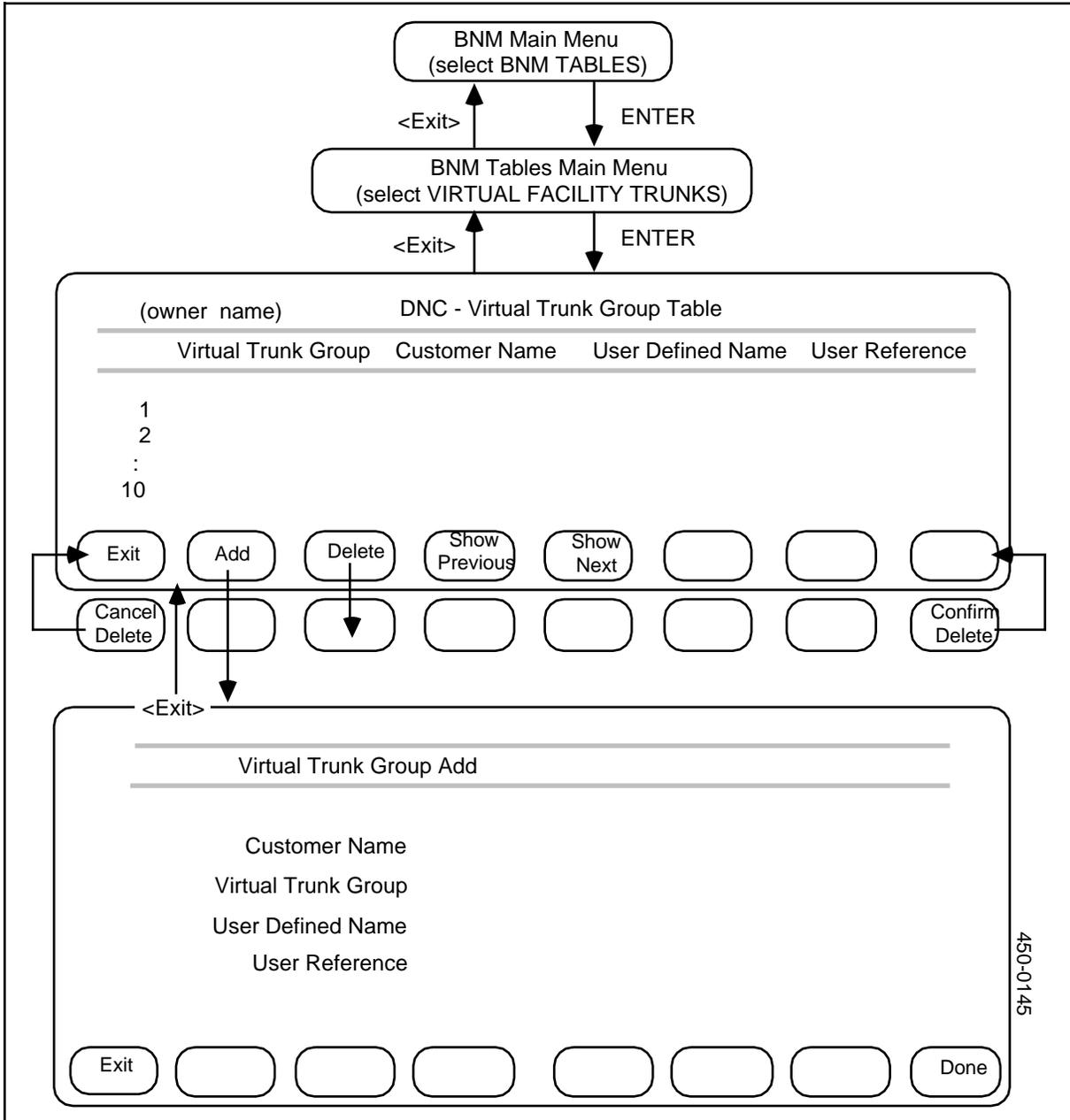
To delete a trunk, use the arrow keys to select the trunk you want to delete on the DNC Translation Tables screen (Figure 3-5), then:

- (1) Press <Delete>.   
==> A message requests confirmation, and new softkeys appear.
- (2) Press <Confirm Delete>.   
==> The list reappears with the entry deleted.

**Exit**

To leave the table and return to previous screens, press <Exit> on each screen in turn.

**Figure 3-7**  
**Facility ownership - virtual facility trunk table**



## Facility ownership - virtual facility trunk table

The Virtual Trunk Group table (Figure 3-7) lists the virtual facility groups to which your network has access. This table contains the following information:

- (a) **Virtual Trunk Group.** This is the name of a virtual trunk group that is used by your network on a DMS switch.
- (b) **Customer Name.** This is the name by which your network is recognized on DMS switches.
- (c) **User-defined Name.** This is your own name for the virtual trunk group. This is the name that will appear on reports.
- (d) **User Reference.** This is a shorter version of the user-defined name that the system uses when formatting spooled SMDR data.

This table can contain a maximum of 100 virtual trunk groups.

### Displaying the table

To display the entries in the Virtual Facility Trunk Group table, follow these steps:

- (1) From the BNM main menu, select BNM Tables and then press ENTER.  
==> The BNM Tables Main Menu appears.
- (2) Select Virtual Facility Trunks and then press ENTER.  
==> The Virtual Trunk Group table appears. If there are too many entries to be displayed on one screen, you can use the <Show Next> and <Show Previous> softkeys to move to different sections of the table.

### Adding an entry

To add a new entry to the Virtual Trunk Group table, first display the table, then follow these steps:

- (1) Press <Add>.  
==> The Virtual Trunk Group Add screen appears.
- (2) Fill out the fields on this screen, pressing RETURN or TAB to move between fields. When all the fields are correct, press <Done>.  
==> A message indicates that the entry has been added.

**Note:** To leave this screen without creating a new entry, press <Exit>.

- (3) Add other entries as above, typing new information over the old, or exit.

### Deleting an entry

To delete an entry from the Virtual Trunk Group table, use the arrow keys to select the entry you want to delete, then:

- (1) Press <Delete>.  
==> A message requests confirmation, and new softkeys appear.
- (2) Press <Confirm Delete>.  
==> The table reappears with the entry deleted.

## Exit

To leave the Virtual Trunk Group screens and return to previous screens, press <Exit> on each screen in turn.

## Installation - DNC owner profile

The DNC-100 Owner Profile (Figure 3-8) registers you as the owner of the DNC-100. As owner you have access to all the functions of the DNC-100 and to the data transferred to that DNC-100 from the telephone company's DNC-500. The table contains the following information:

- (a) **Customer Name.** This is the name by which your network is recognized on DMS switches.
- (b) **DNC Reference.** This is your customer name as it is known to the DNC.
- (c) **Password.** Not used for NSR27. The password used to log on to the DNC-500 is now specified in the DNC Table.

To examine the DNC Owner Profile, follow these steps:

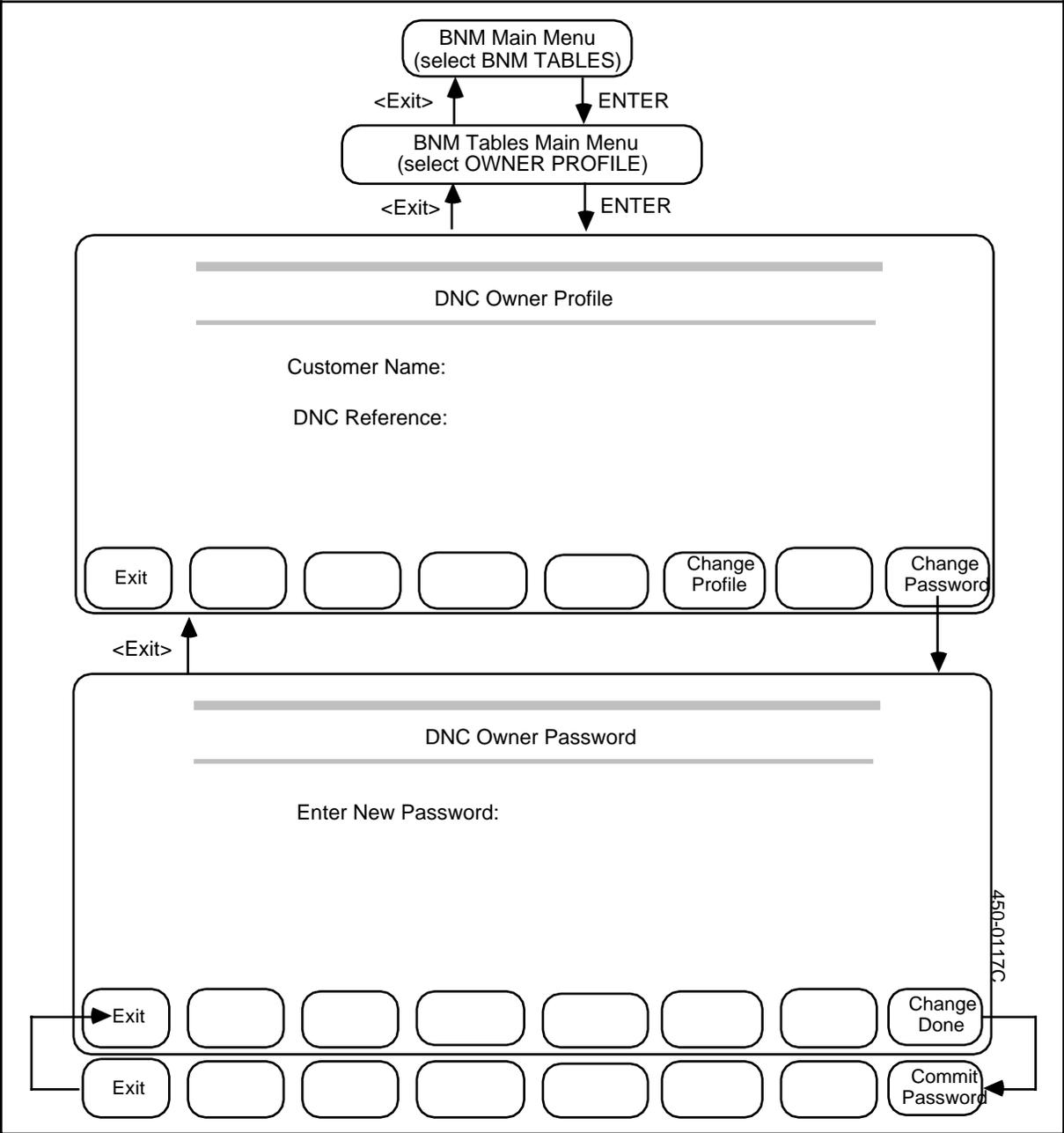
- (1) From the BNM main menu, select BNM Tables and then press ENTER.  
==> The BNM Tables Main Menu appears.
- (2) Select Owner Profile and then press ENTER.  
==> The DNC Owner Profile screen appears.

## Changing the password

To change the password, begin at the DNC Owner Profile screen, then follow these steps:

- (1) Press <Change Password>.  
==> The DNC Owner Password screen appears and you are prompted to enter a new password.
- (2) Type a new password.  
==> The cursor moves, but the password is not displayed on the screen.
- (3) Press <Change Done>.  
==> A message requests confirmation.
- (4) Retype the new password and press <Commit Password> to save the new password, or press <Exit> to return to the first bank of softkeys without changing the password.
- (5) Press <Exit> on each screen in turn to return to previous screens.

**Figure 3-8**  
**Installation - DNC owner profile**



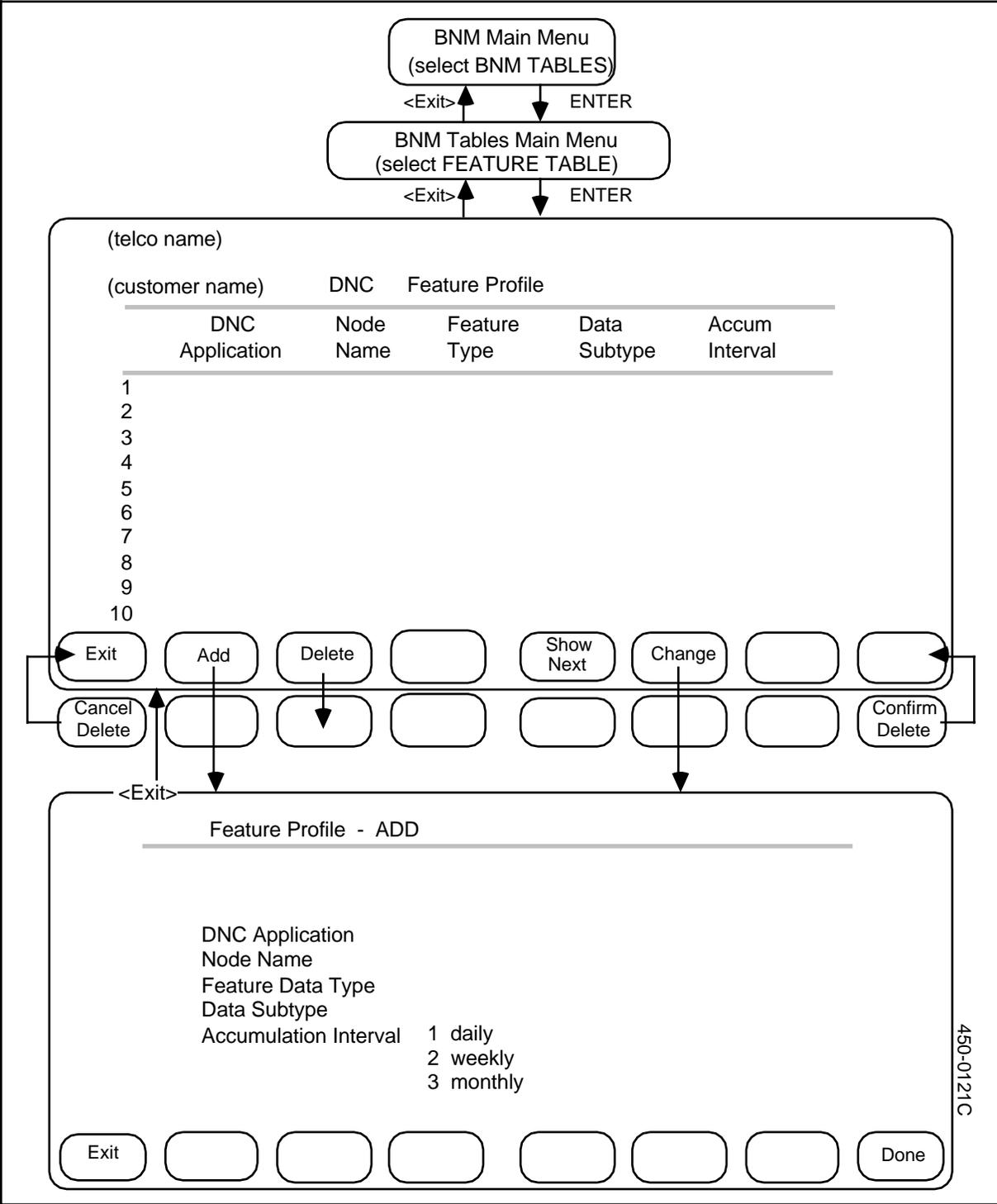
## Installation - feature profile

The Feature Profile table (Figure 3-9) registers the types of feature data (such as SMDR or ATT) that the DNC-100 collects from each node. Each combination of feature and node requires a separate entry in the table. There can be a maximum of 120 entries. The table contains the following information:

- (a) **DNC Application.** This field always shows the value "BNM" for Business Network Management.
- (b) **Node Name.** This is the name of a DMS node in your network (as known to the DNC) that collects data.
- (c) **Feature Type.** This shows a type of data that is collected by the node. The type may be SMDR (for Station Message Detail Recording), ATT (for Automatic Trunk Testing), KT (for Killer Trunks), or OM (for Operational Measurements).
- (d) **Data Subtype.** This shows the subtype of OM data being collected. The field is blank for other feature types. The subtype is one of the following:

IBN	Meridian Digital Centrex features
IBNAC	Attendant Consoles
IBNSG	Attendant Subgroups
OHCBQ	Off-hook Queuing and Call-back Queuing usage
PRK	Call Park usage
SLU	Subscriber Line Usage
TRK	Trunk Group Usage
VFG	Virtual Facility Groups
- (e) **Accumulation Interval.** This shows whether the node collects the data for daily, weekly, or monthly summaries.

Figure 3-9  
Installation - feature profile



### Displaying the table

To display the Feature Profile table, follow these steps:

- (1) From the BNM main menu, select BNM Tables and then press ENTER.  
==> The BNM Tables Main menu appears.
- (2) Select Feature Table and press ENTER.  
==> The Feature Profile table appears.

### Adding an Entry

To add a new entry to the table, follow these steps:

- (1) From the Feature Profile screen, press <Add>.  
==> The Feature Profile-Add screen appears.
- (2) Type data in each field. Use the RETURN or TAB key to change fields. Press <Exit> at any time to return to the previous screen without adding an entry. To save a new entry, press <Done> when all the fields are correct.  
==> A message indicates that the new entry has been added.
- (3) Add another new entry by typing new data in the fields and pressing <Done> again, or press <Exit> to return to the previous screen.

### Deleting an entry

To delete an entry from the Feature Profile screen, first select the entry you want to delete, then follow these steps:

- (1) Press <Delete>.  
==> A message requests confirmation, and new softkeys appear.
- (2) Press <Confirm Delete> to confirm, or press <Cancel Delete> to cancel.  
==> The first bank of softkeys reappears, and a message indicates whether or not the entry has been deleted. When an entry is deleted it disappears from the screen display.

### Changing an entry

To change an entry in the Feature Profile table, first select the entry you want to change on the Feature Profile screen, then:

- (1) Press <Change>.  
==> The Feature Profile - Change screen appears.
- (2) Type new data in each field. Use the RETURN or TAB key to move from field to field. Press <Exit> at any time to return to the previous screen without changing the entry. To save the changes, press <Done> when all the fields are correct.  
==> A message indicates that the entry has been changed.
- (3) Press <Exit> to return to the previous screen.

### Exiting

To leave the Feature Profile screens and return to previous screens, press <Exit> on each screen in turn.

## Installation - node table

The Node table (Figure 3-10) lists the nodes from which your DNC can collect data. In a basic BNM system, all nodes are Northern Telecom DMS-100 switches. In a BNM system that includes the Switch/PBX Poller (SPP) feature, a node may also be any other type of switch that is supported by SPP. (See 450-1021-131 and 450-1021-331 for more information about SPP.) There can be a maximum of 60 nodes, with a maximum of 30 non-DMS or SL100 switches.

The Node table contains the following information about each node:

- (a) **Node:** This shows the name of the node.
- (b) **Network Address:** This shows the address of the node, as recognized by the DNC system.
- (c) **DNC ID:** This identifies the DNC-500 through which your DNC-100 is connected to this node.
- (d) **Node Type:** This shows what type of switch the node is. The type can be DMS, or any type that is supported by the Switch/PBX Poller feature. See 450-1021-131 for information about the types of nodes supported by SPP.
- (e) **S/W Load:** This identifies the software load that is running on the node. This field is not used by the system, but is available for your reference.  
**Note:** For NSR32-patch 29 and up, field S/W Load accepts both BCSxx and NAxxx software load names (where xx and xxx refer to the number of the appropriate software load in the switch).
- (f) **SMDR Data ID:** This field identifies which of three possible SMDR data streams the DNC collects from the node. The value must be 1, 5, or 6.
- (g) **15IDDD Activated?:** (Add and Change screens only.) This field specifies the format of SMDR spooling. If the box next to this field is empty (the default value), then BNM spools the former SMDR format; pressing the space bar, which enters a check mark in the box, indicates that BNM is to spool the expanded SMDR format.

**Note:** Field 15IDDD Activated? is only displayed for international calls with software releases NA004 and above.

When your BNM system is installed, the Node table contains appropriate entries for DMS nodes, but not for SPP nodes. To register the SPP nodes in the BNM Node table, you must display the Node table and then press the <Retrieve SPP Nodes> softkey.

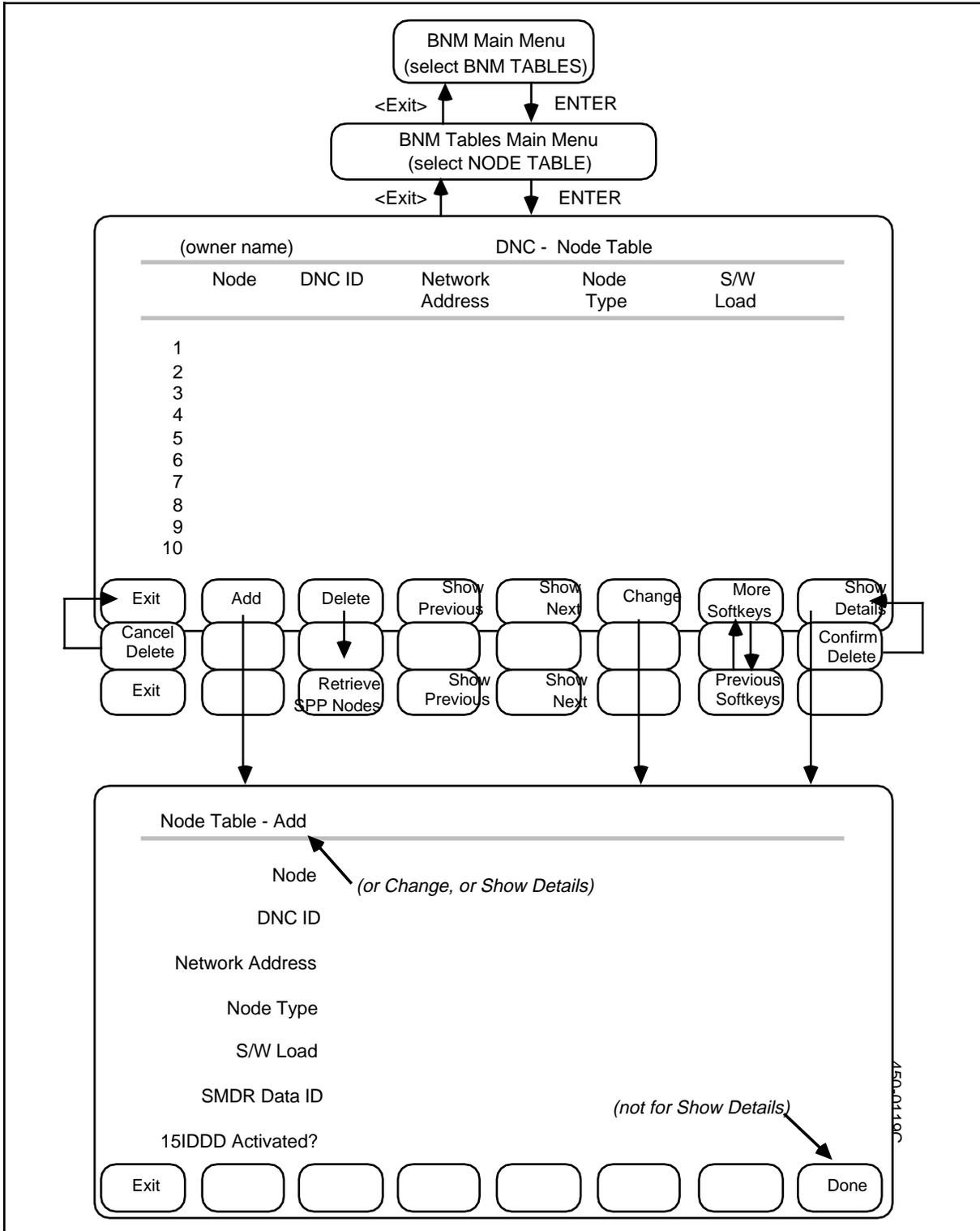
You can add, delete, and change information for DMS nodes in the BNM Node table, but you can only display SPP nodes. You must use the SPP feature's screens to make changes to SPP nodes.

### **Displaying the table**

To display the Node table, follow these steps:

- (1) From the BNM main menu, select BNM Tables and then press ENTER.  
==> The BNM Tables Main Menu appears.
- (2) Select Node Table and then press ENTER.  
==> The Node Table screen appears. If there are too many entries to be displayed on one screen, you can use the <Show Next> and <Show Previous> softkeys to move to different sections of the table.

**Figure 3-10**  
**Installation - node table**



### Retrieving SPP information

If you have the Switch/PBX Poller feature, follow these steps to retrieve information about nodes from the SPP database and store it in the Node table:

- (1) Display the Node table. (See Displaying the Table above.)
- (2) Press <More Softkeys>.  
==> Different softkeys appear.
- (3) Press <Retrieve SPP Nodes>.  
==> BNM collects node information from the SPP database and displays it in the Node table.
- (4) Press <Show Next> or <Show Previous> to look at other parts of the Node table, or press <Previous Softkeys> or <Exit> to display other softkeys or exit from the Node screen.

### Adding an entry

To add a DMS entry to the table, follow these steps (you must use SPP screens to add SPP nodes):

- (1) Display the Node table. (See Displaying the Table above.)
- (2) Press <Add>.  
==> The Node Table-Add screen appears.
- (3) Type data in each field. Use the RETURN or TAB key to change fields. Press <Exit> at any time to return to the previous screen without adding an entry. To save a new entry, press <Done> when all the fields are correct.  
==> A message indicates that the new entry has been added.
- (4) Add another new entry by typing new data in the fields and pressing <Done> again, or press <Exit> to return to the previous screen.

### Deleting an entry

To delete a DMS entry from the Node table, follow these steps (you must use the SPP screens to delete an SPP node):

- (1) Select the entry you want to delete on the Node Table screen, then press <Delete>.  
==> A message requests confirmation, and new softkeys appear.
- (2) Press <Confirm Delete> to confirm, or press <Cancel Delete> to cancel.  
==> The first bank of softkeys reappears, and a message indicates whether or not the entry has been deleted. When an entry is deleted it disappears from the screen display.

---

## Changing an entry

To change a DMS entry in the Node table, follow these steps (you must use SPP screens to change SPP entries):

- (1) Select the entry you want to change on the Node Table screen, then press <Change>.  
==> The Node Table - Change screen appears.
- (2) Type new data in each field. Use the RETURN or TAB key to move from field to field. Press <Exit> at any time to return to the previous screen without changing the entry. To save the changes, press <Done> when all the fields are correct.  
==> A message indicates that the entry has been changed.
- (3) Press <Exit> to return to the previous screen.

## Exiting

To leave the Node Table screens and return to previous screens, press <Exit> on each screen in turn.

## Installation - DNC table

The DNC Table (Figure 3-11) gives information about the DNC-500s to which this DNC-100 is connected. It must also contain an entry for the DNC-100 itself. Each entry contains the following information:

- (a) **DNC Name.** This shows the name of the other DNC as known to that system's users.
- (b) **DNC Reference.** This shows the name of the other DNC system as it is known to this DNC.
- (c) **DNC Network Address.** This gives the address of the other DNC as understood by all other connected DNC systems.
- (d) **DNC Logon Password.** This is the password that will be expected by the DNC-500 when this DNC-100 logs on to it. This entry must be identical to the password for this DNC-100 in the Customer Table on the DNC-500.
- (e) **DNC Type.** This shows whether the other DNC is a DNC-500 or a DNC-100.

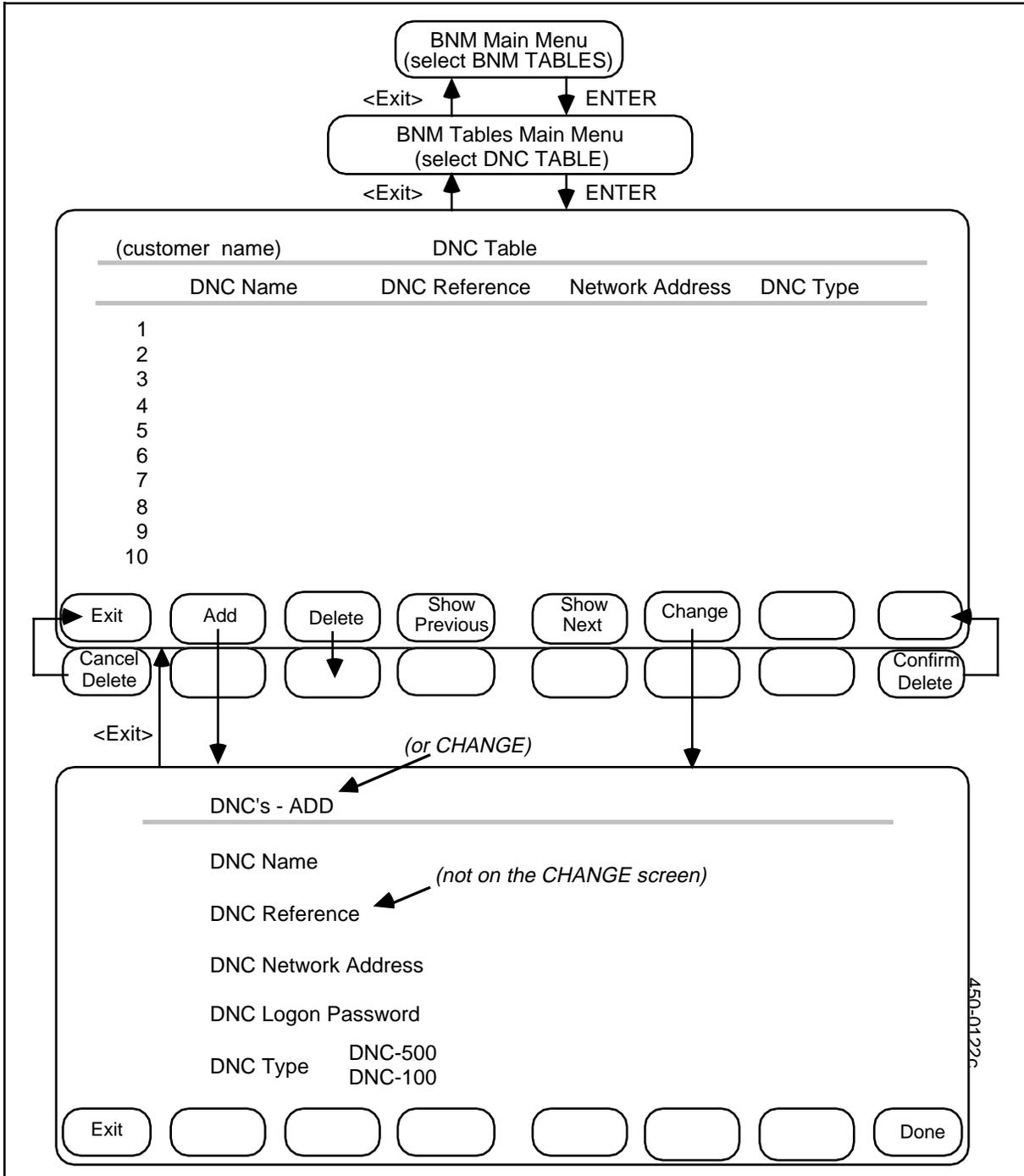
There can be only 1 other DNC in NSR28.

## Displaying the table

To examine the DNC table, follow these steps:

- (1) From the BNM main menu, select BNM Tables and then press ENTER.  
==> The BNM Tables Main Menu appears.
- (2) Select DNCs Table and then press ENTER.  
==> The DNC Table screen appears.

**Figure 3-11**  
**Installation - DNC table**



### **Adding an entry**

To add a new entry to the table, follow these steps:

- (1) From the DNC Table screen, press <Add>.  
==> The DNC -Add screen appears.
- (2) Type data in each field. Use the RETURN or TAB key to change fields. Press <Exit> at any time to return to the previous screen without adding an entry. To save a new entry, press <Done> when all the fields are correct.  
==> A message indicates that the new entry has been added.
- (3) Add another new entry by typing new data in the fields and pressing <Done> again, or press <Exit> to return to the previous screen.

### **Deleting an Entry**

To delete an entry from the DNC table, first select the entry you want to delete on the DNC Table screen, then follow these steps:

- (1) Press <Delete>.  
==> A message requests confirmation, and new softkeys appear.
- (2) Press <Confirm Delete> to confirm, or press <Cancel Delete> to cancel.  
==> The first bank of softkeys reappears, and a message indicates whether or not the entry has been deleted. When an entry is deleted it disappears from the screen display.

### **Changing an entry**

To change an entry in the DNC table, first select the entry you want to change on the DNC Table screen, then:

- (1) Press <Change>.  
==> The DNC - Change screen appears.
- (2) Type new data in each field. Use the RETURN or TAB key to move from field to field. Press <Exit> at any time to return to the previous screen without changing the entry. To save the changes, press <Done> when all the fields are correct.  
==> A message indicates that the entry has been changed.
- (3) Press <Exit> to return to the previous screen.

### **Exiting**

To leave the DNC Table screens and return to previous screens, press <Exit> on each screen in turn.

## Mask table

The Mask table registers all telephone numbers in the network that are to have their called numbers masked in SMDR data. Screens are shown in Figure 3-12.

### Displaying the mask table

From the BNM main menu,

- (1) Select BNM Tables and press ENTER.  
==> The BNM Tables Main Menu appears.
- (2) Select Mask Table and then press ENTER.  
==> The Mask Table screen appears with a prompt for a telephone number.

### Querying an entry

To find out whether or not a particular directory number is in the Mask table, follow these steps:

- (1) Type the number on the Mask Table screen, including the area code. Use the form NPA-NXX-XXXX or NPANXXXXXX.
- (2) Press <Query>.  
==> A message tells you whether the number is in the Mask Table or not.

### Listing all entries

To list all the entries in the Mask table, display the Mask Table screen, then press <List>.

==> The Mask Table List screen appears with a list of all the entries in the table. If the list takes more than one page, you can use the <Show Next> softkey to move to subsequent pages.

### Adding an entry

To add an entry to the Mask Table, follow these steps:

- (1) Type the directory number on the Mask table screen. Use 10 digits, including the area code (use the form NPA-NXX-XXXX or NPANXXXXXX).
- (2) Press <Add>.  
==> A message confirms that the number has been added.

### Deleting an entry

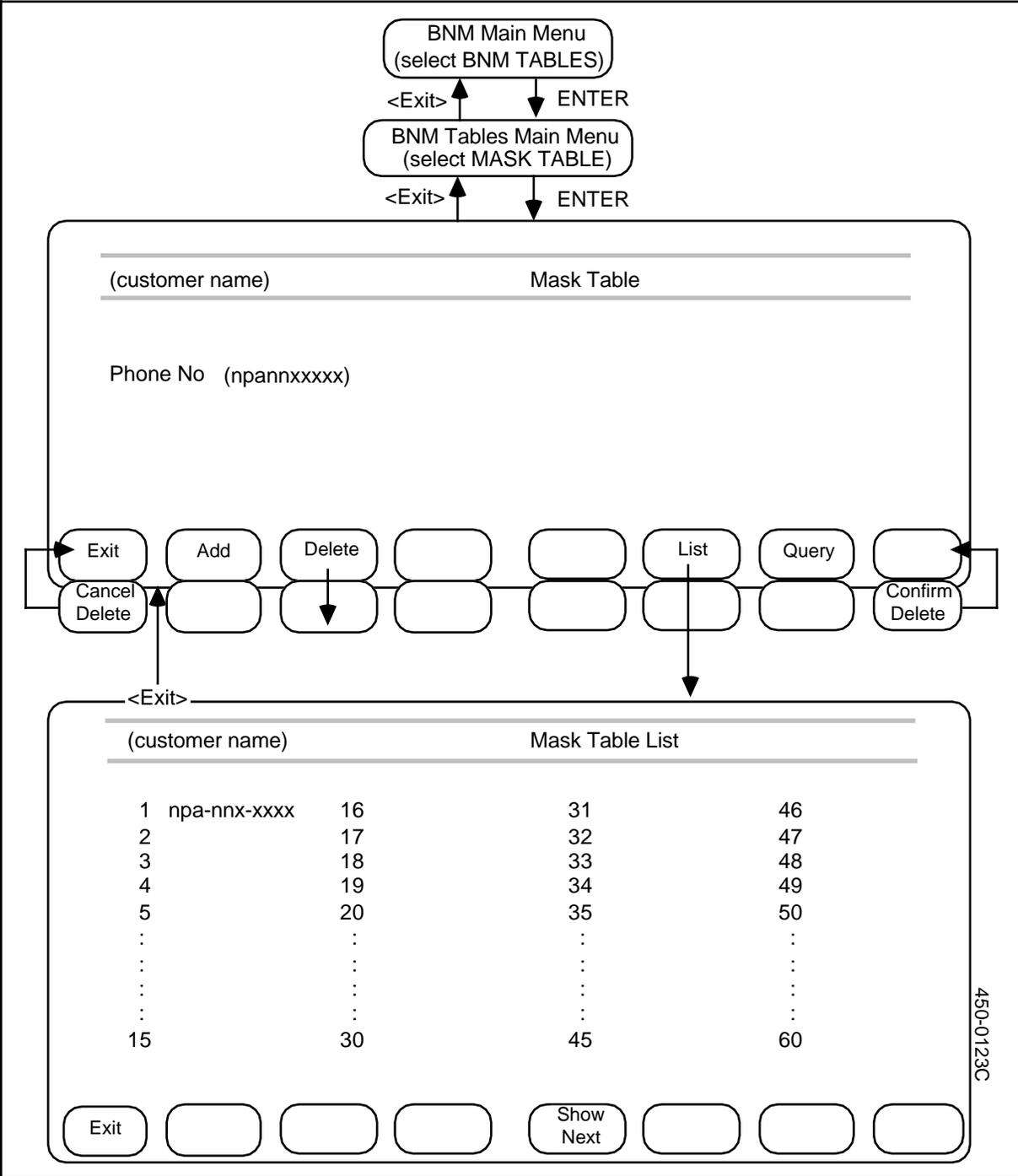
To delete an entry in the Mask Table:

- (1) Type the directory number on the Mask table screen, including the area code. Use the form NPA-NXX-XXXX or NPANXXXXXX.
- (2) Press <Delete>.  
==> A message confirms deletion.

### Exiting

To exit from any screen and return to the previous screen, press <Exit>.

Figure 3-12  
Mask table



Network Operations Systems  
**Business Network  
Management**

DNC-100: Administration

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