

Critical Release Notice

Publication number: 297-8021-814
Publication release: Standard 20.02

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

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

Bookmark Color Legend

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

Red: Applies to new or modified content for SN04 (DMS) that is valid through the current release.

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

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

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

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

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

Attention!

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

Publication History

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

November 2005

Standard release 20.02 for software release SN09 (DMS).

For the Standard SN09 (DMS) release the following changes were made:

Volume 2

OM group CNDB (modified by CR Q01148982)

Volume 5

OM group TRMTER (modified by CR Q01053671)

The Critical Release Notice has been updated to correctly show the details of the documentation releases associated with software release SN07.

September 2005

Preliminary release 20.01 for software release SN09 (DMS).

For the Preliminary SN09 (DMS) release the following changes were made:

Volume 1

No changes

Volume 2

No changes

Volume 3

OM group ISUPUSAG (modified by CR Q01104397)

Volume 4

OM group STORE (modified by CR Q01079425)

Volume 5

No changes

Volume 6

No changes

June 2005

Standard release 19.02 for software release SN08 (DMS).

No changes – null release

March 2005

Preliminary release 19.01 for software release SN08 (DMS).

No changes – null release

December 2004

Standard release 18.02 for software release SN07 (DMS).

For the Standard SN07 (DMS) release the following changes were made:

Volume 1

No changes

Volume 2

No changes

Volume 3

OAPNMTC by Feature A00005160

OFZ2 by CR Q00792099

Volume 4

No changes

Volume 5

TDGTHRU (new) by Feature A00005160

Volume 6

No changes

September 2004

Preliminary release 18.01 for software release SN07 (DMS).

For the Preliminary SN07 (DMS) release the following changes were made:

Volume 1

AIN, AINICOFF, AINICSUB, AINOGOGG, AINOGB2, ATTAMA

Volume 2

CP, IS4ITOPS (obsolete, removed)

Volume 3

No changes

Volume 4
SMSTOPS (new)

Volume 5
TC7WRLSS (new), VOW (new), WINTOPS (new)

Volume 6
No changes

March 2004

Standard release 17.03 for software release SN06 (DMS).

For the Standard SN06 (DMS) release the following changes were made:

Volume 1
No changes

Volume 2
DCA references removed/marked obsolete

Volume 3
No changes

Volume 4
No changes

Volume 5
TFCANA

Volume 6
DCA references removed/marked obsolete

September 2003

Standard release 17.02 for software release SN06 (DMS).

For the Standard SN06 (DMS) release the following changes were made:

Volume 1
OM group BTTANDM (NEW)
OM group BCTPOOL (new)

Volume 2
OM group IS4ITOPS (new)

Volume 3
No changes

Volume 4

No changes

Volume 5

OM group TOPSDACC
OM group TOPSISUP
OM group TRK
OM group TRKQOSOM

Volume 6

No changes

June 2003

Preliminary release 17.01 for software release SN06 (DMS).
For the Standard SN06 (DMS) release the following changes were made:

Volume 1

No changes

Volume 2

OM group DCTS

Volume 3

No changes

Volume 4

No changes

Volume 5

OM group TRK2
OM group TRKDCTS
OM group TRKQOSOM (new)

Volume 6

No changes

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297-8021-814

DMS-100 Family

North American DMS-100

Operational Measurements Reference Manual Volume 2 of 6
OM Groups CNAB-ISDNPDOM

LET0015 and up Standard 14.02 May 2001

DMS-100 Family

North American DMS-100

Operational Measurements Reference Manual Volume 2 of 6

OM Groups CNAB-ISDNPDOM

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1 Operational measurements

Introduction

This chapter contains descriptions of operational measurement (OM) groups. Each OM group description contains the following sections:

- OM description
- Release history
- Registers
- Group structure
- Associated OM groups
- Associated functional groups
- Associated functionality codes
- OM group registers flowchart
- Register descriptions

OM description

This section provides a short description of the data the OM group counts and how the OM group uses this data.

Release history

This section contains a history of changes to the OM group. The release history describes the changes and the software releases that associate with the changes.

Registers

This section indicates how the registers in the OM group appear on the MAP display.

Group structure

This section describes the structure of the OM group that includes:

- the number of OM tuples
- the number of OM key fields

- office parameters
- other information entered associated with the group

Associated OM groups

This section lists other OM groups for the OM group.

Associated functional groups

This section lists the associated functional groups for the OM group.

Associated functionality codes

This section lists the associated functionality codes for the OM group.

OM group registers flowchart

This section provides an operating flowchart of all associated registers for the OM group. The flowchart shows the sequence of events that cause the registers to increase. The flowchart also shows the relationship between registers within the group.

Register descriptions

This section provides a short description of each register that associates with the OM group.

Register descriptions are arranged in alphabetical order within each group. There are three types of registers:

- Peg registers that increase when an event occurs.
- Usage registers that record activities or states at specified time intervals.
- High water registers that indicate the maximum number of items in simultaneous use during the current transfer period.

Each register description contains the following sections:

- register <short name>
- register <short name> release history
- Associated registers
- Associated logs
- Extension registers

Register <short name>

This section expands the register acronym and describes the data the register counts.

If the description refers to registers from a different group, the group name identifies these registers. An underscore and the register name follows the

group name. For example, OFZ_ORGFSET refers to register ORGFSET in group OFZ.

Register <short name> release history

This section shows the software development stream in which the system register was created and lists register changes.

Associated registers

This section lists related registers and explains how these registers relate. This section can include validation formulae or equations. Registers from a different group are identified by the group name and register name, separated by an underscore, for example, OFZ_ORGFSET.

Associated logs

This section lists logs that the system generates, together with events that are counted or related to the understanding of OM data.

Extension registers

This section provides the name of the register that the system uses for overflow when the original register is full. The system multiplies the value in the extension register by 65336. The system adds this total to the original register value to get the total count.

OM group CNAB

OM description

Calling name delivery blocking (CNAB)

The OM group CNAB provides a record of the activity of the CNAB feature for Residential Enhanced Services (RES). The OM group CNAB also provides a record of the activity of the CNAB feature for Meridian Digital Centrex (MDC) lines. The CNAB feature is the Caller ID Delivery and Suppression-Delivery (CIDS DLV) for Integrated Services Digital Network (ISDN) lines. The CNAB feature also uses this OM group. You can obtain the CNAB feature alone or as part of the universal access group of features.

This OM group also includes registers for the Calling Name and Number Delivery (CNND) feature.

Release history

NA008

Additional information on registers pegged for CIDS DLV use on ISDN BRI lines.

BCS33

The OM group CNAB was introduced in BCS33.

Registers

The OM group CNAB registers appear on the MAP terminal as follows:

| | | | |
|----------|----------|----------|----------|
| CNABATT | CNABFDEN | CNABSACT | CNNDSDEN |
| CNABUNIV | CNABDENY | CNNDDENY | |

Group structure

The OM group CNAB provides one tuple for each office.

Key field:

There are no Key fields.

Info field:

There are no Info fields.

Associated functional OM groups

There are no associated functional OM groups.

OM group CNAB (continued)

Associated functional groups

There are no associated functional groups.

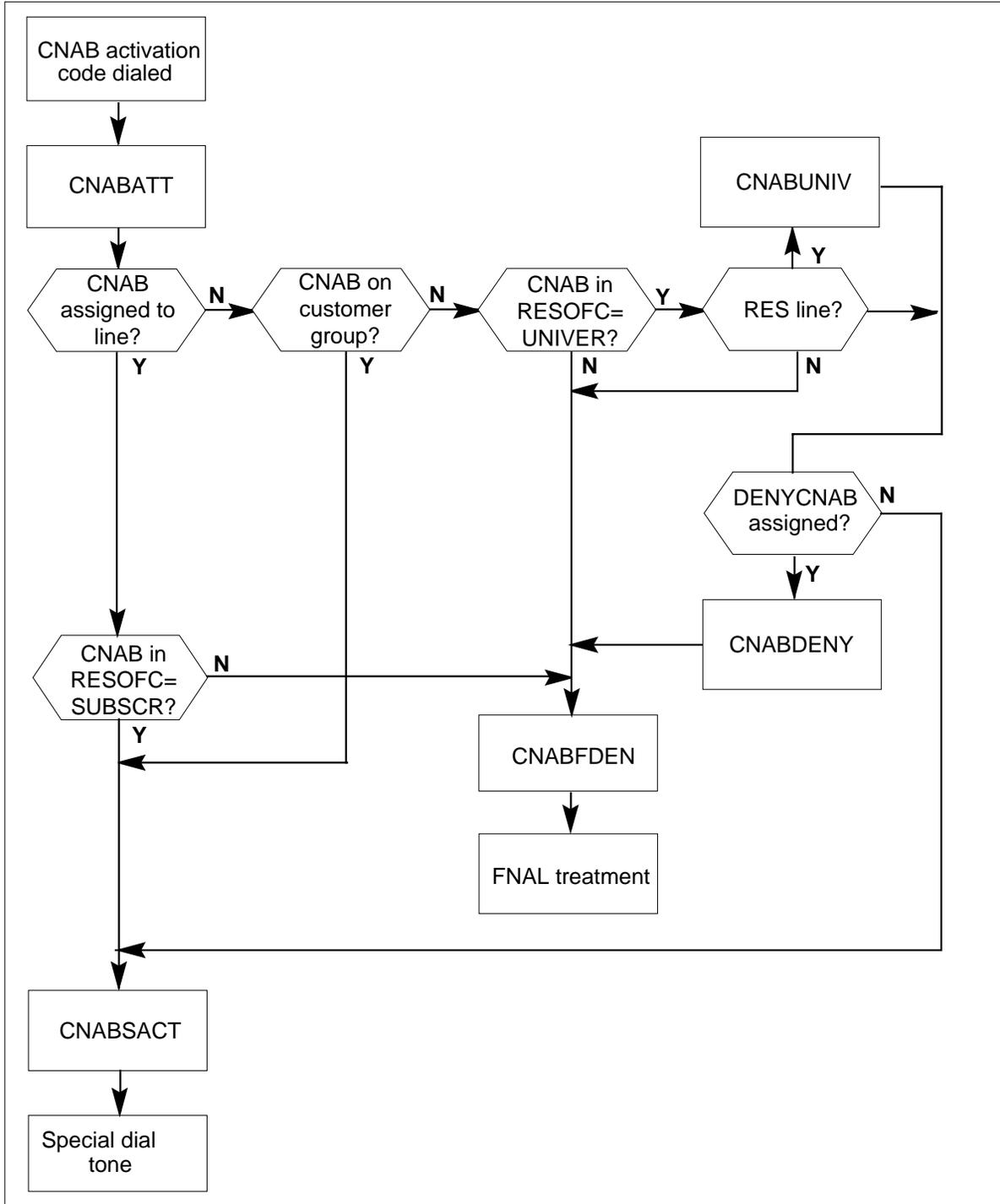
Associated functionality codes

The functionality code for OM group CNAB appears in the following table.

| Functionality | Code |
|---|-------------|
| CLASS+ Calling Name Delivery Blocking for Lines | NTXQ29AA |
| NI0 NI-2/3 BRI Services | NI000051 |

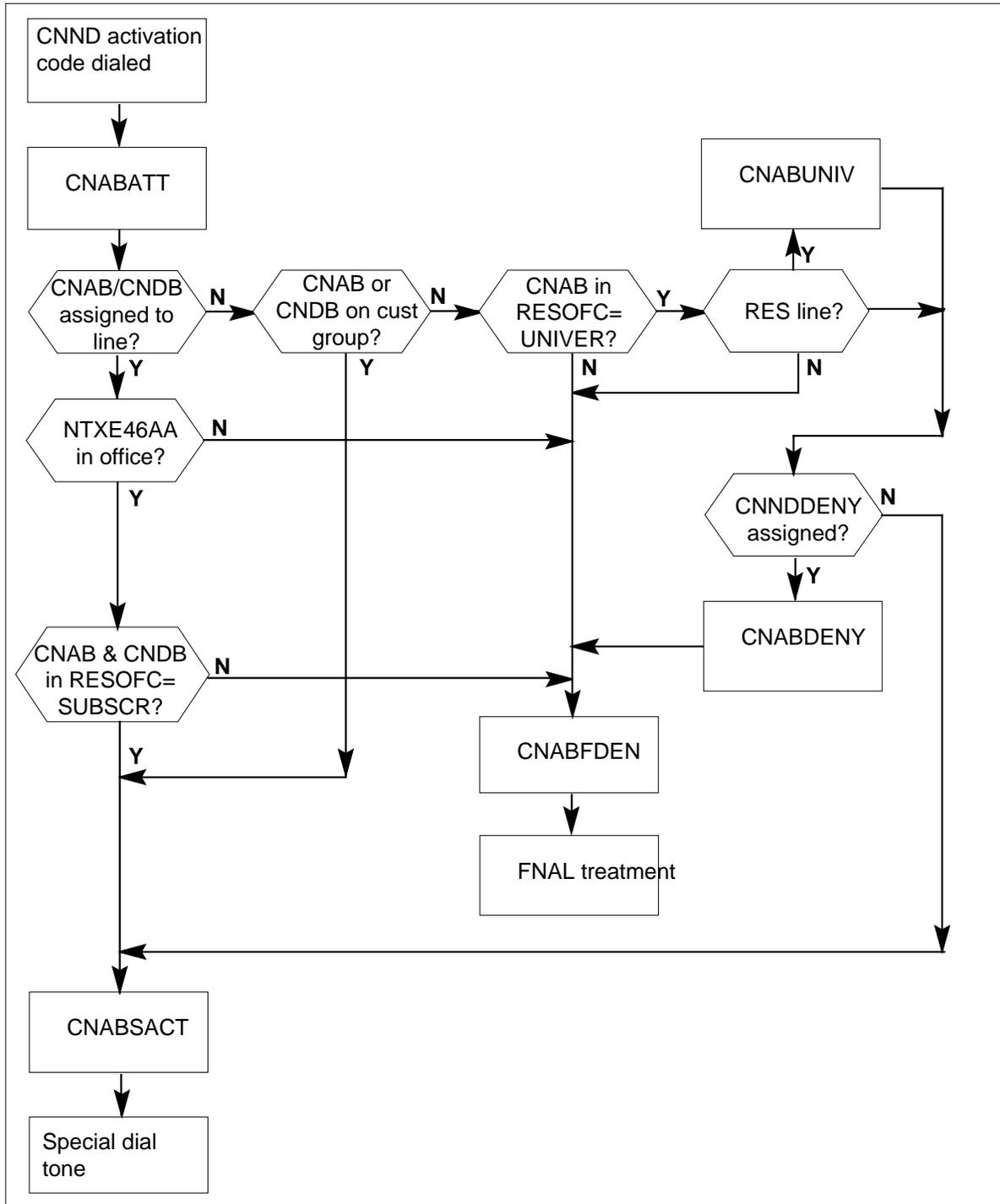
OM group CNAB (continued)

OM group CNAB registers - CNAB access code dialed



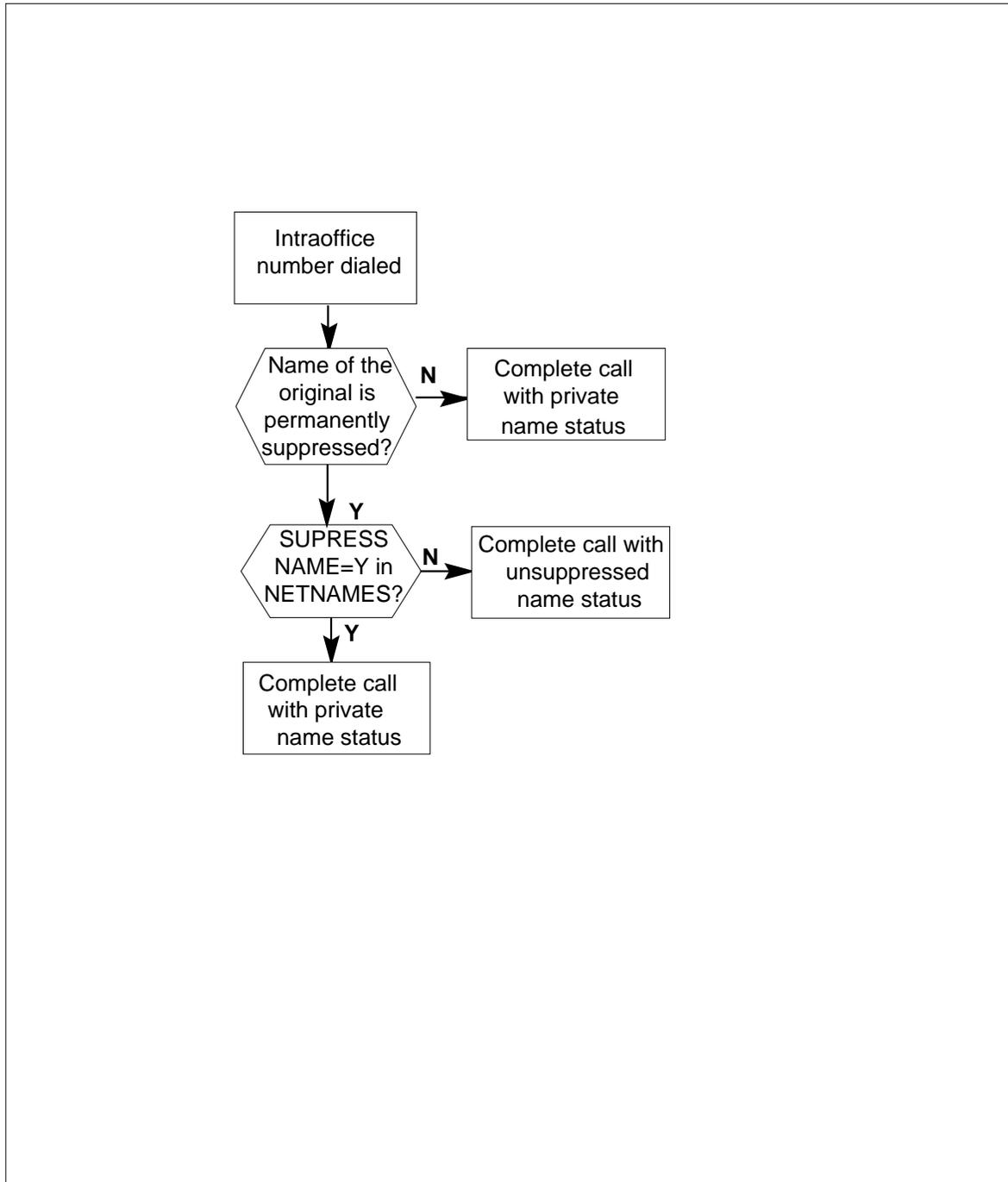
OM group CNAB (continued)

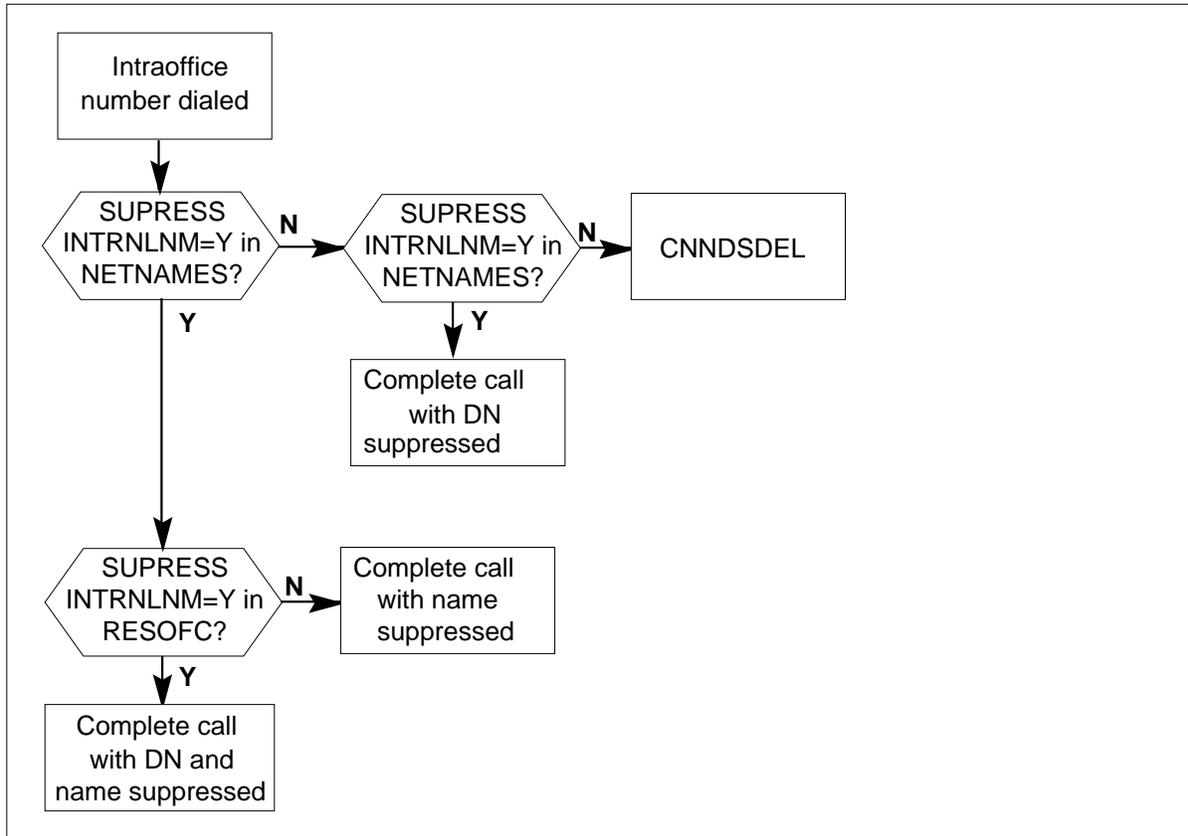
OM group CNAB registers - CNAB access code dialed (continued)



OM group CNAB (continued)

OM group CNAB registers - intraoffice number dialed



OM group CNAB (continued)**OM group CNAB registers - intraoffice number dialed (continued)****Register CNABATT**

CNAB attempts (CNABATT)

Register CNABATT counts the number of times the CNAB or CNND feature access code is dialed. This count includes successful and unsuccessful attempts to activate the feature.

This register increases for ISDN sets when an ISDN line activates CIDS DLV by access code.

Register CNABATT release history

Register CNABATT was introduced in BCS33.

NA008

This register increases for CND CIDS DLV activation on ISDN lines.

OM group CNAB (continued)

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register CNABDENY

CNAB denial (CNABDENY)

Register CNABDENY counts the number of CNAB common attempts denied because the SO option DENYCNAB is in effect.

The ISDN lines do not use this register.

Register CNABDENY release history

Register CNABDENY was introduced in BCS35.

NA008

The ISDN lines do not use this register.

Associated registers

Register CNABFDEN increases when CNABDENY increases.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register CNABFDEN

CNAB feature access denied (CNABFDEN)

Register CNABFDEN increases when the system denies CNAB or CNND feature activation for any of the following reasons:

- the CNAB line option (or the CIDS DLV option for ISDN subscribers) is not assigned to the subscriber
- the CNAB (or CNDB for ISDN) customer group option is not assigned to the subscriber

OM group CNAB (continued)

- the system denies a universal access attempt because the corresponding SO option DENY is on the line. This line does not apply to ISDN.
- CNDB is not enabled for the office and the subscriber has the CIDS DLV line option
- the CNAB line option is assigned but is not enabled for the office

Register CNABFDEN release history

Register CNABFDEN was introduced in BCS33.

NA008

The ISDN lines peg this register when the system denies CNAB feature activation.

The system denies the CNAB feature when any of the following conditions occur:

- CIDS DLV line option is not assigned
- CNDB customer group option is not assigned
- CNDB is not enabled for the office and the subscriber has the CIDS DLV line option

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register CNABSACT

CNAB successful activations (CNABSACT)

Register CNABSACT increases when the system correctly activates the CNAB or CNND feature. Register CNABSACT increases when a subscriber with an unsuppressed default name status is successful in suppressing the name through CNAB activation. Register CNABSACT also increases when a subscriber with a suppressed name status activates CNAB. The activation of CNAB unsuppresses the name for the call.

This register also increases when an ISDN subscriber activates CIDS DLV with an access code.

OM group CNAB (continued)

Register CNABSACT release history

Register CNABSACT was introduced in BCS33.

NA008

The ISDN lines peg this register when an ISDN subscriber activates CIDS DLV with an access code.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register CNABUNIV

CNAB universal (CNABUNIV)

Register CNABUNIV counts the number of common access attempts for the CNAB, CNND, and CIDS DLV features.

Register CNABUNIV release history

Register CNABUNIV was introduced in BCS35.

NA008

The ISDN lines peg this register when the system activates CIDS DLV through universal access.

Associated registers

Register CNABATT increases when CNABUNIV increases.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register CNND DENY

CNND denial (CNND DENY)

Register CNND DENY counts the number of CNND common access attempts the system denies because the SO option DENYCNND is in effect.

OM group CNAB (end)

The ISDN lines do not use this register.

Register CNNDDENY release history

Register CNNDDENY was introduced in BCS35.

NA008

The ISDN lines do not use this register.

Associated registers

Register CNABFDEN increases when CNNDDENY increases.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register CNNDSDEL

CNND successful delivery (CNNDSDEL)

Register CNNDSDEL counts the times the name or number or both are delivered. The delivery occurs after the system activates CNND or CIDSDELV for an intranodal call to a terminator with CLASS number delivery.

This register increases when an ISDN subscriber activates CIDSDELV under these conditions.

Register CNNDSDEL release history

Register CNNDSDEL was introduced in BCS33.

NA008

This register increases for ISDN lines when the name or number or both are delivered. The delivery occurs after the system activates CIDSDELV for an intranodal call to a terminator with CLASS number delivery.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

OM group CNAMD

OM description

Calling name delivery (CNAMD)

The OM group CNAMD measures the display activity for the CNAMD feature for both intra- and inter-switched calls. This also includes times the following events occur:

- the system transmits the name to customer premises equipment (CPE)
- the name and number are delivered to CPE
- the system sends the Private indication for the calling name to CPE
- the system sends an Out-of-Area indication for the calling name to CPE
- transaction-capabilities application part (TCAP) name queries are launched toward a name database for Residential Enhanced Services (RES) lines
- TCAP timeouts occur when the switch is waiting for a response from the name database
- a query was not launched because TransactionID (TRID) was not available
- the system blocks a query by an active automatic call gapping (ACG) six-digit code control
- the service control point (SCP) requests that the system apply an ACG six-digit code control, but the request is not completed because the code control table is full
- Integrated services digital network (ISDN) user part (ISUP) query timeouts occur when the switch is waiting for a response from the originating switch (for proprietary name design only)

Release history

OM group CNAMD is added to BCS36.

Registers

OM group CNAMD registers display on the MAP terminal as follows:

| | | | |
|-----------|----------|----------|----------|
| CNAMDEL | CNAMDEL2 | CNAMPDEL | CNAMODEL |
| NANUMDEL | NANUMDE2 | NAMTCPQ | NAMTCPQ2 |
| NAMTCPPTO | TRIDUAVL | NAMACGBK | NAMACGOV |
| NAMISPTO | LOCLKUP | | |

OM group CNAMD (continued)

Group structure

OM group CNAMD provides one tuple per office.

Key field:

None

Info field:

None

Associated OM groups

CND will continue to increase the CNAMD activation and termination OMs. There is one common CLASS display activation-deactivation code for both CND and CNAMD.

Associated operating groups

The following operating groups associate with OM group CNAMD:

- CLASS Call Management Services (CMS)
- RES Meridian Digital Centrex (MDC)—for proprietary CNAMD only
- ISDN basic rate interface (BRI)

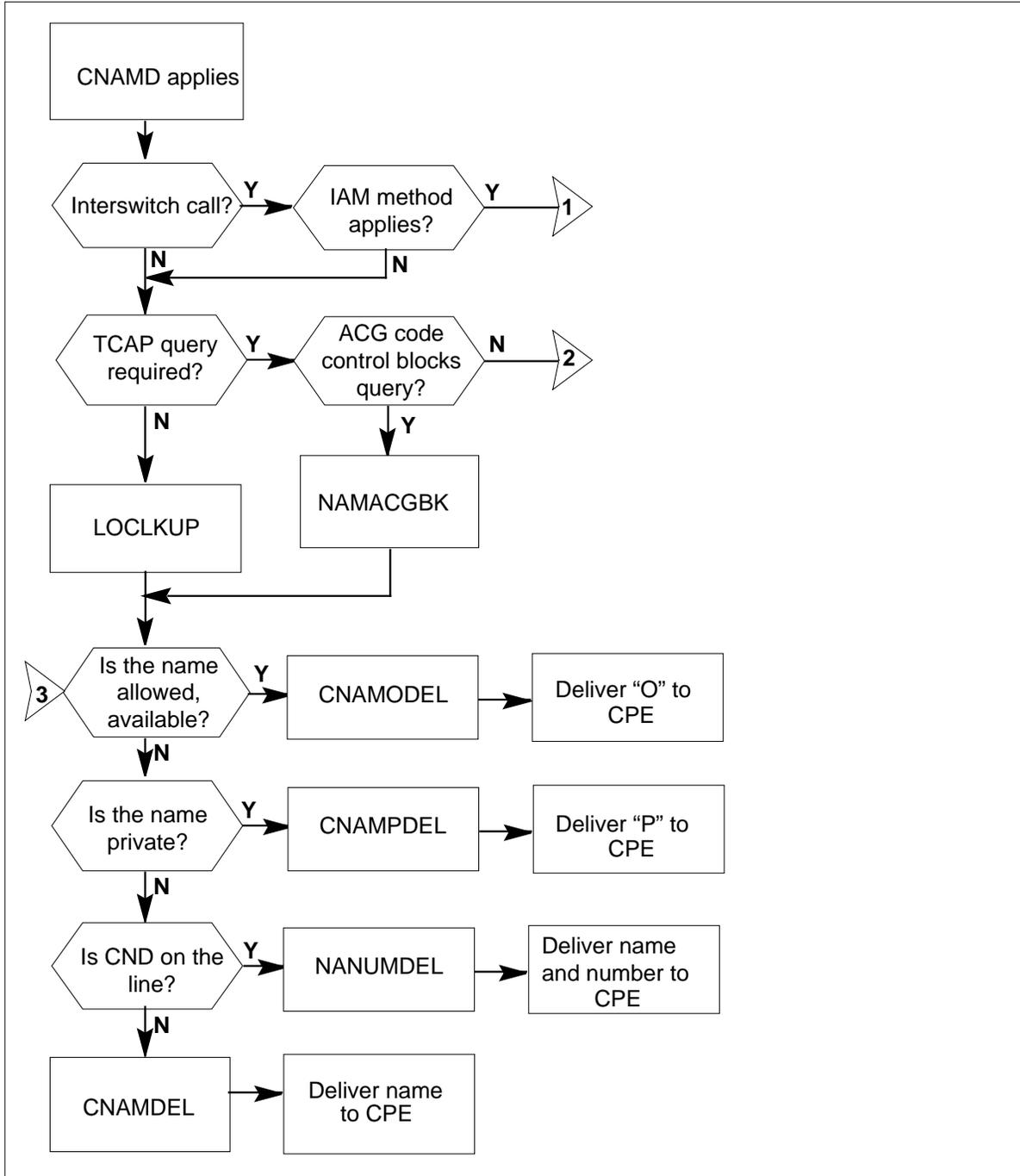
Associated functionality codes

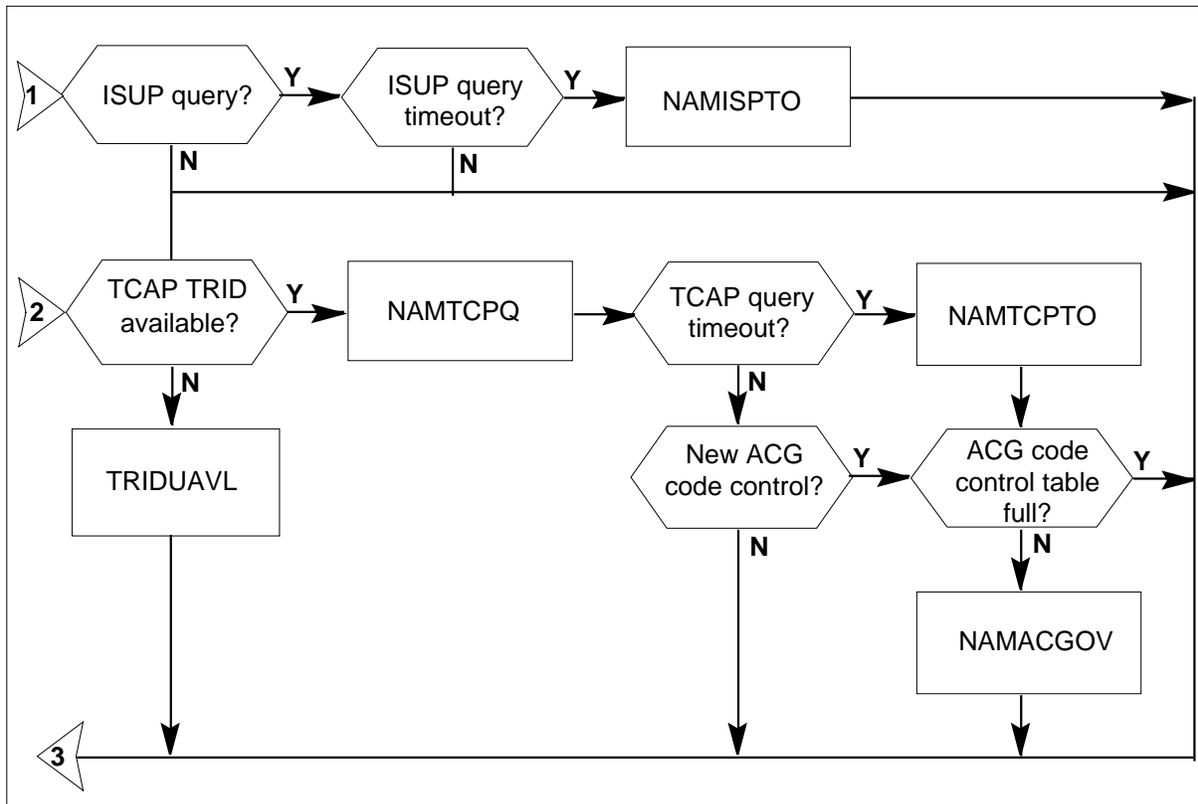
The functionality codes associated with OM group CNAMD are shown in the following table.

| Functionality | Code |
|--------------------|----------|
| Name Display--TCAP | NTXR95AA |

OM group CNAMD (continued)

OM group CNAMD registers



OM group CNAMD (continued)**OM group CNAMD registers (continued)****Register CNAMDEL**

Calling name delivered (CNAMDEL)

Calling name delivered (CNAMDEL) increased every time the system delivers the calling name to a CNAMD subscriber.

Register CNAMDEL release history

CNAMDEL is added to BCS36.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

CNAMDEL2

OM group CNAMD (continued)

Register CNAMODEL

Calling name out-of-area delivered (CNAMODEL)

Calling name out-of-area delivered (CNAMODEL) increases every time the calling name is unavailable. Also, the system has to send the Out-of-Area name indication (O) to the subscriber's customer premises equipment.

Register CNAMODEL release history

CNAMODEL is added to BCS36.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register CNAMPDEL

Calling name privacy indicator delivered (CNAMPDEL)

Calling name privacy indicator delivered (CNAMPDEL) increases every time the system determines the calling name to be private. The system also has to determine whether to send the private name indication (P) to the subscriber's customer premises equipment.

Register CNAMPDEL release history

CNAMPDEL is added to BCS36.

Associated registers

There are no associated registers

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register NAMACGBK

Name TCAP queries blocked by ACG (NAMACGBK)

OM group CNAMD (continued)

Name TCAP queries blocked by ACG (NAMACGBK) increases every time the system blocks a calling TCAP query because of an active ACG 6-digit code control.

Register NAMACGBK release history

NAMACGBK is added to BCS36.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register NAMACGOV

Name ACG table overflow (NAMACGOV)

Name ACG table overflow (NAMACGOV) increases when the SCP requests that the system apply an ACG 6-digit code control. However, the system can not apply the code control due to the code control table being full.

Register NAMACGOV release history

NAMACGOV is added to BCS36.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register NAMISPTO

Name ISUP query timeouts (NAMISPTO)

Name ISUP query timeouts (NAMISPTO) increases every time a calling name ISDN user part (ISUP) query is initiated. Also, the TNAME timer has to expire before the ISUP Pass Along Message is received. The expiry delay is an ISUP timeout condition.

OM group CNAMD (continued)

Register NAMISPTO release history

NAMISPTO is added to BCS36.

Associated registers

There are no associated registers

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register NAMTCPQ

Calling name TCAP queries sent (NAMTCPQ)

Calling name TCAP queries sent (NAMTCPQ) increases every time the system initiates a calling name TCAP query.

Register NAMTCPQ release history

NAMTCPQ is added to BCS36.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension register

NAMTCPQ2

Register NAMTCPTO

Name TCAP query timeouts (NAMTCPTO)

Name TCAP query timeouts (NAMTCPTO) increases every time the system initiates a calling name TCAP query. The condition is that the TNAME timer expires before the TCAP response package is received. This is a TCAP timeout condition.

Register NAMTCPTO release history

NAMTCPTO is added to BCS36.

Associated registers

There are no associated registers.

OM group CNAMD (continued)

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register NANUMDEL

Calling name and number delivered (NANUMDEL)

Calling name and number delivered (NANUMDEL) increases every time the calling name is available. However, the system has to send the name with a calling number or indicator to the subscriber's customer premises equipment.

Register NANUMDEL release history

NANUMDEL is added to BCS36.

Associated registers

CNAMDEL increases when NANUMDEL increases. One of the correct registers in group CND (CNDDNDEL, CNDPDEL, CNDODEL, DDNDEL) also increases.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register TRIDUAVL

Transaction ID unavailable (TRIDUAVL)

Transaction ID not available (TRIDUAVL) increases every time the system can not initiate a calling name TCAP query because a transaction ID is not available.

Register TRIDUAVL release history

TRIDUAVL is added to BCS36.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

OM group CNAMD (end)

Extension registers

There are no extension registers.

Register LOCLKUP

Local lookup (LOCLKUP)

Register LOCLKUP is pegged each time a TCAP name query is saved by using a local name lookup. This register is pegged as a line is allocated and a TCAP name query is not launched due to the local lookup activity.

The validation formula is $NAMTCPQ + LOCLKUP =$ the total number of TCAP name queries saved.

Register LOCLKUP release history

Register LOCLKUP was introduced in NA009.

Associated registers

NAMTCPQ - number of TCAP queries launched.

Associated logs

There are no associated logs.

Extension registers

There are no associated registers.

OM group CND

OM description

Calling number delivery (CND)

The OM group CND provides information on the office-wide use of Custom Local Area Signaling Service (CLASS) display features. These features include: Dialable Directory Number (DDN), Calling Number Delivery (CND), Calling Name Delivery (CNAMD), and Redirecting Number and Reason Delivery (RND). This OM applies to Residential Enhanced Services (RES), Meridian Digital Centrex (MDC), and Integrated Services Digital Network (ISDN) lines.

The CND registers count the following events:

- attempts to activate and deactivate CND, CNAMD, and RND subscriber usage-sensitive pricing (SUSP)
- attempts to access a feature that are denied because the feature is not available
- attempts to access a feature that are denied because of software shortage
- calling numbers delivered
- calling numbers that are private or outside area
- calling numbers that the system cannot deliver because CLASS modem resource (CMR) cards are not available
- DDNs delivered
- failures to deliver DNs because a DN is not available, the calling number is not unique, or the number of digits is not correct
- long-distance indicators (LDI) delivered
- failure to deliver the LDI message because no room is present in the multiple data message
- all spontaneous call-waiting identification (SCWID) data delivered for call waiting
- all activation codes that attempt to activate cancel SCWID (CSCWID) for the current call
- the number of calls not allowed to display because the controller activated CSCWID before originating the current call

The OM group CND applies to feature use on remote carrier SLC-96 (RCS) and remote digital terminal (RDT) lines.

OM group CND (continued)

The OM group CND can use either single data message or multiple data message format. Single data messages contain time, date, and ten-digit calling DN information. DDN requires multiple data message format. Multiple data messages contain the following elements:

- a time parameter that includes time and date
- a calling line identification (CLID) parameter that is a ten-digit DN
- a dialable DN parameter that contains a 1- to 11-digit dialable form of the number of the calling party
- a reason for the absence of calling information parameter that is either O (not available) or P (private)
- the number of times the system sends the coin telephone indicator 'C' to the subscriber
- the number of times the system sends the service interaction indicator 'S' to the subscriber
- a call qualifier parameter (L), which indicates that the call is a long-distance call

If the dialable form of the calling number is not 1 to 11 digits, the system sends the 10-digit DN in the CLID parameter of the multiple data message. The CLID parameter is sent if the system cannot deliver a DDN to a DDN subscriber because of the following reasons:

- information is not available
- the calling number is not unique

The CLASS LDI feature provides call qualification information to the subscriber premises equipment of the called party for incoming long-distance calls.

Release history

The OM group CND was introduced in BCS27.

MMP12

Introduced the following two OMs:

- CNDCDEL/CNDCDEL2--CND 'C' delivery with extension register. This register indicates the number of times the DMS-100 sends the coin telephone indicator 'C' to the subscriber.
- CNDSDEL/CNDSDEL2--CND 'S' delivery with extension register. This register indicates the number of times the system sends the service interaction indicator 'S' to the subscriber.

OM group CND (continued)

NA011

Added information on registers pegged for RND use on ISDN BRI lines.

NA008

Added information on registers pegged for CND use on ISDN BRI lines.

APC005

Functionality added for CLASS features that use the following:

- Australian telephone user part (ATUP) trunk signaling
- Australian ISDN user part (AISUP) trunk signaling
- ANSI integrated services user part (ISUP) trunk signaling

BCS36

Nine registers are zeroed in CND and moved into CNAMD (Calling Name Delivery) where the registers are counted. The zeroed registers in CND are CNMDEL, CNMDEL2, CNMDODEL, CNMDPDEL, CNMNDEL, CNMNDEL2, CNMUNAVL, CNMUNAV2, NNDUNAVL.

BCS34

Software change to include feature use on RCS lines that a subscriber carrier module-100S remote (SMSR) services. The registers that are present increase in the host remote cluster controller, which contains the in-service, data-entered CMR card.

BCS33

Registers CNMDODEL and CNMDPDEL were introduced in BCS33.

BCS32

Registers CSCWDACT, SCWDNYDS, and SCWIDDEL were introduced in BCS32. Registers increase the use of CND on remote terminal lines.

BCS30

Registers CNDACT, CNDDACT, CNDDNDEL, CNDFDNA, CNDFDND, CNDODEL, CNDOVFL, CDPDEL, and CNDUNAVL count use of the CND feature on remote carrier DMS-1 urban lines. Registers CNMDEL, CNMDEL2, CNMNDEL, CNMNDEL2, CNMUNAVL, CNMUNAV2, and NNDUNAVL introduced for CLASS CNAMD.

BCS29

Registers LDIDEL, LDIDEL2, and LDIOVFL were introduced for incoming long-distance calls.

OM group CND (continued)

BCS28

Registers DDNDEL, DDNDEL2, DDNUNAVL, DDNNUNIQ, and DDNTRUNC were introduced for DDN calls. Software change to include all CLASS display features and feature use on RCS lines.

Registers

The OM group CND registers appear on the MAP terminal as follows:

| | | | |
|----------|----------|----------|----------|
| CNDACT | CNDDACT | CNDFDNA | CNDFDND |
| CNDOVFL | CNDDNDEL | CNDDDEL2 | CNDPDEL |
| CNDPDEL2 | CNDODEL | CNDODEL2 | CNDUNAVL |
| DDNDEL | DDNDEL2 | DDNUNAVL | DDNNUNIQ |
| DDNTRUNC | LDIDEL | LDIDEL2 | LDIOVFL |
| CNMDEL | CNMDEL2 | CNMNDEL | CNMNDEL2 |
| CNMUNAVL | CNMUNAV2 | NNDUNAVL | SCWIDDEL |
| CSCWDACT | SCWDNYDS | CNMDODEL | CNMDPDEL |
| CNDCDEL | CNDCDEL2 | CNDSDEL | CNDSDEL2 |

Group structure

The OM group CND provides one tuple for each office.

Key field:

There is no Key field

Info field:

There is no Info field

Field SUSP in table AMAOPTS is set to ON for lines with CND SUSP for registers CNDACT and CNDDACT to increase. CND SUSP activation and release codes are defined in table IBNXLA.

CMR cards must be present in extended multiprocessor system (XMS)-based peripheral modules (XPM) and entered in table LTCINV or RCCINV for CND to work. The OM group CND register CNDUNAVL counts CND attempts if the cards are not in XMS-XPM and correctly data entered.

Reverse translations for DDN must be entered in tables DNREGION, DNREVLXA, and CUSTNTWK.

OM group CND (continued)**Associated OM groups**

The OM group CNDXPM provides information like that of CND for XPMs.

The OM group OTS register ORGFSET increases when CND SUSP and CND automatic message accounting (AMA) are activated or deactivated. The OM group OTS register ORGFSET appears only in DMS-100 switch offices without TOPS.

Associated functional groups

The CLASS/CMS RES functional groups are associated functional groups for OM group CND.

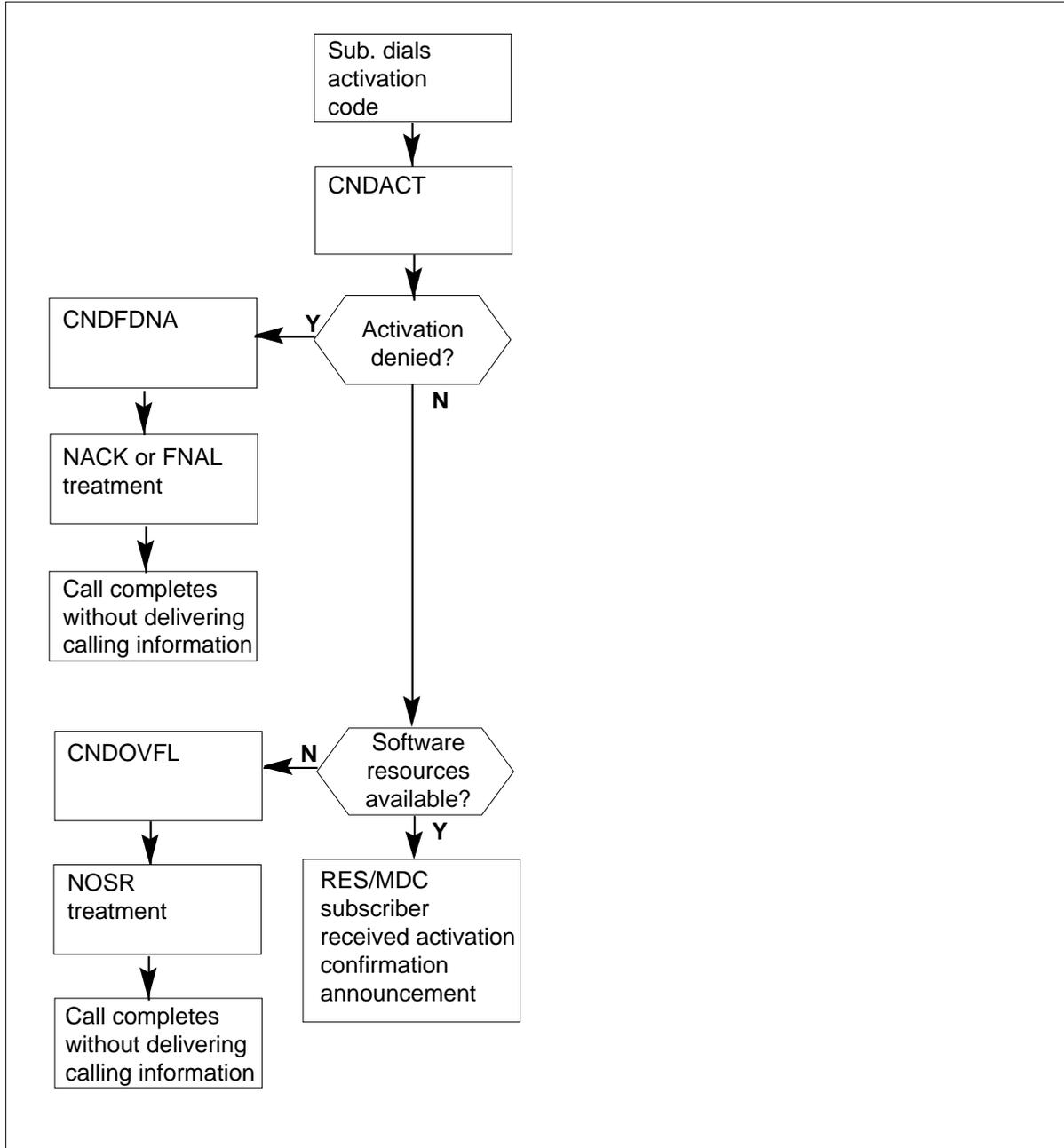
Associated functionality codes

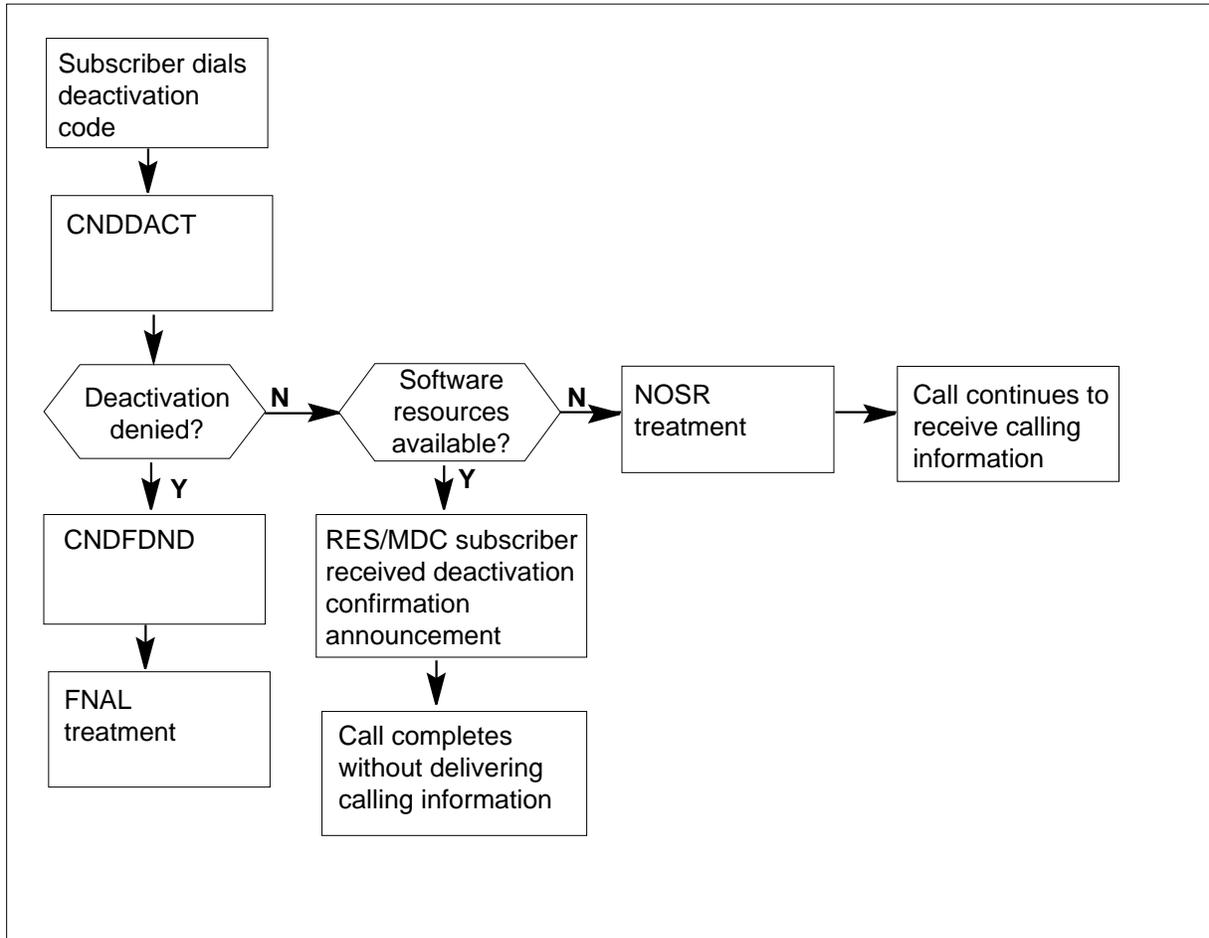
The associated functionality codes for OM group CND appear in the following table.

| Functionality | Code |
|--|-------------|
| CLASS: Calling Number Display | NTXA01AA |
| CLASS: Calling Number Delivery—Dialable Number | NTXE27AA |
| CLASS for SMS: Phase 1A—CND | NTXE38AA |
| CMS Long Distance Indicator | NTXA87AB |
| SIMU Subscriber Module Urban | NTX387AB |
| CLASSPLUS Call Waiting Display | NTXN97AA |
| Name Display—TCAP | NTXR95AA |
| NI0 NI-2/3 BRI Services | NI000051 |

OM group CND (continued)

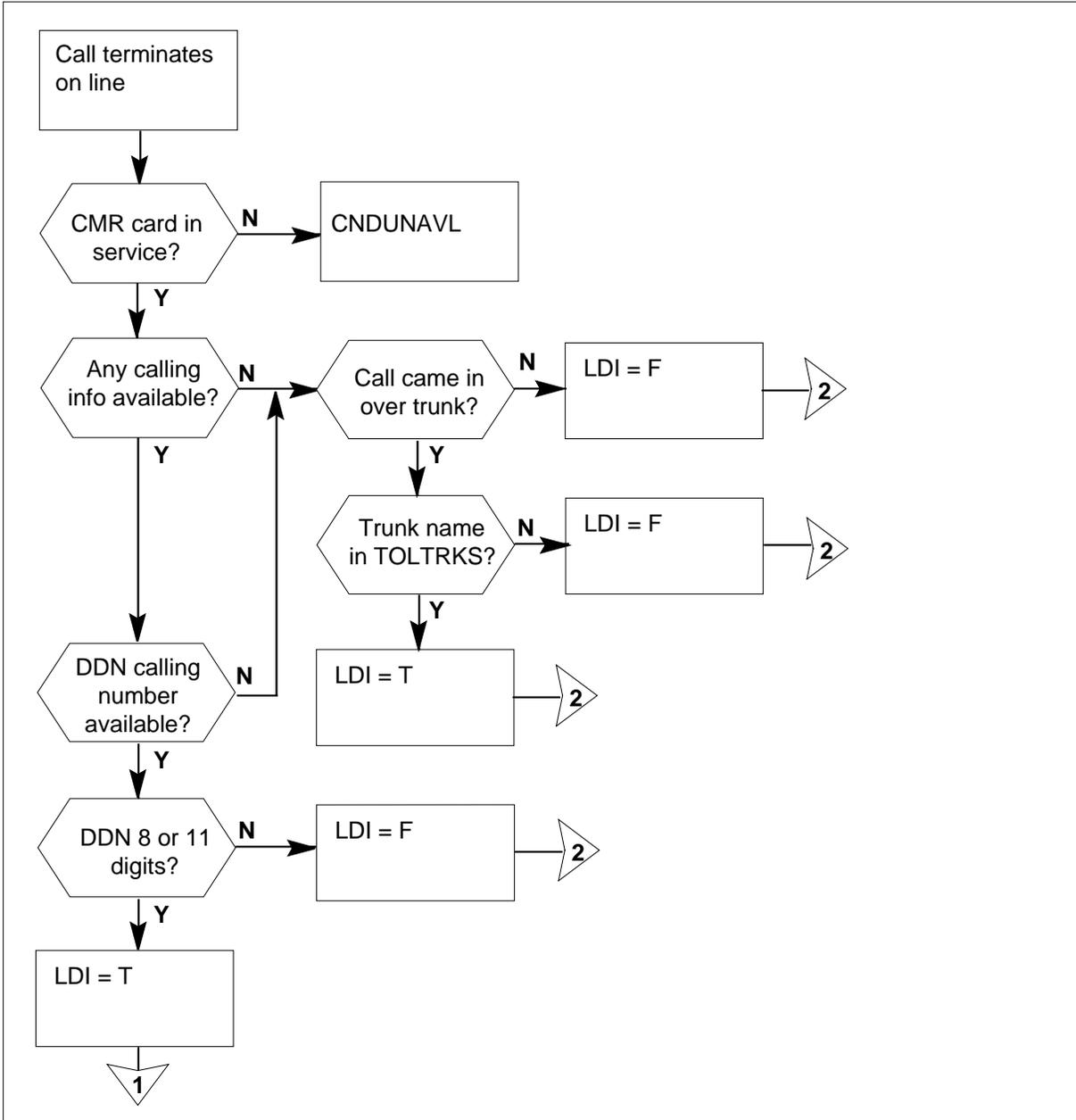
OM group CND activation registers for MDC, RES, and ISDN



OM group CND (continued)**OM group CND release registers for MDC, RES, and ISDN**

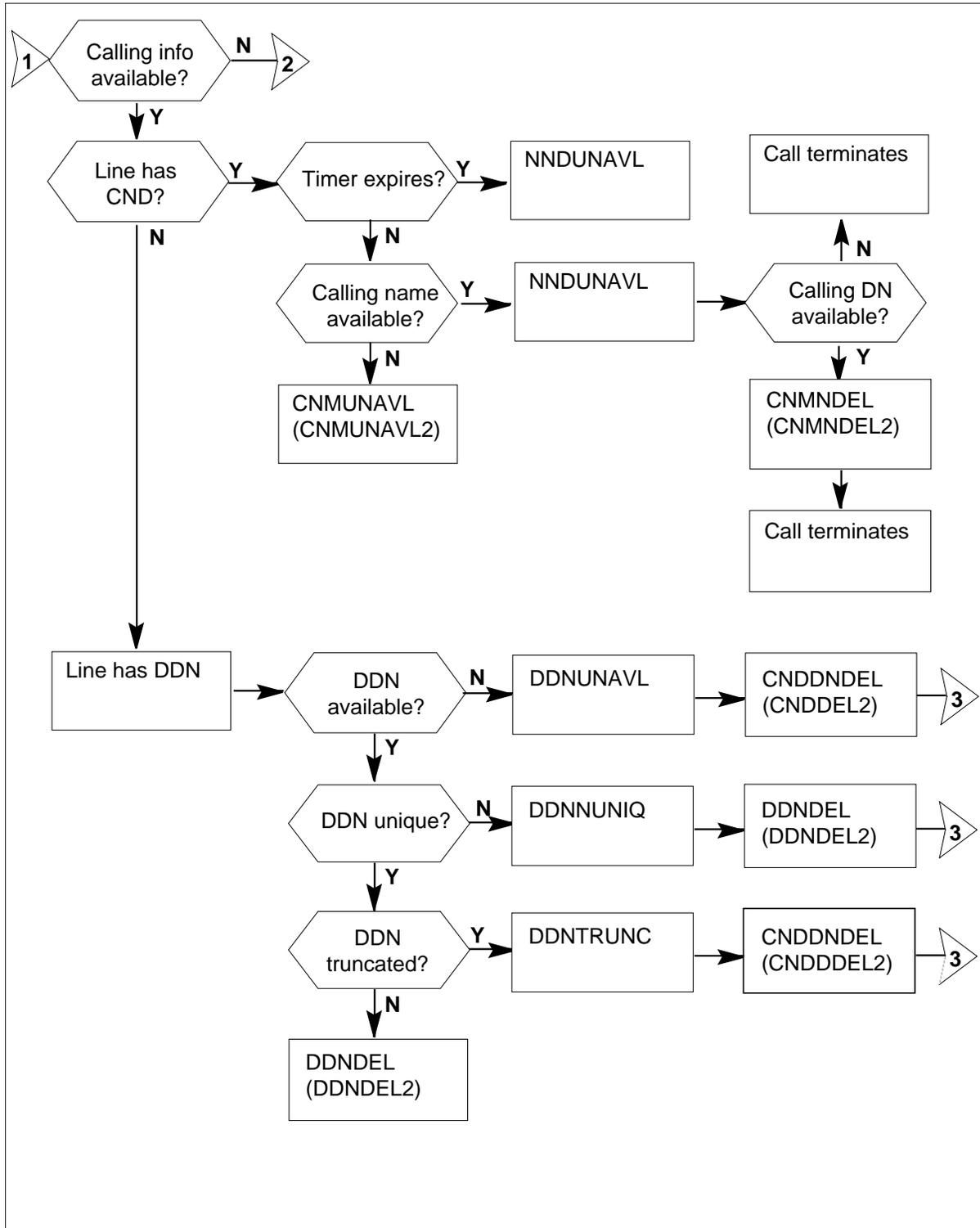
OM group CND (continued)

OM group CND registers: CLASS display features



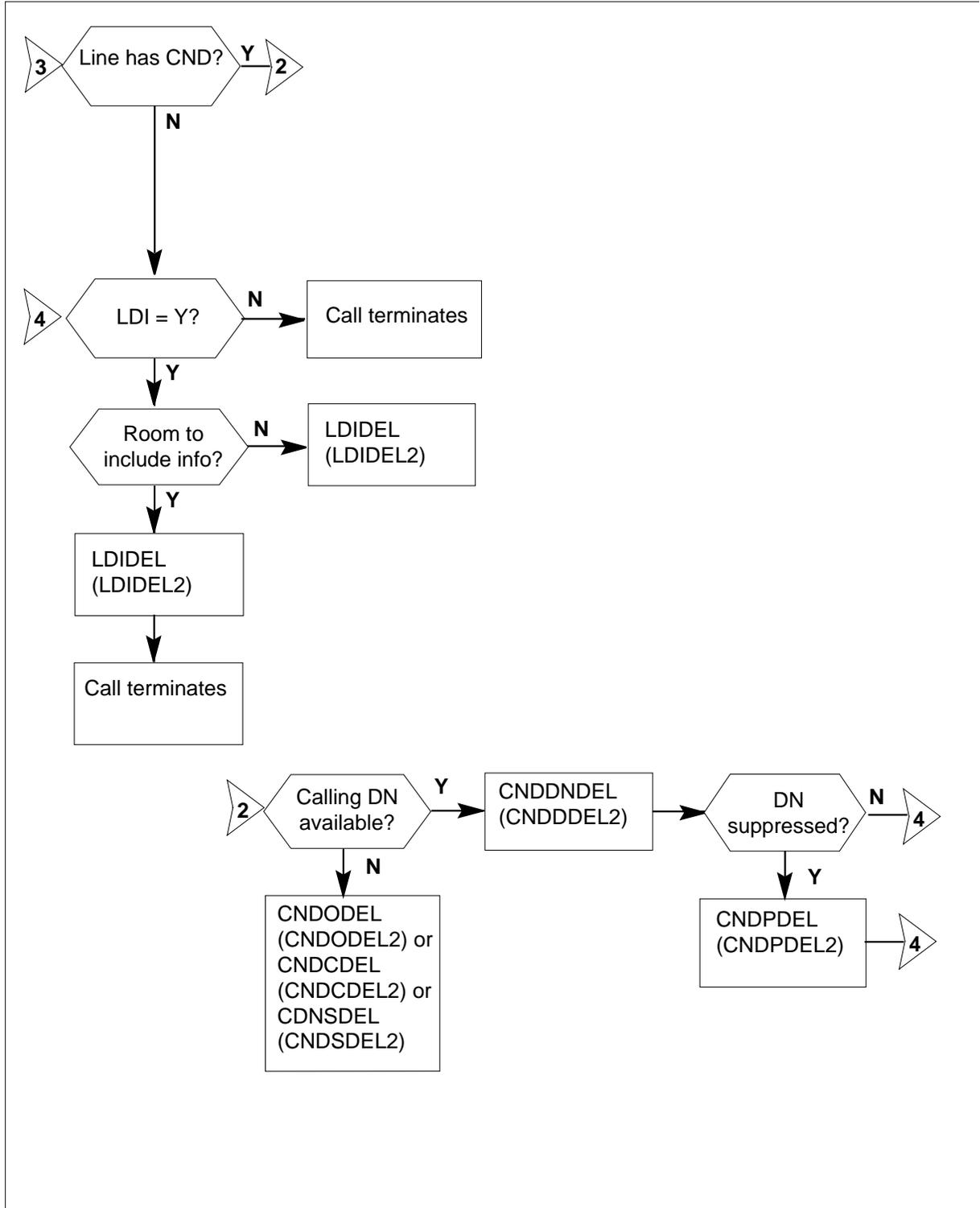
OM group CND (continued)

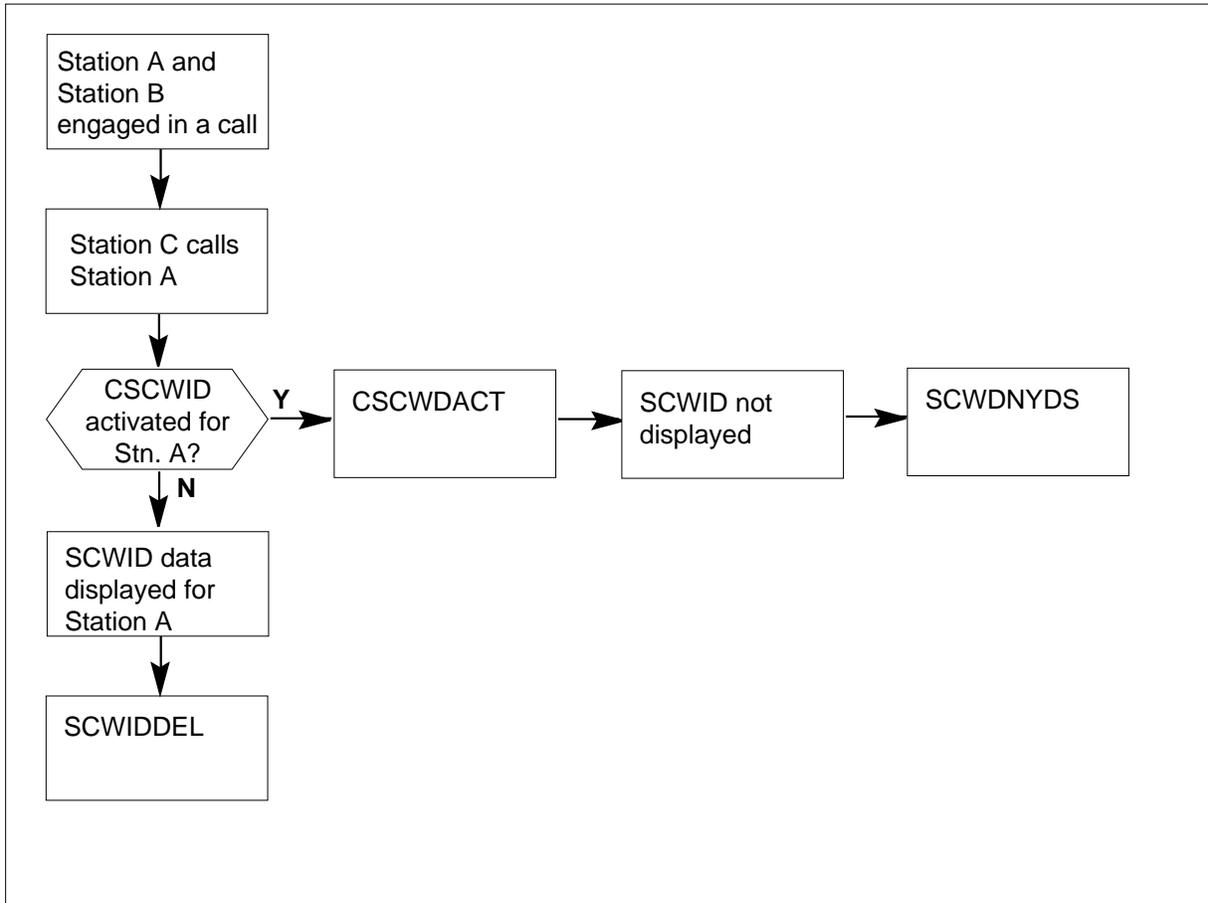
OM group CND registers: CLASS display features (continued)



OM group CND (continued)

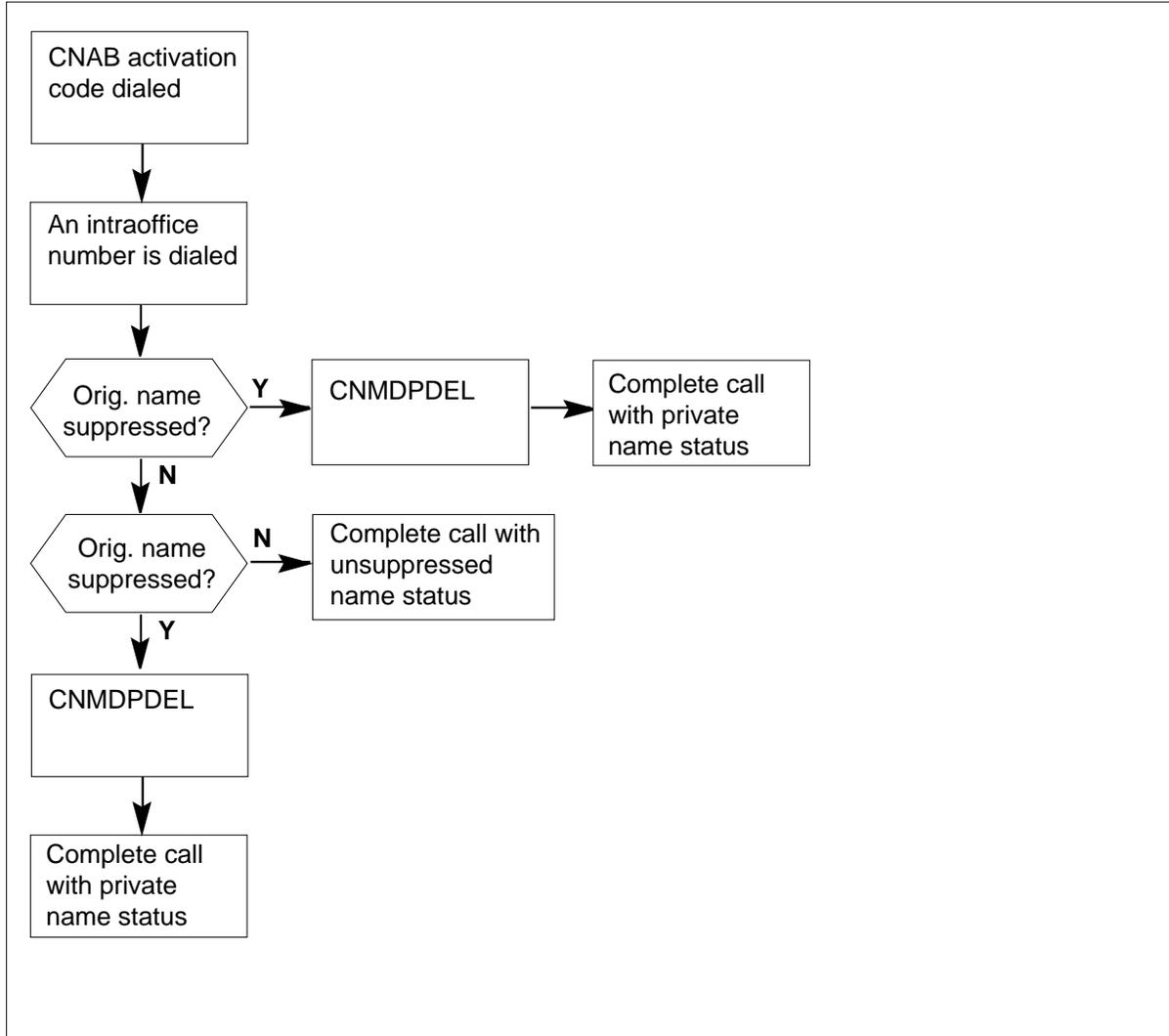
OM group CND registers: CLASS display features (continued)

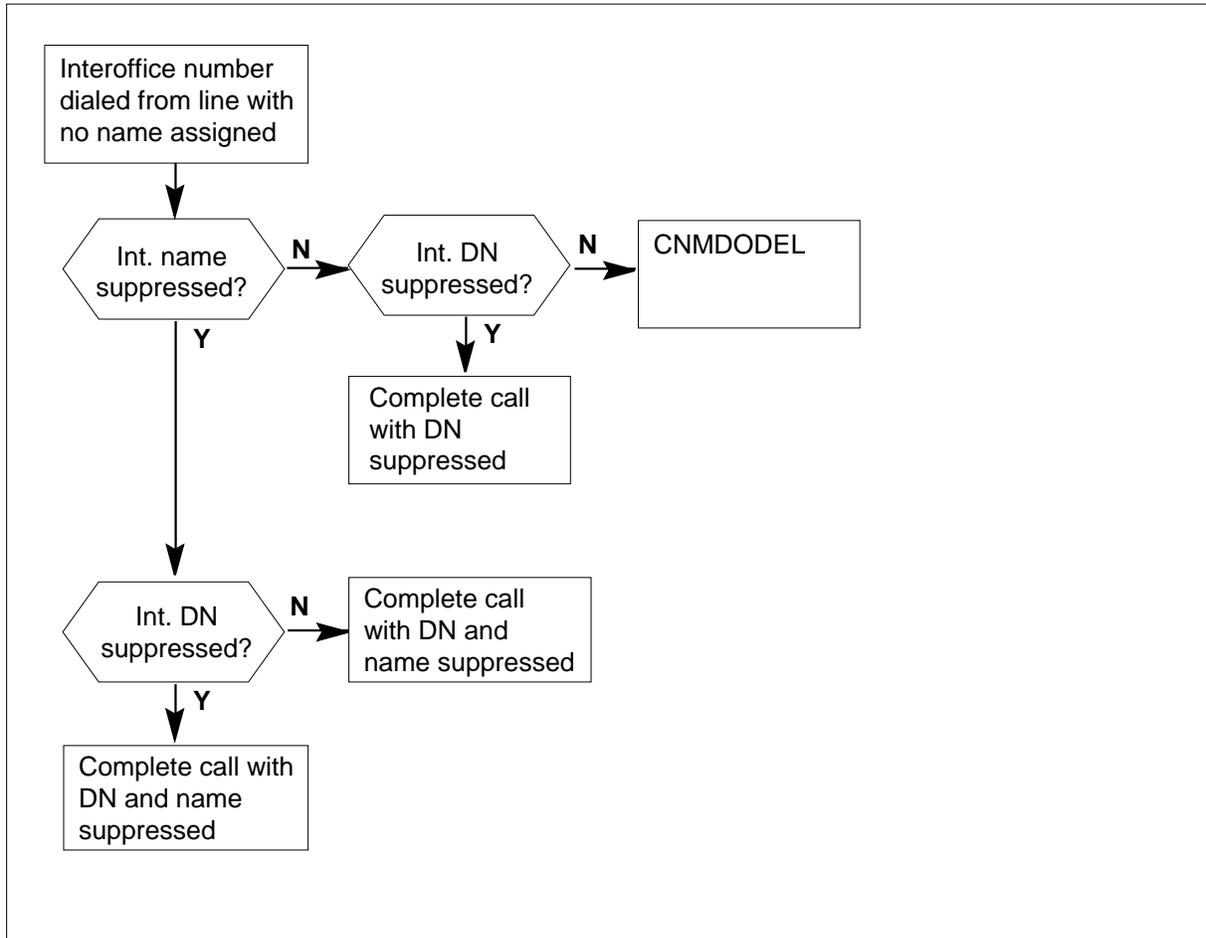


OM group CND (continued)**OM group CND registers: SCWID activation and deactivation**

OM group CND (continued)

OM group CND registers: CNMDPDEL register



OM group CND (continued)**OM group CND registers: CNMDODEL register****Register CNDACT**

CND SUSP activation (CNDACT)

Register CNDACT increases when a subscriber dials the activation code for CLASS SUSP display features.

A count in this register does not mean that the display feature was correctly activates.

Register CNDACT release history

CNDACT was introduced in BCS27.

NA011

This register increases for RND SUSP activations on ISDN lines.

OM group CND (continued)

NA008

This register increases for CND SUSP activations on ISDN lines.

BCS30

Register CNDDACT counts the use of the CND feature on remote carrier DMS-1 urban lines.

BCS28

Software change to include all CLASS display features.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register CNDCDEL

CND coin phone delivery (CNDCDEL)

Register CNDCDEL increases when the DMS-100 does not send the CND as a result of a call from a coin telephone. The DMS-100 sends the indicator 'C' to the subscriber.

Register CNDCDEL release history

Register CNDCDEL was introduced in MMP12.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

Register CNDCDEL2

Register CNDDACT

CND SUSP release (CNDDACT)

Register CNDDACT increases when a subscriber dials the deactivation code for CLASS SUSP display features.

OM group CND (continued)

A count in this register does not mean that the display was deactivated.

Register CNDDACT release history

Register CNDDACT was introduced in BCS27.

NA011

This register increases for RND SUSP deactivations on ISDN lines.

NA008

This register increases for CND SUSP deactivations on ISDN lines.

BCS30

Register CNDDACT counts use of the CND feature on remote carrier DMS-1 urban lines.

BCS28

Software change to include all CLASS display features.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register CNDDNDEL

CND DN delivery (CNDDNDEL)

Register CNDDNDEL increases for CLASS lines when the system delivers a ten-digit DN as one of the following:

- a calling number in a single data CND message
- the CLID parameter in a multiple data message

This register does not include P (private) or O (not available) delivered as a calling number.

This register increases once for each calling number that CND delivers to ISDN sets.

Register CNDDNDEL release history

Register CNDDNDEL was introduced in BCS27.

OM group CND (continued)

NA008

The register increases for each calling number CND delivers to ISDN sets.

BCS30

Register CNDDNDEL counts use of the CND feature on remote carrier DMS-1 urban lines.

BCS28

Software change to include all CLASS display features.

Associated registers

A CND delivered as P counts in CNDPDEL. A CND delivered as O counts in CNDODEL.

Register CNDDNDEL increases when DDNUNAVL, DDNNUNIQ, or DDNTRUNC increases.

Associated logs

The system generates AMAB117 in offices with the Bellcore format type AMA assigned in table CRSFMT. The system generates this log when the following occur:

- the system delivers a calling number to a CND SUSP set of the subscriber
- the system produces an AMA record

Extension register

Register CNDDDEL2

Register CNDFDNA

CND SUSP feature denial on activation (CNDFDNA)

Register CNDFDNA increases when a subscriber dials the activation code for CND SUSP but the system denies access. The system denies access if the CLASS or ISDN display feature is not available on the line. The system also denies access if the CLASS display feature is not activated for the office in table RESOFC. The system routes the call to feature not allowed (FNAL) treatment.

The system routes the call to negative acknowledgment (NACK) treatment if CND SUSP cannot be accessed because of one of the following reasons:

- denied termination
- the multiple appearance directory number (MADN) option is on the line

OM group CND (continued)

Register CNDFDNA release history

Register CNDFDNA was introduced in BCS27.

NA008

The register increases when a subscriber denies access to CND SUSP on ISDN sets.

BCS30

Register CNDFDNA counts use of the CND feature on remote carrier DMS-1 urban lines.

BCS28

Software change to include all CLASS display features.

Associated registers

There are no associated registers.

Associated logs

The system generates LINE138 when the system routes the call to FNAL or NACK treatment.

Extension registers

There are no extension registers.

Register CNDFDND

CND SUSP feature denial on release (CNDFDND)

Register CNDFDND increases when a subscriber dials the release code for CND SUSP but the system denies access. The system denies access if the following occur:

- the CLASS or ISDN display feature is not available on the line
- if the CLASS display feature is not activated for the office in table RESOFC

The system routes the call to feature not allowed (FNAL) treatment.

If CND SUSP is not accessed because the denied termination or MADN options are on the line, the call is routed to negative NACK treatment.

Register CNDFDND release history

Register CNDFDND was introduced in BCS27.

OM group CND (continued)

NA008

The register increases when a subscriber is not allowed to deactivate CND SUSP on ISDN sets.

BCS30

Register CNDFDND counts use of the CND feature on remote carrier DMS-1 urban lines.

BCS28

Software change to include all CLASS display features.

Associated registers

There are no associated registers.

Associated logs

The system generates LINE138 when the system routes the call to FNAL or NACK treatment.

Extension registers

There are no extension registers.

Register CNDODEL

CND outside area number delivery (CNDODEL)

Register CNDODEL increases when the calling information delivered to a subscriber is O (for outside area) in a single data message. This register also increases when O appears in parameter REASON_FOR_ABSENCE_OF_DN in a multiple data message. If multiple data messaging is used, the called party is outside the area defined for CND.

This register increases when the calling number is out-of-area for ISDN sets assigned the CND feature. The ISDN set displays *outside call* for both not known and private calls.

Register CNDODEL release history

Register CNDODEL was introduced in BCS27.

NA008

The register increases when the calling number is out-of-area for ISDN sets assigned the CND feature.

BCS30

Register CNDODEL counts the use of the CND feature on remote carrier DMS-1 urban lines.

OM group CND (continued)

BCS28

Software change to include all CLASS display features.

Associated registers

There are no associated registers.

Associated logs

The system generates AMAB117 in offices with the Bellcore format type of AMA assigned in table CRSFMT. The system generates this log when both of the following occur:

- the system delivers a calling number to a CND SUSP set of the subscriber
- the system produces an AMA record

Extension register

Register CNDODEL2

Register CNDOVFL

CND SUSP overflow (CNDOVFL)

Register CND SUSP overflow (CNDOVFL) is incremented when a CLASS or ISDN CND SUSP display feature cannot be activated or deactivated because of insufficient software resources. The call is routed to no software resources (NOSR) treatment. CNDOVFL is not incremented on the DMS-100G switch.

Register CNDOVFL release history

Register CNDOVFL was introduced in BCS27.

NA008

The register increases when the subscriber is not allowed to activate or deactivate the CND feature on ISDN sets. The subscriber cannot activate or deactivate the CND feature because of not enough software resources.

BCS30

Register CNDOVFL counts use of the CND feature on remote carrier DMS-1 urban lines.

BCS28

Software change to include all CLASS display features.

Associated registers

There are no associated registers.

OM group CND (continued)

Associated logs

The system generates LINE138 when the system routes the call to NOSR treatment.

Extension registers

There are no extension registers.

Register CNDPDEL

CND private number delivery (CNDPDEL)

Register CNDPDEL increases when a private (P) message delivers to a subscriber. The register also increases when P appears in parameter REASON_FOR_ABSENCE_OF_DN in a multiple data message. When the register increases, the called party has the Calling Number Delivery Blocking (CNDB) feature.

This register increases when the calling number is private when the system assigns CND to an ISDN set. The system sends an out-of-area indication to the customer premises equipment (CPE).

Note: The CND feature for ISDN only supplies out-of-area indication to the CPE. The OM counts for private and out-of-area names increase correctly.

Register CNDPDEL release history

Register CNDPDEL was introduced in BCS27.

NA008

The register increases when the calling number is private when the system assigns CND to an ISDN set.

BCS30

Register CNDPDEL counts use of the CND feature on remote carrier DMS-1 urban lines.

BCS28

Software change to include all CLASS display features.

Associated registers

There are no associated registers.

OM group CND (continued)

Associated logs

The system generates AMAB117 in offices with the BCFMT type AMA assigned in table CRSFMT. The system generates this log when both of the following occur:

- a calling number delivers to a CND SUSP subscriber set
- the system produces an AMA record

Extension register

Register CNDPDEL2

Register CNDSDEL

CND service interaction delivery (CNDSDEL)

Register CNDSDEL increases when the DMS-100 does not send the CND as a result of a service interaction. The DMS-100 sends the indicator 'S' to the subscriber.

Register CNDSDEL release history

Register CNDSDEL was introduced in MMP12.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

Register CNDSDEL2

Register CNDUNAVL

CND unavailable (CNDUNAVL)

Register CNDUNAVL increases when the system does not deliver calling information because a CLASS Modem Resource (CMR) card is not available.

This register does not apply to ISDN sets because ISDN does not use the CMR.

The CMR cards are required for successful operation of CLASS display features. The CMR cards are entered in table LTCINV or RCCINV for the peripheral module which supports a line with CLASS display features.

OM group **CND** (continued)

Register **CNDUNAVL** release history

Register CNDUNAVL was introduced in BCS27.

NA008

This register does not apply to CND on ISDN sets.

BCS30

Register CNDUNAVL counts use of the CND feature on remote carrier DMS-1 urban lines.

BCS28

Software change to include all CLASS display features.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register **CNMDEL**

Calling name delivered (CNMDEL)

Register CNMDEL set to zero

This register is not supported on the DMS 100G switch.

Register **CNMDEL** release history

Register CNMDEL was introduced in BCS30.

BCS36

Register CNMDEL is set to zero. Register CNAMDEL in OM group CNAMD increases in its place.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension register

Register CNMDEL2

OM group CND (continued)

Register CNMDODEL

Calling name out-of-area indication delivered (CNMDODEL)

Register CNMDODEL is zeroed.

This register is not supported on the DMS 100G switch.

Register CNMDODEL release history

Register CNMDODEL was introduced in BCS33.

BCS36

Register CNMDODEL is set to zero. Register CNAMODEL in OM group CNAMD increases in its place.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register CNMDPDEL

Calling name private indication delivered (CNMDPDEL)

Register CNMDPDEL is set to zero.

Register CNMDPDEL release history

Register CNMDPDEL was introduced in BCS33.

BCS36

Register CNMDPDEL is set to zero. Register CNAMPDEL in OM group CNAMD increases in its place.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

OM group CND (continued)

Register CNMNDEL

Calling name and number delivered (CNMNDEL)

Register CNMNDEL is set to zero.

Register CNMNDEL release history

Register CNMNDEL was introduced in BCS30.

BCS36

Register CNMNDEL is set to zero. Register NANUMDEL in OM group CNAMD increases in its place.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

Register CNMUNDEL2

Register CNMUNAVL

Calling name unavailable (CNMUNAVL)

Register CNMUNAVL is set to zero.

This register is not supported on the DMS 100G switch.

Register CNMUNAVL release history

Register CNMUNAVL was introduced in BCS30.

BCS36

Register CNMUNAVL is set to zero. Registers CNAMODEL and CNAMPDEL in OM group CNAMD increase in its place.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

Register CNMUNAV2

OM group CND (continued)

Register CSCWDACT

Cancel spontaneous call waiting identification (CSCWID) activation attempt (CSCWDACT)

Register CSCWDACT increases when a subscriber dials the code that activates CSCWID for the current call.

This register does not apply to ISDN sets.

This register is not supported on the DMS 100G switch.

Register CSCWDACT release history

Register CSCWDACT was introduced in BCS32.

NA008

This register does not apply to ISDN sets.

Associated registers

Register SCWDNYDS

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register DDNDEL

DDN delivery (DDNDEL)

Register DDNDEL increases when the system delivers calling information in a dialable format.

This register does not apply to ISDN sets.

Register DDNDEL release history

Register DDNDEL was introduced in BCS28.

NA008

This register does not apply to ISDN sets.

Associated registers

If DDNDEL increases, CNDDNDEL does not increase.

OM group CND (continued)

Associated logs

There are no associated logs.

Extension registers

Register DDNDEL2

Register DDNNUNIQ

DDN nonunique (DDNNUNIQ)

Register DDNNUNIQ increases when the calling number the system delivers to a DDN subscriber is not different.

An example of a nonunique calling number is a line with teen service, also known as secondary directory number. The system delivers the ten-digit DN in the CLID parameter to the DDN subscriber (instead of the DDN parameter).

This register does not apply to ISDN sets.

This register is not supported on the DMS 100G switch.

Register DDNNUNIQ release history

Register DDNNUNIQ was introduced in BCS28.

NA008

This register does not apply to ISDN sets.

Associated registers

Register CNDDNDEL increases when DDNNUNIQ increases.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register DDNTRUNC

DDN truncated (DDNTRUNC)

Register DDNTRUNC increases when the reverse translations for a calling number delivered to a DDN subscriber are:

- more than 24 digits long
- less than 1 digit long

OM group CND (continued)

The system delivers the 10-digit DN in the CLID parameter to the DDN subscriber instead of the DDN parameter.

Reverse translations for DDN are entered in tables DNREGION, DNREVLXA, and CUSTNTWK.

This register does not apply to ISDN sets.

Register DDNTRUNC release history

Register DDNTRUNC was introduced in BCS28.

NA008

This register does not apply to ISDN sets.

Associated registers

Register CNDDNDEL increases when DDNTRUNC increases.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register DDNUNAVL

DDN unavailable (DDNUNAVL)

Register DDNUNAVL increases when a reverse translator is not entered in table CUSTNTWK for a unique number calling a DDN subscriber. The system delivers the ten-digit DN in the CLID parameter to the DDN subscriber instead of the DDN parameter.

Reverse translations for DDN are entered in tables DNREGION, DNREVLXA, and CUSTNTWK.

This register does not apply to ISDN sets.

Register DDNUNAVL release history

Register DDNUNAVL was introduced in BCS28.

NA008

This register does not apply to ISDN sets.

Associated registers

Register CNDDNDEL increases when DDNUNAVL increases.

OM group CND (continued)

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register LDIDEL-Canada only

LDI delivered (LDIDEL)

Register LDIDEL increases when the calling information delivered to the subscriber has call qualifier L, indicating a long-distance call.

This register does not apply to ISDN sets.

This register is not supported on the DMS 100G switch.

Register LDIDEL release history

Register LDIDEL was introduced in BCS29.

NA008

This register does not apply to ISDN sets.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

Register LDIDEL2

Register LDIOVFL-Canada only

LDI overflow (LDIOVFL)

Register LDIOVFL increases when the long-distance call qualifier is not sent to the subscriber. The qualifier is not sent to the subscriber because room in the multiple data message is not present.

This register does not apply to ISDN sets.

This register is not supported on the DMS 100G switch.

OM group CND (continued)

Register LDIOVFL release history

Register LDIOVFL was introduced in BCS29.

NA008

This register does not apply to ISDN sets.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register NNDUNAVL

Network name delivery unavailable (NNDUNAVL)

Register NNDUNAVL is set zero.

This register is not supported on the DMS 100G switch.

Register NNDUNAVL release history

Register NNDUNAVL was introduced in BCS30.

BCS36

Register NNDUNAVL is set to zero. Register NAMISPTO in OM group CNAMD increases in its place.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register SCWDNYDS

SCWID denied display by cancel SCWID (CSCWID) (SCWDNYDS)

Register SCWDNYDS counts the number of calls not allowed to display because the controller activated CSCWID before originating the current call.

OM group CND (continued)

This register does not apply to ISDN sets.

Register SCWDNYDS release history

Register SCWDNYDS was introduced in BCS32.

NA008

This register does not apply to ISDN sets.

Associated registers

Register CSCWDACT

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register SCWIDDEL

SCWID data delivered (SCWIDDEL)

Register SCWIDDEL counts all SCWID data delivered for a waiting call to the XPM from the CM.

Note: Register SCWIDDEL indicates that the system delivers SCWID data to the XPM from the CM. Associated OM group CNDXPM must be referenced to determine if the XPM delivered the SCWID data to the telephone of the subscriber.

This register does not apply to ISDN sets.

This register is not supported on the DMS 100G switch.

Register SCWIDDEL release history

Register SCWIDDEL was introduced in BCS32.

NA008

This register does not apply to ISDN sets.

Associated registers

When SCWIDDEL increases, each register for each CLASS display feature assigned are also increased.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

OM group CNDB

OM description

Calling number delivery blocking (CNDB)

The OM group CNDB provides information on office-wide use of the following:

- Calling Number Delivery Blocking (CNDB) feature for Residential Enhanced Services (RES)
- Meridian Digital Centrex (MDC)
- Integrated Services Digital Network (ISDN) lines
- Resource shortages or denials that result from use of the CNDB, MDC and ISDN

CNDB prevents directory number (DN) on the display of the terminating equipment for each party call. The terminating display of the party shows *P* for private if CNDB is active on the called RES or MDC line.

You access calling number suppression through calling number blocking (CNB) and calling name/number blocking (CNNB) as well as CNDB. You can obtain calling number suppression alone or as part of the common access group of features.

The OM group CNDB counts:

- attempts to use CNDB
- attempts to use CNDB with common access
- successful use of CNDB
- denials of CNDB, CNB, or CNNB because the feature is not available
- failures of CNDB caused by not enough software resource
- successful name suppression

Release history

SN09 (DMS)

CR Q01148982 introduces changes to the figure “OM group CNDB registers for RES”.

NA008

Information on registers for the ISDN Caller ID Delivery and Suppression (CIDSDLV and CIDSSUP) functionalities on ISDN BRI lines was added in NA008.

OM group CNDB (continued)

APC005

Functionality was added for CLASS features that use:

- Australian telephone user part (ATUP)
- Australian ISDN user part (AISUP)
- ANSI integrated services user part (ISUP) trunk signaling

BCS35

Registers CNBDENY, CNDBDENY, CNDBUNIV, and CNNBDENY were added in BCS35.

BCS29

Register CNNBSUP was added in BCS29 to count name suppression that uses CNNB.

BCS27

The OM group CNDB was introduced in BCS27.

Registers

The system displays the OM group CNDB registers the display on the MAP terminal as follows:

| | | | |
|----------|----------|----------|----------|
| CNDBATT | CNDBSUP | CNDBUSUP | CNDBFDEN |
| CNDBOVFL | CNNBSUP | CNDBUNIV | CNDBDENY |
| CNBDENY | CNNBDENY | | |

Group structure

The OM group CNDB provides one tuple for each office.

Key field:

There is no Key field

Info field:

There is no Info field

Associated OM groups

OM group OTS register ORGFSET includes successful activations of CNDB.

The system increases OM group OTS register SYSFSET when CNDB activates after flashing during a talking call. In this occurrence, the system increases register SYSFSET instead of register ORGFSET.

OM group CNDB (continued)

Associated operating groups

The OM group CNDB associates with the CLASS/CMS RES functional group.

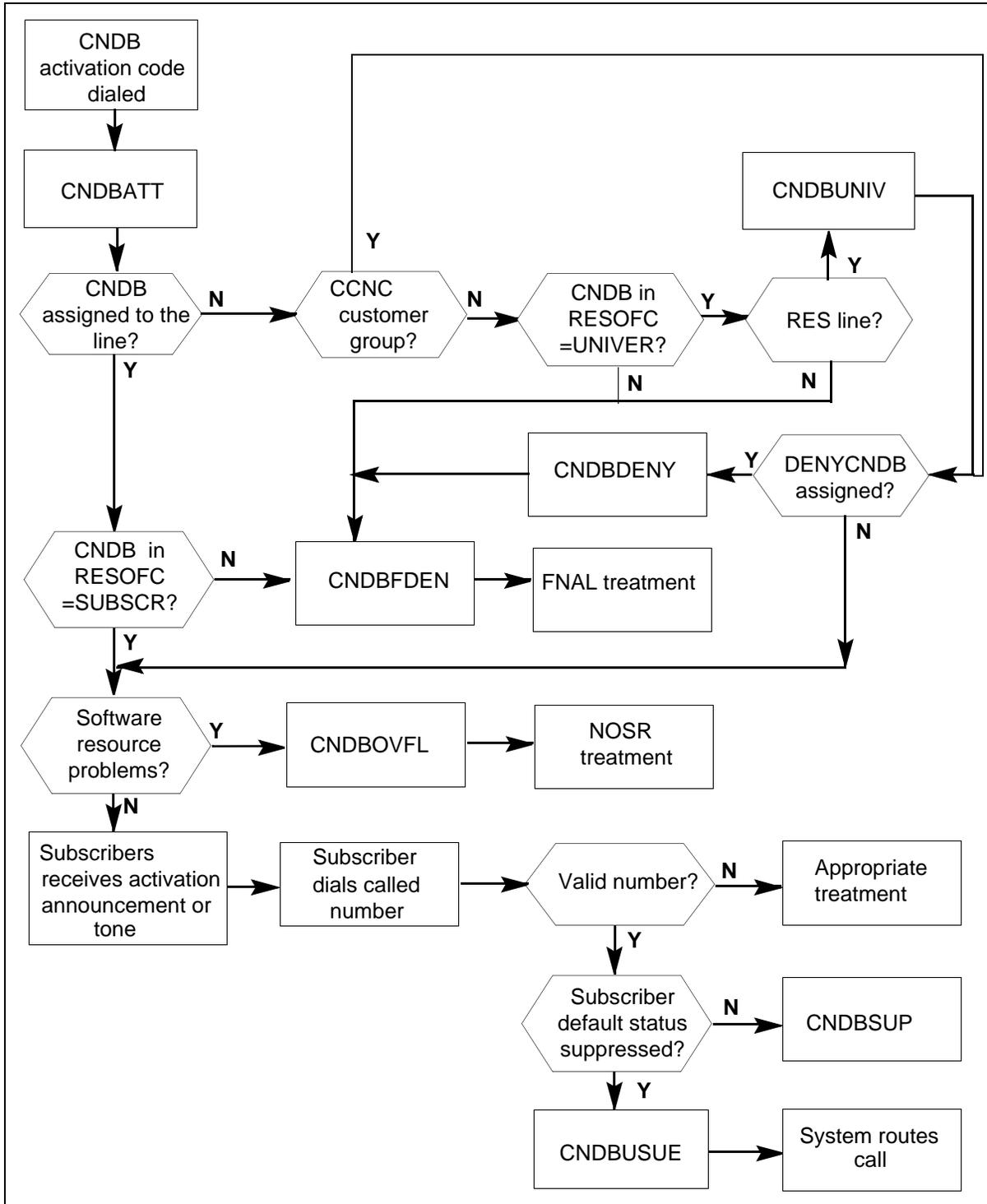
Associated functionality codes

The associated functionality codes for the OM group CNDB appear in the following table.

| Functionality | Code |
|---|-------------|
| CLASS: Calling Number Delivery Blocking | NTXA41AA |
| Calling Name/Number Delivery Blocking | NTXE46AA |
| NI0 NI-2/3 BRI Services | NI000051 |

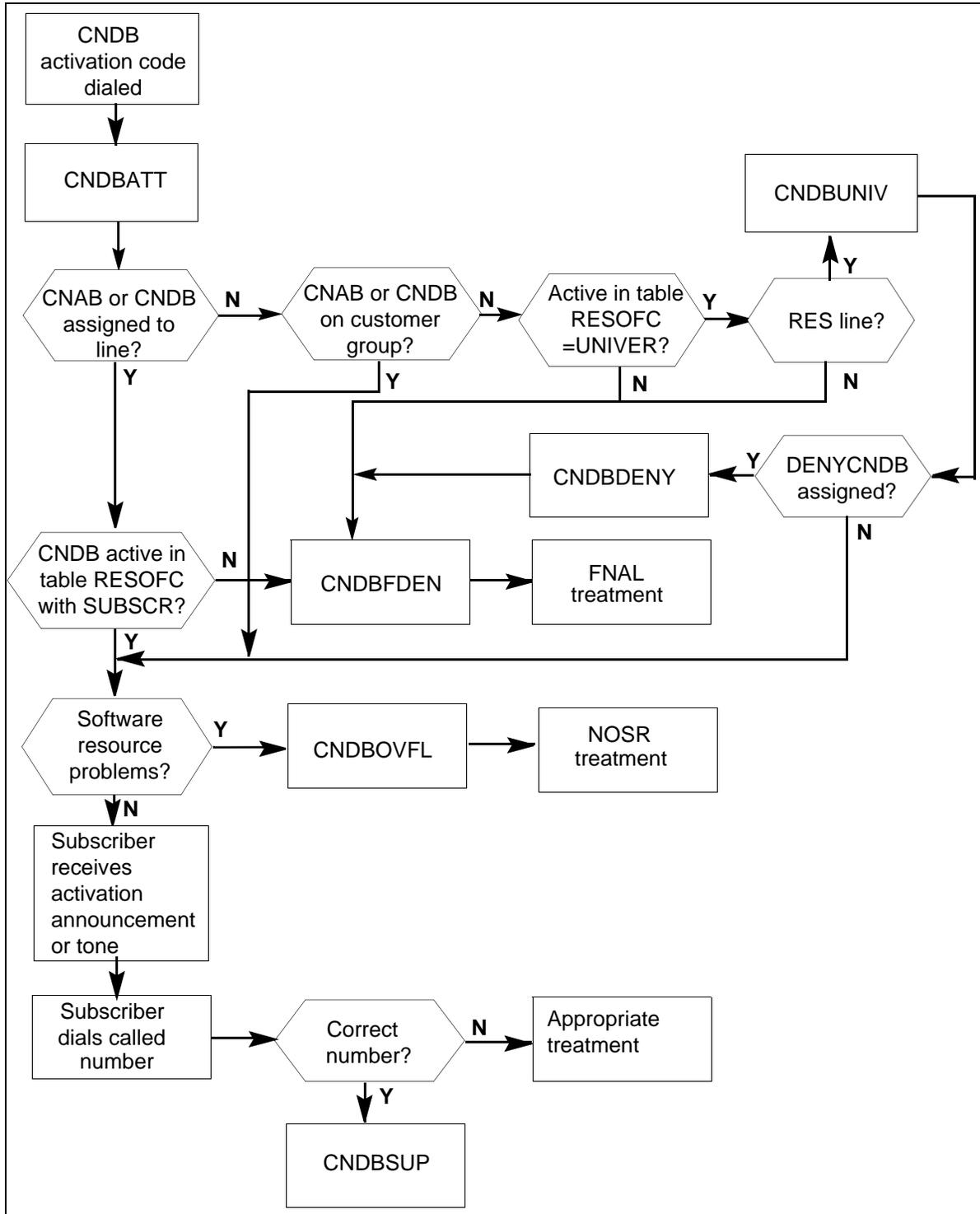
OM group CNDB (continued)

OM group CNDB registers for RES



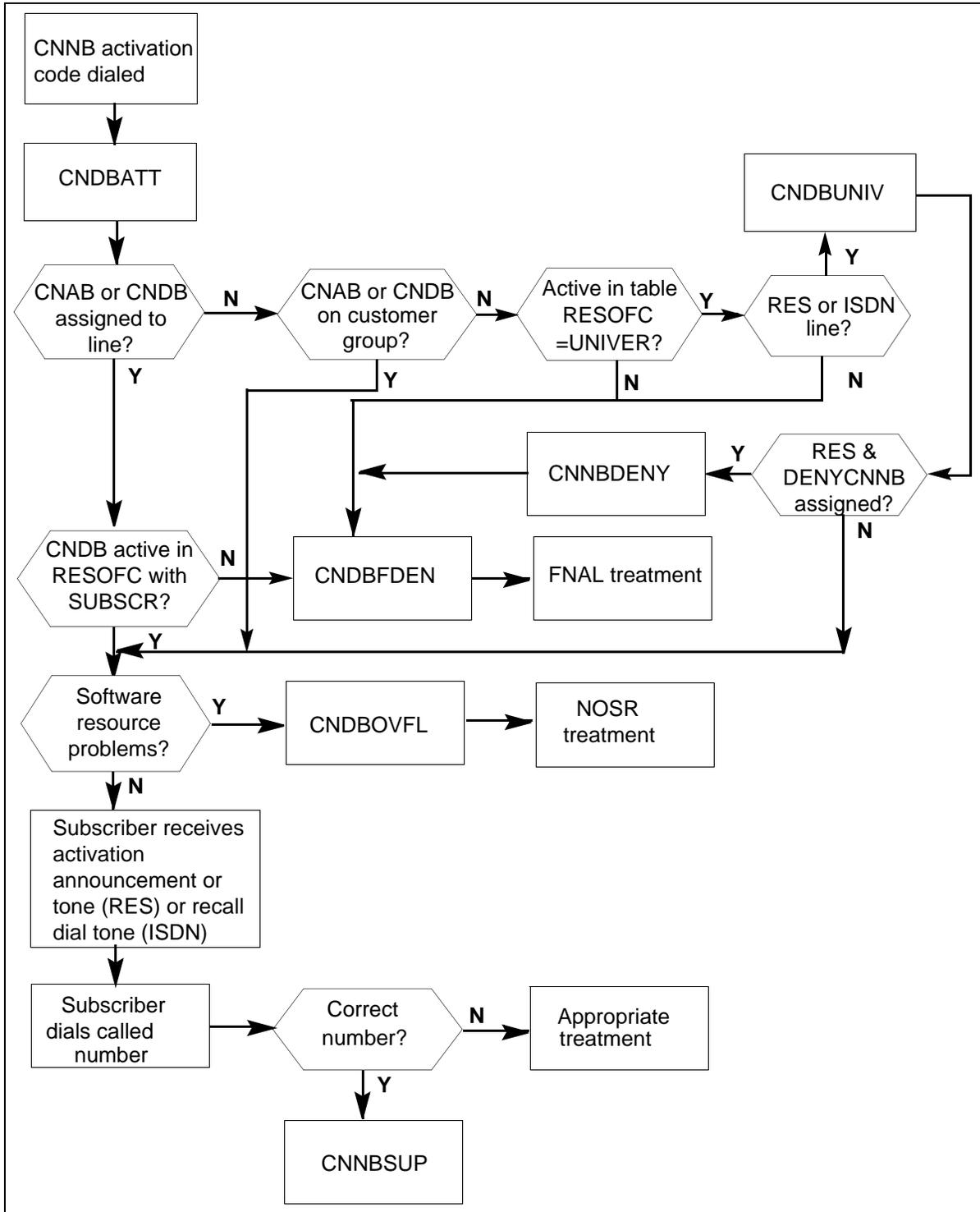
OM group CNDB (continued)

OM group CNDB registers for RES (continued)



OM group CNDB (continued)

OM group CNDB registers for RES and ISDN (continued)



OM group CNDB (continued)

Register CNBDENY

Calling number blocking denial (CNBDENY)

The register CNBDENY counts the number of CNB common attempts denied because the SO option DENYCNB is active.

Register CNBDENY does not apply to ISDN sets.

Register CNBDENY release history

Register CNBDENY was introduced in BCS35.

NA008

Register CNBDENY does not apply to ISDN sets.

Associated registers

The system increases CNDBFDEN when CNBDENY increases.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register CNDBATT

Calling number delivery blocking attempts (CNDBATT)

The system increases the register CNDBATT when a subscriber dials the access code for CNDB, CNB, or CNNB. Increases in register CNDBATT do not indicate successful CNDB activation.

The system increases register CNDBATT when an ISDN subscriber activates CIDSSUP with the access code.

Register CNDBATT release history

Register CNDBATT was introduced in BCS27.

NA008

The system increases CNDBATT register CIDSSUP with an access code from an ISDN set.

Associated registers

Each time CNDBATT increases, another register in OM group CNDB increases, unless the subscriber does not make a call.

OM group CNDB (continued)

The system increases CNDBFDEN when the system cannot activate CNDB. The system cannot activate CNDB for one of the following reasons:

- the option is not available on the line
- CNDB in table RESOFC is not enabled for the office

The system increases CNDBOVFL when CNDB is not active because software resources required for CNDB are busy or not available.

Register CNDBSUP counts the number of times CNDB activates and the system suppresses the originating number of the caller for a call.

Register CNDBUSUP counts the number of times the originating number of the caller can appear on a display. The display is on the terminating equipment of the party for a call on a line with CNDB.

The system increases CNNBSUP when CNNB suppresses the name and number of the originating caller.

$CNDB_CNDBATT = CNDB_CNDBSUP + CNDB_CNDBUSUP + CNDB_CNDBFDEN + CNDB_CNDBOVFL + CNDB_CNNBSUP + \text{no calls}$

where no calls = successful activation of CNDB and the subscriber does not make a call.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register CNDBDENY

Calling number delivery blocking denial (CNDBDENY)

The register CNDBDENY counts the number of CNDB common access attempts denied. The system denies the CNDB common access attempts when the SO option DENYCNDB is in active.

This register does not apply to ISDN sets.

Register CNDBDENY release history

Register CNDBDENY was introduced in BCS35.

OM group CNDB (continued)

NA008

Register CNDBDENY does not apply to ISDN sets.

Associated registers

The system increases CNDBFDEN when CNDBDENY increases.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register CNDBFDEN

Calling number delivery blocking feature access denied (CNDBFDEN)

The system increases the register CNDBFDEN when the system cannot activate CNDB, CNB, or CNNB for any of the following reasons:

- the CNDB or CIDSSUP ISDN option is not available on the line or customer group
- CNDB in table RESOFC is not enabled for the office
- the system makes a common access attempt and line has the associated DENY option.

The system routes the call to FNAL treatment.

Register CNDBFDEN release history

Register CNDBFDEN was introduced in BCS27.

NA008

The system increases register CNDBFDEN when the system denies feature activation. The system denies feature activation because: This is because the CIDSSUP is not on t or group.

- the ISDN line does not have the CIDSSUP line option
- the CNDB is not enabled for the office or customer group.

Associated registers

Register CNDBATT counts the number of times a subscriber dials the access code for CNDB.

The system increases CNDBOVFL when CNDB cannot be activated because software resources required for CNDB are busy or not available.

OM group CNDB (continued)

Register CNDBSUP counts the number of times CNDB activates and the system suppresses the number of the originating caller number for a call.

Register CNDBUSUP counts the number of times the originating number of the caller can appear on a display. The display is on the terminating equipment of the party for a call on a line with CNDB.

The system increases CNNBSUP when CNNB suppresses the name and number of the originator call.

$CNDB_CNDBATT = CNDB_CNDBSUP + CNDB_CNDBUSUP + CNDB_CNDBFDEN + CNDB_CNDBOVFL + CNDB_CNNBSUP + \text{no calls}$

where no calls = successful activation of CNDB and the subscriber does not make a call.

Associated logs

The system generates LINE138 when the system routes the call to FNAL treatment.

Extension registers

There are no extension registers.

Register CNDBOVFL

Calling number delivery blocking overflow (CNDBOVFL)

Register Calling number delivery blocking overflow (CNDBOVFL) is incremented when CNDB or CIDSSUP cannot be activated because software resources such as feature data blocks required for CNDB are busy or unavailable. The call is routed to NOSR treatment. CNDBOVFL is not incremented on the DMS-100G switch.

Register CNDBOVFL release history

Register CNDBOVFL was introduced in BCS27.

GL04

GL04 does not increase register CNDBOVFL.

NA008

The system increases register CNDBOVFL on CIDSSUP attempts when feature activation fails because CNDB abilities are busy or not available.

OM group CNDB (continued)

Associated registers

Register CNDBATT counts the number of times a subscriber dials the access code for CNDB.

The system increases CNDBFDEN when the system cannot activate CNDB. The system cannot activate CNDB for the following reasons:

- the option is not available on the line
- the CNDB in table RESOFC is not enabled for the office

Register CNDBSUP counts the number of times CNDB activates and the system suppresses the number of the originating caller for a call.

Register CNDBUSUP counts the number of times the originating number of the caller can appear on a display. The display is on the terminating equipment of the party for a call on a line with CNDB.

The system increases CNNBSUP when the CNDB suppresses the name and number of the originating caller.

The system increases CNDBOVFL when CNDBATT increases.

$\text{CNDB_CNDBATT} = \text{CNDB_CNDBSUP} + \text{CNDB_CNDBUSUP} + \text{CNDB_CNDBFDEN} + \text{CNDB_CNDBOVFL} + \text{CNDB_CNNBSUP} + \text{no calls}$

where no calls = successful activation of CNDB and the subscriber does not make a call.

Associated logs

The system generates LINE138 when the the system routes a call to NOSR treatment.

Extension registers

There are no extension registers.

Register CNDBSUP

Calling number delivery blocking suppression (CNDBSUP)

The system increases the register CNDBSUP when the following two conditions occur. The system must correctly activate CNDB and suppress the number of the originating caller.

The system increases this register for ISDN subscribers when an ISDN set activates CIDSSUP with an access code.

OM group CNDB (continued)

Register CNDBSUP release history

Register CNDBSUP was introduced in BCS27.

NA008

The system increases this register CNDBSOP for ISDN sets when the system activates CIDSSUP with an access code.

Associated registers

Register CNDBATT counts the number of times a subscriber dials the access code for CNDB.

The system increases CNDBFDEN when the system cannot activate CNDB. The system cannot activate CNDB for one of the following reasons:

- the option is not available on the line
- CNDB in table RESOFC is not enabled for the office

The system increases CNDBOVFL when the system cannot activate cannot because software resources required for CNDB are busy or not available.

Register CNDBUSUP counts the number of times the originating number of the caller can appear on a display. The display is on the equipment of the terminating party for a call on a line with CNDB.

The system increases CNNBSUP when CNDB suppresses the name and number of the originating caller.

The system increases OM group OTS register ORGFSET or register SYSFSET with each successful activation of CNDB.

$CNDB_CNDBATT = CNDB_CNDBSUP + CNDB_CNDBUSUP + CNDB_CNDBFDEN + CNDB_CNDBOVFL + CNDB_CNNBSUP + \text{no calls}$

where no calls = successful activation of CNDB and the subscriber does not make a call

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register CNDBUNIV

Calling number delivery blocking universal access (CNDBUNIV)

OM group CNDB (continued)

The register CNDBUNIV counts the number of CNDB, CNB, CNNB, and CIDSSUP universal access attempts.

Register CNDBUNIV release history

Register CNDBUNIV was introduced in BCS35.

NA008

The system increases register CNDBUNIV for ISDN sets when universal access activates CIDSSUP.

Associated registers

The system increases CNDBUNIV, when CMDBATT increases.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register CNDBUSUP

Calling number delivery blocking unsuppressed (CNDBUSUP)

The system increases register CNDBUSUP when the number of the originating caller can appear on a display. The display is on the equipment of the terminating party for a call on a line with CNDB. The system also increases this register when the system suppresses the number of the originating caller. The system suppresses the number even though the originating subscriber attempts to allow the DN to appear on a display. The display is on the equipment of the terminating party for the call. This condition can occur if you set suppression at the office level in table NETNAMES.

Register CNDBUSUP does not apply to ISDN lines because ISDN does not support the CNDB toggle feature is not supported with ISDN.

Register CNDBUSUP release history

Register CNDBUSUP was introduced in BCS27.

NA008

Register CNDBUSUP does not apply to ISDN sets.

Associated registers

Register CNDBATT counts the number of times a subscriber dials the access code for CNDB.

OM group CNDB (continued)

The system increases CNDBFDEN when the system cannot activate CNDB. The system cannot activate CNDB for one of the following reasons:

- the option is not available on the line
- CNDB in table RESOFC is not enabled for the office

The system increases CNDBOVFL when the system cannot activate CNDB because software resources required for CNDB are busy or not available.

Register CNDBSUP counts the number of times CNDB activates and the system suppresses the number of the originating caller for a call.

The system increases CNNBSUP when the CNDB suppresses the number of the originating caller.

The system increases OM group OTS register ORGFSET or register SYSFSET with each successful activation of CNDB.

$CNDB_CNDBATT = CNDB_CNDBSUP + CNDB_CNDBUSUP + CNDB_CNDBFDEN + CNDB_CNDBOVFL + CNDB_CNNBSUP + \text{no calls}$

where no calls = successful activation of CNDB and the subscriber does not make a call.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register CNNBDENY

Calling name and number blocking denial (CNNBDENY)

Register CNNBDENY counts the number of CNNB universal attempts denied because the SO option DENYCNNB is active.

Register CNNBDENY does not apply to ISDN sets.

Register CNNBDENY release history

Register CNNBDENY was introduced in BCS35.

NA008

Register CNNBDENY does not apply to ISDN sets.

Associated registers

The system increases CNDBFDEN when CNNBDENY increases.

OM group CNDB (continued)

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register CNNBSUP

Calling name and number delivery blocking suppression (CNNBSUP)

The system increases register CNNBSUP when CNNB suppresses the name and number of the originating caller. The system suppresses the DN of the originating caller that does not have an associated name.

The system increases this register CNNBSUP for ISDN sets when CIDSSUP correctly suppresses a name and DN option.

Register CNNBSUP release history

Register CNNBSUP was introduced in BCS29.

NA008

The system increases register CNNBSUP for ISDN sets when CIDSSUP correctly increases a name and DN option.

Associated registers

Register CNDBATT counts the number of times a subscriber dials the access code for CNDB.

The system increases CNDBFDEN when the system cannot activate CNDB for one of the following reasons.

- the option is not available on the line
- CNDB in table RESOFC is not enabled for the office

The system increases CNDBOVFL when the system cannot activate CNDB because software resources required for CNDB are busy or not available.

Register CNDBSUP counts the number of times CNDB activates and the system suppresses the number of the originating caller.

Register CNDBUSUP counts the number of times the number of the originating caller can appear on a display. The display is on the equipment of the terminating party for a call on a line with CNDB.

OM group CNDB (continued)

$CNDB_CNDBATT = CNDB_CNDBSUP + CNDB_CNDBUSUP +$
 $CNDB_CNDBFDEN + CNDB_CNDBOVFL + CNDB_CNNBSUP + \text{no calls}$

where no calls = successful activation of CNDB and the subscriber does not make a call.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

OM group CNDXPM

OM description

OM group CNDXPM pegs calling number delivery (CND) events in XMS-based peripheral modules (PM). You can view the CLASS Modem Resource (CMR) card events at the end of a monitoring period with the command `OMSHOW CNDXPM HOLDING`. CNDXPM registers accumulate total events which occur in the current monitoring period. The `OMSHOW CNDXPM ACTIVE` command does not display the current OM period count totals.

CNDXPM counts event attempts, including failures, to deliver calling numbers for each PM. The XMS-based PMs that follow are included:

- line trunk controller (LTC)
- line group controller (LGC)
- subscriber carrier module-100 access (SMA)
- subscriber carrier module-100S (SMS)
- subscriber carrier module-100S remote (SMS-R)
- subscriber carrier module-100 urban (SMU)
- remote cluster controller (RCC)
- remote cluster controller 2 (RCC2)

Eight registers count failures that occur for the following reasons:

- CNDNOMON—no ringing monitor is available
- CNDNOMDM—no modem resource is available
- CNDEANS—subscriber answers the call before the system delivers the number
- CNDOABND—caller abandons the call before the system delivers the number
- SCWDNAKA—failure to receive an ACK tone during alerting
- SCWDNAKR—failure to receive an ACK tone during re-alerting
- SCWDFAIL—SCWID failures
- SCWDNUTR—lack of a universal tone receiver channel for acknowledgement (ACK) tone reception

The 12 registers that follow count the maximum number of CLASS Modem Resource (CMR) card events during the current OM reporting period. The

OM group CNDXPM (continued)

CMR OM peg counts, before a reset at the PMDEBUG level, are reset when the CC requests counts from the last reporting period.

- ADSIATTS—total Analog Display Services Interface (ADSI) attempts
- ADSICOMPS—total ADSI completions
- CMRADSIR—maximum ADSI requests at the same time (maximum ADSI sessions at the same time is 10)
- CNDATTS—total calling number delivery (CND) attempts
- CNDCOMP—total CND completions
- CMRCNDRQ—maximum number of CND requests at the same time
- CMRMODEM—maximum modems used at the same time (32 on CMR card)
- CMRRINGD—maximum ring detectors used at the same time (32 on CMR card)
- CMRBCLDR—maximum Bulk-Calling Line Identification (BCLID) requests at the same time (maximum BCLID sessions at the same time is 10)
- CMRFASTQ—maximum fast queue (FASTQ) elements at the same time (FASTQ is the internal queue for all functions except diagnostics)
- CMRTIMRQ—maximum CMR timer elements used at the same time (maximum timer elements at the same time is 127)
- CMRSHRAM—maximum messages in shared RAM at the same time (maximum messages from the signal processor (SP) to the CMR is 64)

The three registers that follow count automatic call waiting with disposition (SCWID) events:

- SCWDATTS—spontaneous call waiting identification (SCWID) attempts
- SCWDOVLP—SCWID overlap
- SCWDCOMP—SCWID completions

Register CNDMSG counts the number of times the PM transfers operational measurements (OM) to the central control (CC).

Release history

Release BCS27 introduced OM group CNDXPM.

OM group CNDXPM (continued)

NA006

12 registers were added:

- ADSIATTS
- ADSICOMP
- CMRRINGD
- CMRMODEM
- CMRCNDRQ
- CMRBCLDR
- CMRADSIR
- CMRFASTQ
- CMRTIMRQ
- CMRSHRAM
- CNDATTS
- CNDCOMP

APC005

Functionality added for CLASS features using Australian telephone user part (ATUP), Australian ISDN user part (AISUP), and American National Standards Institute (ANSI) integrated services user part (ANSI ISUP) trunk signaling.

BCS34

Changes included feature use on remote carrier speech (RCS) lines serviced by a subscriber carrier module (SCM)-100S remote (SMSR). The existing registers are incremented for each SMSR whose host RCC contains a CMR card (NT6X78AA) that is entered and in service. The exception is register CNDNOMON, which is not incremented for an RCS line because the CMR ringing monitors are not used.

BCS32

Registers SCWDCOMP, SCWDATTS, SCWDFAIL, SCWDNUTR, SCWDNAKA, SCWDNAKR, and SCWDOVLP were added.

The system increases the CNDNOMDM when the XPM receives a SCWID request and no custom-local area signaling services (CLASS) modem resource board modems are available to transmit the data.

OM group CNDXPM (continued)

The system increases the CNDEANS every time the XPM attempts to transmit data to the SCWID line, but the line flashes before the transmission is completed.

BCS31

Registers CNDNOMON, CNDNOMDM, and CNDEANS are incremented when delivery of CLASS message waiting indicator (CMWI) information through the CLASS modem resource card did not occur.

BCS30

Registers CNDEANS, CNDNOMDM, and CNDOABND count failures to deliver calling information on remote carrier DMS-1 urban line calls.

Registers

OM group CNDXPM registers on the MAP terminal as follows:

| | | | |
|----------|----------|----------|-----------|
| CNDNOMON | CNDNOMDM | CNDEANS | CNDOABND |
| CNDMSG | SCWDATTS | SCWDCOMP | SCWDFAIL |
| SCWDNUTR | SCWDNAKA | SCWDNAKR | SCWDOVLP |
| CNDATTS | CNDCOMP | ADSIATTS | ADSI COMP |
| CMRRINGD | CMRMODEM | CMRCNDRQ | CMRBCLDR |
| CMRADSIR | CMRFASTQ | CMRTIMRQ | CMRSHRAM |

Group structure

OM group CNDXPM provides one tuple for each XPM (LTC/LGC/RCC/RCC2/SMS/SMS-R/SMU/SMA) to a maximum of 128.

Key field:

None

Info field:

PM_NAME: peripheral name

The system enters the Info field information in table LTCINV or RCCINV.

A CLASS modem resource (CMR) card must be present in the XPM and entered in table LTCINV or RCCINV for CND to work correctly.

Related OM groups

CND provides the same information for an office.

The CLASS/CMS-RES operating groups are associated with OM group CNDXPM.

OM group CNDXPM (continued)

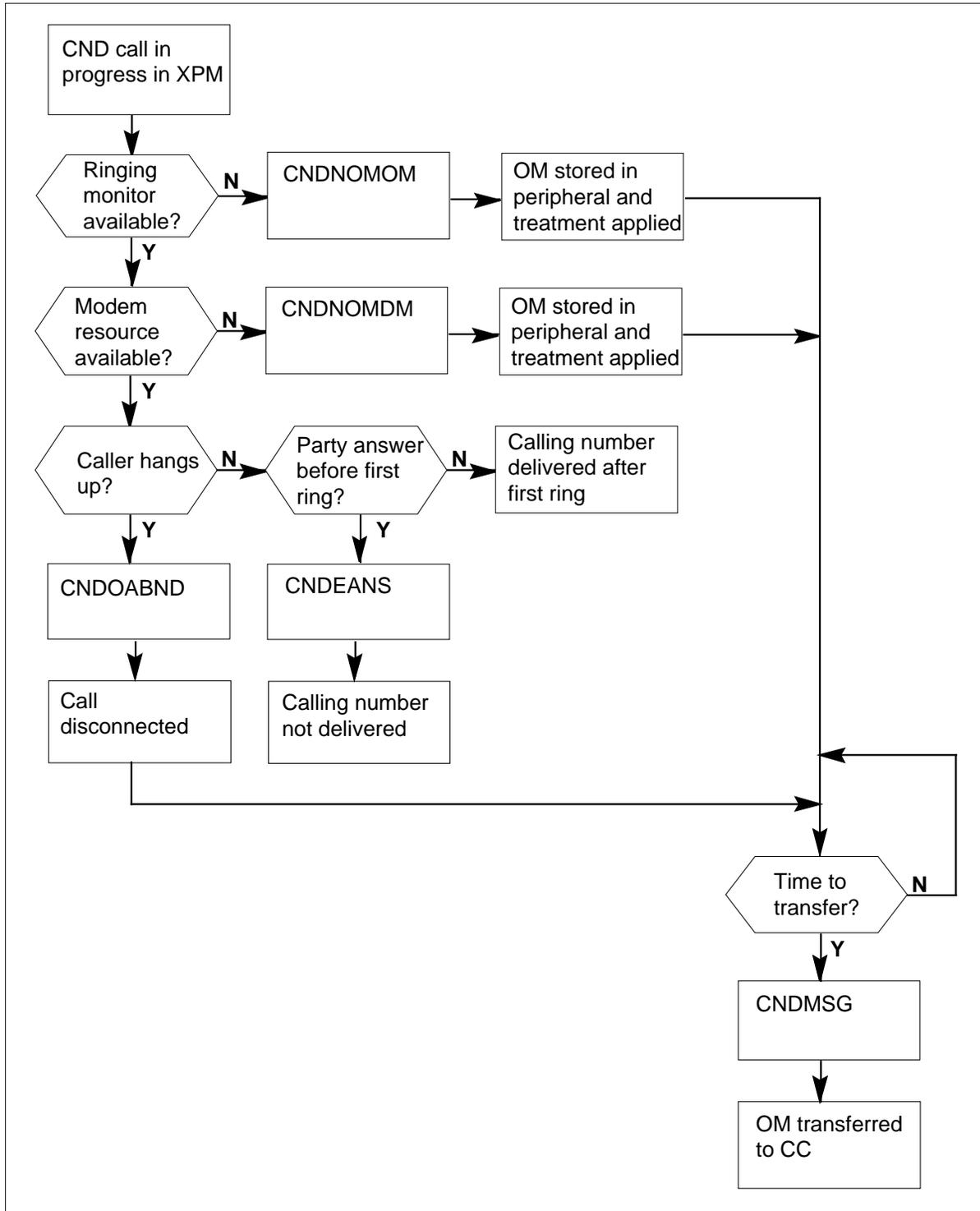
Related functionality codes

The table that follows lists the functionality name and codes related to OM group CNDXPM.

| Functionality | Code |
|--|-------------|
| CLASS: Calling Number Display | NTXA01AA |
| CLASS: Calling Number Delivery—Dialable Number | NTXE27AA |
| CLASS: for SMS: Phase 1A—CND | NTXE38AA |
| CLASS Visual Message Waiting Indicator | NTXJ39AA |
| CLASSPLUS Call Waiting Display | NTXN97AA |

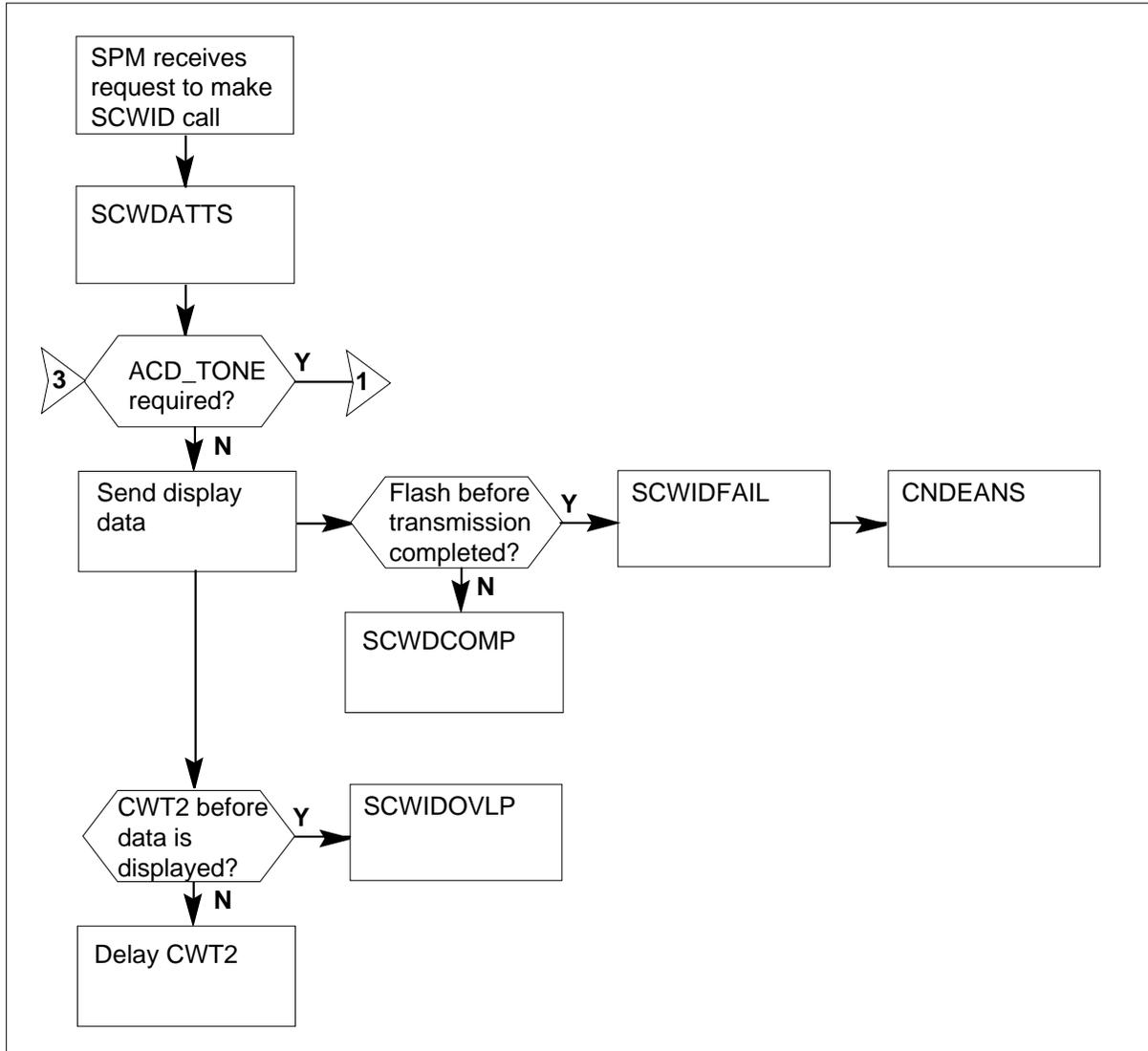
OM group CNDXPM (continued)

OM group CNDXPM registers



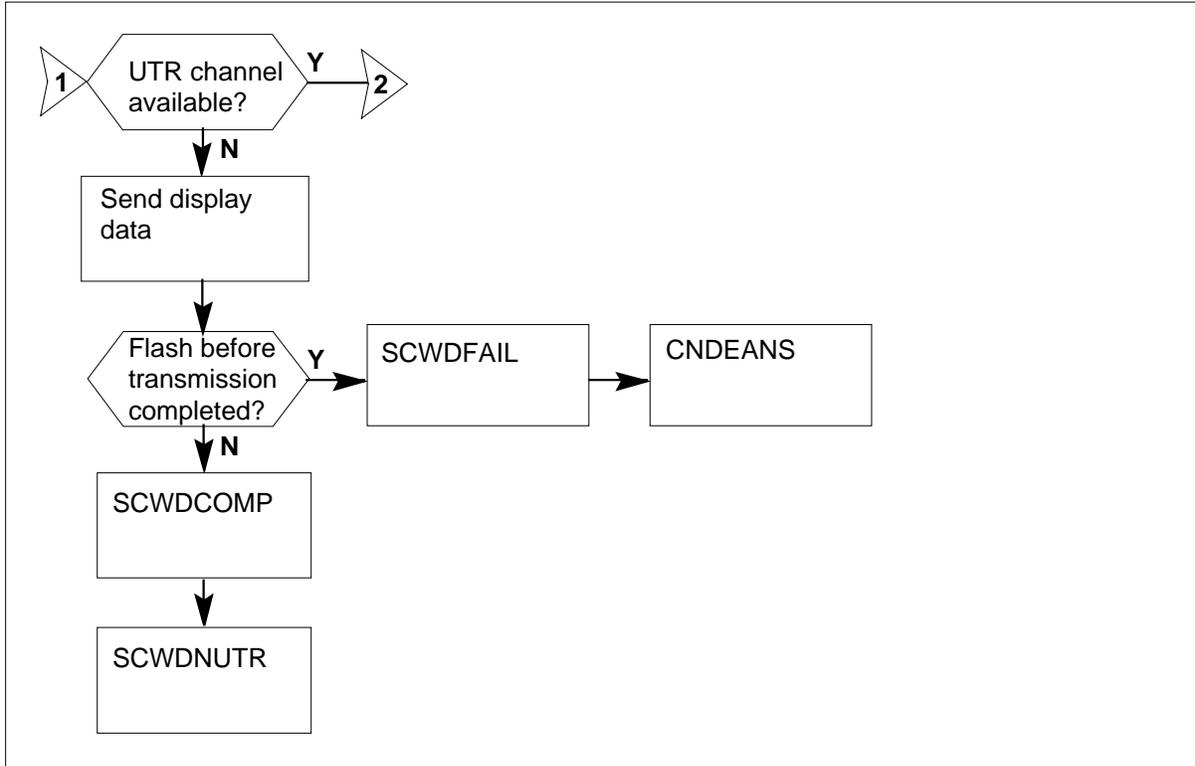
OM group CNDXPM (continued)

OM group CNDXPM registers: SCWID calls



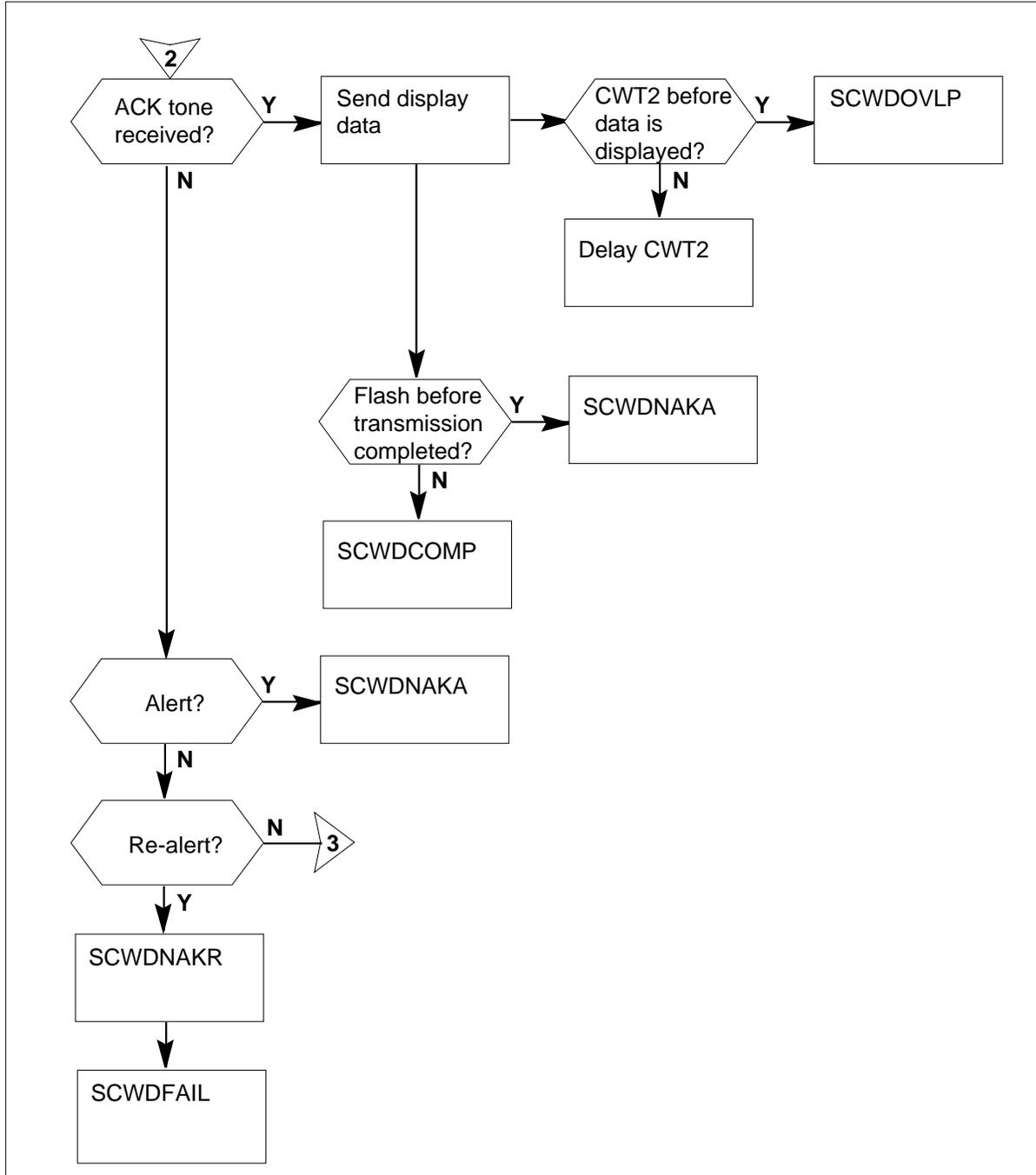
OM group CNDXPM (continued)

OM group CNDXPM registers: SCWID calls (continued)



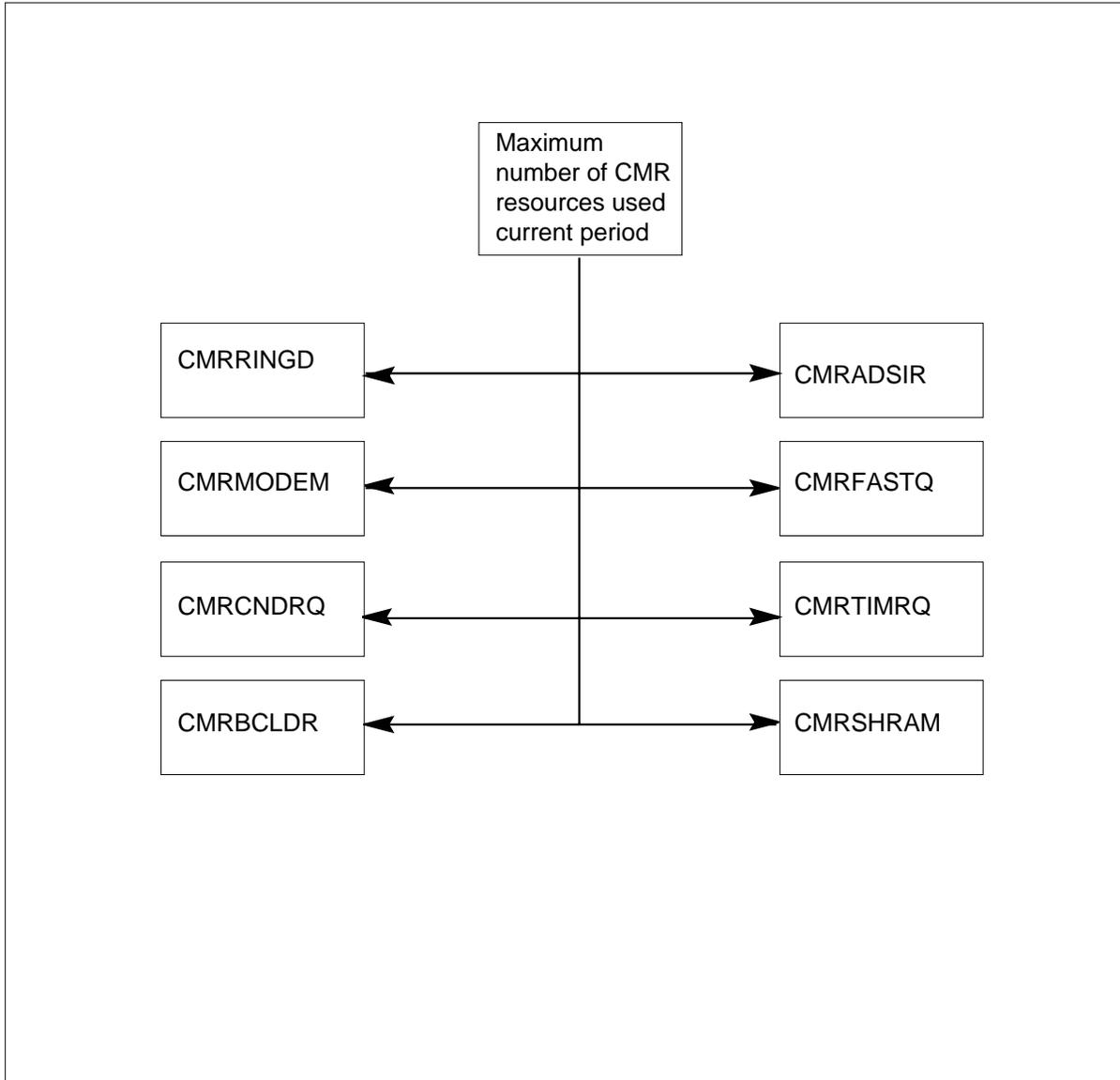
OM group CNDXPM (continued)

OM group CNDXPM registers: SCWID calls (continued)



OM group CNDXPM (continued)

OM group CNDXPM registers: Maximum resource usage counts at end of OM current measurement period

**Register ADSIATTS**

Analog Display Services Interface (ADSI) Attempts

Register ADSIATTS records the total number of ADSI attempts during the last OM reporting period.

Register ADSIATTS release history

ADSIATTS was introduced in NA006.

OM group CNDXPM (continued)

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register ADSICOMP

ADSI Completions

Register ADSICOMP records the total number of ADSI completions during the last OM reporting period.

Register ADSICOMP release history

ADSI COMP was introduced in NA006.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register CMRADSIR

CMR ADSI Requests

Register CMRADSIR records the maximum number of ADSI modem requests handled at the same time by the CMR during the last OM reporting period. The maximum number of ADSI sessions allowed is ten.

Register CMRADSIR release history

CMRADSIR was introduced in NA006.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

OM group CNDXPM (continued)

Extension registers

There are no extension registers.

Register CMRBCLDR

CMR BCLID Requests

Register CMRBCLDR records the maximum number of BCLID modem at the same time requests handled by the CMR during the last OM reporting period. The maximum number of BCLID sessions allowed is ten.

Register CMRBCLDR release history

CMRBCLDR was introduced in NA006.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register CMRCNDRQ

CMR CND Requests

Register CMRCNDRQ records the maximum number of CMR CND at the same time requests handled by the CMR during the last OM reporting period.

Register CMRCNDRQ release history

CMRCNDRQ was introduced in NA006.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register CMRFASTQ

CMR Fast Queue Elements (CMRFASTQ)

OM group CNDXPM (continued)

Register CMRFASTQ records the maximum number of CMR FAST queue elements used at the same time by the CMR. The CMR uses these elements during the last OM reporting period. The FAST queue is the CMR internal queue for all functions except the diagnostics.

Register CMRFASTQ release history

Register CMRFASTQ was introduced in NA006.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register CMRMODEM

CMR Modems (CMRMODEM)

Register CMRMODEM records the maximum number of CMR modems used at the same time by the CMR. The CMR uses these modems during the last OM reporting period. Each CMR card contains 32 modems.

Register CMRMODEM release history

Register CMRMODEM was introduced in NA006.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register CMRRINGD

CMR Ring Detectors (CMRRINGD)

Register CMRRINGD records the maximum number of CMR ring detectors used at the same time by the CMR. The CMR uses these detectors during the last OM reporting period. Each CMR card contains 32-ring detectors.

OM group CNDXPM (continued)

Register CMRRINGD release history

Register CMRRINGD was introduced in NA006.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register CMRSHRAM

CMR Shared RAM Messages (CMRSHRAM)

Register CMRSHRAM records the maximum number of messages in the shared RAM interface of the CMP at the same time. The CMP contains these messages during the last OM reporting period. The maximum number of messages from the SP to the CMR at the same time is 64.

Register CMRSHRAM release history

Register CMRSHRAM was introduced in NA006.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register CMRTIMRQ

CMR Timer Requests (CMRTIMRQ)

Register CMRTIMRQ records the maximum number of CMR timer queue elements used at the same time by the CMR. The CMP uses these elements during the last OM reporting period. The maximum number of timer queues that the system can use at one time is 27.

Register CMRTIMRQ release history

Register CMRTIMRQ was introduced in NA006.

OM group CNDXPM (continued)

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register CNDATTS

Calling Number Delivery Attempts (CNDATTS)

Register CNDATTS records the total number of CND attempts during the last OM reporting period.

Register CNDATTS release history

Register CNDATTS was introduced in NA006.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register CNDCOMP

Calling Number Delivery Completions (CNDCOMP)

Register CNDCOMP records the total number of CND completions during the last OM reporting period.

Register CNDCOMP release history

Register CNDCOMP was introduced in NA006.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

OM group CNDXPM (continued)

Extension registers

There are no extension registers.

Register CNDEANS

Calling number delivery (CND) early answer (CNDEANS)

Register CNDEANS increases when the system cannot deliver a calling number. The system cannot deliver the number because the CND subscriber answered a call before the calling information. This failure of delivery occurs when the caller answers before the end of the first ring.

Register CNDEANS release history

Register CNDEANS was introduced in BCS27.

BCS32

Register CNDEANS increases when the XPM attempts to transmit data to the automatic call waiting identification (SCWID) line. The increase occurs when the line flashes before the transmission completes.

BCS31

Register CNDEANS increases when the system does not deliver CLASS message waiting indicator (CMWI) information.

BCS30

Register CNDEANS increases when the system does not deliver calling information on remote carrier DMS-1 urban line calls.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register CNDMSG

Calling number delivery XMS-based peripheral module OM message (CNDMSG)

Register CNDMSG increases when the system transfers CNDXPM OM data to the CC.

OM group CNDXPM (continued)

Register CNDMSG release history

Register CNDMSG was introduced in BCS27.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register CNDNOMDM

Calling number delivery (CND) no modem resource available (CNDNOMDM)

Register CNDNOMDM increases when CND fails because modem resources are not available on the CLASS modem resource (CMR) card. The CMP card is in the XPM that supports the line in use.

Register CNDNOMDM is not pegged if the CMR card is BSY. If the CMR card is BSY, the call is treated as a non-CND call.

Register CNDNOMDM release history

Register CNDNOMDM was introduced in BCS27.

BCS32

Register CNDNOMDM increases when the XPM receives an automatic call waiting identification (SCWID) request. The increase of this register occurs when CLASS modem resource card modems are not available to transmit the data.

BCS31

Register CNDNOMDM increases when the system does not deliver CLASS message waiting indicator (CMWI) information.

BCS30

Register CNDNOMDM increases when the system does not deliver calling information on remote carrier DMS-1 urban line calls.

Associated registers

There are no associated registers.

OM group CNDXPM (continued)

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register CNDNOMON

Calling number delivery (CND) no ringing monitor available (CNDNOMON)

Register CNDNOMON increases when CND fails because ringing monitors are not available on the CMR card. The CMR card is in the XPM that supports the line in use.

Register CNDNOMON release history

Register CNDNOMON was introduced in BCS27.

BCS31

Register CNDNOMON increases when the system does not deliver CLASS message waiting indicator (CMWI) information.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register CNDOABND

Calling number delivery originator abandon (CNDOABND)

Register CNDOABND increases when the system does not deliver a calling number. The system does not deliver a calling number because the calling party abandoned the call before the first ring.

Register CNDOABND release history

Register CNDOABND was introduced in BCS27.

BCS30

Register CNDOABND increases when the system does not deliver calling information on remote carrier DMS-1 urban line calls.

OM group CNDXPM (continued)

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register SCWDATTS

Spontaneous call waiting identification (SCWID) attempts (SCWDATTS)

Register SCWDATTS increases each time the XPM receives a request to make a SCWID call.

Register SCWDATTS release history

Register SCWDATTS was introduced in BCS32.

Associated registers

SCWDATTS SCWDCOMP + SCWDFAIL

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register SCWDCOMP

Spontaneous call waiting identification (SCWID) completed (SCWDCOMP)

Register SCWDCOMP increases each time the XPM successfully transmits data to the SCWID line.

Register SCWDCOMP release history

Register SCWDCOMP was introduced in BCS32.

Associated registers

SCWDATTS SCWDCOMP + SCWDFAIL

Associated logs

There are no associated logs.

OM group CNDXPM (continued)

Extension registers

There are no extension registers.

Register SCWDFAIL

Spontaneous call waiting identification (SCWID) failure (SCWDFAIL)

Register SCWDFAIL increases each time the XPM fails to transmit data to the CMR card. The copy is successful when the system copies data to the CMR card.

Register SCWDFAIL release history

Register SCWDFAIL was introduced in BCS32.

Associated registers

SCWDATTS SCWDCOMP + SCWDFAIL

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register SCWDNAKA

Spontaneous call waiting identification (SCWID) no ACK alerting (SCWDNAKA)

Register SCWDNAKA increases each time the XPM expects an acknowledgement tone and a tone does not transmit. The tone is from customer premises equipment and occurs during alerting.

Register SCWDNAKA release history

Register SCWDNAKA was introduced in BCS32.

Associated registers

SCWDATTS

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

OM group CNDXPM (continued)

Register SCWDNAKR

Spontaneous call waiting identification (SCWID) no ACK re-alerting (SCWDNAKR)

Register SCWDNAKR increases each time the XPM expects an acknowledgement tone and a tone does not transmit. The tone is from the customer premises equipment and occurs during re-alerting.

Register SCWDNAKR release history

Register SCWDNAKR was introduced in BCS32.

Associated registers

SCWDATTS, SCWDNAKA, SCWDFAIL

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register SCWDNUTR

Spontaneous call waiting identification (SCWID) no universal tone receivers (UTR) channels (SCWDNUTR)

Register SCWDNUTR increases each time the XPM receives a SCWID request with the ACK_TONE option and UTR channels are not available. The UTR channels monitor for the ACK tone.

Register SCWDNUTR release history

Register SCWDNUTR was introduced in BCS32.

Associated registers

SCWDATTS, SCWDCOMP

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register SCWDOVLP

Spontaneous call waiting identification (SCWID) overlap (SCWDOVLP)

OM group CNDXPM (end)

Register SCWDOVLP increases each time the XPM tries to apply call waiting tone 2 (CWT2) and the data transmission is not complete.

Register SCWDOVLP release history

Register SCWDOVLP was introduced in BCS32.

Associated registers

SCWDATTS

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

OM group COT

OM description

Customer-originated trace (COT)

The OM group COT measures the use of the Customer-originated Trace (COT) feature for an office. You can obtain this feature alone or as part of the common access group of features. Registers in the OM group COT count attempts, successful completions, not finished completions, and reasons for failures. Separate registers count the number of failures caused by:

- abandons by user
- too many digits
- digit collection time outs
- no service circuits
- not enough software resource
- no connections available

The OM group COT data helps to monitor completion of COT feature use and identify areas that can cause repeated problems.

Release history

The OM group COT was introduced in BCS27.

BCS35

Registers COTDENY and COTUNIV were introduced for common access.

Registers

The OM group COT registers appear on the MAP terminal as follows:

| | | | |
|---------|---------|---------|---------|
| COTATT | COTFDEN | COTOVFL | COTCMPL |
| COTINCM | COTPRCD | COTOPTO | COTBDIN |
| COTPFLR | COTUNIV | COTDENY | |

Group structure

The OM group COT provides one tuple for each office.

Key field:

There is no key field

Info field:

There is no info field

OM group COT (continued)

The time out value that COT_COTBDIN uses defines LN_PERM_SIG_TIME in table OFCENG.

Associated OM groups

The OM group ANN provides information on traffic for recorded announcement machines.

Associated functional groups

The CLASS/CMS RES functional groups associate with OM group COT.

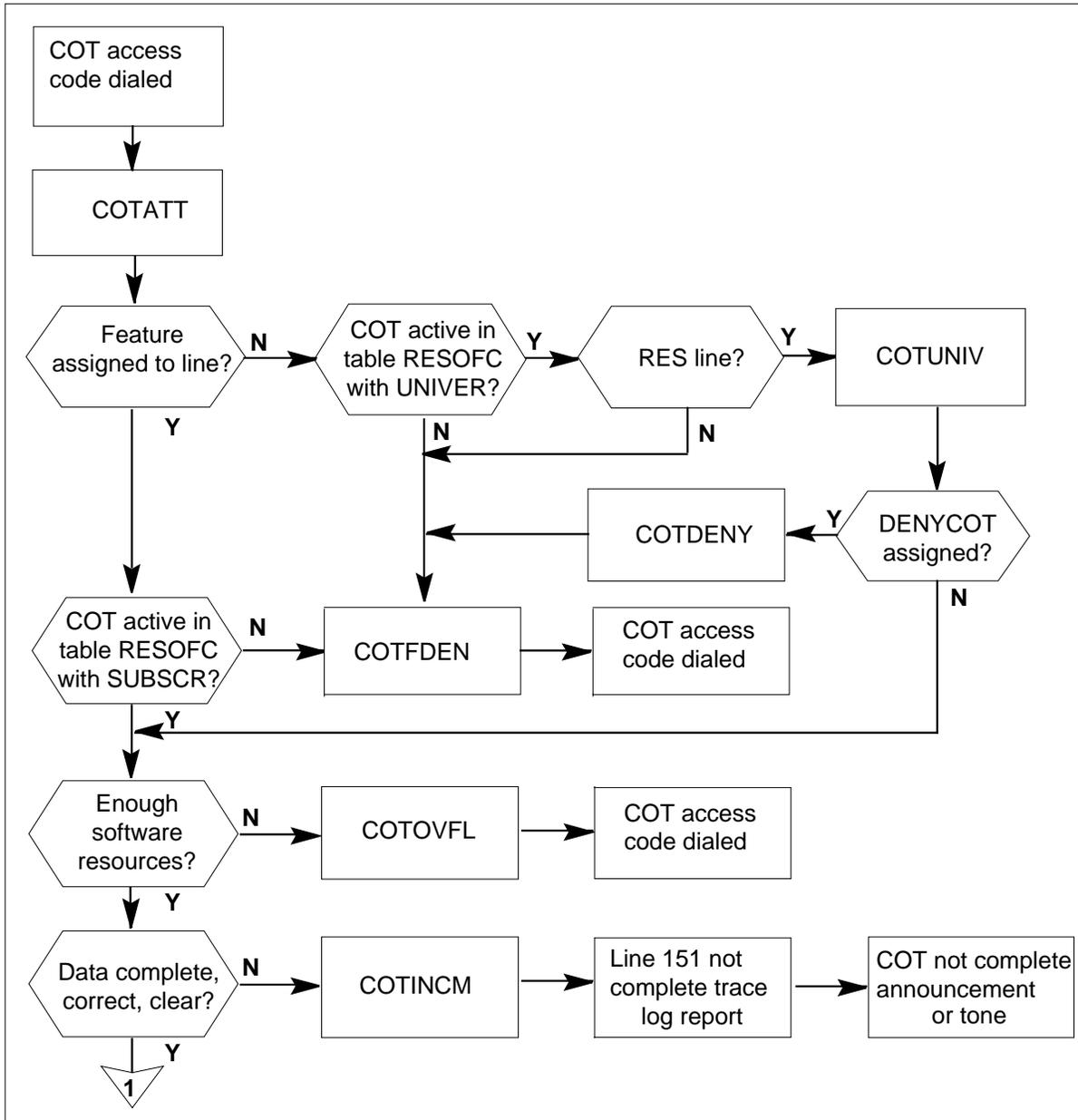
Associated functionality codes

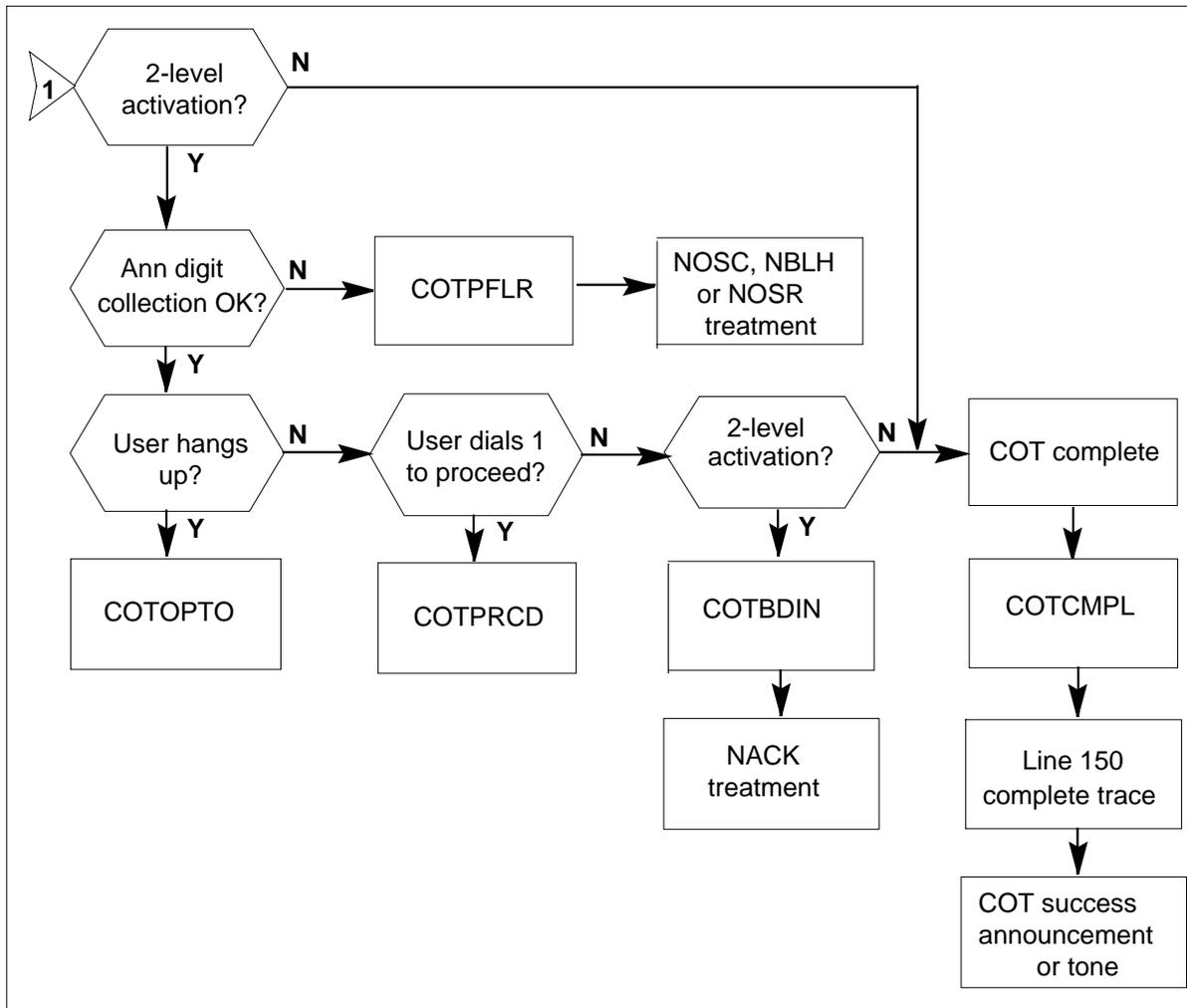
The functionality codes associated with OM group COT appear in the following table.

| Functionality | Code |
|---------------|-------------------------------------|
| NTXA02AA | CLASS: Customer-originated Trace |

OM group COT (continued)

OM group COT registers



OM group COT (continued)**OM group COT registers (continued)****Register COTATT**

COT access attempts (COTATT)

Register COTATT counts the number of times subscriber dials the access code for the COT feature. Increases in register COTATT do not indicate that COT activated successfully.

Register COTATT release history

Register COTATT was introduced in BCS27.

OM group COT (continued)

Associated registers

$COTATT = COTFDEN + COTOVFL + COTPFLLR + COTOPTO + COTBDIN + COTCMPL + COTINCM$

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register COTBDIN

COT bad digit input for two-level activation (COTBDIN)

Register COTBDIN increases when a subscriber enters a wrong digit for COT two-level activation. Register COTBDIN also increases when digit collection time out occurs too many times. The LN_PERM_SIG_TIME in table OFCENG defines the Digit collection time out value. In either condition, the subscriber receives NACK treatment.

Register COTBDIN release history

Register COTBDIN was introduced in BCS27.

Associated registers

$COTATT = COTFDEN + COTOVFL + COTPFLLR + COTOPTO + COTBDIN + COTCMPL + COTINCM$

Associated logs

The system generates LINE138 when the subscriber receives NACK treatment. The log report identifies the date, time, and type of treatment.

Extension registers

There are no extension registers.

Register COTCMPL

COT complete traces (COTCMPL)

Register COTCMPL counts the number of completed traces.

Register COTCMPL release history

Register COTCMPL was introduced in BCS27.

OM group COT (continued)

Associated registers
$$\text{COTATT} = \text{COTFDEN} + \text{COTOVFL} + \text{COTPFRL} + \text{COTOPTO} + \text{COTBDIN} + \text{COTCMPL} + \text{COTINCM}$$
$$\text{Percentage of successful traces} = \frac{\text{COTCMPL}}{\text{COTATT} - (\text{COTFDEN} + \text{COTOVFL} + \text{COTPFRL} + \text{COTOPTO} + \text{COTBDIN} + \text{COTINCM})} \times 100$$
Associated logs

The system generates LINE150-FULL COT TRACE when the system delivers a complete COT trace. The log report identifies the date, time, subscriber, and trace information.

Extension registers

There are no extension registers.

Register COTDENY

COT universal access denial (COTDENY)

Register COTDENY increases when the system denies the subscriber universal access to the COT feature. This is because the DENYCOT option is active.

Register COTDENY release history

Register COTDENY was introduced in BCS35.

Associated registers

Register COTFDEN increases when the COTDENY increases.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register COTFDEN

COT feature denied (COTFDEN)

Register COTFDEN counts each time a subscriber cannot activate the COT feature.

OM group COT (continued)

The subscriber cannot activate the COT features for one of the following reasons:

- the COT option is not on the line
- the COT option is not enabled in table RESOFC for the office
- access prevents other features on the line

The caller receive NACK or FNAL treatment.

Register COTFDEN release history

Register COTFDEN was introduced in BCS27.

Associated registers

$COTATT = COTFDEN + COTOVFL + COTPFLR + COTOPTO + COTBDIN + COTCMPL + COTINCM$

Associated logs

The system generates LINE138 when the subscriber receives FNAL or NACK treatment. The log report identifies the date, time, and type of treatment.

Extension registers

There are no extension registers.

Register COTINCM

COT incomplete traces (COTINCM)

Register COTINCM counts the number of times the system generates a partial trace.

Register COTINCM release history

Register COTINCM was introduced in BCS27.

Associated registers

$COTATT = COTFDEN + COTOVFL + COTPFLR + COTOPTO + COTBDIN + COTCMPL + COTINCM$

Associated logs

The system generates LINE151-PART COT TRACE when the system delivers only part of a COT trace. The log report identifies the date, time, and reason for failure.

Extension registers

There are no extension registers.

OM group COT (continued)

Register COTOPTO

COT opt out of two-level activation (COTOPTO)

Register COTOPTO counts the number of times a subscriber terminates a phone call. The termination avoids activation of two-level COT.

Register COTOPTO release history

Register COTOPTO was introduced in BCS27.

Associated registers

$COTATT = COTFDEN + COTOVFL + COTPFLR + COTOPTO + COTBDIN + COTCMPL + COTINCM$

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register CTOVFL

COT software resource overflow (CTOVFL)

Register CTOVFL counts the number of times a subscriber cannot activate the COT feature. The subscriber cannot activate COT feature because not enough feature data blocks (FDB) or an incoming memory block (ICMB) is on the line. The caller receives NOSR treatment.

Register CTOVFL release history

Register CTOVFL was introduced in BCS27.

Associated registers

$COTATT = COTFDEN + CTOVFL + COTPFLR + COTOPTO + COTBDIN + COTCMPL + COTINCM$

Associated logs

The system generates LINE 138 when the subscriber receives the NOSR treatment. The log report identifies the date, time, and type of treatment.

Extension registers

There are no extension registers.

Register COTPFLR

COT prompt failure in two-level activation (COTPFLR)

OM group COT (continued)

Register COTPFLLR counts the number of times two-level activation of COT fails. Two-level activation of COT fails because of a failure of the utilities that collect digits during interruptable announcements. A failure can occur because universal tone receivers (UTR), receiver service circuits (RCVR), or ports are not available. If the failure occurs for one of these reasons, the system routes the call to NOSC treatment. If COT fails because feature data blocks (FDB) are not available, the call receives NOSR treatment. If COT fails because connections are not available, the system routes the call to NBLH treatment.

Register COTPFLLR release history

Register COTPFLLR was introduced in BCS27.

Associated registers

$COTATT = COTFDEN + COTOVFL + COTPFLLR + COTOPTO + COTBDIN + COTCMPL + COTINCM$

Associated logs

The system generates LINE138 when the subscriber receives NOSC, NOSR, or NBLH treatment. The log report identifies the date, time, and type of treatment.

Extension registers

There are no extension registers.

Register COTPRCD

COT proceed with two-level activation (COTPRCD)

Register COTPRCD increases when a subscriber dials 1 to continue two-level activation of COT.

Register COTPRCD release history

Register COTPRCD was introduced in BCS27.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

OM group COT (end)

Register COTUNIV

COT universal access attempts (COTUNIV)

Register COTUNIV counts the number of times a universal subscriber attempts to access COT.

Register COTUNIV release history

Register COTUNIV was introduced in BCS35.

Associated registers

COTATT increases when the COTUNIV increases.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

OM group COVMDISK

OM description

Central office voice mail disk statistics (COVMDISK)

The OM group COVMDISK provides statistics on percentage of text and voice used on each disk on a service peripheral module (SPM). The OM group COVMDISK provides these statistics at polling time. Polling time occurs every 5 min.

Release history

The OM group COVMDISK was introduced in BCS35.

Registers

The OM group COVMDISK registers appear on the MAP terminal as follows:

| | | | |
|----------|----------|----------|----------|
| VOICEDSK | TEXTDSK | COVMFL03 | COVMFL04 |
| COVMFL05 | COVMFL06 | COVMFL07 | COVMFL08 |
| COVMFL09 | COVMFL10 | COVMFL11 | COVMFL12 |
| COVMFL13 | COVMFL14 | COVMFL15 | COVMFL16 |
| COVMFL17 | COVMFL18 | COVMFL19 | COVMFL20 |
| COVMFL21 | COVMFL22 | COVMFL23 | COVMFL24 |
| COVMFL25 | COVMFL26 | COVMFL27 | COVMFL28 |
| COVMFL29 | COVMFL30 | COVMFL31 | COVMFL32 |

The OM group COVMDISK does not use the registers COVMFL03 to COVMFL32. The registers are for future expansion, if required.

Group structure

The OM group COVMDISK

Key field:

COVMDISK_OM_KEY

Info field:

There is no Info field

Associated OM groups

There are no associated OM groups.

Associated functional groups

There are no associated functional groups.

OM group COVMDISK (end)

Associated functionality codes

The functionality codes associated with OM group COVMDISK appear in the following table.

| Functionality | Code |
|------------------------------|----------|
| UAE/UNIX Conversant Software | NTXS30AA |

Register TEXTDSK

Text disk usage (TEXTDSK)

The system updates register TEXTDSK every 5 min to record the percentage of text used on each disk on the SPM.

Register TEXTDSK release history

Register TEXTDSK was introduced in BCS35.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Register VOICEDSK

Voice disk usage (VOICEDSK)

The system updates register VOICEDSK every 5 min to record the percentage of voice used on each disk on the SPM.

Register VOICEDSK release history

Register VOICEDSK was introduced in BCS35.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

OM group COVMDSPP

OM description

Central office voice mail digital signal processing ports (COVMDSPP)

The OM group COVMDSPP provides statistics on the maximum number of digital signal processing (DSP) ports in use for each active node. The OM group COVMDSPP provides these statistics during polling time. The system sets these volumes again to zero after the polling is complete. Polling occurs every 5 min.

Release history

The OM group COVMDSPP was introduced in BCS35.

Registers

The OM group COVMDSPP registers appear on the MAP terminal as follows:

| | | | |
|----------|----------|----------|----------|
| MAXPORTS | COVMFL02 | COVMFL03 | COVMFL04 |
| COVMFL05 | COVMFL06 | COVMFL07 | COVMFL08 |
| COVMFL09 | COVMFL10 | COVMFL11 | COVMFL12 |
| COVMFL13 | COVMFL14 | COVMFL15 | COVMFL16 |
| COVMFL17 | COVMFL18 | COVMFL19 | COVMFL20 |
| COVMFL21 | COVMFL22 | COVMFL23 | COVMFL24 |
| COVMFL25 | COVMFL26 | COVMFL27 | COVMFL28 |
| COVMFL29 | COVMFL30 | COVMFL31 | COVMFL32 |

The OM group COVMDSPP does not use the registers COVMFL02 to COVMFL32. These registers are for future expansion, if required.

Group structure

The OM group COVMDSPP

Key field:

COVMDSPP_OM_KEY

Info field:

There is no info field

Associated OM groups

There are no associated OM groups.

Associated operational groups

There are no associated operational groups.

OM group COVMDSPP (end)

Associated functionality codes

The functionality codes associated with OM group COVMDSPP appear in the following table.

| Functionality | Code |
|------------------------------|----------|
| UAE/UNIX Conversant Software | NTXS30AA |

Register MAXPORTS

Maximum ports (MAXPORTS)

Register MAXPORTS counts the maximum number of DSP ports in use at one time for each active node. The count takes place during a 5 min period.

Register MAXPORTS release history

Register MAXPORTS was introduced in BCS35.

Associated registers

There are no associated registers.

Associated logs

There are no associate logs.

OM group COVMFLTY

OM description

Central office voice mail faulty nodes COVMFLTY

The OM group COVMFLTY provides statistics on the number of faulty nodes on the service peripheral module (SPM) at polling time. which occurs every 5 min.

Release history

The OM group COVMFLTY was introduced in BCS35.

Registers

The OM group COVMFLTY registers appear on the MAP terminal as follows:

| | | | |
|----------|----------|----------|----------|
| FLTYSPN | COVMFL02 | COVMFL03 | COVMFL04 |
| COVMFL05 | COVMFL06 | COVMFL07 | COVMFL08 |
| COVMFL09 | COVMFL10 | COVMFL11 | COVMFL12 |
| COVMFL13 | COVMFL14 | COVMFL15 | COVMFL16 |
| COVMFL17 | COVMFL18 | COVMFL19 | COVMFL20 |
| COVMFL21 | COVMFL22 | COVMFL23 | COVMFL24 |
| COVMFL25 | COVMFL26 | COVMFL27 | COVMFL28 |
| COVMFL29 | COVMFL30 | COVMFL31 | COVMFL32 |

The OM group COVMFLTY does not use the registers COVMFL02 to COVMFL32. These registers are for future expansion, if required.

Group structure

OM group COVMFLTY

Key field:

COVMFLTY_OM_KEY

Info field:

There is no info field

Associated OM groups

There are no associated OM groups.

Associated operational groups

There are no associated operational groups.

OM group COVMFLTY (end)

Associated functionality codes

The functionality codes associated with OM group COVMFLTY appear in the following table.

| Functionality | Code |
|------------------------------|----------|
| UAE/UNIX Conversant Software | NTXS30AA |

Register FLTYSPPN

Faulty service peripheral node (FLTYSPPN)

Register FLTYSPPN counts the number of faulty nodes on the SPM at polling time. Polling time occurs every 5 min.

Register FLTYSPPN release history

Register FLTYSPPN was introduced in BCS35.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

OM group COVMISCH

OM description

Central office voice mail T1 channels not in service (COVMISCH)

The OM group COVMISCH provides statistics on the number of T1 channels not in service on the service peripheral module (SPM). The OM group COVMISCH provides statistics at polling time. Polling occurs every 5 min.

Release history

The OM group COVMISCH was introduced in BCS35.

Registers

The OM group COVMISCH registers appears on the MAP terminal as follows:

| | | | |
|----------|----------|----------|----------|
| T1NOTIN | COVMFL02 | COVMFL03 | COVMFL04 |
| COVMFL05 | COVMFL06 | COVMFL07 | COVMFL08 |
| COVMFL09 | COVMFL10 | COVMFL11 | COVMFL12 |
| COVMFL13 | COVMFL14 | COVMFL15 | COVMFL16 |
| COVMFL17 | COVMFL18 | COVMFL19 | COVMFL20 |
| COVMFL21 | COVMFL22 | COVMFL23 | COVMFL24 |
| COVMFL25 | COVMFL26 | COVMFL27 | COVMFL28 |
| COVMFL29 | COVMFL30 | COVMFL31 | COVMFL32 |

Group structure

The OM group COVMISCH provides one tuple for each office.

Key field:

COVMISCH_OM_KEY

Info field:

There is no info field

Associated OM groups

There are no associated OM groups.

Associated functional groups

There are no associated functional groups.

OM group COVMISCH (end)

Associated functionality codes

The functionality codes associated with OM group COVMISCH appear in the following table.

| Functionality | Code |
|------------------------------|----------|
| UAE/UNIX Conversant Software | NTXS30AA |

Register T1NOTIN

T1 channels not in service (T1NOTIN)

Register T1NOTIN counts the number of T1 channels not in service on the SPM at polling time. Polling occurs every 5 min.

Register T1NOTIN release history

Register T1NOTIN was introduced in BCS35.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

OM group COVMISND

OM description

Central office voice mail nodes not in service (COVMISND)

The OM group COVMISND provides statistics on the number of nodes not in service on the service peripheral module (SPM) at polling time. Polling occurs every 5 min.

Release history

The OM group COVMISND was introduced in BCS35.

Registers

The OM group COVMISND registers appear on the MAP terminal as follows:

| | | | |
|----------|----------|----------|----------|
| NODEOUT | COVMFL02 | COVMFL03 | COVMFL04 |
| COVMFL05 | COVMFL06 | COVMFL07 | COVMFL08 |
| COVMFL09 | COVMFL10 | COVMFL11 | COVMFL12 |
| COVMFL13 | COVMFL14 | COVMFL15 | COVMFL16 |
| COVMFL17 | COVMFL18 | COVMFL19 | COVMFL20 |
| COVMFL21 | COVMFL22 | COVMFL23 | COVMFL24 |
| COVMFL25 | COVMFL26 | COVMFL27 | COVMFL28 |
| COVMFL29 | COVMFL30 | COVMFL31 | COVMFL32 |

The OM group COVMISND does not use registers COVMFL02 to COVMFL32. These registers are for future expansion, if required.

Group structure

The OM group COVMISND provides one tuple for each office.

Key field:

COVMISND_OM_KEY

Info field:

There is no info field

Associated OM groups

There are no associated OM groups.

Associated functional groups

There are no associated functional groups.

OM group COVMISND (end)

Associated functionality codes

The functionality codes associated with OM group COVMISND appear in the following table.

| Functionality | Code |
|------------------------------|----------|
| UAE/UNIX Conversant Software | NTXS30AA |

Register NODEOUT

Nodes out of service (NODEOUT)

Register NODEOUT counts the number of nodes that are not in service on the SPM at polling time. Polling occurs every 5 min.

Register NODEOUT release history

Register NODEOUT was introduced in BCS35.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

OM group COVMISPT

OM description

Central office voice mail ports not in service (COVMISPT)

The OM group COVMISPT provides statistics on the number of digital signal processing (DSP) ports not in service on the service peripheral module (SPM). The OM group COVMISPT provides statistics at polling time. Polling occurs every 5 min.

Release history

The OM group COVMISPT was introduced in BCS35.

Registers

The OM group COVMISPT registers appear on the MAP terminal as follows:

| | | | |
|----------|----------|----------|----------|
| DSPNOTIN | COVMFL02 | COVMFL03 | COVMFL04 |
| COVMFL05 | COVMFL06 | COVMFL07 | COVMFL08 |
| COVMFL09 | COVMFL10 | COVMFL11 | COVMFL12 |
| COVMFL13 | COVMFL14 | COVMFL15 | COVMFL16 |
| COVMFL17 | COVMFL18 | COVMFL19 | COVMFL20 |
| COVMFL21 | COVMFL22 | COVMFL23 | COVMFL24 |
| COVMFL25 | COVMFL26 | COVMFL27 | COVMFL28 |
| COVMFL29 | COVMFL30 | COVMFL31 | COVMFL32 |

The registers COVMFL02 to COVMFL32 are not used but are for future expansion, if required.

Group structure

OM group COVMISPT provides one tuple for each office.

Key field:

COVMISPT_OM_KEY

Info field:

There is no info field

Associated OM groups

There are no associated OM groups.

Associated operating groups

There are no associated operating groups.

OM group COVMISPT (end)

Associated functionality codes

The functionality codes associated with OM group COVMISPT appear in the following table.

| Functionality | Code |
|------------------------------|----------|
| UAE/UNIX Conversant Software | NTXS30AA |

Register DSPNOTIN

DSP ports not in service (DSPNOTIN)

Register DSPNOTIN counts the number of DSP ports not in service on the SPM at polling time. Polling occurs every 5 min.

Register DSPNOTIN release history

Register DSPNOTIN was introduced in BCS35.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

OM group COVMT1CH

OM description

Central office voice mail T1 channels (COVMT1CH)

The OM group COVMT1CH provides statistics on the maximum number of T1 channels in use for each active T1 span during polling time. The system resets these values to zero after the polling is complete. Polling occurs every 5 min.

Release history

The OM group COVMT1CH was introduced in BCS35.

Registers

The OM group COVMT1CH registers appear on the MAP terminal as follows:

| | | | |
|----------|----------|----------|----------|
| MAXCHNLS | COVMFL02 | COVMFL03 | COVMFL04 |
| COVMFL05 | COVMFL06 | COVMFL07 | COVMFL08 |
| COVMFL09 | COVMFL10 | COVMFL11 | COVMFL12 |
| COVMFL13 | COVMFL14 | COVMFL15 | COVMFL16 |
| COVMFL17 | COVMFL18 | COVMFL19 | COVMFL20 |
| COVMFL21 | COVMFL22 | COVMFL23 | COVMFL24 |
| COVMFL25 | COVMFL26 | COVMFL27 | COVMFL28 |
| COVMFL29 | COVMFL30 | COVMFL31 | COVMFL32 |

The OM group does not use registers COVMT1CH. The registers COVMFL02 to COVMFL32. These registers are for future expansion, if required.

Group structure

The OM group COVMT1CH provides eight tuples for each office, one for each channel or link.

Key field:

COVMT1CH_OM_KEY

Info field:

There is no info field

Associated OM groups

There are no associated OM groups

Associated operating groups

There are no associated operating groups.

OM group COVMT1CH (end)

Associated functionality codes

The functionality codes associated with OM group COVMT1CH appear in the following table.

| Functionality | Code |
|------------------------------|----------|
| UAE/UNIX Conversant Software | NTXS30AA |

Register MAXCHNLS

Maximum channels (MAXCHNLS)

Register MAXCHNLS counts the maximum number of T1 channels in use for each active T1 span. The count takes place during a 5 min period.

Register MAXCHNLS release history

Register MAXCHNLS was introduced in BCS35.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

OM group CP

OM description

Call processing software resources

CP provides information on the use of call processing software resources such as call condense blocks, call processes, multiblocks, wakeup blocks, and long buffers. CP contains 27 peg registers.

CP is provided for all types of DMS switch offices.

Release history

OM group CP was introduced prior to BCS20.

SN07 (DMS)

Changes were made to the description of register CPLOOVFL for Q00897881.

CSP18/SN05

Extension registers CPLOSZ2, CINITC2, and WAKESZ2 introduced.

GSF031

Register ORIGDENY is pegged in the Generic Services Framework (GSF) environment.

BCS26

Added registers INLBSZ, INLBSZ2, INLBOVFL, and CPLBOOVF.

BCS25

Deleted registers CCBTRU, CPTRU, CPLTRU, OUTBRTU, MULTRU, WAKETRU.

BCS24

Zeroed registers CCBTRU, CPTRU, CPLTRU, OUTBRTU, MULTRU, and WAKETRU, and deleted register CPLLOW.

BCS23

Zeroed register CPLLOW. When the guaranteed dial tone queue is full and dial tone cannot be guaranteed, register ORIGDENY is incremented.

BCS22

Added that register ORIGDENY counts originations ignored by the central control (CC) due to overload.

OM group CP (continued)**BCS21**

Software change to provide usage counts either in CCS or in deci-erlangs.

BCS20

If register ORIGDENY is incremented, a call origination is lost.

Registers

OM group CP registers display on the MAP terminal as follows:

| | | | |
|----------|----------|----------|----------|
| CCBSZ | CCBSZ2 | CCBOVFL | CPSZ |
| CPSZ2 | CPTRAP | CPSUIC | ORIGDENY |
| WAITDENY | CPLSZ | CPLSZ2 | CPLOOVFL |
| CPLPOVFL | CPLOSZ | OUTBSZ | OUTBOVFL |
| MULTSZ | MULTOVFL | WAKESZ | WAKEOVFL |
| CINITC | WINITC | INITDENY | INLBSZ |
| INLBSZ2 | INLBOVFL | CPLBOOVF | CPLOSZ2 |
| CINITC2 | WAKESZ2 | | |

Group structure

OM group CP provides one tuple per office. Each tuple consists of 30 registers.

Key field:

None

Info field:

There are six information fields. The first always has value zero. The remaining five contain the number of CP letters, wakeup blocks, call processes, call condense blocks, and longbuffers that are provisioned for the office.

Two tables must be datafilled: OFCENG and OFCSTD.

The office parameter NCCBS, in table OFCENG, defines the number of call condense blocks.

The office parameter NUMCALLPROCESSES, in table OFCENG, defines the number of call processes.

The office parameter NUMCPWAKE, in table OFCENG, defines the number of wakeup blocks.

OM group CP (continued)

Associated OM groups

CP2 extends OM group CP. It measures the use of extended call control blocks and reflects the maximum number of selected call processing resources in simultaneous use during each OM transfer period.

Associated functional groups

None

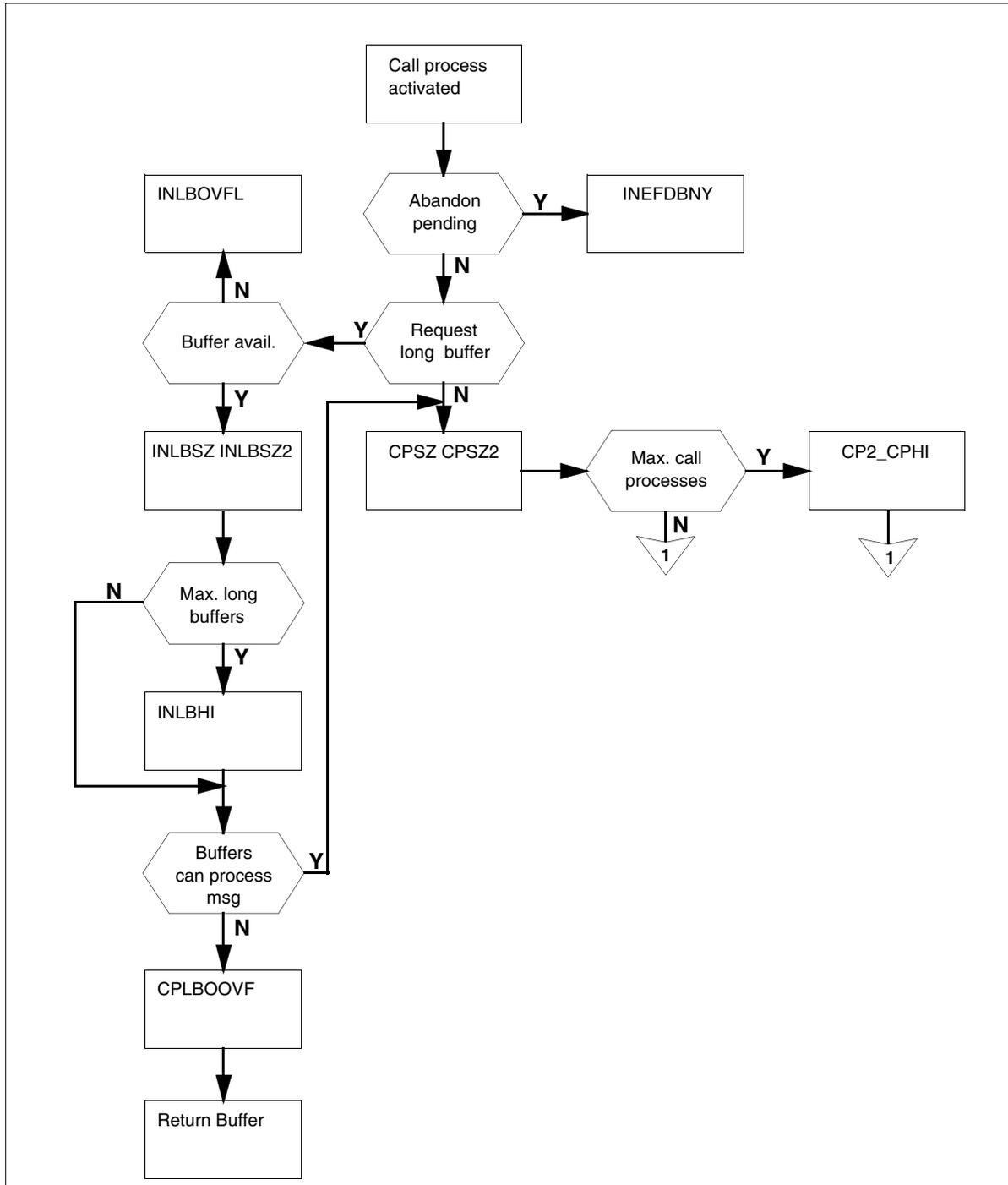
Associated functionality codes

The functionality codes associated with OM group CP are shown in the following table.

| Functionality | Code |
|--|----------|
| Common Basic | NTX001AA |
| International—Call Processing System | NTX485AA |
| International—Common Basic | NTX470AA |
| OMs in Erlangs | NTX664AA |
| Enhanced Real Time Indicator | NTX291AA |
| NonRes NT Support Software | NTX181AA |
| International—Local Basic (UPGR NTX472AA) | NTX472AB |

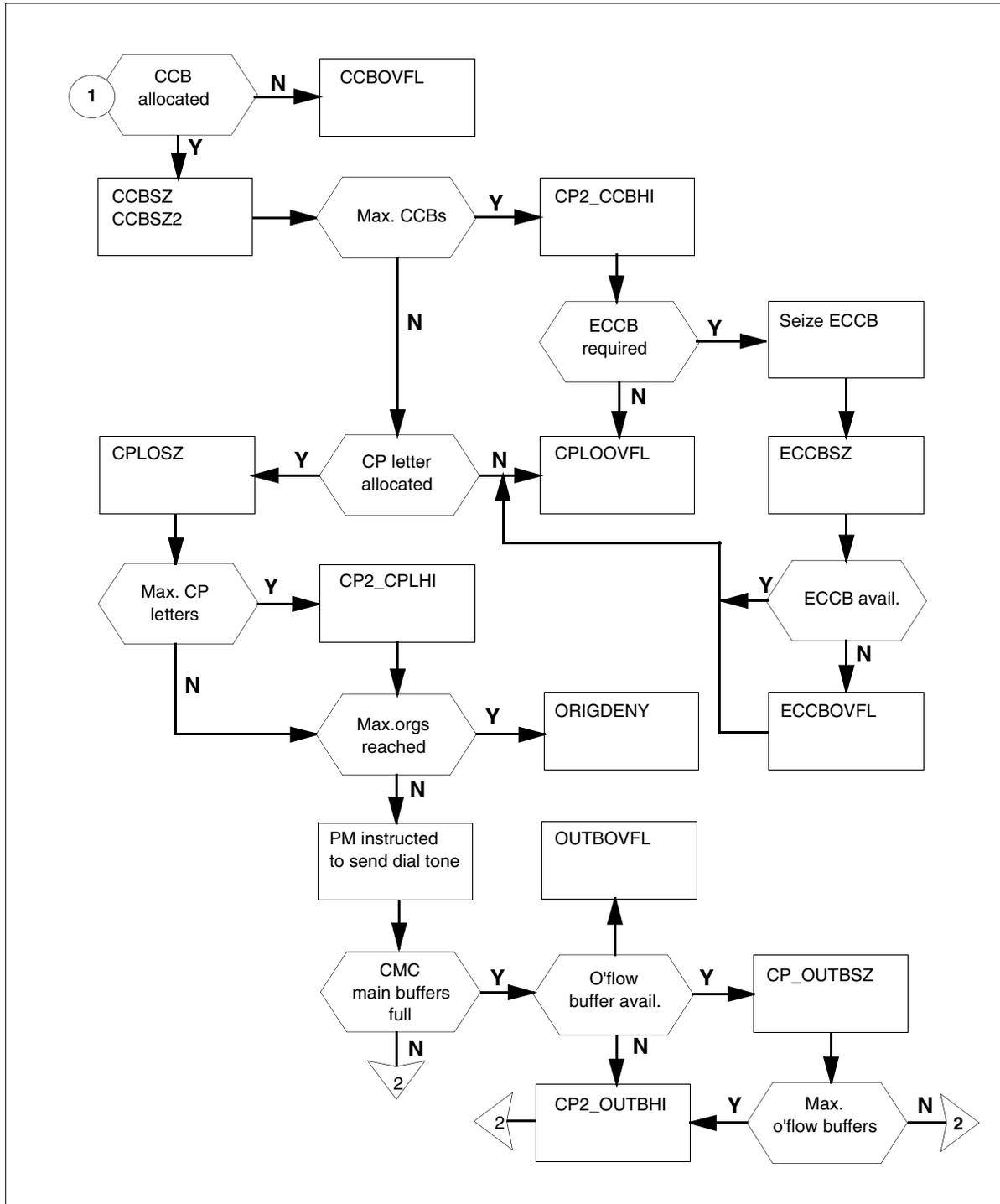
OM group CP (continued)

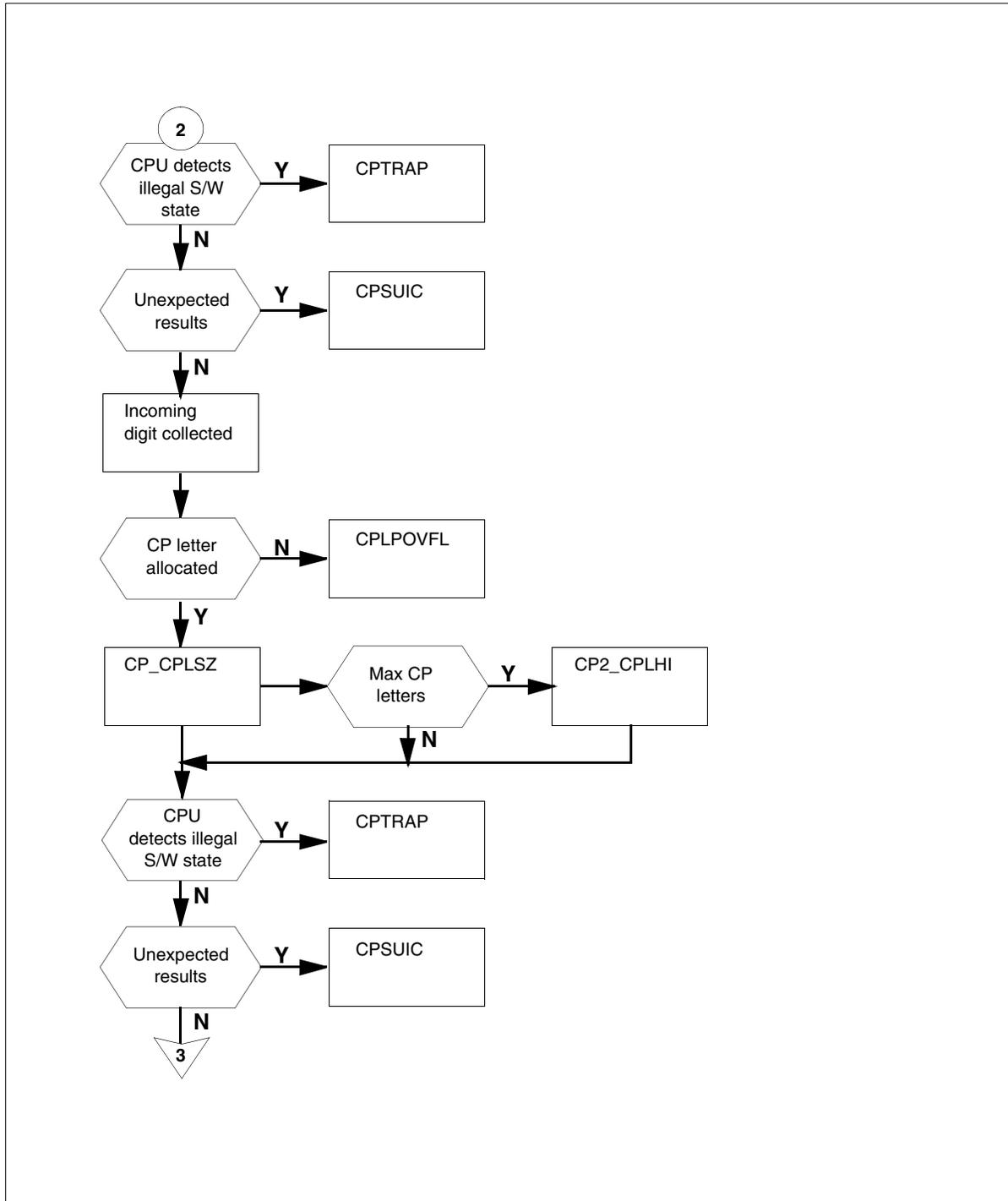
OM group CP registers



OM group CP (continued)

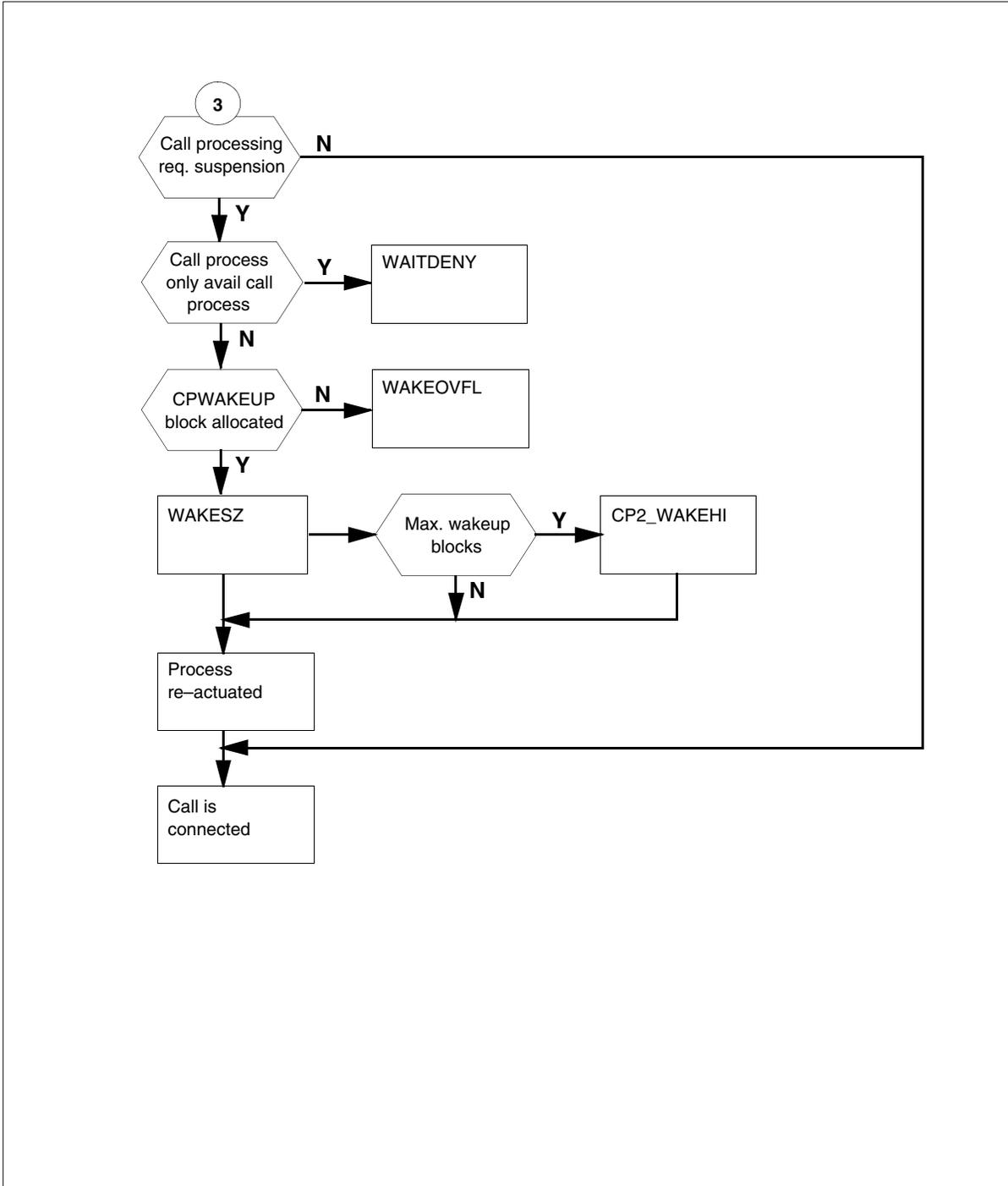
OM group CP registers (continued)



OM group CP (continued)**OM group CP registers (continued)**

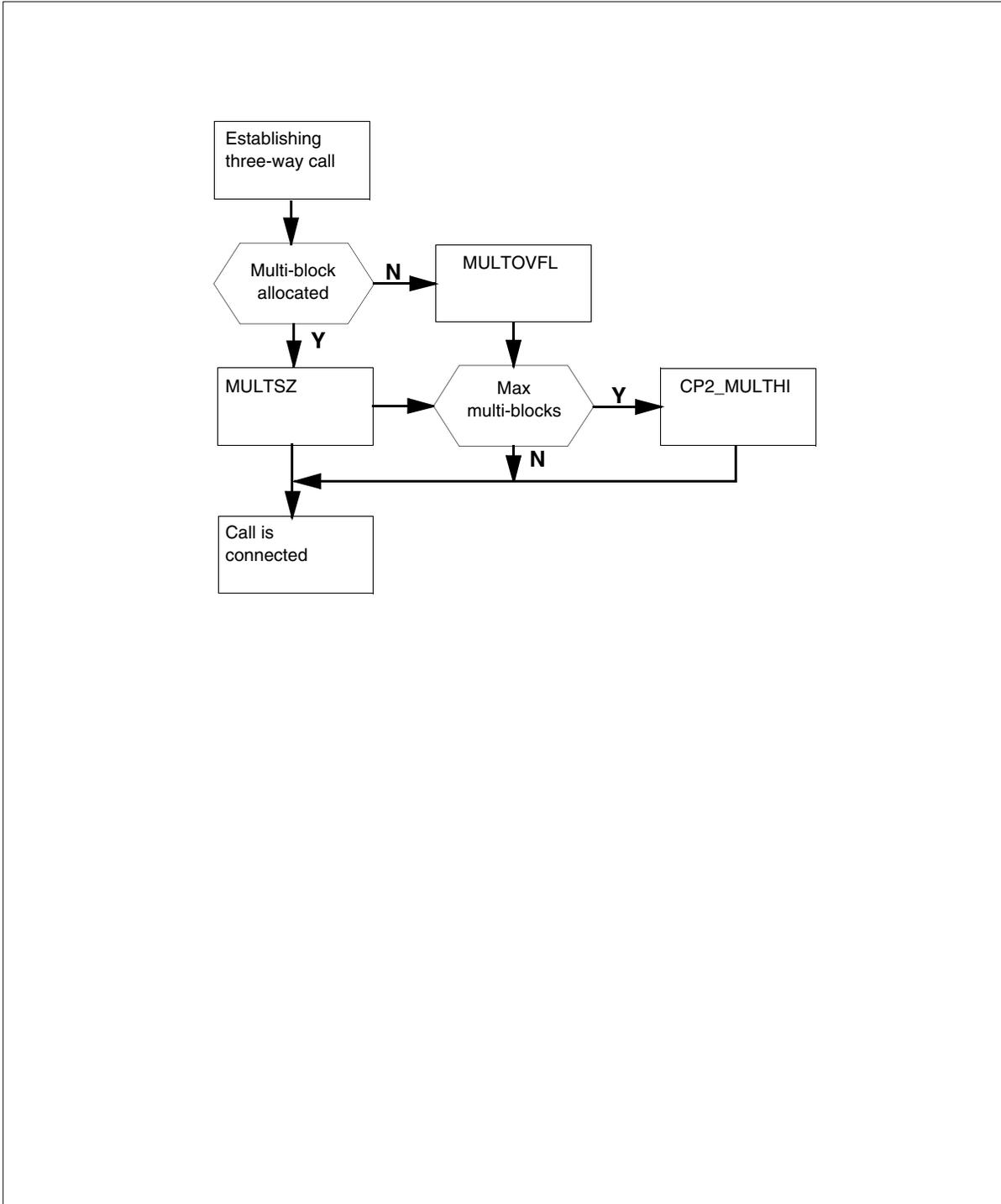
OM group CP (continued)

OM group CP registers (continued)



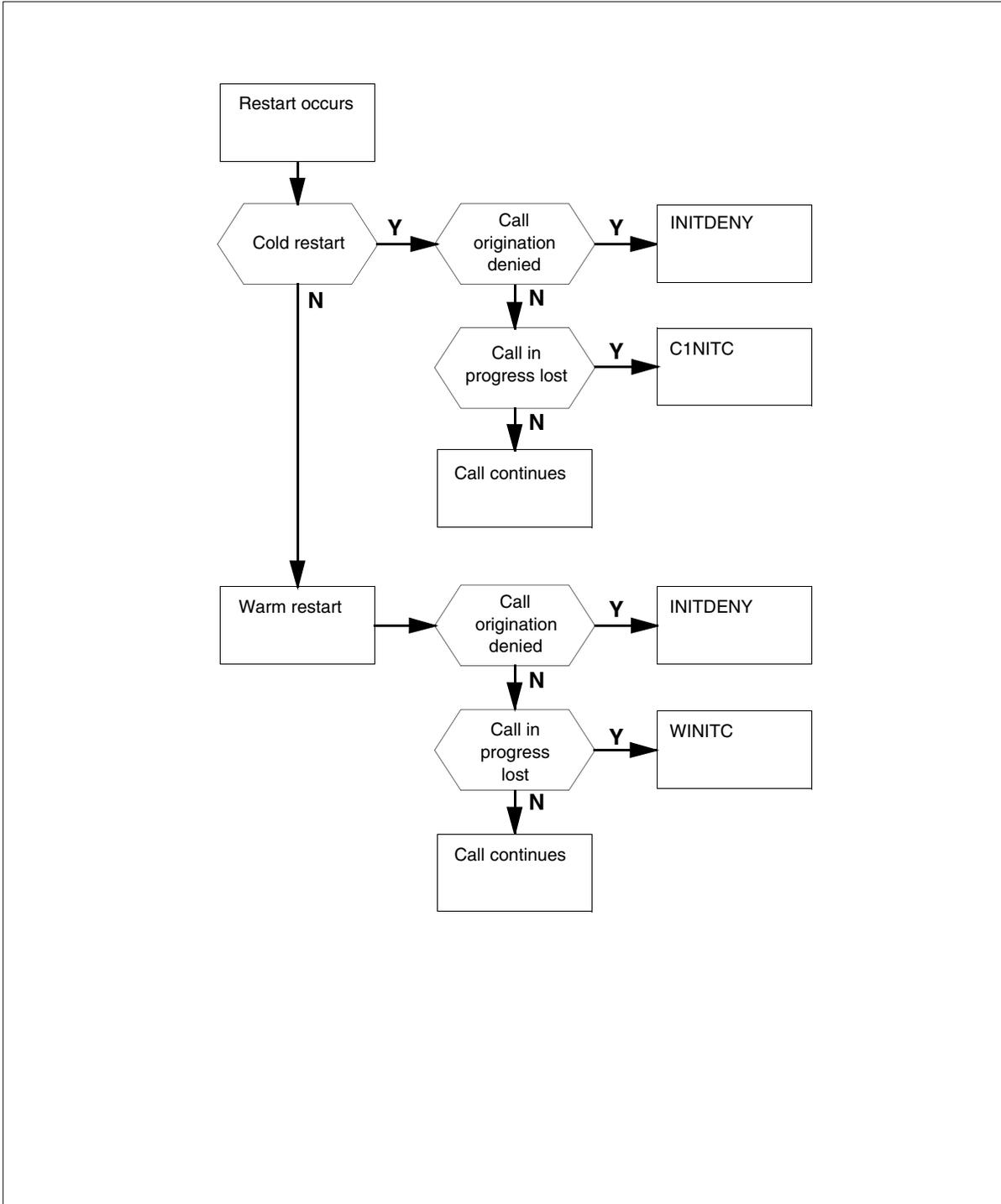
OM group CP (continued)

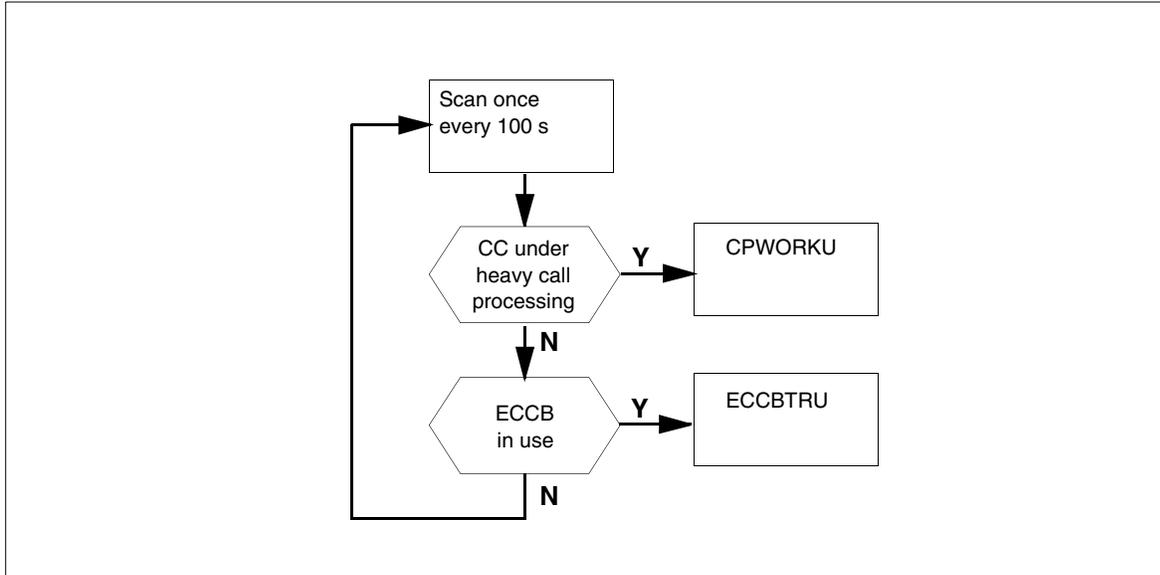
OM group CRegisters: three-way call



OM group CP (continued)

OM group CP registers: cold and warm restarts



OM group CP (continued)**OM group CP usage registers****Register CCBOVFL**

Call condense block overflow

CCBOVFL counts originating messages that are lost because no idle call condense blocks (CCB) are available to which they can be assigned.

Register CCBOVFL release history

CCBOVFL was introduced prior to BCS20.

Associated registers

None

Associated logs

OM2200 is generated when a threshold defined in tables ALARMTAB and OMTHRESH is exceeded.

Register CCBSZ

Call condense block seizures

CCBSZ is incremented when a call condense block is allocated to an originating call.

Register CCBSZ release history

CCBSZ was introduced prior to BCS20.

OM group CP (continued)

Associated registers

OFZ_NIN counts incoming calls.

OFZ_NORIG counts originating calls.

$CP_CCBSZ = OFZ_NIN + OFZ_NORIG$

Associated logs

None

Extension registers

CCBSZ2

Register CINITC

Calls lost cold restart

CINITC counts call condense blocks that were in use at the time of a cold restart. This count is equal to the number of calls that were in progress and lost because of the cold restart.

Register CINITC release history

CINITC was introduced prior to BCS20.

Associated registers

None

Extension registers

CINITC2

Associated logs

CC107 is generated after a system restart.

INIT is generated when a cold initial program load, reload, or warm restart is performed.

Register CPLBOOVF

Long origination denials

CPLBOOVF counts long originations that were denied to reserve long buffers for long progress messages.

Register CPLBOOVF release history

CPLBOOVF was introduced in BCS26.

OM group CP (continued)

Associated registers

None

Associated logs

None

Register CPLOOVFL

Call processing letters overflow originating calls

CPLOOVFL counts originating messages that could not be passed to call processing using a CP letter because the number of letters available did not exceed the number reserved for calls in progress.

The switch allows originations until the number of CP letters used by both Origination and Progress calls exceeds NUMCLETTERS minus ORIGTHRES. The remaining CP letters are reserved for Progress messages.

If this register is being pegged, then the CPU is overloaded. The calling capacity has temporarily been exceeded because of a very high busy hour.

Register CPLOOVFL release history

CPLOOVFL was introduced prior to BCS20.

Associated registers

None

Associated logs

OM2200 is generated when a threshold defined in tables ALARMTAB and OMTHRESH is exceeded.

Register CPLOSZ

Call processing letters seizures originating calls

CPLOSZ counts origination messages that are successfully attached to a call condense block.

Register CPLOSZ release history

CPLOSZ was introduced prior to BCS20.

Associated registers

None

OM group CP (continued)

Extension registers

CLOPSZ2

Associated logs

None

Register CPLPOVFL

Call processing letters overflow existing calls

CPLPOVFL counts attempts to send a progress message to an existing call that fail because no CP letters are available.

If this register is being pegged, then the CPU is overloaded. The calling capacity has temporarily been exceeded because of a very high busy hour. Parameter ORIDTHRES in table OFCENG needs to be examined.

Register CPLPOVFL release history

CPLPOVFL was introduced prior to BCS20.

Associated registers

None

Associated logs

OM2200 is generated when a threshold defined in tables ALARMTAB and OMTHRESH is exceeded.

Register CPLSZ

Call processing letters seizures existing calls

CPLSZ counts seizures of CP letters that carry messages to calls already in the system.

Register CPLSZ release history

CPLSZ was introduced prior to BCS20.

Associated registers

None

Associated logs

None

Extension registers

CPLSZ2

Register CPSUIC

Call process suicide

CPSUIC counts calls that fail during call processing because unexpected results were detected during call processing.

Register CPSUIC release history

CPSUIC was introduced prior to BCS20.

Associated registers

None

Associated logs

NET101 is generated when a receiving peripheral detects an integrity mismatch.

SWER is generated when a software condition affecting normal operation of the DMS switch or its peripherals occurs, or when a manual request from the LOGUTIL level of the MAP terminal for a log trace is made.

AUDT100 is generated when an error in a call process is encountered.

AUDT103 is generated when a call process is destroyed.

AUD395 is generated when a call process stops unexpectedly.

AUD398 is generated when a call process stops unexpectedly.

Register CPSZ

Call process seizures

CPSZ is incremented when a call process is activated, which can occur several times during a call.

Register CPSZ release history

CPSZ was introduced prior to BCS20.

Associated registers

None

Associated logs

None

OM group CP (continued)

Extension registers

CPSZ2

Register CPTRAP

Call process trap

CPTRAP counts calls that fail during call processing because the call processing unit hardware detected illegal software conditions.

Only those traps affecting call processing are counted in CPTRAP.

Register CPTRAP release history

CPTRAP was introduced prior to BCS20.

Associated registers

CPU_TRAPINT counts the number of trap interrupts.

CP_CPTRAP £ CPU_TRAPINT

Associated logs

SWER is generated when a software condition affecting normal operation of the DMS switch or its peripherals occurs, or when a manual request from the LOGUTIL level of the MAP display for a log trace is made.

TRAP is generated when an interruption of normal DMS switch operations occurs because of a software or hardware error condition.

AUDT101 is generated when a problem is encountered in the call condense block.

AUDT103 is generated when a call process is destroyed.

AUDT197 is generated when a call is routed to a missing route list.

CC103 is generated when a TRAP occurs.

CC104 is generated when a fault is detected in a central message controller (CMC).

Register INITDENY

Call originations denied, cold and warm restarts

INITDENY counts line and trunk call originations that are lost during cold and warm restarts.

OM group CP (continued)

Register INITDENY release history

INITDENY was introduced in BCS20.

Associated registers

OFZ_NIN counts incoming calls.

OFZ_NORIG counts originating calls.

The values in OFZ_NIN and OFZ_NORIG are converted into a measure of average call origination volume per unit time. This measure multiplied by the duration of the restart is used to increment INITDENY.

Associated logs

CC107 is generated after a system restart.

Register INLBOVFL

Incoming long buffer overflow

INLBOVFL counts requests for a long buffer for an incoming long message that are unsuccessful because there were no free long buffers in the system.

Register INLBOVFL release history

INLBOVFL was introduced in BCS26.

Associated registers

None

Associated logs

OM2200 is generated when a threshold, as defined in tables ALARMTAB and OMTHRESH, is exceeded.

Register INLBSZ

Incoming long buffer seizure

INLBSZ counts successful requests for a long buffer for an incoming long message.

Register INLBSZ release history

INLBSZ was introduced in BCS26.

Associated registers

None

OM group CP (continued)

Associated logs

None

Extension registers

INLBSZ2

Register MULTOVFL

Multiblock overflow

MULTOVFL counts attempts at three-way calling that fail because no idle multiblock is available.

Register MULTOVFL release history

MULTOVFL was introduced prior to BCS20.

Associated registers

None

Associated logs

OM2200 is generated when a threshold, as defined in tables ALARMTAB and OMTRESH, is exceeded.

Register MULTSZ

Multiblock seizure

MULTSZ counts seizures of a multiblock.

Register MULTSZ release history

MULTSZ was introduced prior to BCS20.

Associated registers

None

Associated logs

None

Register ORIGDENY

Origination denial

ORIGDENY counts originations that are ignored by the CC because they were not serviced within 3 s of arrival.

OM group CP (continued)

Register ORIGDENY release history

ORIGDENY was introduced in BCS20.

GSF031

This register is pegged in the GSF environment.

BCS23

In DMS-100 switch International offices, the ORIGDENY register is incremented when the dial tone queue is full and a dial tone cannot be given to a subscriber.

BCS22

ORIGDENY measures originations ignored by the CC.

BCS20

The incrementing of ORIGDENY implies that a call origination is lost.

Associated registers

None

Associated logs

None

Register OUTBOVFL

Outgoing buffer overflow

OUTBOVFL counts outgoing messages that are lost because no idle outgoing buffer was available.

Register OUTBOVFL release history

OUTBOVFL was introduced prior to BCS20.

Associated registers

None

Associated logs

OM2200 is generated when a threshold, as defined in tables ALARMTAB and OMTHRESH, is exceeded.

Register OUTBSZ

Outgoing buffer seizures

OM group CP (continued)

OUTBSZ counts messages going to peripheral modules that are placed in an outgoing buffer because the CMC through which they are routed is busy.

Register OUTBSZ release history

OUTBSZ was introduced prior to BCS20.

Associated registers

None

Associated logs

None

Register WAITDENEY

Wait denial

WAITDENEY counts calls that are lost because call processing requested a brief suspension and the associated call process was the only one available to process requests for service from other calls. The call is lost.

Register WAITDENEY release history

WAITDENEY was introduced prior to BCS20.

Associated registers

None

Associated logs

None

Register WAKEOVFL

CPWAKEUP block overflow

WAKEOVFL counts unsuccessful CPWAKEUP block seizures.

Register WAKEOVFL release history

WAKEOVFL was introduced prior to BCS20.

Associated registers

None

Associated logs

OM2200 is generated when a threshold condition, as defined in tables ALARMTAB and OMTHRESH, is exceeded.

Register WAKESZ

CPWAKEUP block seizure

WAKESZ counts CPWAKEUP block seizures.

Register WAKESZ release history

WAKESZ was introduced prior to BCS20.

Associated registers

None

Extension registers

WAKESZ2

Associated logs

None

Register WINITC

Calls lost warm restart

WINITC counts calls in progress that were lost because of a warm restart. Following a restart, a short period of time may elapse before the register recognizes how many calls were lost.

Register WINITC release history

WINITC was introduced prior to BCS20.

Associated registers

None

Associated logs

CC107 is generated after a system restart.

INIT is generated when a cold initial program load, reload, or warm restart is performed.

SOS100 is generated when a DUMP command fails.

SWCT103 is generated when a switch of activity (SWACT) step fails to complete successfully.

OM group CP2

OM description

Call processing software resources extension (CP2)

The OM group CP2 contains 11 peg registers and two usage registers that extend group CP. The CP2 provides additional information on call processing software resources. This OM group provides information on the use of extended call condense blocks (ECCB). The CP2 contains the high watermark OMs for call processing software resources.

High watermark registers CPLHI, CCBHI, CPHI, OUTBHI, MULTHI, WAKEHI, and INLBHI count the following call processing software resources:

- call processing letters
- call condense blocks
- call processes
- outgoing buffers
- multi-blocks
- wakeup-service blocks
- long buffers

These registers count the preceding software resources if these resources are in use at the same time during the previous OM transfer period. You can use these registers to verify and adjust the engineered quantities of the resources.

All types of DMS switch offices can use CP2.

The scan rate for usage registers is 100 s.

Release history

The OM group CP2 was introduced before BCS20.

CSP18/SN05

Made changes due to CR Q00271653. Removed references to the following office parameters

- CPSTATUS_ON
- NUMECCBS
- NMULTIBLKS

OM group CP2 (continued)

- NUMLONGBUFFERS
- NUMOUTBUFFS

Added the following extension registers:

- CCBHI2
- ECCBSZ2

GSF031

Register INEFDENY increases in the Generic Services Framework (GSF) environment.

BCS29

Register INEFDENY increases in DMS-250 switch offices by the three-message toss.

BCS26

Register INLBHI was introduced in BCS26.

BCS25

Register OVRLD was introduced in BCS25.

BCS23

Registers CPLHI, CCBHI, CPHI, OUTBHI, MULTHI, and WAKEHI were introduced in BCS23.

BCS22

Register INEFDENY was introduced in BCS22.

BCS21

Software changes in BCS21 provide use counts in centum call seconds (CCS) or deci-erlangs. Register CPWORKU was introduced in BCS21.

Registers

The OM group CP2 registers appear on the MAP terminal as follows:

| | | | |
|---------|----------|----------|---------|
| ECCBSZ | ECCBSZ2 | ECCBOVFL | ECCBTRU |
| CPWORKU | INEFDENY | CPLHI | CCBHI |
| CCBHI2 | CPHI | OUTBHI | MULTHI |
| WAKEHI | OVRLD | INLBHI | |

OM group CP2 (continued)

Group structure

OM group CP2 provides one tuple for each office.

Key field:

There is no key field.

Info field:

There are two information fields. The first field value is 0. The second field is the number of extended callcontrol blocks for the office.

You must make entries in the following three tables: OFCENG, OFCSTD, and OFCVAR.

The office parameter NCCBS in table OFCENG defines the number of call condense blocks.

The office parameter NUMCALLPROCESSES in table OFCENG defines the number of call processes.

The office parameter ORIGTHRES in table OFCENG defines the maximum number of CP letters that the system can use to serve originations.

The office parameter NUMCPWAKE in table OFCENG defines the number of wakeup-service blocks.

Associated OM groups

The OM group CP records the use of call processing software resources. These resources include call condense blocks, call processes, CP letters, multi-blocks, wakeup-service blocks, and long buffers.

Associated functional groups

There are no associated functional groups.

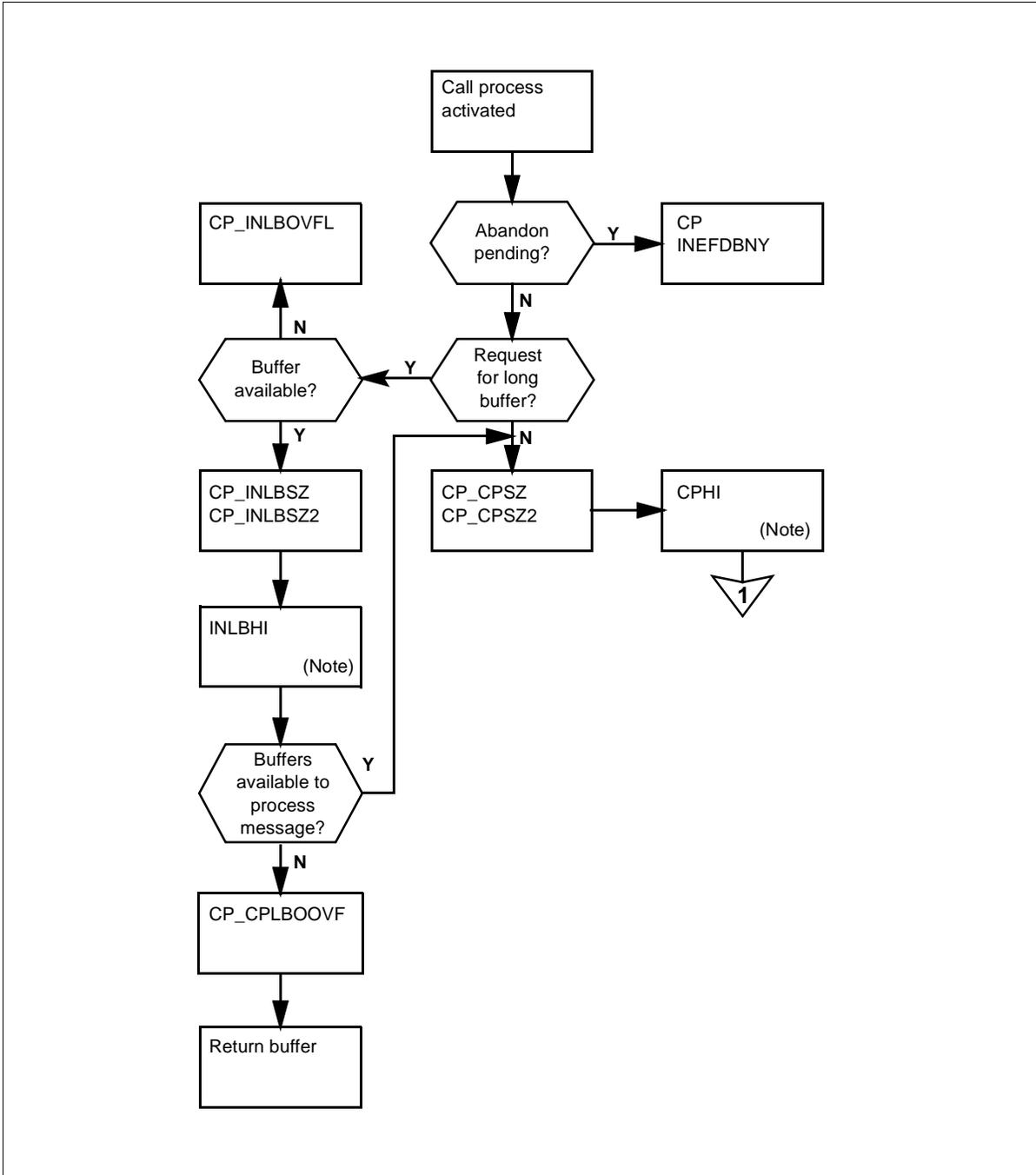
Associated functionality codes

The associated functionality codes for the OM group CP2 appear in the following table.

| Functionality | Code |
|---------------|----------|
| Common Basic | NTX001AA |

OM group CP2 (continued)

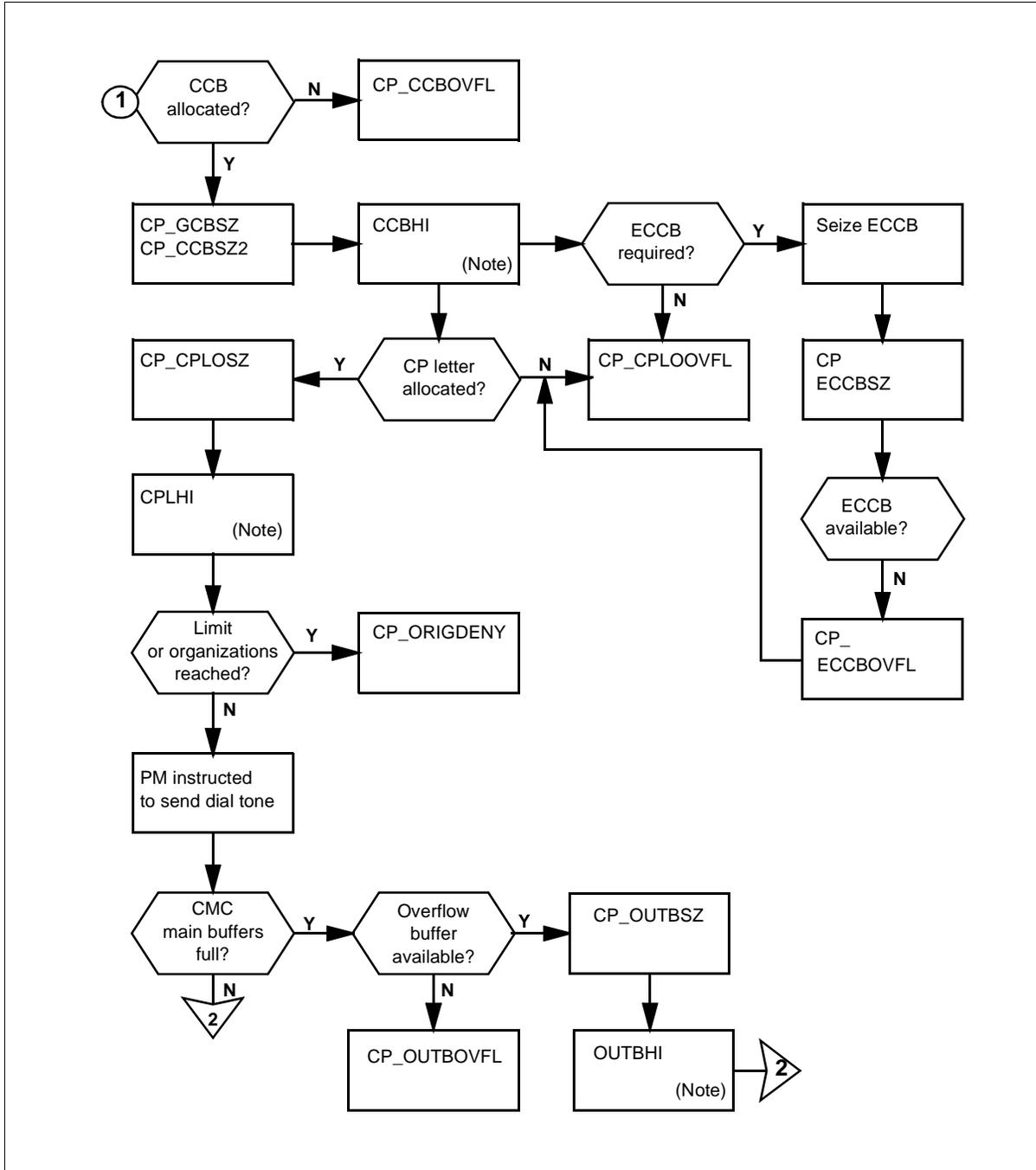
OM group CP2 registers



Note: Refer to the figure OM group CP2 registers: high watermarks.

OM group CP2 (continued)

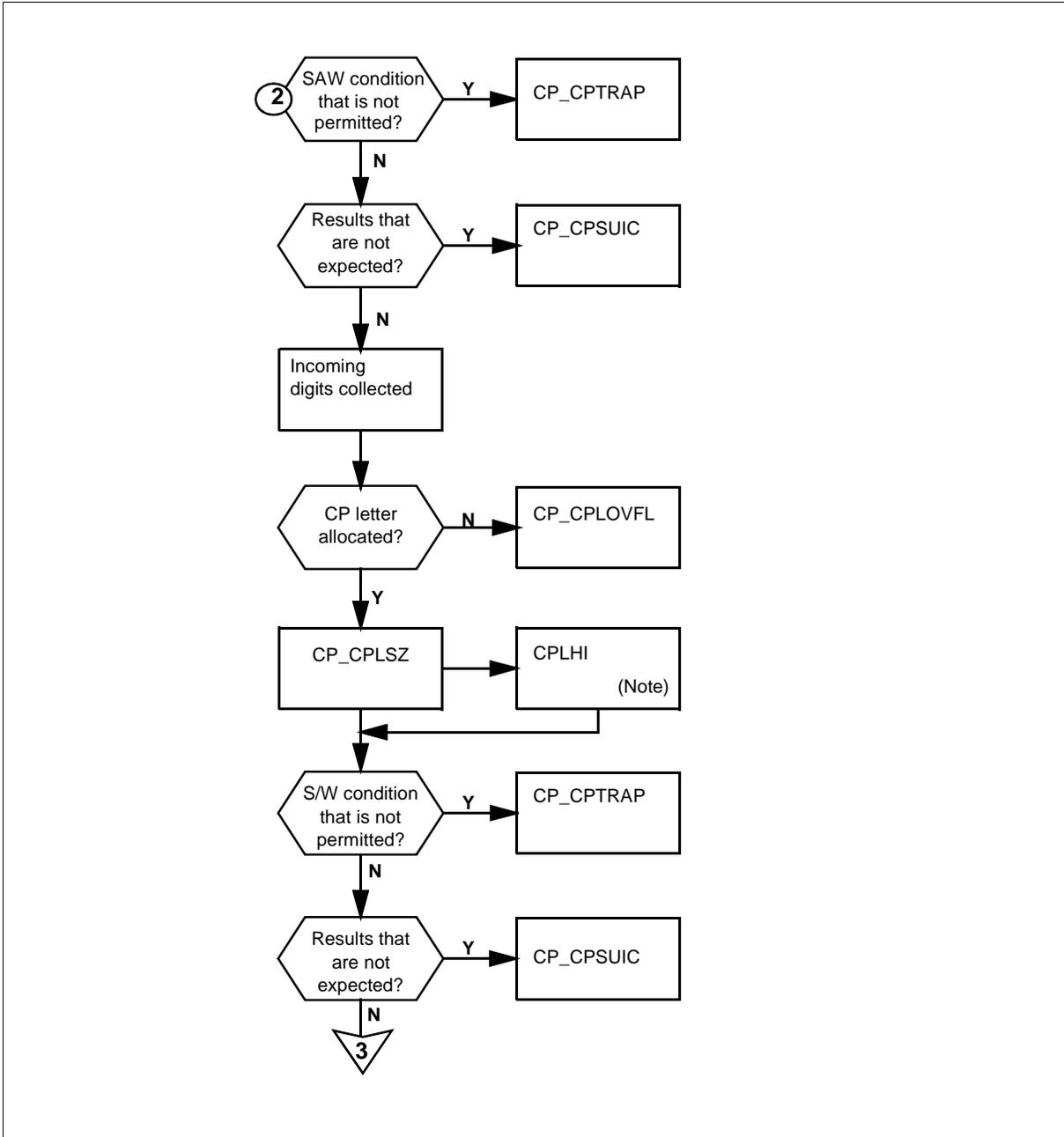
OM group CP2 registers (continued)



Note: Refer to the figure OM group CP2 registers: high watermarks.

OM group CP2 (continued)

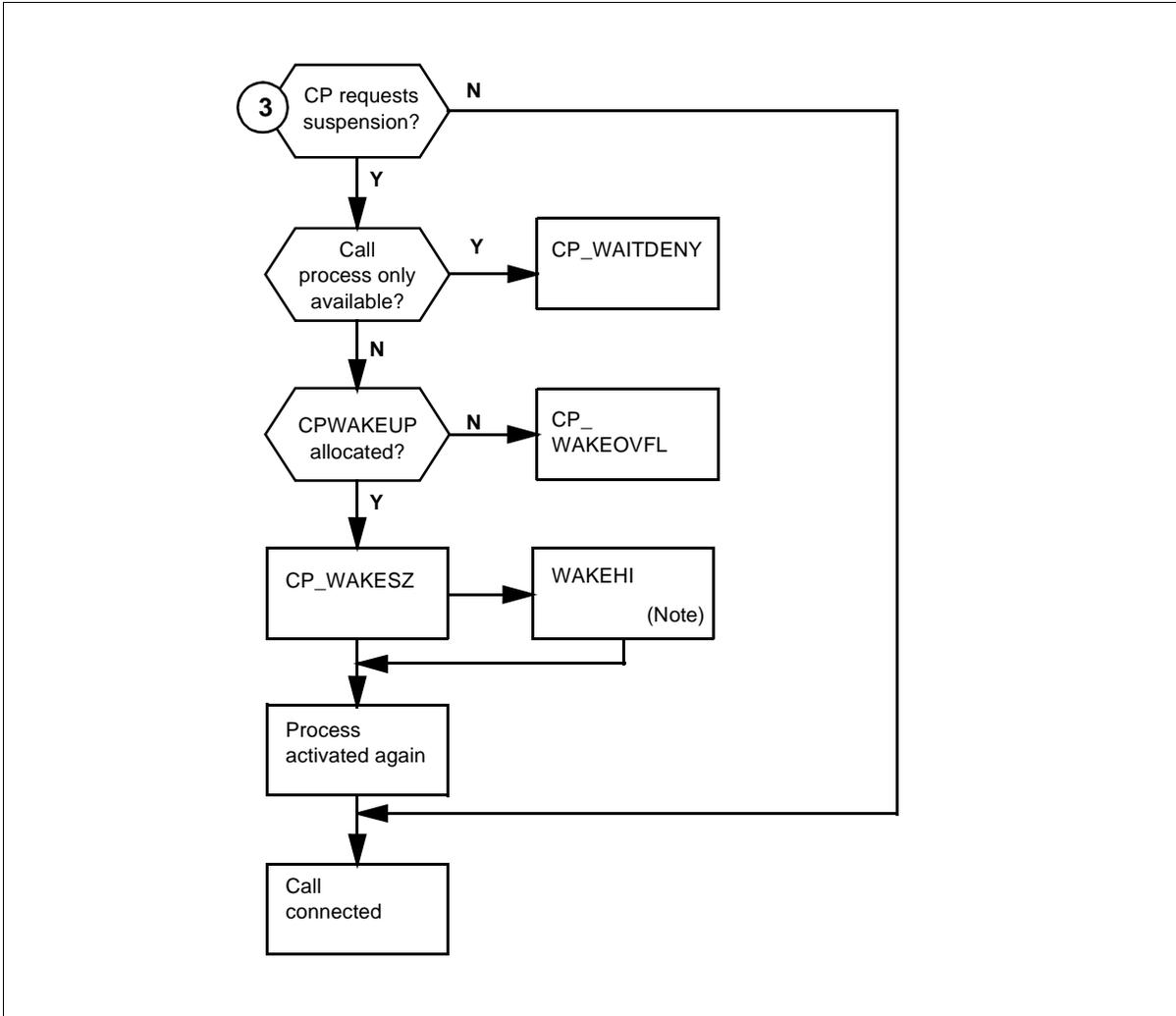
OM group CP2 registers (continued)



Note: Refer to the figure OM group CP2 registers: high watermarks

OM group CP2 (continued)

OM group CP2 registers (continued)

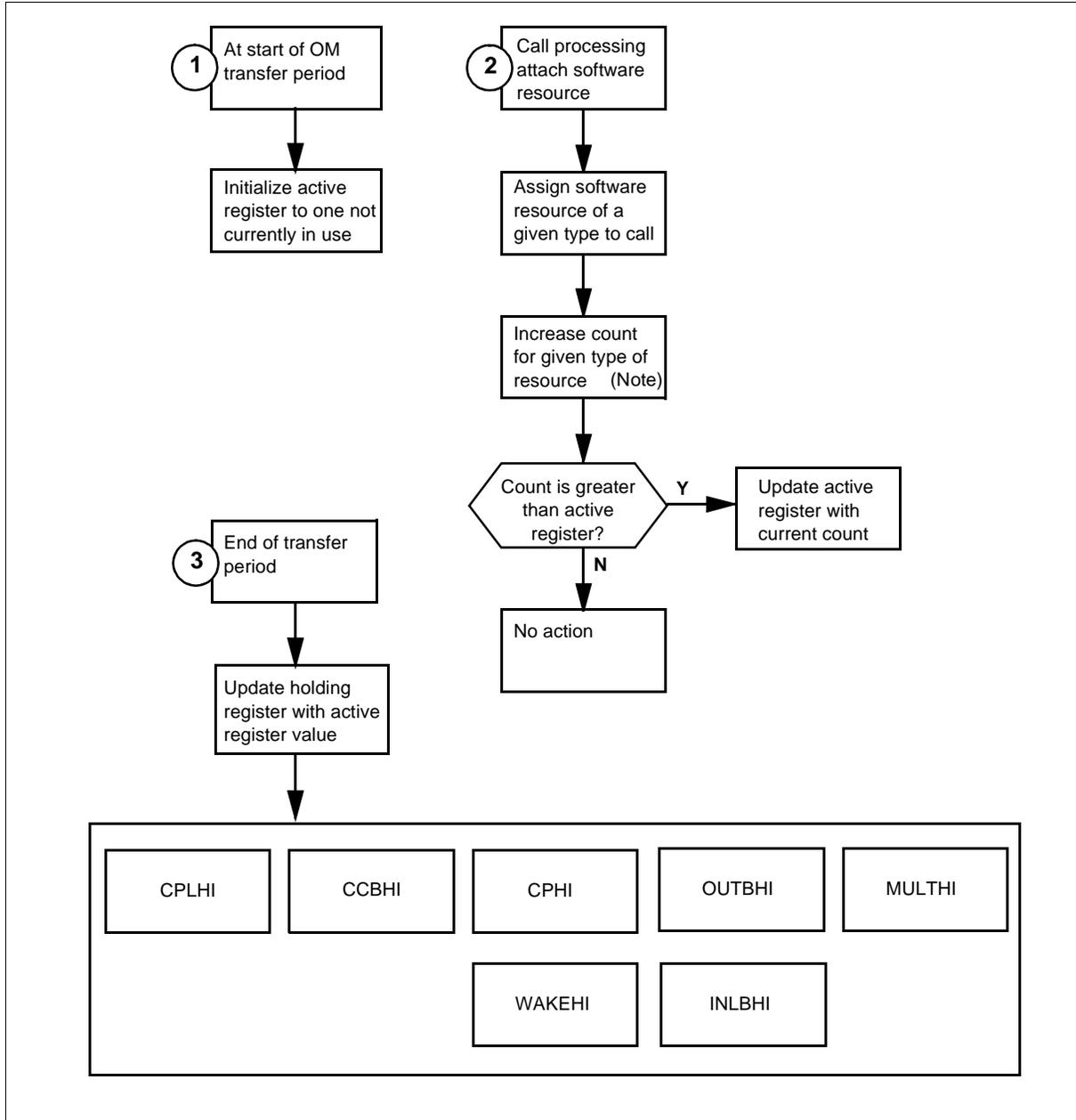


Note: Refer to the figure OM group CP2 registers: high watermarks.

The high watermarks appear in the following flowchart.

OM group CP2 (continued)

OM group CP2 registers: high watermarks



Note: The count decreases when a software resource release occurs.

Register CCBHI

Call condense block high watermark (CCBHI)

OM group CP2 (continued)

Register CCBHI reflects the maximum number of CCBs in use at the same time during the previous OM transfer period. This OM transfer period is 15 or 30 min. To predict peak use correctly, you must gather high watermarks for the busiest hours of the busiest days of the year. Follow the High Day Busy Hour or the Extreme Value Engineering method. Use this data to perform calculations and to adjust the number of CCBs. These adjustments make sure that the CCBs are never more than 80% busy during peak use periods.

At the start of each transfer period, the system initializes the active register to the number of CCBs currently in use. The system updates the active register continuously during the transfer period. The system updates this register when the number of blocks currently in use is greater than the value recorded at an earlier period of time.

At the end of the transfer period, the system transfers the active register value to the holding register (CCBHI). The active register value remains in the CCBHI until the system writes a new value. The system writes this value at the end of the next transfer period. The transfer period is 15 or 30 min.

To predict peak use, gather the maximum value of all the high watermarks from each transfer period during the busiest days of the year. Make sure that you add an additional amount to this value so that software resource use during peak periods does not exceed 80%. Enter the calculated value in office parameter NCCBS in table OFCENG.

Register CCBHI release history

Register CCBHI was introduced in BCS23.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

Register CCBHI2 is an extension register.

Register CPHI

Call processes high watermark (CPHI)

Register CPHI reflects the maximum number of call processes in use at the same time during the previous OM transfer period. The OM transfer period is 15 or 30 min. To predict peak use, correctly gather the high watermarks for the busiest hours of the busiest days of the year. Follow the High Day Busy

OM group CP2 (continued)

Hour or the Extreme Value Engineering method. Use this data to perform calculations and to adjust the number of call processes. These adjustments make sure that the call processes are never more than 80% used during the peak use periods.

At the start of each transfer period, the system initializes the active register to the number of call processes currently in use. The system updates the active register continuously during the transfer period. The system updates the active register when the number of call processes that are currently in use exceeds the previously recorded value.

At the end of the transfer period (15 or 30 min), the active register value is transferred to the holding register (CPHI), where it is retained without change until the system writes a new value. The system writes over a new value at the end of the next transfer period.

To predict correct peak use, take the maximum value of all high watermarks from each transfer period during the busiest days of the year. Calculate an addition to the maximum value to make sure of software resource use is not greater than the target 80% during peak use periods. Enter the calculated value in office parameter NUMCALLPROCESS in table OFCENG.

Register CPHI release history

CPHI was introduced in BCS23.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Register CPLHI

Call processing letters high watermark

Register CPLHI reflects the maximum number of call processing letters in simultaneous use during the previous OM transfer period. The OM transfer period is 15 or 30 min. To predict peak use, gather high watermarks for the busiest hours of the busiest days of the year. Follow the High Day Busy Hour or the Extreme Value Engineering method. Use this data to perform calculations to adjust call processing letters. Adjust the call processing letters to make sure that the letters are never more than 80% busy during peak use periods.

OM group CP2 (continued)

At the start of each transfer period, the system initializes the active register to the number of call processing letters currently in use. The system updates the active register continuously during the transfer period. The system updates the active register when the number of call processing letters currently in use is greater than the previously recorded value.

At the end of the transfer period, the system transfers the active register value to the holding register (CPLHI). The active value register remains in the CPLHI without change until the system writes over the value. The system writes over the value at the end of the next transfer period.

To predict correct peak use, take the maximum value of all high watermarks from each transfer period during busiest days of year. Add an additional calculated amount to this value. This addition makes sure that the system does not exceed the target 80% use of software resources during peak use periods. Software parameter NUMCPLETTERS sets the calculated amount.

You can use register CPLHI to indicate not enough CP letters.

Register CPLHI release history

CPLHI was introduced in BCS23.

Associated registers

Register CP_CPLPOVFL counts failed attempts to send a progress message to a current call. The attempts fail because idle CP letters are not available. Denial of CP letters to calls in progress can cause serious traffic degradation in the office.

Register CP_CPLOOVFL counts messages that the system cannot pass to call processing through the originating buffers. The buffers associate with peripheral modules in the sequence given. The system cannot pass these messages to call processing with a CP letter. This condition occurs because the number of letters available is not greater than the number reserved for calls in progress.

Associated logs

There are no associated logs.

Register CPWORKU

Call processing use (CPWORKU)

Register CPWORKU is a usage register. The system scans the scheduler in the central control (CC) every 100 s. This register records the scheduler state. Use

OM group CP2 (continued)

the count in CPWORKU to measure the amount of time that the CC undergoes heavy call processing.

Register CPWORKU release history

CPWORKU was introduced in BCS21.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Register ECCBOVFL

Extended call control block unsuccessful attempts (ECCBOVFL)

Register ECCBOVFL counts failed requests for an ECCB. The requests fail because the system does not have enough software resources.

Register ECCBOVFL release history

ECCBOVFL was introduced before BCS20.

GL04

The DMS-100G switch does not increment ECCBOVFL.

Associated registers

There are no associated registers.

Associated logs

The system generates LINE138 if the system routes a call to a treatment after the call is call processing busy.

The system generates TRK138 if the system routes a call to a treatment after the call is call processing busy.

Register ECCBSZ

Extended call control blocks successful seizures (ECCBSZ)

Register ECCBSZ counts ECCBs that the system seizes.

Register ECCBSZ release history

ECCBSZ was introduced before BCS20.

OM group CP2 (continued)

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

Register ECCBSZ2 is an extension register.

Register ECCBTRU

Extended call control block usage (ECCBTRU)

Register ECCBTRU is a usage register. The system scans the ECCBs every 100s and register ECCBTRU records if these blocks are in use.

Register ECCBTRU release history

ECCBTRU was introduced before BCS20.

BCS21

Software changed in BCS21 to provide use counts in CCS or in deci-erlangs.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Register INEFDENY

Ineffective deny (INEFDENY)

Register INEFDENY counts origination and abandon pairs that the central control (CC) ignores. The CC ignores the pairs because the pairs were not serviced in 0.5 s of the time origination arrived in the CC.

In DMS-250 switch offices, three messages associate with a CCB on the start queue. Register INEFDENY increases by the three-message toss. If message 1 is an origination and message 3 is an abandon or clear forward, the system ignores the origination. Register INEFDENY increases. If message 1 is an origination and message 2 is an abandon or clear forward and message 3 is not an origination, the system ignores the origination. Register INEFDENY increases.

OM group CP2 (continued)

Register INEFDENY release history

Register INEFDENY was introduced in BCS22.

GSF031

Register INEFDENY was added to GSF031.

The system pegs this register when two or three message toss overload controls toss messages.

BCS29

Register INEFDENY was added in BCS29 to increase by the three-message toss in DMS-250 switch offices.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Register INLBHI

Long buffer high watermark (INLBHI)

Register INLBHI reflects the maximum number of long buffers in use at the same time during the previous OM transfer period. The OM transfer period is 15 or 30 min. To predict peak usage correctly, gather high watermarks for the busiest hours of the busiest days of the year. Follow the High Day Busy Hour or the Extreme Value Engineering method. Use this data to perform calculations and to adjust the number of CCBs. These adjustments make sure that the CCBs are never more than 80% busy during peak use periods.

At the start of each transfer period, the system initializes the active register to the number of long buffers currently in use. The system updates the active register continuously during the transfer period. The system updates the registers when the number of long buffers currently in use is greater than the previously recorded value.

At the end of the transfer period, the system transfers the active register value to the holding register (INLBHI). The active register value remains in the CCBHI until the system writes a new value at the end of the next transfer period.

To predict peak use, gather the maximum value of all the high watermarks from each transfer period during the busiest days of the year. Make sure that you add an additional amount to this value so that software resource use during

OM group CP2 (continued)

peak periods does not exceed 80%. Enter the calculated value in office parameter NUMLONGBUFFERS in table OFCENG.

Register INLBHI release history

Register INLBHI was introduced in BCS26.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Register MULTHI

Multiblock high watermark (MULTHI)

Register MULTHI reflects the maximum number of multi-blocks in use at the same time during the previous OM transfer period. This OM transfer period is 15 or 30 min. To predict peak use correctly, you must gather high watermarks for the busiest hours of the busiest days of the year. Follow the High Day Busy Hour or the Extreme Value Engineering method. Use this data to perform calculations and to adjust the number of multi-blocks. These adjustments make sure that the multi-blocks are never more than 80% busy during peak use periods.

At the start of each transfer period, the system initializes the active register to the number of multi-blocks currently in use. The system updates the active register continuously during the transfer period. The system updates this register when the number of multi-blocks currently in use is greater than the value recorded at an earlier period of time

At the end of the transfer period, the system transfers the active register value to the holding register (MULTHI). The active register value remains in the MULTHI until the system writes a new value. The system writes this value at the end of the next transfer period. The transfer period is 15 or 30 min.

To predict peak use, gather the maximum value of all the high watermarks from each transfer period during the busiest days of the year. Make sure that you add an additional amount to this value so that software resource use during peak periods does not exceed 80%. Enter the calculated in office parameter NMULTIBLKS in table OFCENG.

Register MULTHI was introduced in BCS23.

OM group CP2 (continued)

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Register OUTBHI

Outgoing buffer high watermark (OUTBHI)

Register OUTBHI reflects the maximum number of outgoing buffers in use at the same time during the previous OM transfer period. This OM transfer period is 15 or 30 min. To predict peak use correctly, you must gather high watermarks for the busiest hours of the busiest days of the year. Follow the High Day Busy Hour or the Extreme Value Engineering method. Use this data to perform calculations and to adjust the number of outgoing buffers. These adjustments make sure that the multi-blocks are never more than 80% busy during peak use periods.

At the start of each transfer period, the system initializes the active register to the number of outgoing buffers currently in use. The system updates the active register continuously during the transfer period. The system updates this register when the number of outgoing buffers currently in use is greater than the value recorded at an earlier period of time

At the end of the transfer period, the system transfers the active register value to the holding register (OUTBHI). The active register value remains in the OUTBHI until the system writes a new value. The system writes this value at the end of the next transfer period. The transfer period is 15 or 30 min.

To predict peak use, gather the maximum value of all the high watermarks from each transfer period during the busiest days of the year. Make sure that you add an additional amount to this value so that software resource use during peak periods does not exceed 80%. Enter the calculated value in office parameter NUMOUTBUFFS in table OFCENG.

High use of outgoing buffers can cause central message controller (CMC) congestion or out-of-service states.

Register OUTBHI release history

Register OUTBHI was introduced in BCS23.

Associated registers

There are no associated registers.

OM group CP2 (continued)

Associated logs

There are no associated logs.

Register OVRLD

Central control overload (OVRLD)

Register OVRLD counts the number of minutes during which CC overload controls were active during the last OM transfer period. If the OVRLD field is set to on, this register increases every minute by CPSTATUS. You set the OVRLD field to on at the CPSTATUS display at the MAP terminal or on the CPSTAT output.

Register OVRLD release history

Register OVRLD was introduced in BCS25.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Register WAKEHI

Wakeup block high watermark (WAKEHI)

Register WAKEHI reflects the maximum number of wakeup-service blocks in use at the same time during the previous OM transfer period. This OM transfer period is 15 or 30 min. To predict peak use correctly, you must gather high watermarks for the busiest hours of the busiest days of the year. Follow the High Day Busy Hour or the Extreme Value Engineering method. Use this data to perform calculations and to adjust the number of outgoing buffers. These adjustments make sure that the multi-blocks are never more than 80% busy during peak use periods.

At the start of each transfer period, the system initializes the active register to the number of wakeup-service blocks currently in use. The system updates the active register continuously during the transfer period. The system updates this register when the number of wakeup-service blocks currently in use is greater than the value previously recorded.

At the end of the transfer period, the system transfers the active register value to the holding register (WAKEHI). The active register value remains in the WAKEHI until the system writes a new value. The system writes this value at the end of the next transfer period. The transfer period is 15 or 30 min.

OM group CP2 (end)

To predict peak use, gather the maximum value of all the high watermarks from each transfer period during the busiest days of the year. Make sure that you add an additional amount to this value so that software resource use during peak periods does not exceed 80%. Enter the calculated value in office parameter NUMCPWAKE in table OFCENG.

Register WAKEHI release history

Register WAKEHI was introduced in BCS23.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

OM group CPICG

OM description

Call progress indication for customer groups (CPICG)

The OM group CPICG counts calls that are completely inside ISDN and calls for which only one party is inside ISDN.

The OM group CPICG registers count calls when:

- both originator and terminator are ISDN terminals
- the originator is an ISDN terminal and the terminator is not an ISDN terminal
- the originator is not an ISDN terminal, the terminator is an ISDN terminal, and both terminals are on the same node
- the originator or terminator is an ISDN terminal and the other end is not on the ISDN node
- the call originates from an ISDN terminal and sent to a non-ISDN terminal in the same node. The system redirects the call to an ISDN terminal

Release history

The OM group CPICG was introduced in BCS23.

Registers

The OM group CPICG registers appear on the MAP terminal as follows:

| | | | |
|-----------|----------|----------|---------|
| EENOTISN | DENOTISN | ORNOTISN | RTRNISN |
| INTRASISN | | | |

Group structure

The OM group CPICG provides one tuple for each customer group.

Key field:

IBNG_INDEX in table CUSTHEAD.

Info field:

OMIBNGINFO is the customer group name entered in table CUSTHEAD.

OM group CPICG (continued)

Table CUSTHEAD is required for translations. Table CUSTHEAD lists information for each customer group. The information contains;

- the customer or feature names for blocks of data entered in table IBNXLA
- the name for the block of data to specify digit collection, entered in table DIGCOL

Associated OM groups

The OM group BCAPCG collects the operational measurements that relate to bearer capability (BC) for each customer group.

Associated operational groups

The integrated services digital network (ISDN) functional group associates with the OM group CPICG

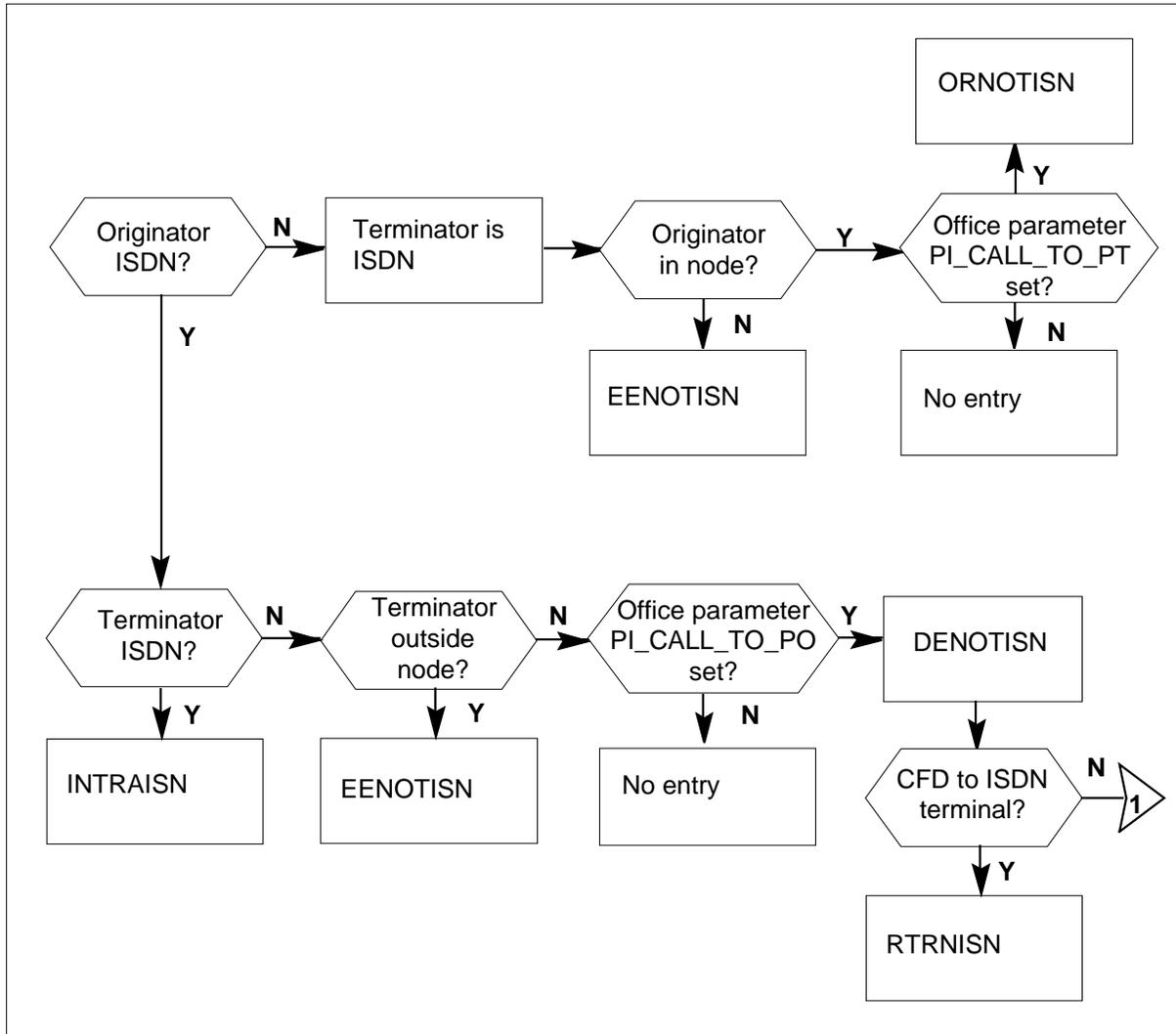
Associated functionality codes

The following table shows the functionality code associated with OM group CPICG.

| Functionality | Code |
|------------------|----------|
| ISDN Base Access | NTX750AB |

OM group CPICG (continued)

OM group CPICG registers



Register DENOTISN

Call destination is non-ISDN (DENOTISN)

Register DENOTISN increases under the following conditions:

- when an originating ISDN terminal makes a call within the same node to a non-ISDN terminal. Non-ISDN terminal include attendant consoles, IBN stations, or POTS stations.
- the entry for office parameter PI_CALL_TOPO in table OFCOPT is Y

OM group CPICG (continued)

Register DENOTISN release history

Register DENOTISN was introduced in BCS23.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

There are no extension register.

Register EENOTISN

Call is not end-to-end ISDN (EENOTISN)

Register EENOTISN increases when a call originates or terminates outside the ISDN network. Register EENOTISN counts calls that include trunk-to-ISDN terminal calls and ISDN terminal-to-trunk calls.

Register EENOTISN release history

Register EENOTISN was introduced in BCS23.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register INTRAIISN

Call is ISDN to ISDN (INTRAIISN)

Register INTRAIISN counts calls from an originating ISDN terminal to another ISDN terminal.

Register INTRAIISN release history

Register INTRAIISN was introduced in BCS23.

Associated registers

There are no associated registers.

OM group CPICG (continued)

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register ORNOTISN

Call start is not ISDN (ORNOTISN)

Register ORNOTISN increases under the following conditions:

- when an originating non-ISDN terminal, makes a call to an ISDN terminal within the same node. Non-ISDN terminals include attendant consoles, ISN stations, or POTS stations.
- the entry for office parameter PI_CALL_TOPO in table OFCOPT is Y

Register ORNOTISN release history

ORNOTISN was introduced in BCS23.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register RTRNISN

Call returns to the ISDN (RTRNISN)

Register RTRNISN counts calls that originates from an ISDN terminal and that the system call-forwards to a non-ISDN terminal. The system directs the calls to an ISDN terminal because of the following two conditions:

- Call Forward Do Not Answer activates
- the entry for office parameter PI_CALL_TOPO in table OFCOPT is Y.

Register RTRNISN release history

Register RTRNISN was introduced in BCS23.

OM group CPICG (end)

Associated registers

Registers DENOTISN and INTRAINSN increase when register RTRNINSN increases.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

OM group CPICKUP

OM description

Call Pickup (CPICKUP)

Call Pickup (CPU) is a Meridian Digital Centrex (MDC) feature. The CPU feature allows a station to answer incoming calls to another station within a known call pickup group. The CPU feature is available for each station within a customer group.

The OM group CPICKUP reports on CPU feature activity. Each time the system attempts to pick up a call in the customer group, register CPUATT increases. If the system cannot connect to the originating party with the CPU feature, register CPUFAIL increases. Register CPUINVLD counts attempts to pickup a call that is not correct. The count increases when the CPU feature is active, a call to pickup is not present, or when race conditions are present.

The CPICKUP does not increase Directed Call Pickup, with the Barge-in (DCBI) or Non-barge-in (DCBU) options.

Release history

The OM group CPICKUP was introduced before to BCS20.

APC005

Functionality was added to CPICKUP in APCOOS to support MDC features, like CPU. The OM group CPICKUP supports MDC features on:

- Global Peripheral Platform (GPP) lines for Australian-telephone user part (ATUP)
- ANSI ISDN user part (ANSI ISUP)
- Australian ISUP (AISUP) trunk signaling

Registers

OM group CPICKUP registers appear on the MAP terminal as follows:

CPUATT

CPUFAIL

CPUINVLD

Group structure

The OM group CPICKUP provides one tuple for each customer group. Each tuple contains the three registers in CPICKUP.

OM group CPICKUP (continued)

Key field:

IBNG_INDEX. The tuple number of CPICKUP is the key in the OMSHOW command. The maximum number of keyfields is 4096.

Info field:

Field CUSTNAME in table CUSTENG defines customergroup OMIBNGINFO.

Table CUSTENG lists the values for the engineering parameters and options for each of the customer groups.

Associated OM groups

The OM group TRMT counts the use of different call treatments. Each time a call routes through a treatment, the associated register increases.

Associated operational groups

The following operational groups associated with OM group CPICKUP:

- Meridian Digital Centrex
- Meridian SL-100

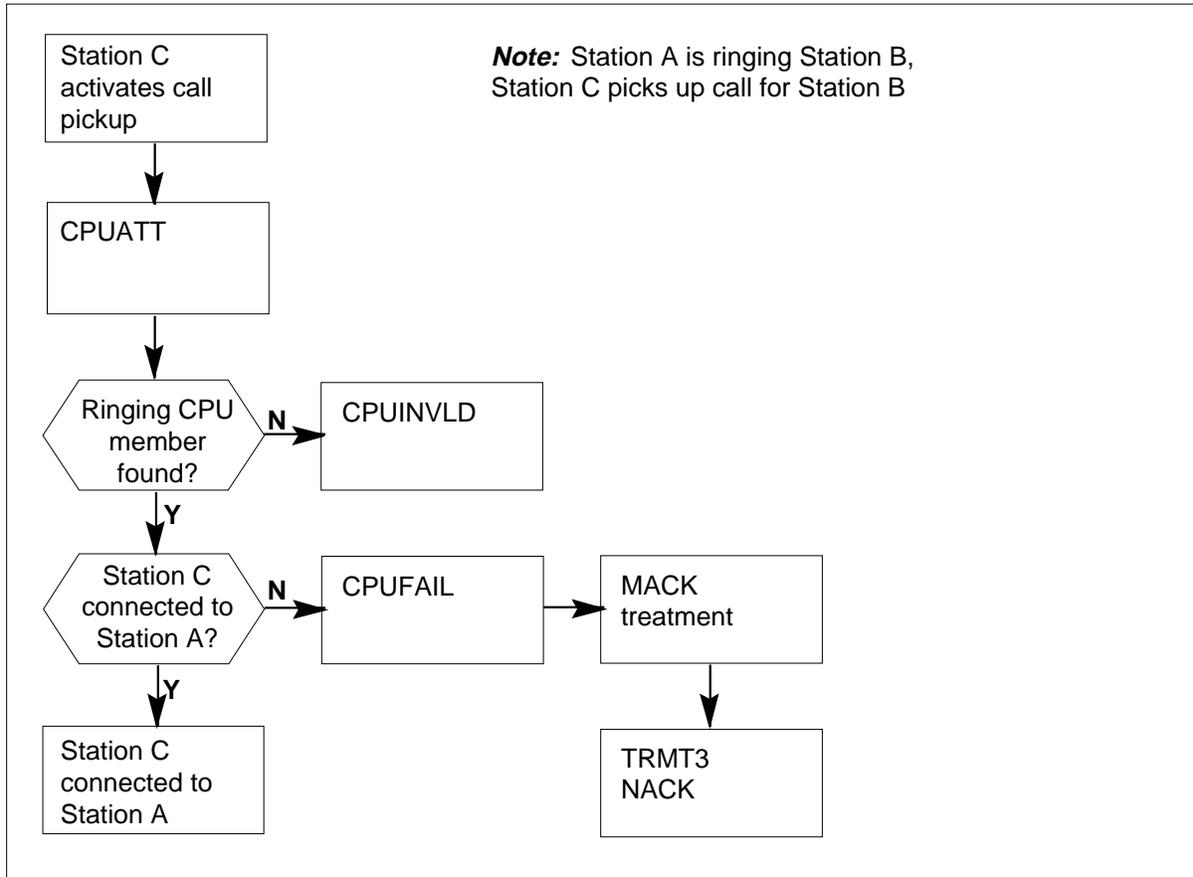
Associated functionality codes

The associated functionality code for the OM group CPICKUP appear in the following table.

| Functionality | Code |
|---|--------|
| Integrated Business Network Basic (IBN) | NTX100 |

OM group CPICKUP (continued)

OM group CPICKUP registers



Register CPUATT

Call pickup attempts (CPUATT)

Register CPUATT counts attempts to pick up a call in a customer group.

Register CPUATT release history

Register CPUATT was introduced before BCS20.

Associated registers

There are no associated registers.

Associated logs

The Automatic Message Accounting Buffer (AMAB) generates AMAB150 to test or monitor the generation of Station Message Detail Records (SMDR). Log AMAB150 references register CPUATT to SMDRs.

OM group CPICKUP (continued)

Extension registers

There are no extension registers.

Register CPUFAIL

Call pickup failure (CPUFAIL)

Register CPUFAIL increases when an attempt to pick up an incoming call fails. The system routes the call to negative acknowledgement treatment and register TRMT3_NACK increases.

Register CPUFAIL release history

Register CPUFAIL was introduced before BCS20.

Associated registers

Register TRMT3_NACK increases each time a call is routed to the negative acknowledgement (NACK) treatment.

Associated logs

The system generates LINE138 when the system routes a call to treatment after the call is call processing busy. Log LINE138 normally follows LINE102 and LINE problem reports. Call treatment code NOSR indicates that software resources were not available.

Extension registers

There are no extension registers.

Register CPUINVLD

Call pickup invalid (CPUINVLD)

Register Call pickup invalid (CPUINVLD) counts attempts to pickup a call that is not correct. The count increases when the CPU feature is active but no call to pickup is present, or when race conditions occur.

Register CPUINVLD release history

Register CPUINVLD was introduced before BCS20.

Associated registers

There are no associated registers.

Associated logs

The system generates LINE138 when the system generates a call to a treatment after the call is call processing busy. Log LINE138 follows LINE102 and

OM group CPICKUP (end)

LINE problem reports. Call treatment code BUSY indicates that the line was busy.

Extension registers

There are no extension registers.

OM group CPUSTAT

OM description

Central processing unit status (CPUSTAT)

The OM group CPUSTAT provides information on CPU occupancy. The CPU occupancy is the percentage of total CPU time that the CPU spends on one function. CPUSTAT shows the CPU percentage assigned to the scheduler and the percentage available for call processing at capacity. You can use this OM group to check capacity.

The support operating system (SOS) scheduler uses scheduler classes to allocate CPU time processes that occur at the same time. A scheduler class is a group of processes that perform like or related functions. CPUSTAT measures the CPU use of processes that runs in each scheduler class for all types of CPUs. The OM group CPUSTAT does not measure for the Bell-Northern Research reduced instruction set computer (BRISC) SuperNode core.

The OM group CPUSTAT registers count the following CPU occupancies:

- call processing
- call processing occupancy available
- scheduler
- system operations
- critical system maintenance
- Network Operating System (NOS) file transfer
- operational measurements
- guaranteed terminals
- processes that are not guaranteed and that you can delay
- idler
- auxiliary call processing
- network maintenance

Use the data supplied by CPUSTAT to calculate the average work time and the switch capacity for office equipment and engineering.

Release history

The OM group CPUSTAT was introduced in BCS25

OM group CPUSTAT (continued)

BCS36

Register CPSSNIP was introduced in BCS36.

BCS34

Register CPSNETM was introduced in BCS34.

BCS31

Register CPSAUXCP was introduced in BCS31.

Registers

The OM group CPUSTAT registers appear on the MAP terminal as follows:

| | | | |
|----------|----------|----------|----------|
| CPSCPOCC | CCPAVAIL | CPSSCHED | CPSFORE |
| CPSMAINT | CPSDNC | CPSOM | CPSGTERM |
| CPSBKG | CPSIDLE | CPSAUXCP | CPSNETM |
| CPSSNIP | | | |

Group structure

The OM group CPUSTAT provides one tuple for each office.

Key field:

There is no Key field

Info field:

There is no Info field

Parameter CC_ENGLEVEL_WARNING_THRESHOLD in table OFCENG defines the engineered occupancy level of the switch.

Parameter AUXCP_CPU_SHARE in table OFCENG shows the percentage of CPU time allocated for the auxiliary call processing scheduler class.

Parameter GUARANTEED_TERMINAL_CPU_SHARE in table OFCENG indicates the percentage of CPU time allocated for the guaranteed terminal scheduler class.

Associated OM groups

The OM group APOCCS measures CPU use for processes that run on an application processor.

The OM group BRSTAT provides information on CPU use for SuperNode offices that use the Bell-Northern Research reduced instruction set computer (BRISC).

OM group CPUSTAT (continued)

The OM group BSCPU measures CPU use for processes that run on a Billing Server.

The OM group CP provides information on the use of call condense blocks (CCBs).

The OM group CP2 provides information on the use of extended call condense blocks (ECCBs).

The OM group ENETOCC measures CPU use for processes that run on the enhanced network (ENET).

The OM group NCMCPUST measures CPU use for processes that run on non-CM SOS-based nodes.

Associated operational groups

The following operational groups associate with OM group CPUSTAT:

- DMS-100 Local
- DMS-100/200
- DMS-100/200 TOPS
- DMS-200
- DMS-200 TOPS
- DMS-100 Meridian
- DMS-MTX
- DMS-250
- DMS-300
- Meridian SL-100 PBX
- DMS-SuperNode

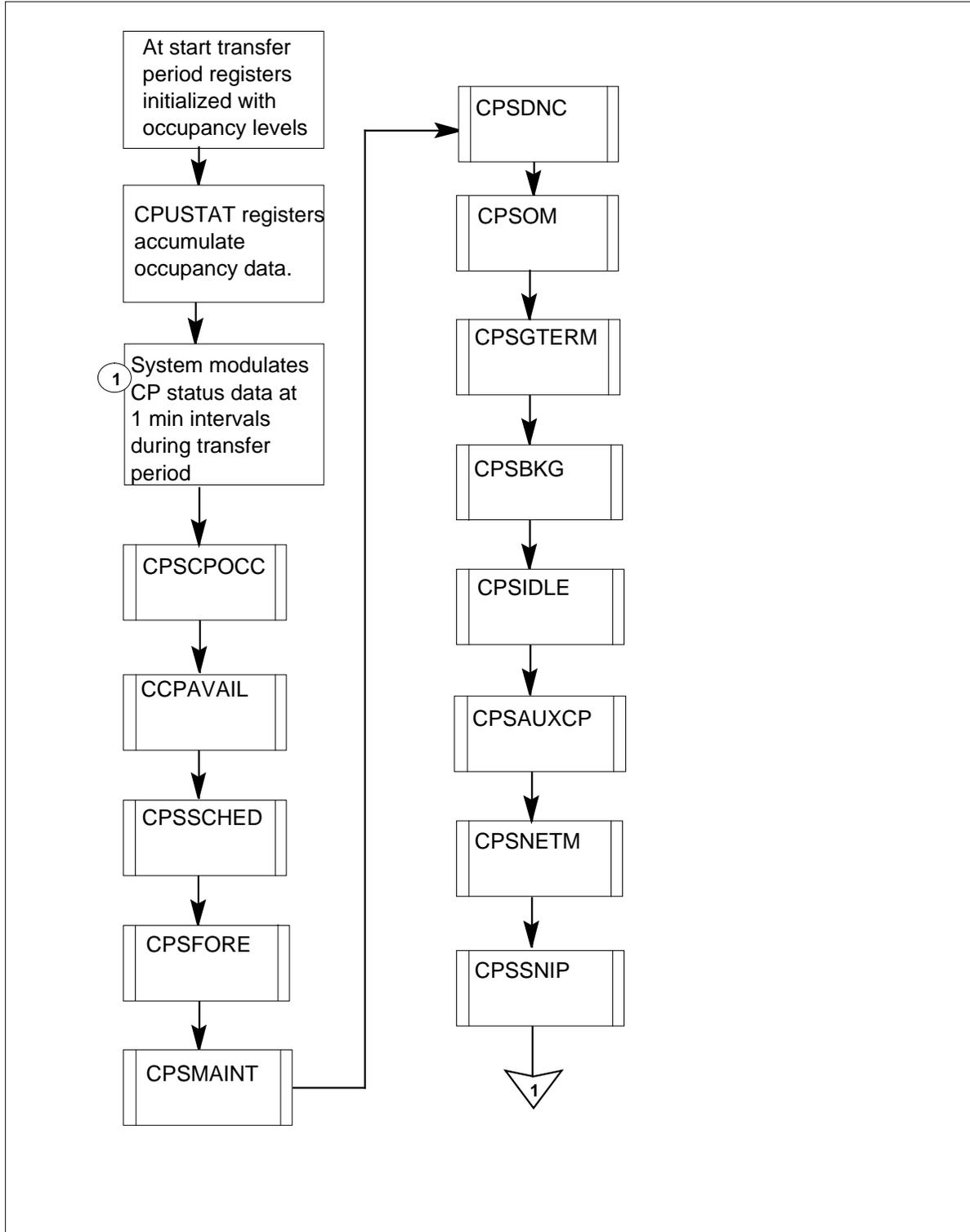
Associated functionality codes

The following table shows functionality codes associated with OM group CPUSTAT.

| Functionality | Code |
|------------------------------|----------|
| Enhanced Real Time Indicator | NTX291AA |
| ISDN Base Access | NTX750AA |

OM group CPUSTAT (continued)

OM group CPUSTAT registers



OM group CPUSTAT (continued)

Register CCPAVAIL

CPU call processing available occupancy (CCPAVAIL)

Register CCPAVAIL accumulates the CPU call processing available occupancies and displays this amount as an integer. Each of these occupancies is the percentage of CPU time that available for call processing in a given time sample. This occupancy is the difference between maximum CPU time available for call processing and the percentage of CPU time in use in a given time sample.

At the beginning of the transfer period, the system initializes CCPAVAIL to the current value of the CPU call processing available occupancy. The system updates the occupancy values from CPSTATUS data at 1 min intervals during the transfer period. Each time the occupancy increases, register CCPAVAIL accumulates the value.

To obtain the average CPU call processing available occupancy for one min, divide the holding register value by the transfer period. Measure the transfer period in minutes.

Register CCPAVAIL release history

Register CCPAVAIL was introduced in BCS25.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Register CPSAUXCP

CPU status auxiliary call processing occupancy (CPSAUXCP)

Register CPSAUXCP accumulates the CPU auxiliary call processing occupancies and displays this amount as an integer. Each of these occupancies is the percentage of CPU time spent on the simplified-message desk interface (SMDI) incoming message handler processes. The system measures these occupancies in a given time sample. These processes are the processes in the auxiliary call processing scheduler class.

At the beginning of the transfer period, the system initializes CPSAUXCP to the current value of the CPU auxiliary call processing occupancy. The system updates the occupancy values from CPSTATUS data at 1 min intervals during the transfer period. Each time, the occupancy increases and the register CPSAUXCP accumulates the value.

OM group CPUSTAT (continued)

To obtain the average CPU auxiliary call processing occupancy for 1 min, divide the holding register value by the transfer period. Measure the transfer period in minutes.

Office parameter AUXCP_CPU_SHARE in table OFCENG indicates percentage of CPU time allocated for the auxiliary call processing scheduler class.

Register CPSAUXCP release history

Register CPSAUXCP was introduced in BCS31.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Register CPSBKG

CPU status background occupancy (CPSBKG)

Register CPSBKG accumulates the CPU background occupancies and displays this amount as an integer. Each of these occupancies is the percentage of CPU time spent on processes related to:

- the log system,
- audits
- non-critical system maintenance
- non-guaranteed MAP
- operational measurements

The system measures those occupancies in a given time sample.

At the beginning of the transfer period, the system initializes register CPSBKG to the current value of the CPU background occupancy. The system updates the occupancy values from CPSTATUS data at 1 min intervals during the transfer period. Each time the occupancy increases, register CPSBKG accumulates the value.

To obtain the average CPU background occupancy for 1 min, divide the holding register value by the transfer period. Measure the transfer period in minutes.

OM group CPUSTAT (continued)

Register CPSBKG release history

Register CPSBKG was introduced in BCS25.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Register CPSCPOCC

CPU status call processing occupancy (CPSCPOCC)

Register CPSCPOCC accumulates the CPU call processing occupancies and displays this amount as an integer. Each of these occupancies is the percentage of CPU time spent on call processing-related processes in a given time sample. These processes are processes in the following scheduler classes:

- high-priority call processing
- normal call processing
- deferrable call processing

At the beginning of the transfer period, the system initializes CPSCPOCC to the current value of the CPU call processing occupancy. The system updates the occupancy values from CPSTATUS data at 1 min intervals during the transfer period. Each time the occupancy increases, register CPSCPOCC accumulates the value.

To obtain the average CPU call processing occupancy for 1 min, divide the holding register value by the transfer period. Measure the transfer period in minutes.

Register CPSCPOCC release history

Register CPSCPOCC was introduced in BCS25.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Register CPSDNC

CPU status dynamic network controller occupancy (CPSDNC)

OM group CPUSTAT (continued)

Register CPSDNC accumulates the CPU dynamic network controller (DNC) occupancies and displays this amount as an integer. Each of these occupancies is percentage of CPU time spent on Network Operations System (NOS) processes that communicate with a DNC. The system measures the occupancies in a given sample. These are the processes in the NOS file transfer scheduler classes.

At the beginning of the transfer period, the system initializes CPSDNC to the current value of the CPU DNC occupancy. The system updates occupancy values from CPSTATUS data at 1 min intervals during the transfer period. Each time the occupancy increases register CPSDNC accumulates the value.

To obtain the average CPU DNC occupancy for 1 min, divide the holding register value by the transfer period. Measure the transfer period in minutes.

Register CPSDNC release history

Register CPSDNC was introduced in BCS25.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Register CPSFORE

CPU status front occupancy (CPSFORE)

Register CPSFORE accumulates the CPU front occupancies displays this amount as an integer. Each of these occupancies is the percentage of CPU time spent on system operations-related processes in a given time sample. These processes are processes in the system and system tools scheduler classes. These scheduler classes were earlier known as system7 and system6, in the sequence given.

At the beginning of the transfer period, the system initializes CPSFORE to the current value of the CPU front occupancy. The system updates the occupancy values from CPSTATUS data at 1 min intervals during the transfer period. Each time the occupancy increases, register CPSFORE accumulates the value.

To obtain the average CPU front occupancy for 1 min, divide the holding register value by the transfer period. Measure the transfer period in minutes.

Register CPSFORE release history

Register CPSFORE was introduced in BCS25.

OM group CPUSTAT (continued)

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Register CPSGTERM

CPU status guaranteed terminal occupancy (CPSGTERM)

Register CPSGTERM accumulates the CPU guaranteed terminal occupancies and displays this amount as an integer. Each of these occupancies is percentage of CPU time spent on guaranteed MAP terminals, guaranteed log devices, and the login process. The system measures those occupancies in a given time sample. These are processes in the guaranteed terminal scheduler class, earlier known as guaranteed background. Guaranteed terminal occupancy is at the cost of call processing.

At the beginning of the transfer period, the system initializes CPSGTERM to the current value of the CPU guaranteed terminal occupancy. The system indicates the occupancy values from CPSTATUS data at 1 min intervals during the transfer period. Each time the occupancy increases, register CPSGTERM accumulates the value.

To obtain the average CPU guaranteed terminal occupancy for 1 min, divide the holding register value by the transfer period. Measure the transfer period in minutes.

Office parameter GUARANTEED_TERMINAL_CPU_SHARE in table OFCENG indicates percentage of CPU time allocated for the guaranteed terminal scheduler class.

Register CPSGTERM release history

Register CPSGTERM was introduced in BCS25.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Register CPSIDLE

CPU status idler occupancy (CPSIDLE)

OM group CPUSTAT (continued)

Register CPSIDLE accumulates the CPU idler occupancies and displays this amount as an integer. Each of these occupancies is the percentage of CPU time spent on the idler process, memory checksums, and call processing audits. The system measures these occupancies in a given time sample. These are processes in the idler scheduler class, earlier known as system 0.

At the beginning of the transfer period, the system initializes CPSIDLE to the current value of the CPU idler occupancy. The system updates the occupancy values from CPSTATUS data at 1 min intervals during the transfer period. Each time the occupancy increases, register CPSIDLE accumulates the value.

To obtain the average CPU idler occupancy for 1 min, divide the holding register value by the transfer period. Measure the transfer period in minutes.

Register CPSIDLE release history

Register CPSIDLE was introduced in BCS25.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Register CPSMAINT

CPU status maintenance occupancy (CPSMAINT)

Register CPSMAINT accumulates the CPU maintenance occupancies and displays this amount as an integer. Each of these occupancies is the percentage of CPU time spent on critical system maintenance processes in a given one time sample. These are processes in the maintenance scheduler class.

At the beginning of the transfer period, the system initializes CPSMAINT to the current value of the CPU maintenance occupancy. The system updates occupancy values from CPSTATUS data at 1 min intervals during the transfer period. Each time the occupancy increases, register CPSMAINT accumulates the value.

To obtain the average CPU maintenance occupancy for 1 min, divide the holding register value by the transfer period. Measure the transfer period in minutes.

Register CPSMAINT release history

Register CPSMAINT was introduced in BCS25.

OM group CPUSTAT (continued)

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Register CPSNETM

CPU status network maintenance class (CPSNETM)

Register CPSNETM accumulates the CPU network maintenance occupancies and displays this amount as an integer. Each of these occupancies is the percentage of CPU time spent on network maintenance processes in a given time sample. These are processes in the network maintenance scheduler class.

At the beginning of the transfer period, the system initializes CPSNETM to the current value of the CPU network maintenance occupancy. The system updates occupancy values from CPSTATUS data at 1 min intervals during the transfer period. Each time the occupancy increases, register CPSNETM accumulates the value.

To obtain the average CPU network maintenance occupancy for 1 min, divide the holding register value by the transfer period. Measure the transfer period in minutes.

Register CPSNETM release history

Register CPSNETM was introduced in BCS34.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Register CPSOM

CPU status operational measurements occupancy (CPSOM)

Register CPSOM accumulates the CPU operational measurements (OM) occupancies and amount as an integer. Each of these occupancies is the percentage of CPU time spent on OM processes in a given time sample. These are processes in the guaranteed and not guaranteed OM scheduler classes.

At the beginning of the transfer period, the system initializes CPSOM to the current value of the CPU OM occupancy. The system updates the occupancy

OM group CPUSTAT (continued)

value from CPSTATUS data at 1 min intervals during the transfer period. Each time the occupancy increases, register CPSOM accumulates the value.

To obtain the average CPU OM occupancy for 1 min, divide is the holding register value by the transfer period. Measure the transfer period in minutes.

Register CPSOM release history

Register CPSOM was introduced in BCS25.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Register CPSSCHED

CPU status scheduler occupancy (CPSSCHED)

Register CPSSCHED accumulates the CPU scheduler occupancies and displays this amount as an integer. Each of these occupancies is the percentage of CPU time the scheduler spends in a given time sample.

At the beginning of the transfer period, the system initializes CPSSCHED to the current value of the CPU scheduler occupancy. The system updates the occupancy values from CPSTATUS data at 1 min intervals during the transfer period. Each time the occupancy increases, register CPSSCHED accumulates the value.

To obtain the average CPU scheduler occupancy for 1 min, divide the holding register value by the transfer period. Measure the transfer period in minutes.

Register CPSSCHED release history

CPSSCHED was introduced in BCS25.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Register CPSSNIP

CPU status of SuperNode internet protocol class (CPSSNIP)

OM group CPUSTAT (end)

Register CPSSNIP measures the CPU use of the SuperNode internet protocol (SNIP) scheduler class on SuperNode cores.

Note: This register does not apply to BRISC SuperNode cores.

Register CPSSNIP release history

Register CPSSNIP was introduced in BCS36.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

OM group CRMDBM

OM description

Call reference manager data block measurements (CRMDBM)

The OM group CRMDBM monitors the use of call reference data blocks. Call reference data blocks are software resources that store information about call reference numbers. Call reference numbers identify each feature request made across a network. Call numbers facilitate non-circuit messaging between the nodes of a Common Channel Signaling No. 7 (CCS7) network.

Two peg registers count attempts by an application to seize a call reference data block. The usage register records if call reference data blocks are in use.

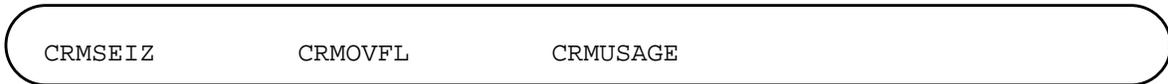
Use the data that CRMDBM collects to determine if enough data blocks are available for application use.

Release history

The OM group CRMDBM was introduced in BCS22.

Registers

The OM group CRMDBM registers appear on the MAP terminal as follows:



Group structure

The OM group CRMDBM provides one tuple for each office.

Key field:

There is no Key field

Info field:

NUM_CR_DATA_BLKs contains the number of data blocks allocated to the switch.

Use office parameter NUM_CALL_REF_DATA_BLKs in table OFCENG to specify the number of call reference data blocks allocated to the switch. If the value in CRMOVFL is continuously high, the number of call reference data blocks in table OFCENG increases. When a cold restart occurs, you must make an on-site change to office parameter NUM_CALL_REF_DATA_BLKs.

Associated OM groups

There are no associated OM groups.

OM group CRMDBM (continued)

Associated operational groups

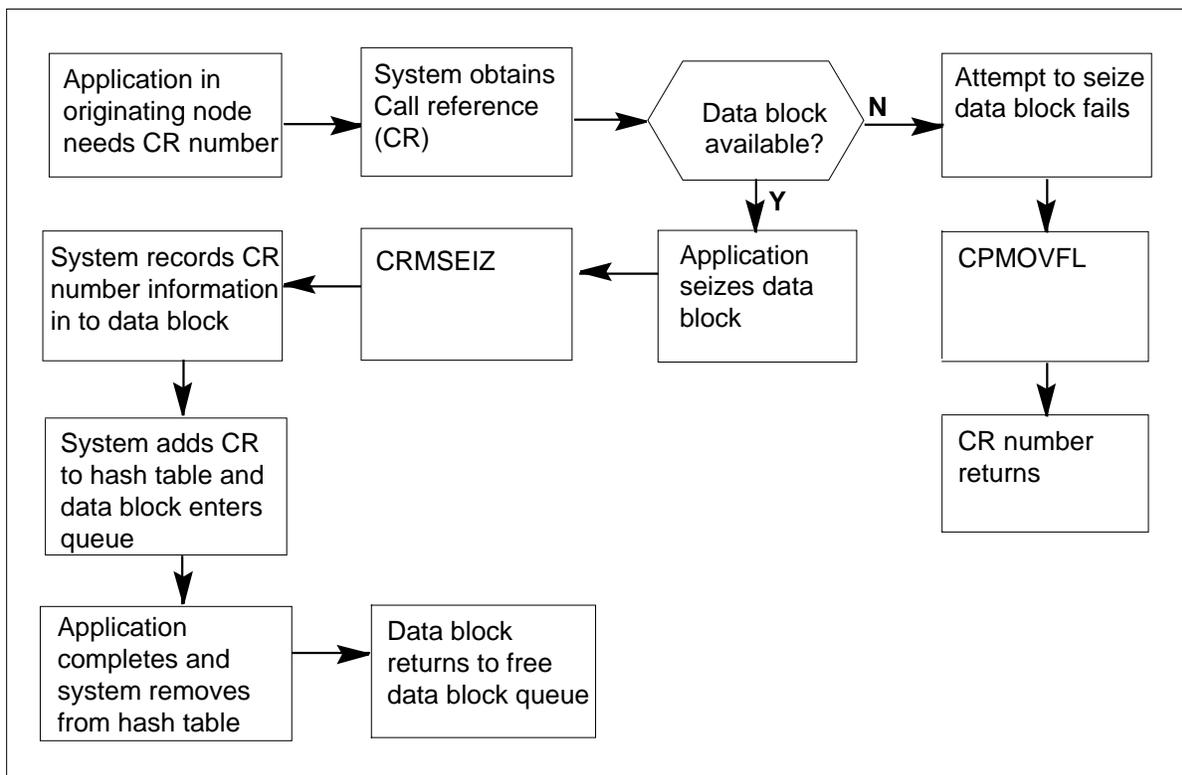
The Meridian SL-100 PBX operational group associates with OM group CRMDBM.

Associated functionality codes

The associated functionality codes with OM group CRMDBM appear in the following table.

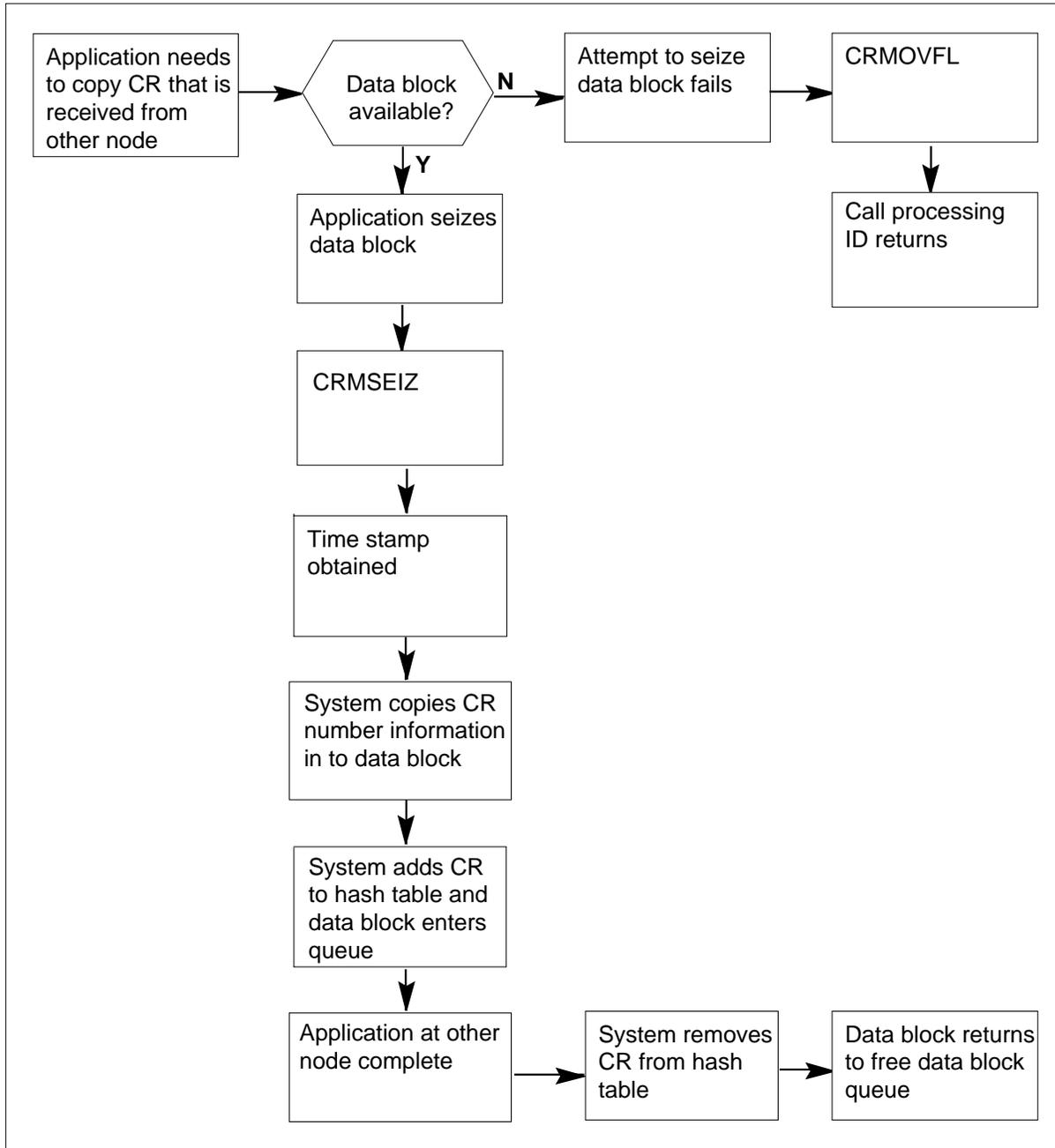
| Functionality | Code |
|--|----------|
| Integrated Business Networks - Basic (IBN) | NTX100AA |

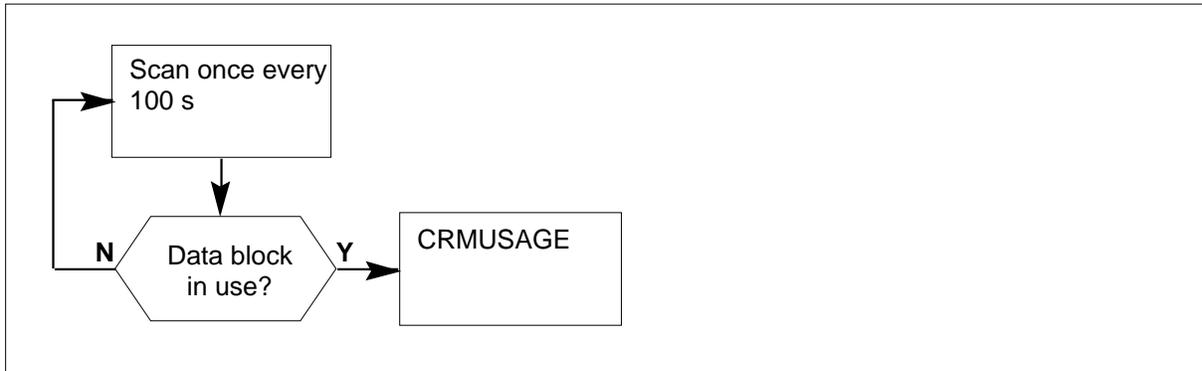
OM group CRMDBM registers: allocation of call reference numbers



OM group CRMDBM (continued)

OM group CRMDBM registers: recording of call reference numbers



OM group CRMDBM (continued)**OM group CRMDBM use registers****Register CRMOVFL**

Call reference manager overflow (CRMOVFL)

Register CRMOVFL counts failed attempts by an application to seize a call reference data block.

Register CRMOVFL release history

Register CRMOVFL was introduced in BCS22.

Associated registers

Register CRMSEIZ increases when an application correctly seizes a call reference data block.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register CRMSEIZ

Call reference manager seize (CRMSEIZ)

Register CRMSEIZ increases when an application correctly seizes a call reference data block.

Register CRMSEIZ release history

Register CRMSEIZ was introduced in BCS22.

OM group CRMDBM (end)

Associated registers

Register CRMOVFL counts failed attempts by an application to seize a call reference data block.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register CRMUSAGE

Call reference manager use (CRMUSAGE)

Register CRMUSAGE is a usage register. The scan rate is slow 100 s.
Register CRMUSAGE records if call reference data blocks are in use.

Register CRMUSAGE release history

Register CRMUSAGE was introduced in BCS22.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

OM group CSL

OM description

Console device maintenance summary (CSL)

The OM group CSL counts errors and faults, and records system or manual busy use for console devices. Console devices include teletypewriters and MAP terminals. Use the data collected by CSL to assess the performance of the console devices.

CSL has four registers. Two peg registers count console device errors and faults.

Two usage registers record if console devices are system busy or manual busy.

Release history

The OM group CSL was introduced in BCS20.

BCS33

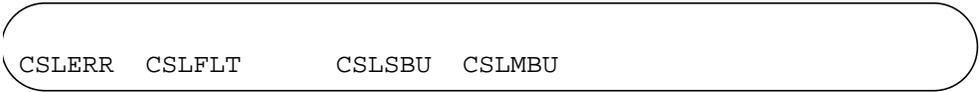
Registers CSLSBU and CSLMBU were added to OM group CSL in BCS33. Use the OMSHOW command on the ACTIVE class to change these registers from CCS to deci-erlangs before display.

BCS21

Software changed for OM group CSL in BCS21 to provide usage counts in CCS or deci-erlangs.

Registers

The OM group CSL registers appear on the MAP terminal as follows:



CSLERR CSLFLT CSLSBU CSLMBU

Group structure

The OM group CSL provides one tuple for each office.

Key field:

There is no Key field

Info field:

There is no Info field

Associated OM groups

There are no associated OM groups.

OM group CSL (continued)

Associated operational groups

The following operational groups associate with OM group CSL:

- DMS-100 Local
- DMS-100/200 Local/Toll
- DMS-100/200 Local/Toll with TOPS
- DMS-200 Toll
- DMS-200 with TOPS
- DMS-100 Meridian
- DMS-MTX Mobile Telephone Exchange
- DMS-250 Toll/Tandem
- DMS-300 Gateway
- Meridian SL-100 PBX

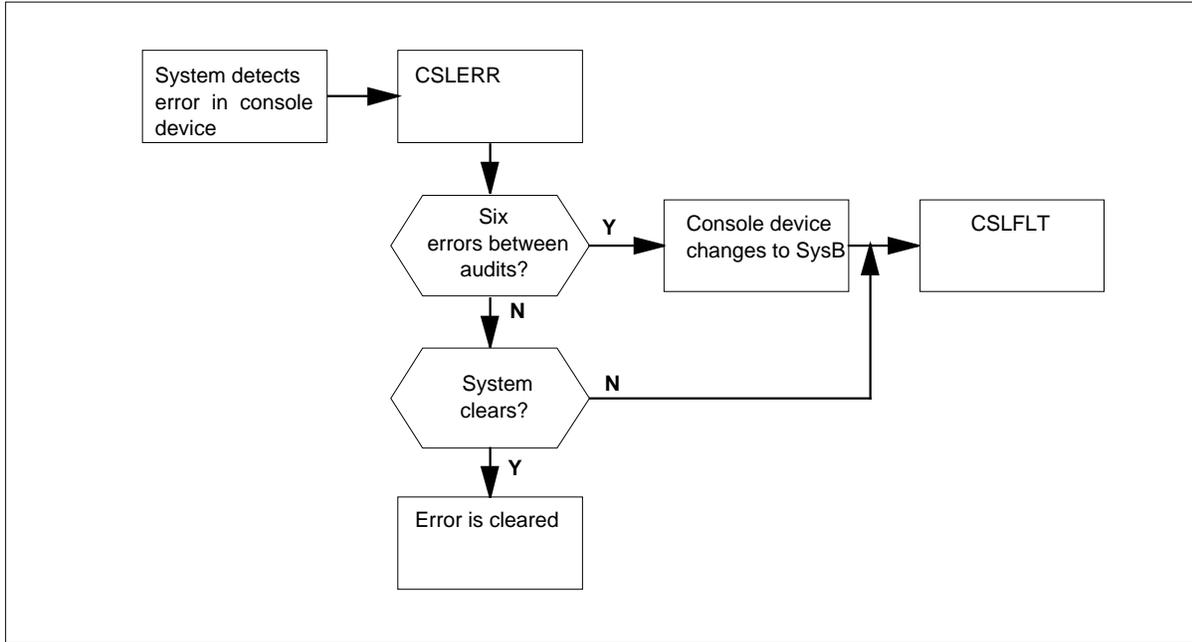
Associated functionality codes

The associated functionality codes with OM group CSL appear in the following table.

| Functionality | Code |
|----------------|----------|
| Common Basic | NTX001AA |
| OMs in Erlangs | NTX664AA |

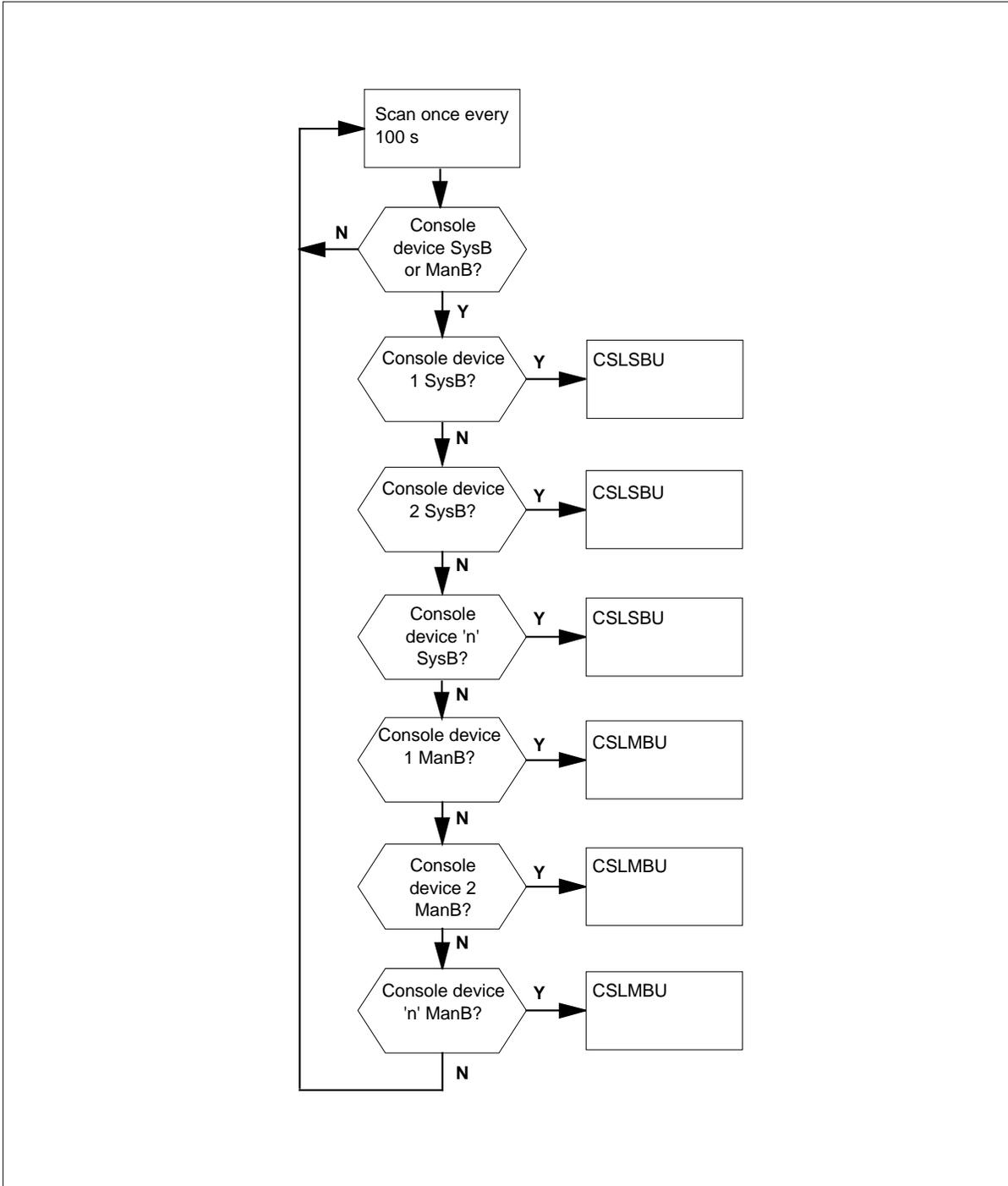
OM group CSL (continued)

OM group CSL registers



OM group CSL (continued)

OM group CSL usage registers



OM group CSL (continued)

Register CSLERR

Console device errors (CSLERR)

Register CSLERR counts console device errors. The count includes errors that clear and errors that make a console device system busy.

The errors that CSLERR counts include

- transmission errors between the central control (CC) and the input/output device (IOD) controller that cause messages to rebound.
- time outs of an IOD controller before the controller returns a required response
- transmission of dataset-not-ready or bad-message responses by a device controller

For a single console device, the system attempts to clear up to five errors that occur between following maintenance audits. If a sixth error occurs, the system makes the console device system busy.

Register CSLERR release history

Register CSLERR was introduced before BCS20.

Associated registers

Register CSLFLT counts faults that make a console device system busy.

Associated logs

The system generates IOD120 when the system detects a difference between current maximum device number (MDN) and expected maximum device number. If the system updates the MDN, the system generates the UPDATED in the log. If the system cannot update the MDN, the system generates MISMATCH in the log.

The system generates IOD306 to indicate that different console device errors occurred.

The system generates IOD310 to indicate that the file system detects a fault in a terminal.

The system generates IOD311 to indicate that a message-related error occurred on a terminal.

The system generates IOGA101 when the I/O handler processes a fault reports related to a messaging fault on a node of the switch.

OM group CSL (continued)

The system generates IOGA105 generates when a node on the switch reports a fault on a node C-side link. Control of the link transfers to the node that interfaces with the C-side of the link.

Register CSLFLT

Console device faults (CSLFLT)

Register CSLFLT counts faults that make a console device system busy. The faults that CLSFLT count include:

- console device errors that system action cannot clear
- the sixth error that occurs between following maintenance audits in a single console device

The system attempts to clear up to five errors that occur between following audits on a single console device. If a sixth error occurs, the system makes the console device system busy. The console device remains system busy or disconnects until manual or system interruption returns to service the console.

Register CSLFLT release history

Register CSLFLT was introduced in BCS20.

Associated registers

Register CSLERR counts console device errors. The count includes errors that the system can clear and errors that make the console device system busy.

Associated logs

The system generates IOD119 when the system detects a messaging fault between:

- a console device and the I/O controller (IOC)
- the IOC and the central message controller (CMC)

The system generates IOD307 to indicate that a loop test on a console device fails.

The system generates IOD308 to indicate that a terminal controller detects a fault on a console device.

Register CSLMBU

Console device manual busy use (CSLMBU)

Register CSLMBU is a usage register. The scan rate is 100 s. Register CSLMBU records if console devices are manual busy.

OM group CSL (continued)

Register CSLMBU release history

Register CSLMBU was introduced before BCS20.

BCS33

When you set office parameter OMINERLANGS to Y, you convert the usage count from CCS to deci-erlangs before the count appears. Use the OMSHOW command on the ACTIVE class to display the usage count. The value in the active register remains in CCS.

BCS21

Software changed for register CSLMBU in BCS21 to provide usage counts in either CCS or deci-erlangs.

Associated registers

Register CSLSBU records if console devices are system busy.

Associated logs

The system generates IOD303 when the system makes a console device manual busy.

The system generates IOD312 when a console device that displays logs becomes P-side busy. An interruption of the power supply or a command from the MAP terminal can make the console device P-side busy.

Register CSLSBU

Console device system busy use (CSLSBU)

Register CSLSBU is a usage register. The scan rate is 100 s. Register CSLSBU records if console devices are system busy.

Register CSLSBU release history

Register CSLSBU was introduced before BCS20.

BCS33

When you set office parameter OMINERLANGS to Y, you convert the usage count from CCS to deci-erlangs before the count appears. Use the OMSHOW command on the ACTIVE class to display the usage count. The value in the active register remains in CCS.

BCS21

Software changed for register CSLSBU to provide usage counts in CCS or deci-erlangs.

OM group CSL (end)

Associated registers

Register CSLMBU records if console devices are manual busy.

Associated logs

The system generates IOD304 when a console device becomes system busy for one of the following reasons:

- a file system error
- to perform an audit
- a message overload condition

The system generates IOD312 when a console device that displays logs becomes P-side busy. An interruption of the power supply or a command at the MAP can make the console device P-side busy.

OM group CSMI

OM description

Call Screening, Monitoring, and Intercept (CSMI)

The OM register CSMI stores the number of CSMI monitoring and intercept attempts and failures. The system assigns this feature for separate customer groups. The ten new registers in the group are as follows:

- PPUINT2W, pay-per-use 2-way call intercept attempts
- PPUINT3W, pay-per-use 3-way call intercept attempts
- PPUINTFL, pay-per-use intercept failures
- PPUMONFL, pay-per-use monitoring failures
- PPUMONIT, pay-per-use monitoring attempts
- SUBINT2W, subscriber 2-way call intercept attempts
- SUBINT3W, subscriber 3-way call intercept attempts
- SUBINTFL, subscriber intercept failures
- SUBMONFL, subscriber monitoring failures
- SUBMONIT, subscriber monitoring attempts

Release history

The OM group CSMI was introduced in NA005.

Registers

The MAP terminal displays the following OM group CSMI registers as follows:

| | | | |
|----------|----------|----------|----------|
| PPUINT2W | PPUINT3W | PPUINTFL | PPUMONFL |
| PPUMONIT | SUBINT2W | SUBINT3W | SUBINTFL |
| SUBMONFL | SUBMONIT | | |

Group structure

The number of tuples correspond to the number of customer groups in table CUSTENG.

The OM group CSMI

Key field:

There is no key field.

OM group CSMI (continued)

Info field:

OMIBNGINFO

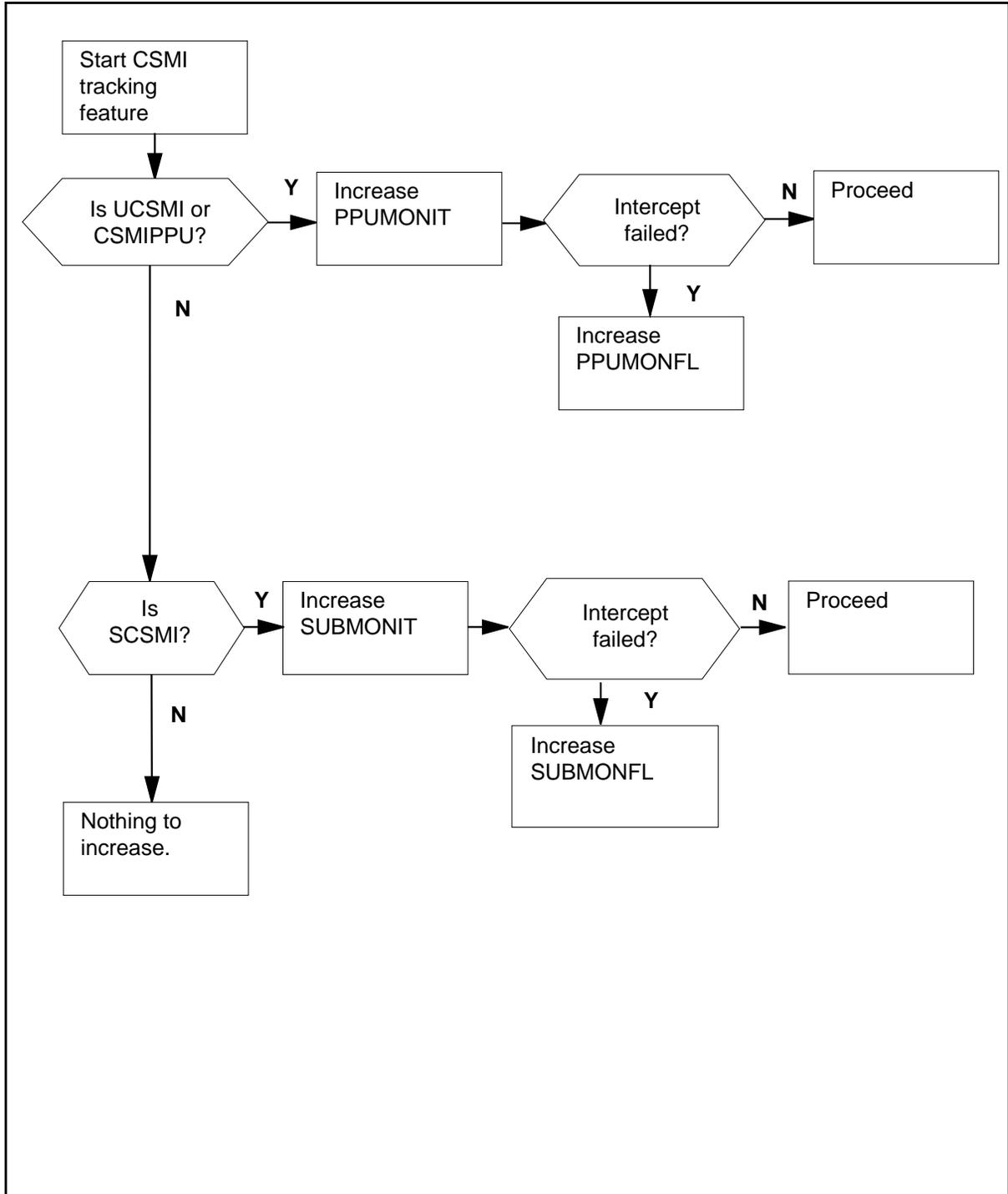
The info field OMIBNGINFO is the customer group which field CUSTNAME in table CUSTENG defines. This info field can have only one customer name for each customer group. This info field can have a maximum of 4095 customer groups.

Associated OM groups

There are no associated OM groups.

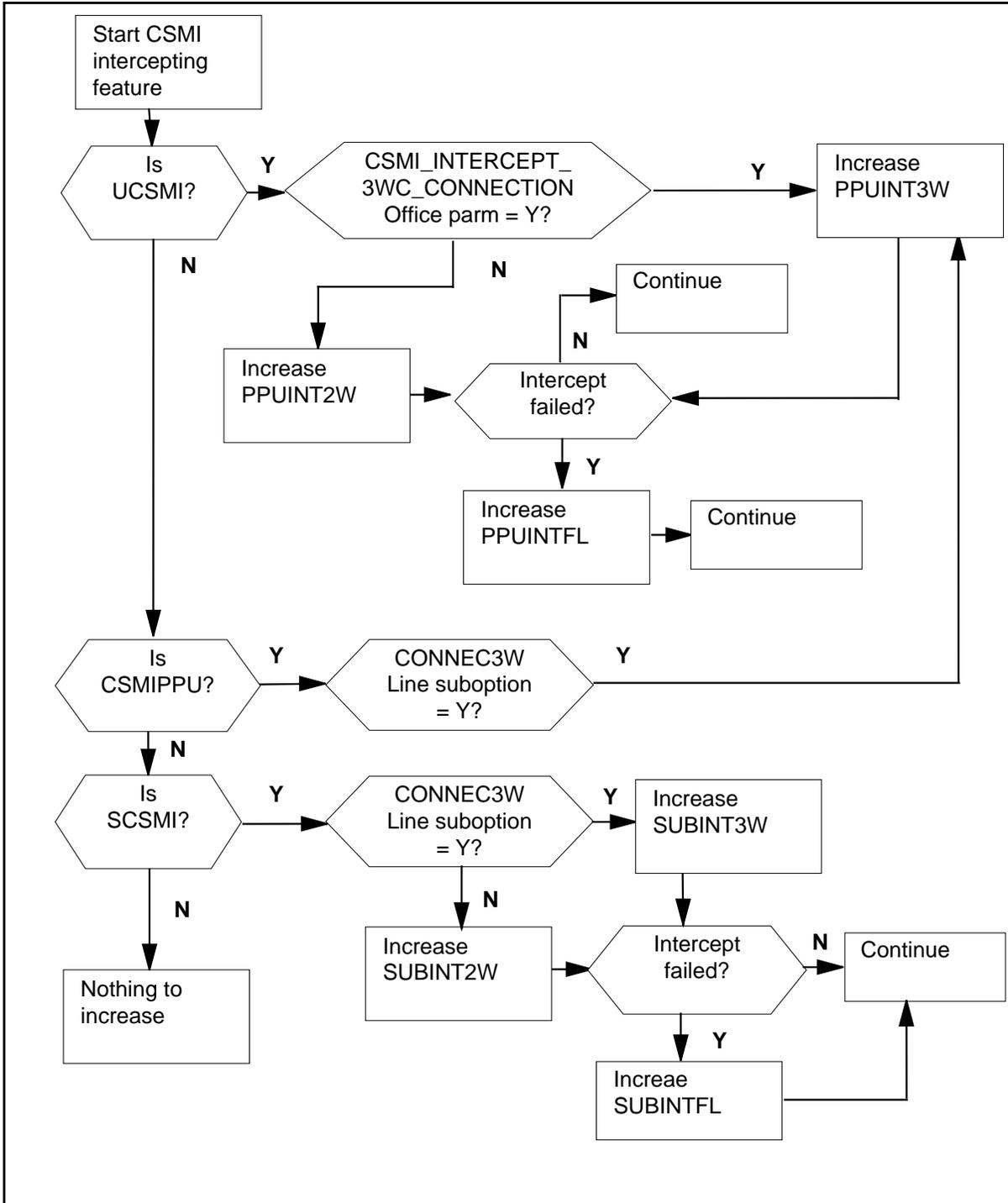
OM group CSMI (continued)

OM group CSMI registers



OM group CSMI (continued)

OM group CSMI registers



OM group CSMI (continued)

Register PPUINT2W

Pay Per Use 2-way Call Interception Attempts (PPUINT2W)

Register PPUINT2W release history

Register PPUINT2W was introduced in NA005.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

Extension registers do not apply to this register.

Register PPUINT3W

Pay Per Use 3-way Call Interception Attempts (PPUINT3W)

Register PPUINT3W release history

Register PPUINT3W was introduced in NA005.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

Extension registers do not apply to this register.

Register PPUINTFL

Pay Per Use Interception Failure (PPUINTFL)

Register PPUINTFL release history

Register PPUINTFL was introduced in NA005.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

OM group CSMI (continued)

Extension registers

Extension registers do not apply to this register.

Register PPUMONFL

Pay Per Use Monitoring Failure (PPUMONFL)

Register PPUMONFL release history

Register PPUMONFL was introduced in NA005.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

Extension registers do not apply to this register.

Register PPUMONIT

Pay Per Use Monitoring Attempts (PPUMONIT)

Register PPUMONIT release history

Register PPUMONIT was introduced in NA005.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

Extension registers do not apply to this register.

Register SUBINT2W

Subscriber 2-way Call Interception Attempts (SUBINT2W)

Register SUBINT2W release history

Register SUBINT2W was introduced in NA005.

Associated registers

There are no associated registers.

OM group CSMI (continued)

Associated logs

There are no associated logs.

Extension registers

Extension registers do not apply to this register.

Register SUBINT3W

Subscriber 3-way Call Interception Attempts (SUBINT3W)

Register SUBINT3W release history

Register SUBINT3W was introduced in NA005.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

Extension registers do not apply to this register.

Register SUBINTFL

Subscriber Interception Failure (SUBINTFL)

Register SUBINTFL release history

Register SUBINTFL was introduced in NA005.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

Extension registers do not apply to this register.

Register SUBMONFL

Subscriber Monitoring Failure (SUBMONFL)

Register SUBMONFL release history

Register SUBMONFL was introduced in NA005.

OM group CSMI (end)

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

Extension registers do not apply to this register.

Register SUBMONIT

Subscriber Monitoring Attempts (SUBMONIT)

Register SUBMONIT release history

Register SUBMONIT was introduced in NA005.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

Extension registers do not apply to this register.

OM group CTRYDIR

OM description

Country Direct

The CTRYDIR OM group tracks the following Country Direct call information:

- the number of CDIR calls
- the number of CDIR calls queued
- the number of CDIR calls served

Release history

GTOPS8.1 and TOPS09

Three new registers, CDCSAL, CDCSBL, and CDCSSUB are added to this release.

TOPS05

OM group CTRYDIR was introduced in TOPS05.

Registers

OM group CTRYDIR registers display on the MAP terminal as follows:

```

>OMSHOW CTRYDIR ACTIVE

CLASS: ACTIVE
START:1995/04/14 15:30:00 FRI; STOP: 1995/04/14 15:58:38 FRI;
SLOWSAMPLES: 17 ; FASTSAMPLES: 156 ;

      CDIRCO          CDIRCO2          CDIRQD          CDIRQD2
      CDIRSV          CDIRSV2          CDIRHA          CDIRHA2
      CDIRFL          CDIRFL2          CDCSAL          CDCSAL2
      CDCSBL          CDCSBL2          CDCSSUB         CDCSSUB2
      CDIRSN          CDIRSN2
0      10              0              9              0
      11              0              8              0
      12              0              7              0
      13              0              6              0
      5                0

```

Group structure

OM group CTRYDIR provides one tuple for each office.

Key field:

None

OM group CTRYDIR (continued)

Info field:

None

Associated OM groups

None

Associated functional groups

The TOPS Country Direct functional group is associated with OM group CTRYDIR.

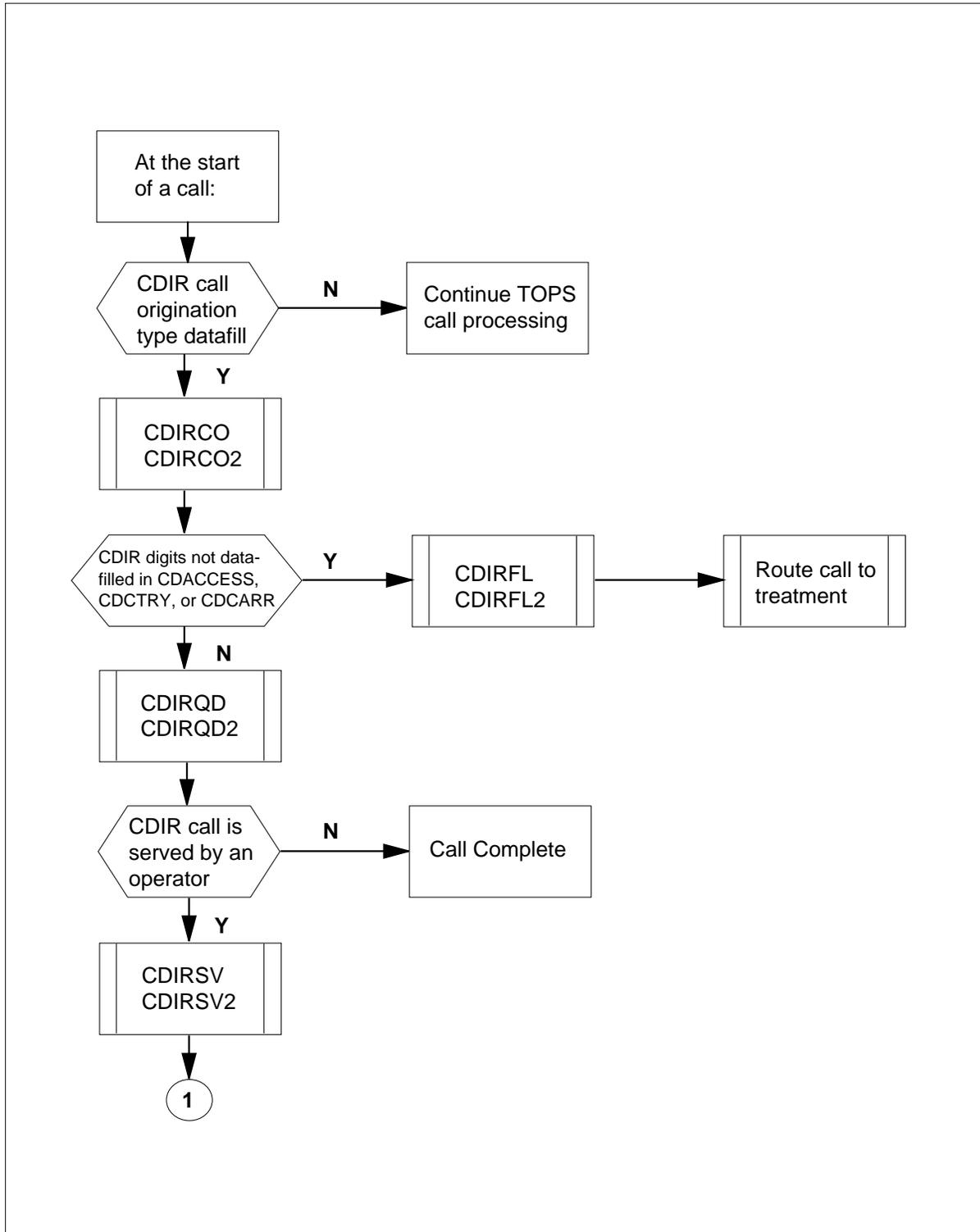
Associated functionality codes

The functionality codes associated with OM group CTRYDIR are shown in the following table.

| Functionality | Code |
|------------------------|----------|
| Auto Country Direct | ENSV0010 |
| ENSV Carrier Selection | ENSV0001 |

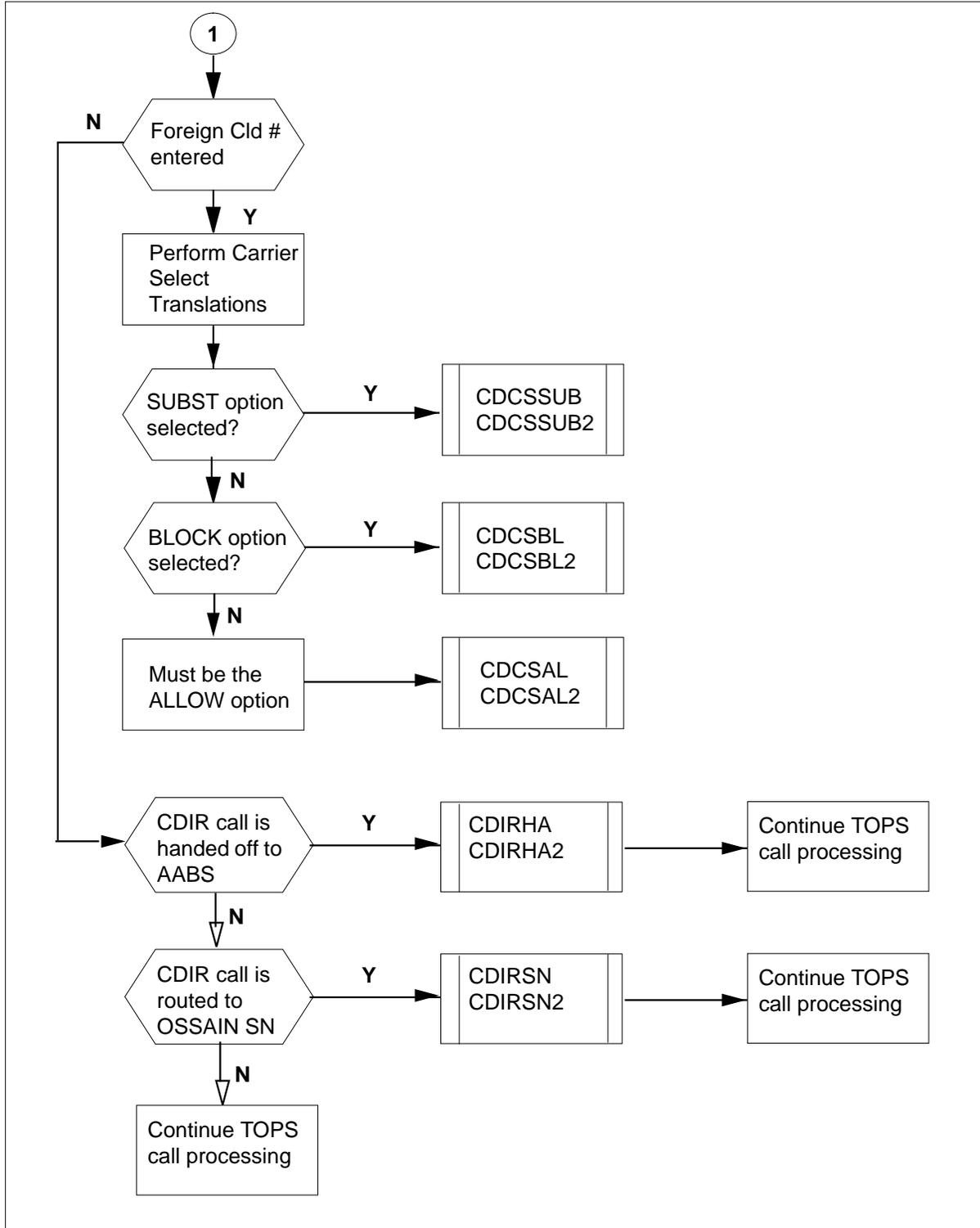
OM group CTRYDIR (continued)

OM group CTRYDIR registers



OM group CTRYDIR (continued)

OM group CTRYDIR registers (continued)



OM group CTRYDIR (continued)

Register CDCSAL

Country Direct Carrier Selection option ALLOW

CDCSAL counts the number of CDIR calls that have received carrier selection service resulting in the ALLOW option.

Register CDCSAL release history

CDCSAL was introduced in GTOPS8.1 and TOPS09.

Associated registers

None

Associated logs

None

Extension registers

CDCSAL2

Register CDCSBL

Country Direct Carrier Selection option BLOCK

CDCSBL counts the number of CDIR calls that have received carrier selection service resulting in the BLOCK option.

Register CDCSBL release history

CDCSBL was introduced in GTOPS8.1 and TOPS09.

Associated registers

None

Associated logs

None

Extension registers

CDCSBL2

Register CDCSSUB

Country Direct Carrier Selection option BLOCK

CDCSSUB counts the number of CDIR calls that have received carrier selection service resulting in the SUBST option.

OM group CTRYDIR (continued)

Register CDCSSUB release history

CDCSSUB was introduced in GTOPS8.1 and TOPS09.

Associated registers

None

Associated logs

None

Extension registers

CDCSSUB2

Register CDIRCO

Country Direct Call Origination

CDIRCO tracks how many calls are assigned the CDIR call origination type by datafill when the feature is SOC'd ON.

Register CDIRCO release history

CDIRCO was introduced in TOPS05.

Associated registers

None

Associated logs

None

Extension registers

CDIRCO2

Register CDIRFL

Country Direct Failure

CDIRFL tracks the number of Country Direct calls that are signalled with no country code or carrier ID, or an undatafilled access code, country code, or

OM group CTRYDIR (continued)

carrier of origin where one was expected. Possible error conditions are described below:

- **Invalid Access Code:** If a call is marked Country Direct, but the digits at the beginning of the Country Direct digit stream are not datafilled in table CDACCESS
- **Invalid Country Code:** If the CDACCESS tuple for the appropriate access code has field CTRYCODE = Y, but the digits following the access code are not found in table CDCTRY
- **Invalid Carrier ID:** If the CDACCESS tuple for the appropriate access code has field CARRCODE = Y, but the digits following the country code, if there is one, or the access code are not found in table CDCARR

If any of the above conditions are met, the call is routed to treatment and CDIRFL is pegged, indicating an error in the Country Direct digit stream.

Register CDIRFL release history

CDIRFL was introduced in TOPS05.

Associated registers

None

Associated logs

TOPS126

- A TOPS126 log, CDIR DIGIT STREAM ERROR, is generated when this OM is pegged. This log contains the Country Direct digit stream, the CLLI of the incoming trunk group, and a text string indicating if the error is in the access code, country code, or carrier of origin.

TRK138

- A TRK138 log is generated by the Trunk Maintenance subsystem when a call is routed to treatment after being call processing busy.

Extension registers

CDIRFL2

Register CDIRHA

Country Direct Handed Off to AABS

CDIRHA tracks the number of Country Direct calls that are handed off to AABS by an operator.

OM group CTRYDIR (continued)

Register CDIRHA release history

CDIRHA was introduced in TOPS05.

Associated registers

None

Associated logs

None

Extension registers

CDIRHA2

Register CDIRQD

Country Direct Queued

CDIRQD tracks the number of Country Direct calls that can be handled by an operator or an OSSAIN service node. This includes calls that are placed in queue and calls that are immediately handled directly by an operator or OSSAIN service node.

Register CDIRQD release history

CDIRQD was introduced in TOPS05.

Associated registers

None

Associated logs

None

Extension registers

CDIRQD2

Register CDIRSV

Country Direct Served by an Operator

CDIRSV tracks the number of Country Direct calls that are served by an operator.

Register CDIRSV release history

CDIRSV was introduced in TOPS05.

Associated registers

None

OM group CTRYDIR (end)

Associated logs

None

Extension registers

CDIRSV2

Register CDIRSN

Country Direct Served by an OSSAIN Seervice Node.

CDIRSN tracks the number of TOPS Country Direct calls that are routed to an OSSAIN Service Node.

Register CDIRSV release history

CDIRSN was introduced in TOPS10 by feature AF7592.

Associated registers

None

Associated logs

None

Extension registers

CDIRSN2

OM group CWTPOTS

OM description

Call Waiting in the plain old telephone service (POTS) environment (CWTPOTS)

The OM group CWTPOTS contains six registers that count attempts and failures to activate the POTS Call Waiting (CWT) feature.

To determine how often Call Waiting is in use and if hardware and software resources are correctly equipped, use CWTPOTS.

Release history

The OM group CWTPOTS was introduced in BCS20.

BCS21

Registers CCWPATT and CCWPNOWT were introduced to CWTPOTS in BCS21.

Registers

The OM group CWTPOTS registers appear on the MAP terminal as follows:

```
CWTPOTS
CLASS: ACTIVE
START:1995/07/14 08:30:00FRI;STOP:1995/07/1408:58:00FRI:
SLOWSAMPLES: 17; FASTSAMPLES: 168;
CWTPATT      CWTPOVFL      CWTPDENY      CWTAPABDN
CCWPATT      CCWPNOWT
100          3              2              1
2            7
```

Group structure

OM group CWTPOTS provides one tuple for each office. The tuple contains six registers.

Key field:

There is no Key field

OM group CWTPOTS (continued)

Info field:

There is no Info field

Associated OM groups

There are no associated OM groups.

Associated operational groups

The OM group CWTPOTS is available for all DMS offices with the POTS Call Waiting feature.

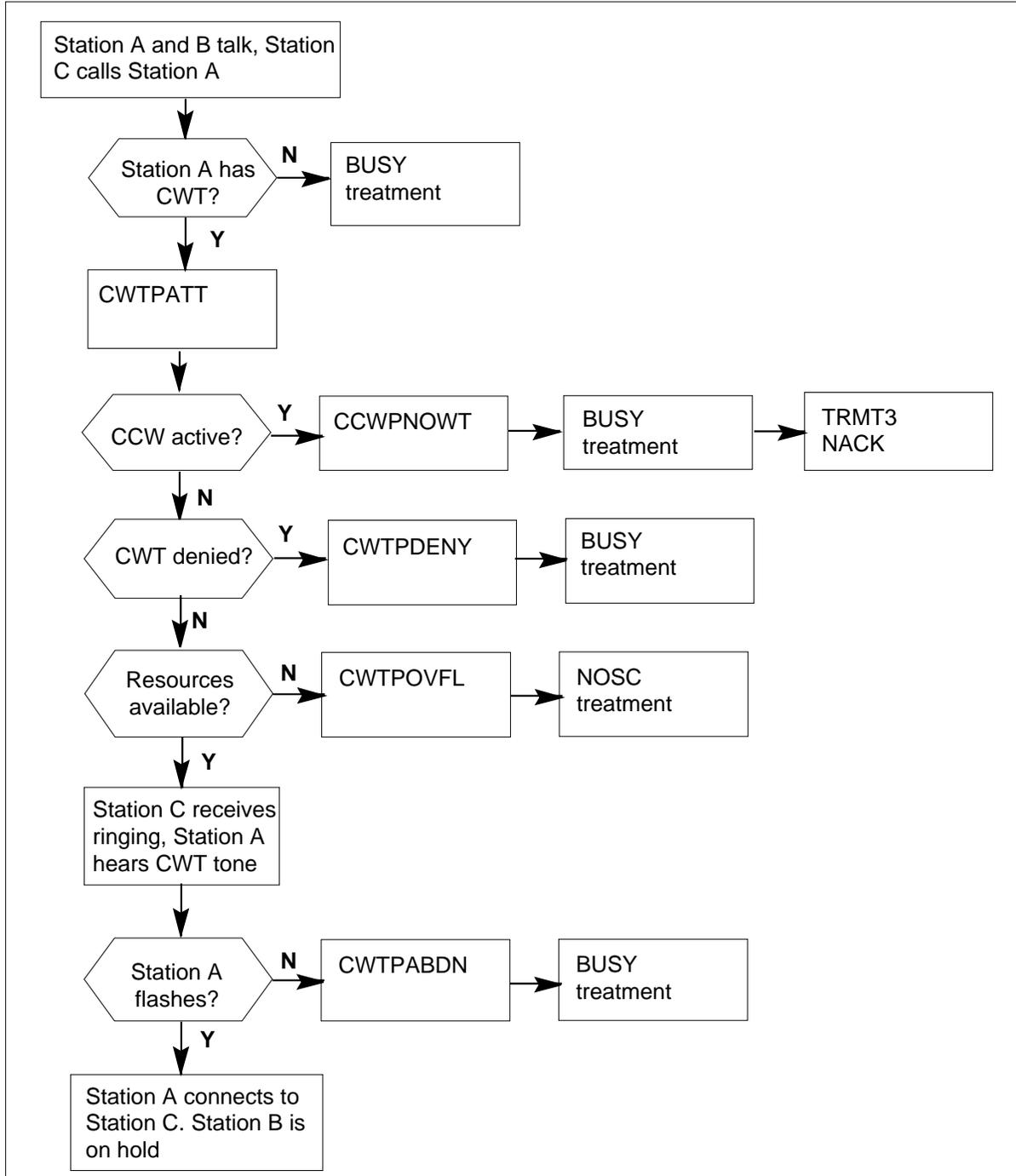
Associated functionality codes

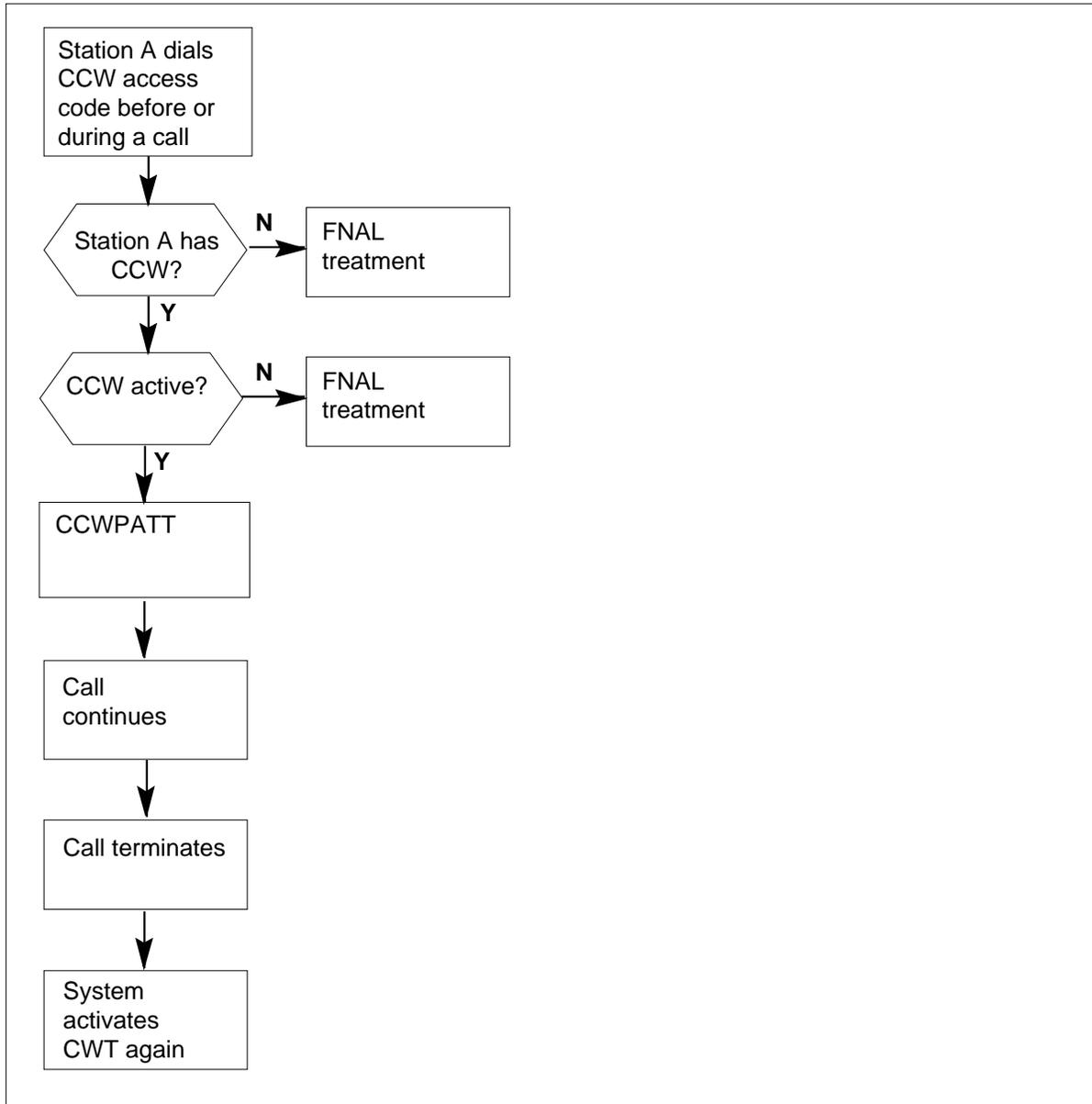
The associated functionality codes with OM group CWTPOTS appear in the following table.

| Functionality | Code |
|----------------------------|-------------|
| Vertical Services I | NTX020AC |
| Vertical Services I | NTX020AD |
| Enhanced Call Waiting POTS | NTX807AA |
| Enhanced Call Waiting POTS | NTX807AB |

OM group CWTPOTS (continued)

OM group CWTPOTS registers: Call Waiting function



OM group CWTPOTS (continued)**OM group CWTPOTS registers: Cancel Call Waiting activation****Register CCWPATT**

Cancel Call Waiting Attempt (CCWPATT)

Register CCWPATT increases when the Call Waiting feature cancels.

Register CCWPATT release history

Register CCWPATT was introduced in BCS21.

OM group CWTPOTS (continued)

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register CCWPNOWT

Call Waiting Attempt Failure, Call Waiting Cancelled (CCWPNOWT)

Register CCWPNOWT increases when a calling party attempts to use Call Waiting feature but cannot because called party cancels Call Waiting.

If the Call Waiting Auto-Suppression (CWAS) feature is active, register CCWPNOWT counts the number of termination attempts. The register counts the termination attempts on a CWT-denied Secondary Directory Number (SDN).

The system call routes to busy line treatment.

Register CCWPNOWT release history

Register CCWPNOWT was introduced in BCS21.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register CWTPABDN

Call Waiting Attempt Abandoned (CWTPABDN)

Register CWTPABDN increases when the calling party goes on-hook before the called party flashes to answer.

Register CWTPABDN release history

Register CWTPABDN was introduced in BCS20.

OM group CWTPOTS (continued)

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

There are no associated extension registers.

Register CWTPATT

Call Waiting Attempts (CWTPATT)

Register CWTPATT increases when a subscriber makes a call to a directory number with the Call Waiting feature. The register increases if another current call uses the directory number.

Register CWTPATT release history

Register CWTPATT was introduced in BCS20.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register CWTPDENY

Call Waiting Attempt Failure, Feature Restrictions (CWTPDENY)

Register CWTPDENY counts attempts to use the Call Waiting feature that fail because of feature interactions.

Register CWTPDENY release history

Register CWTPDENY was introduced in BCS20.

Associated registers

There are associated registers.

Associated logs

The system generates LINE138 when the system routes a call to a treatment after the call is call processing busy.

OM group CWTPOTS (end)

Extension registers

There are no extension registers.

Register CWTPOVFL

Call Waiting Attempt Failure, Lack of Resources (CWTPOVFL)

Register CWTPOVFL counts attempts to use the Call Waiting feature that fail because of not enough hardware or software resources.

Register CWTPOVFL release history

Register CWTPOVFL was introduced in BCS20.

Associated registers

There are no associated registers.

Associated logs

The system generates LINE138 when the system routes a call to a treatment after the call is call processing busy.

Extension registers

There are no extension registers.

OM group DAISGEN

OM description

General data access/information services OMs (DIASGEN)

The OM group DAISGEN provides information on data access/information services (DAIS) in the enhanced input/output controller (EIOC). The OM group DAISGEN counts the following activities:

- system events
- connect events
- refuse events
- release events
- not-finish events
- abort events
- protocol errors
- system errors

Release history

The OM group DAISGEN was introduced in BCS27.

BCS32

Registers for the OM group DAISGEN in BCS32 by the Call History Information Processing System (CHIPS) Enhanced File Transfer feature.

Registers

The OM group DAISGEN registers appear on the MAP terminal as follows:

| | | | |
|----------|----------|----------|----------|
| DAISSYEV | DAISCOEV | DAISREEV | DAISRLEV |
| DAISNFEV | DAISABEV | DAISPRER | DAISSYER |

Group structure

The OM group DAISGEN provides one tuple for each office.

Key field:

There is no Key field

Info field:

There is no Info field

OM group DAISGEN (continued)

Associated OM groups

The DUTLGEN OM group provides the same measurements for the DMS common transport layer.

Associated operational groups

The operational group EIOC associates with OM group DAISGEN.

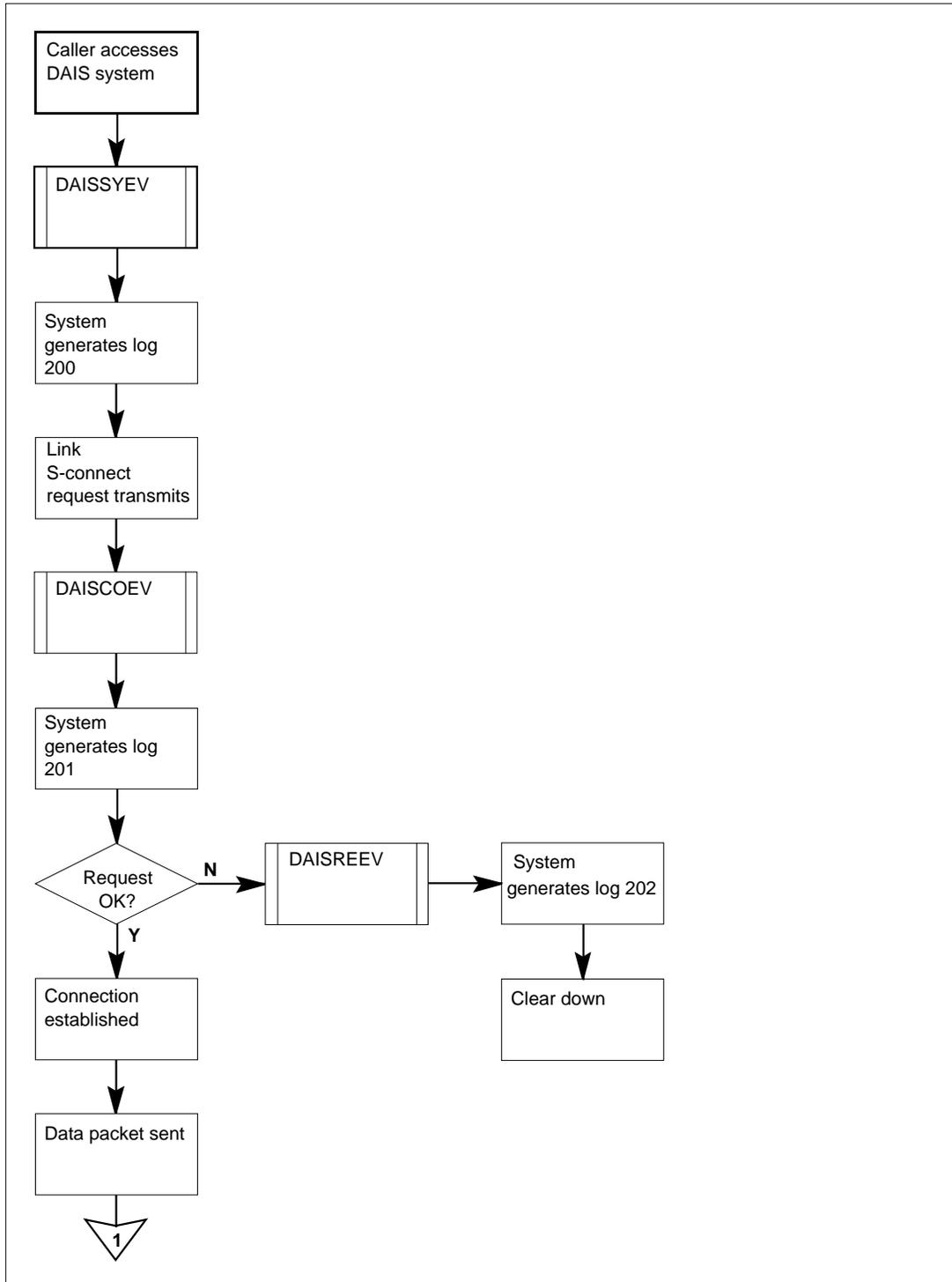
Associated functionality codes

The associated functionality codes for the OM group DAISGEN appear in the following table.

| Functionality | Code |
|---------------------------|-------------|
| CNS—Data Access Interface | NTXG13AA |

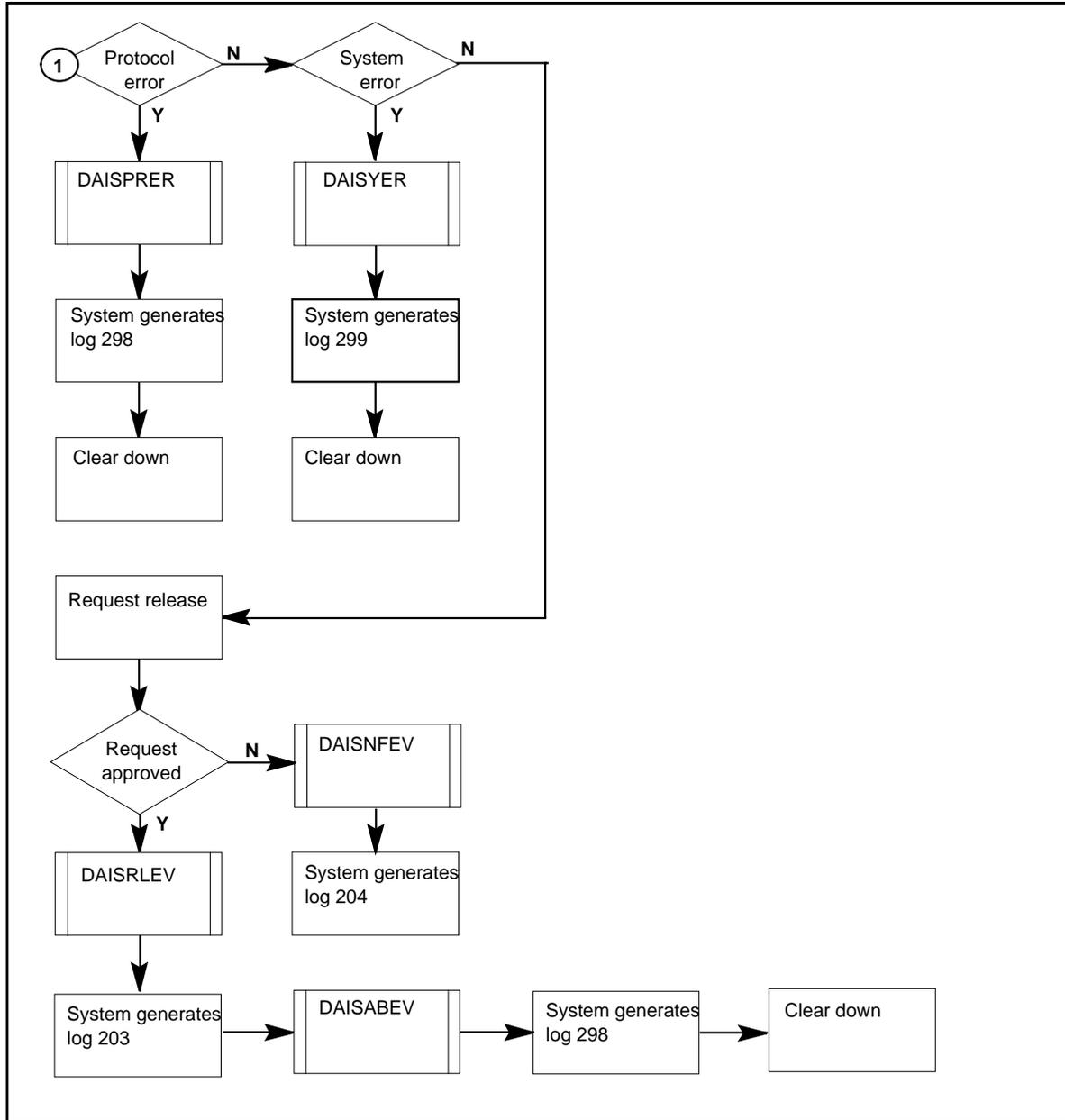
OM group DAISGEN (continued)

OM group DAISGEN registers



OM group DAISGEN (continued)

OM group DAISGEN registers (continued)



Register DAISABEV

Data access/information services (DAIS) abort events (DAISABEV)

Register DAISABEV counts abort events that occur in DAIS in the EIOC. An abort event occurs when a DAIS link sends or receives a system disconnect request, and receives or sends confirmation.

OM group DAISGEN (continued)

Register DAISABEV release history

Register DAISABEV was introduced in BCS27.

Associated registers

There are no associated registers.

Associated logs

Register DAIS297 generates when an abort event occurs. The log report includes the date, time and an explanation text.

Register DAISCOEV

DAIS connect events (DAISCOEV)

Register DAISCOEV counts connect events that occur in DAIS in the EIOC.

Register DAISCOEV release history

Register DAISCOEV was introduced in BCS27.

Associated registers

There are no associated registers.

Associated logs

The system generates DAIS201 when a connect event occurs. The log report includes the date, time, and an explanation text.

Register DAISNFEV

DAIS not-finish events (DAISNFEV)

Register DAISNFEV counts not-finish events that occur in DAIS in the EIOC.

A not-finish event occurs when a DAIS link sends a release request and receives a release reject. A not-finish event also occurs when a DAIS link receives a release request and sends a release reject.

Register DAISNFEV release history

Register DAISNFEV was introduced in BCS27.

Associated registers

There are no associated registers.

Associated logs

The system generates DAIS204 when a not-finish event occurs.

OM group DAISGEN (continued)

Register DAISPRER

DAIS protocol errors (DAISPRER)

Register DAISPRER counts protocol errors that occur in DAIS.

Register DAISPRER release history

Register DAISPRER was introduced in BCS27.

Associated registers

There are no associated registers.

Associated logs

The system generates DAIS298 when a protocol error occurs. The log report includes the date, time, and explanation text.

Register DAISREEV

DAIS refuse events (DAISREEV)

Register DAISREEV counts refuse events that occur in DAIS in the EIOC.

Register DAISREEV release history

Register DAISREEV was introduced in BCS27.

Associated registers

There are no associates registers.

Associated logs

The system generates DAIS202 when a refuse event occurs. The log report includes date, time, and explanation text.

Register DAISRLEV

DAIS release events (DAISRLEV)

Register DAISRLEV counts release events that occur in DAIS in the EIOC. A release event occurs when a DAIS link sends a release request and receives confirmation.

Register DAISRLEV release history

Register DAISRLEV was introduced in BCS27.

Associated registers

There are no associated registers.

OM group DAISGEN (end)

Associated logs

The system generates DAIS203 when a release event occurs. The log report includes date, time, and explanation text.

Register DAISSYER

DAIS system errors (DAISSYER)

Register DAISSYER counts system errors that occur in DAIS.

Register DAISSYER release history

Register DAISSYER was introduced in BCS27.

Associated registers

There are no associated registers.

Associated logs

DAIS299 generates when a system error occurs. The date, time, and explanation text are included in the log report.

Register DAISSYEV

DAIS system events (DAISSYEV)

Register DAISSYEV counts system events that occur in DAIS in the EIOC.

Register DAISSYEV release history

Register DAISSYEV was introduced in BCS27.

Associated registers

There are no associated registers.

Associated logs

The system generates DAIS200 when a system event occurs. The log report includes date, time, and explanation text.

OM group DALINK

OM description

Directory assistance (DA) link (DALINK)

DALINK counts successful and unsuccessful attempts of the Digital Multiplex System (DMS) central control (CC) to send messages to the Directory Assistance System (DAS). It also counts messages that are received by the DAS from the DMS CC.

Release history

OM group DALINK was introduced in BCS25.

NA006

Functional group Directory Assistance (OSDA0001) introduces Database Instance as a key field in the group structure.

Registers

TOPS offices with release NA006 and higher

OM group DALINK registers display on the MAP terminal as follows:

OM group DALINK (continued)

```
>OMSHOW DALINK ACTIVE
```

```
DALINK
```

```
CLASS: ACTIVE
```

```
START:1996/02/29 17:00:00 THU; STOP: 1996/02/29 17:10:56 THU;
```

```
SLOWSAMPLES: 7 ; FASTSAMPLES: 66 ;
```

```
INFO (DBINST_REGISTERINFO)
```

| | MSGSENT | MSGSENT2 | MSGSDSC | MSGSDSC2 |
|------------|---------|----------|----------|----------|
| | MSGSDFL | MSGRCVD | MSGRCVD2 | |
| 0 TOPSVR1 | 0 | | | |
| | 77 | 0 | 42 | 0 |
| | 28 | 63 | 0 | |
| 1 TOPSVR1 | 1 | | | |
| | 0 | 0 | 0 | 0 |
| | 0 | 0 | 0 | |
| 2 TOPSVR1 | 2 | | | |
| | 20 | 0 | 4 | 0 |
| | 9 | 11 | 0 | |
| 16 TOPSVR2 | 0 | | | |
| | 44 | 0 | 19 | 0 |
| | 11 | 0 | 0 | |
| 17 TOPSVR2 | 1 | | | |
| | 6 | 0 | 2 | 0 |
| | 3 | 5 | 0 | |

TOPS offices with a release below NA006

OM group DALINK registers display on the MAP terminal as follows:

OM group DALINK (continued)

```
>OMSHOW DALINK ACTIVE

DALINK

CLASS:    ACTIVE
START:1996/02/29 17:00:00 THU; STOP: 1996/02/29 17:10:56 THU;
SLOWSAMPLES:      7 ; FASTSAMPLES:      66 ;

      INFO (DALINK_REGISTERINFO)
      MSGSENT      MSGSENT2      MSGSNDSC      MSGSNSC2
      MSGSNDNFL    MSGRCVD      MSGRCVD2
1      MPC1
      0            0            0            0
      0            0            0            0
```

Group structure

TOPS offices with release NA006 and higher

OM group DALINK provides a maximum of 32 tuples for each office.

Key field:

Database Instance ([TOPSVR1, TOPSVR2] [0-15])

Note: The addition of this field allows the display of a tuple for each database instance that is defined in table SERVICES, when the OMSHOW command is issued.

Info field:

None

TOPS offices with a release below NA006

OM group DALINK provides one tuple for each office.

Key field:

range of multiprotocol controlled datalinks datafilled in table SERVICES. Valid entries are MPC1, MPC2 and STUB.

Info field:

None

OM group DALINK (continued)

Associated OM groups

OM group DAMISC counts miscellaneous events relating to Traffic Operator Position System (TOPS) DA service.

Associated functional groups

Functional group Directory Assistance (OSDA0001) is associated with OM group DALINK.

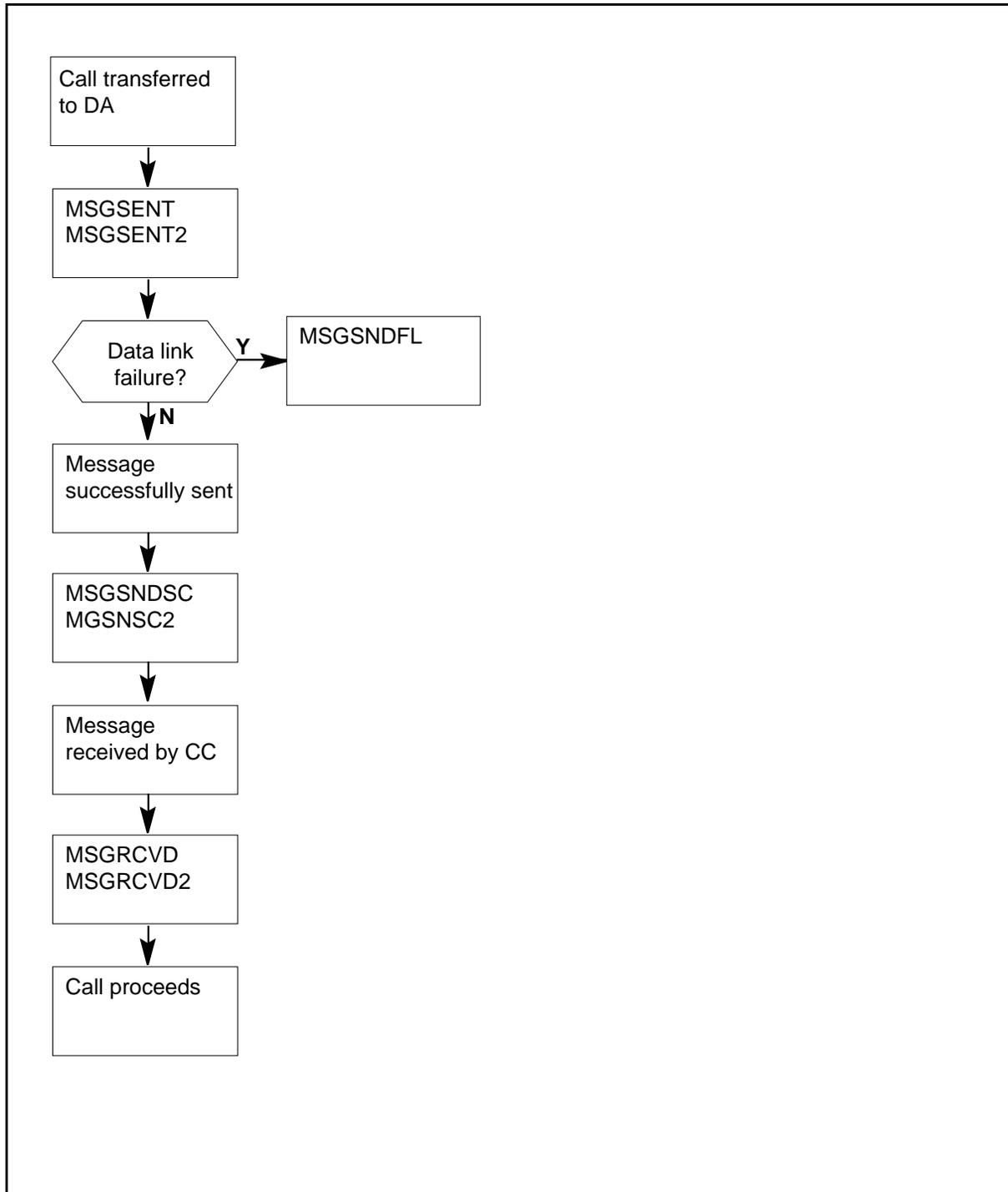
Associated functionality codes

The functionality codes associated with OM group DALINK are shown in the following table.

| Functionality | Code |
|--|-------------|
| Traffic Operator Position Service Multi-purpose Voice Response | NTXA62AA |
| Foldback: Force Management | (TOPSMPVR) |
| TOPS-MP DA/Intercept Messaging | NTXE05AA |

OM group DALINK (continued)

OM group DALINK registers



OM group DALINK (continued)

Register MSGRCVD

Messages received (MSGRCVD)

MSGRCVD is incremented when a message is received by the DMS CC from the DAS during a DA call.

Register MSGRCVD release history

MSGRCVD was introduced in BCS25.

Associated registers

None

Associated logs

None

Extension registers

MSGRCVD2

Register MSGSENT

Messages sent (MSGSENT)

MSGSENT is incremented when an attempt is made to send a message from the DMS CC to the DAS during a DA call.

Register MSGSENT release history

MSGSENT was introduced in BCS25.

Associated registers

None

Associated logs

None

Extension registers

MSGSENT2

Register MSGSNDFL

Messages send failure (MSGSNDFL)

MSGSNDFL is incremented when an attempt to send a message from the DMS CC to the DAS fails because of a datalink failure.

OM group DALINK (end)

Register MSGSNDFL release history

MSGSNDFL was introduced in BCS25.

Associated registers

None

Associated logs

None

Extension registers

None

Register MSGSNDSC

Messages send successfully (MSGSNDSC)

MSGSNDSC is incremented when a message is successfully sent from the DMS CC to the DAS during a DA call.

Register MSGSNDSC release history

MSGSNDSC was introduced in BCS25.

Associated registers

None

Associated logs

None

Extension registers

MSGSNCS2

OM group DAMISC

OM description

Directory assistance (DA) miscellaneous (DAMISC)

DAMISC counts miscellaneous events relating to Traffic Operator Position System (TOPS) DA service.

The registers contained in OM group DAMISC count the following events:

- auto-intercept failures
- communication failures during a call to the Directory Assistance System (DAS)
- intercept float timeouts
- Mechanized Calling Card Service (MCCS) calls that are successfully completed
- Automated Coin Toll Service (ACTS) calls that are successfully completed
- 0+ DA calls that are given Automated Alternate Billing Service (AABS)
- Successful/unsuccessful attempts to transfer to an OSSAIN service node

Release history

OM group DAMISC was introduced in BCS25.

NA006

Two new registers are added to OM group DAMISC: XFERCNTX, and XFERFAIL.

BCS28

Register DAAABSUC was added.

Registers

OM group DAMISC registers display on the MAP terminal as follows:

OM group DAMISC (continued)

```
>OMSHOW DAMISC ACTIVE

CLASS:    ACTIVE
START:1996/02/29 17:00:00 THU; STOP: 1996/02/29 17:10:56 THU;
SLOWSAMPLES:    5 ; FASTSAMPLES:    45 ;

      INFO (DBINST_REGISTERINFO)
      AUTINTFL    OHIMPOSE    DAMCCSUC    DAACTSUC
      INTFLTTO    DAAABSUC    XFERCNTX    XFERFAIL

0     TOPSVR1    0
      0          0          0          0
      0          0          1          1

16    TOPSVR2    1
      0          0          0          0
      0          0          0          0
```

Group structure

OM group DAMISC provides up to 32 tuples per office.

Key field:

None

Info field:

DBINST_REGISTERINFO

Associated OM groups

DALINK counts successful and unsuccessful attempts to send messages from the Digital Multiplex System (DMS) computing module (CM) to the DAS, as well as messages that are received by the DMS from the DAS CM.

Associated functional groups

The following functional groups are associated with OM group DAMISC:

- Operator Services Directory Assistance (OSDA0001)
- Enhanced Services (ENSV0001)

OM group DAMISC (continued)

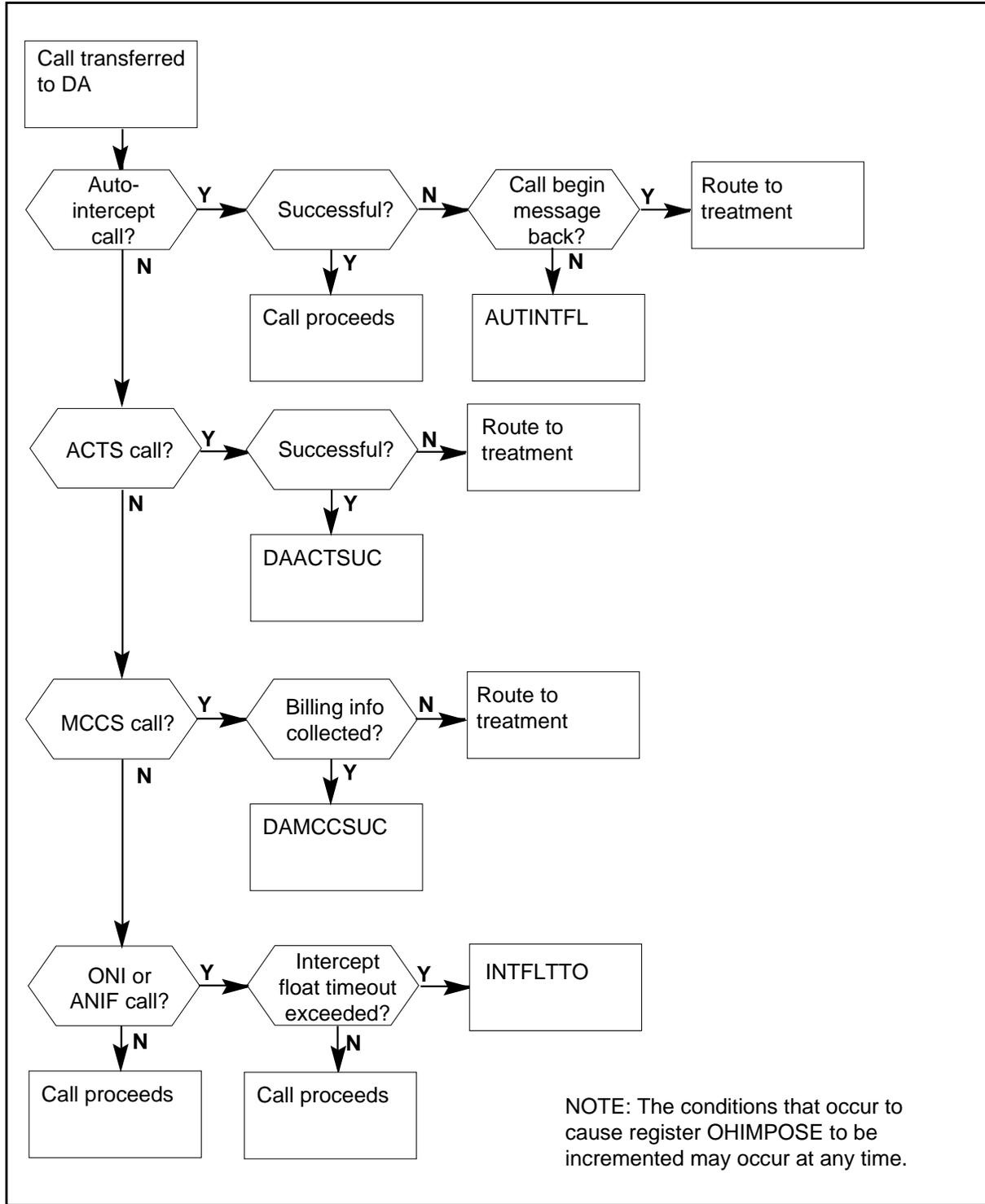
Associated functionality codes

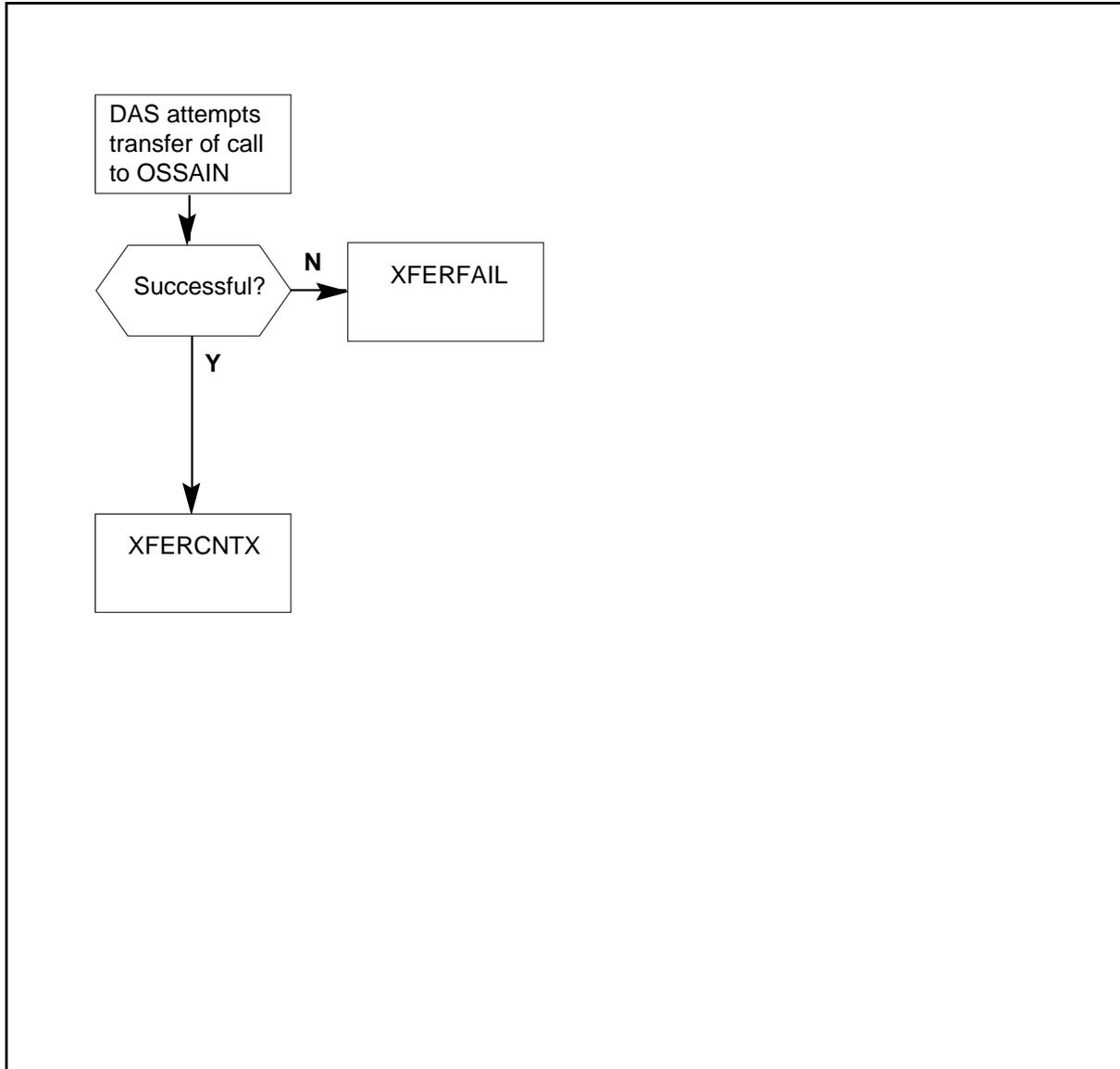
The functionality codes associated with OM group DAMISC are shown in the following table.

| Functionality | Code |
|--|-------------|
| Traffic Operator Position Service Multipurpose Voice Response | NTXA62AA |
| Foldback: Force Management | (TOPSMPVR) |
| Operator Services AIN | ENSV0014 |

OM group DAMISC (continued)

OM group DAMISC registers



OM group DAMISC (continued)**OM group DAMISC registers (continued)****Register AUTINTFL**

Auto-intercept failures (AUTINTFL)

AUTINTFL is incremented when the DAS fails to acknowledge the call begin message sent at the beginning of an auto-intercept call.

Register AUTINTFL release history

Register AUTINTFL was introduced in BCS25.

OM group DAMISC (continued)

Associated registers

None

Associated logs

None

Extension registers

None

Register DAAABSUC

Directory assistance Automated Alternate Billing Service successes (DAAABSUC)

DAAABSUC is incremented when AABS successfully obtains billing information for a 0+ DA call on a TOPS Multipurpose (MP) system.

Register DAAABSUC release history

DAAABSUC was introduced in BCS28.

Associated registers

None

Associated logs

None

Extension registers

None

Register DAACTSUC

Directory assistance (DA) Automated Coin Toll Service successes (DAACTSUC)

DAACTSUC is incremented when Automated Coin Toll Service (ACTS) successfully charges for a DA call.

Register DAACTSUC release history

DAACTSUC was introduced in BCS25.

Associated registers

None

Associated logs

None

OM group DAMISC (continued)

Extension registers

None

Register DAMCCSUC

Directory assistance (DA) Mechanized Call Card Service (MCCS) successes (DAMCCSUC)

DAMCCSUC is incremented when the MCCS successfully obtains billing information for a DA call.

Register DAMCCSUC release history

DAMCCSUC was introduced in BCS25.

Associated registers

None

Associated logs

None

Extension registers

None

Register INTFLTTO

Intercept float timeout (INTFLTTO)

INTFLTTO is incremented when the DMS CM fails to receive a position request or audio response unit (ARU) request from the DAS before the intercept float timeout, and after the CM receives a position float (POS FLOAT) message from the DAS.

This register applies to intercept Operator Number Identification (ONI) calls or automatic number identification failed (ANIF) calls.

Note: The intercept float timeout is specified by parameter FLOAT_INT_TIMEOUT in table VROPT.

Register INTFLTTO release history

INTFLTTO was introduced in BCS25.

Associated registers

None

OM group DAMISC (continued)

Associated logs

None

Extension registers

None

Register OHIMPOSE

Operator handling imposed (OHIMPOSE)

OHIMPOSE is incremented when communication with the DAS is lost during a call. The call is handled by an operator.

Register OHIMPOSE release history

OHIMPOSE was introduced in BCS25.

Associated registers

None

Associated logs

None

Extension registers

None

Register XFERCNTX

Transfer Context to OSSAIN Success (XFERCNTX)

Register XFERCNTX measures the number of times the DA system is successful in transferring a DA call to OSSAIN.

Register XFERCNTX release history

XFERCNTX was introduced in TOPS06.

Associated registers

XFERFAIL is the opposite of this register.

Associated logs

None

Extension registers

None

Register XFERFAIL

Transfer Context to OSSAIN Failure (XFERFAIL)

Register XFERFAIL measures the number of times the DA system is unsuccessful in transferring a DA call to OSSAIN.

Register XFERFAIL release history

XFERFAIL was introduced in TOPS06.

Associated registers

XFERCNTX is the opposite of this register.

Associated logs

None

Extension registers

None

OM group DCADTALG

EXPIRED PAGE. OM OBSOLETE.

OM description

Dynamically Controlled Access Detection on Algorithm State Transitions (DCADTALG)

The OM group DCADTALG measures the Dynamically Controlled Access Detection (DCA) detection operation by counting the detection cycles. The OM group DCADTALG measures the changes of state associated with mass call event (MCE) directory numbers (DN) in the detection algorithm.

The OM group DCADTALG contains registers that are pegged when changes occur or fail in the detection algorithm. You can adjust the detection thresholds and operational parameters to minimize the number of wrongly suspected calls. You can adjust detection thresholds and operational parameters to minimize real-time impact without exceeding the algorithm capacity.

Release history

The OM group DCADTALG was introduced in NA004.

Registers

The following OM group DCADTALG registers appear on the MAP terminal as follows:

| | | | | |
|---------|--------|--------|----------|----------|
| CYCLES | CLRTC | SUSTOC | SUSTOMON | MONTOCLR |
| SAMOFLO | SUSOFF | NOFI | | |

Group structure

The OM group DCADTALG provides the tuple for each office.

Key field

There is no key field.

Info field

There is no info field.

Associated OM groups

There are no associated OM registers.

Associated functional groups

The DCA functional groups are associated with OM group DCADTALG.

EXPIRED PAGE. OM OBSOLETE.**OM group DCADTALG (continued)****Associated functions**

The functionality codes associated with OM group DCADTALG appear in the following table.

| Function name | Code |
|---------------|---------|
| DCA Detection | CA00002 |

Register CYCLES

Register Number of CYCLES

The CYCLES register counts detection cycles. Each change of state can occur one time for each sampling cycle.

Register CYCLES release history**NA004**

The CYCLES register was introduced in NA004.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register CLRTOSUS

Register Clear to Suspect CLRTOSUS

The CLRTOSUS register is the D that are suspected MCE targets based on the effective attempt rate measured during sampling.

Register CLRTOSUS release history**NA004**

The CLRTOSUS registers was introduced in NA004.

OM group DCADTALG (continued)

EXPIRED PAGE. OM OBSOLETE.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register SUSTOCLR

Register Subject to Monitoring (SUSTOCLR)

The SUSTOCLR register controls the D that are not MCE targets after having been suspended.

Register SUSTOCLR release history

NA004

The SUSTOCLR register was introduced in NA004.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register SUSTOMON

Register Subject to Monitoring (SUSTOMON)

The SUSTOMON register controls the I that are MCE targets after having been suspended.

Register SUSTOMON release history

The SUSTOMON register was introduced in NA004.

Associated registers

There are no associated registers.

EXPIRED PAGE. OM OBSOLETE.

OM group DCADTALG (continued)

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register MONTOCLR

Register Monitor to Clear (MONTOCLR)

The MONTOCLR register contains the addresses that are the targets of MCEs that cleared.

Register MONTOCLR release history

NA004

The MONTOCLR register was introduced in NA004.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register SAMOFLOW

Register Sampling Overflow (SAMOFLOW)

The SAMOFLOW register counts the ineffective attempts that occur during sampling but are not recorded. The register does not record because the SAMPLE_SIZE limit has been reached.

Register SAMOFLOW release history

NA004

The SAMOFLOW register was introduced in NA004.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

There are extension registers.

Register SUSOFLOW

Register Suspect Overflow (SUSOFLOW)

The SUSOFLOW register counts the MCEs that must be suspected but cannot be recorded because the NUM_SUSPECT limit has been reached.

Register SUSOFLOW reserved for NA004

The SUSOFLOW register was introduced in NA004.

Associated registers

There are associated registers.

Associated logs

There are associated logs.

Extension registers

There are extension registers.

Register MONOFLOW

Register Monitor Overflow (MONOFLOW)

The MONOFLOW register counts the MCEs that are the targets of MCEs but cannot be monitored because the NUM_MONITOR limit has been reached.

Register MONOFLOW reserved for NA004

The MONOFLOW register was introduced in NA004.

Associated registers

There are associated registers.

Associated logs

There are associated logs.

Extension registers

There are extension registers.

OM group DCAIA

OM description

Dynamic / Controlled Access (DCA) Ineffective Attempts (DCAIA)

The DCA operational measurement (OM) group counts and classifies ineffective attempts to measure switch conditions. The DCA detection records these attempts.

Release history

NA004

The OM group DCAIA was introduced in NA004.

CSP18/SN05

Extension registers TOTAL, TRM2 and ISUP2 were introduced.

Registers

The following OM group DCAIA registers appear on the MAP terminal as follows:

| | |
|-------|-------|
| TOTAL | ISUP |
| TOTAL | ISUP2 |

Group structure

The OM group DCAIA provides one sample for each office.

Key field:

The is no

Info field:

The is no info

Associated OM groups

The OM group DCAIA provides information on how to measure the switch conditions through MCE

Associated functional groups

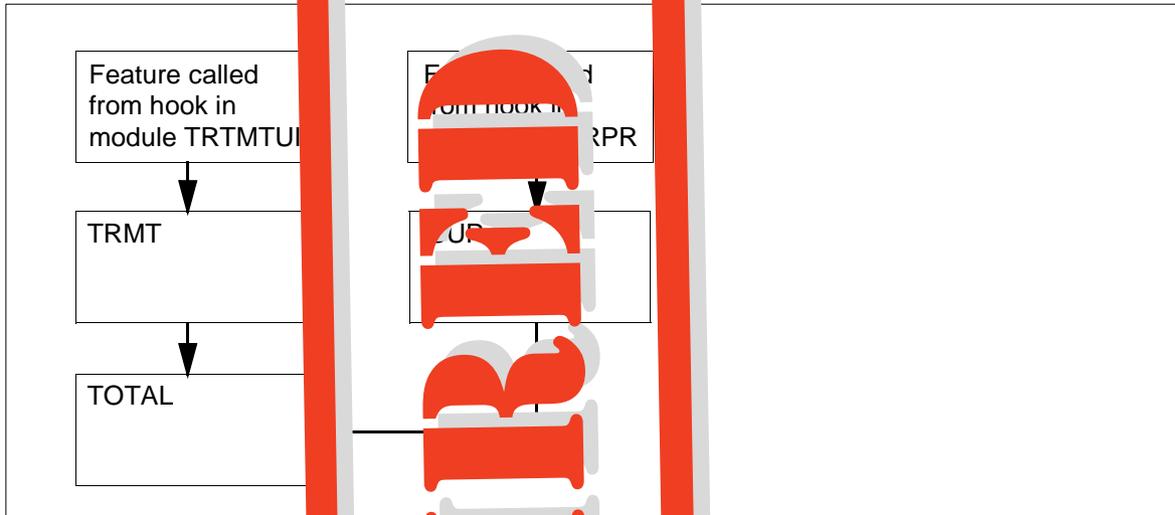
The DCA functional groups associated with OM group DCAIA.

Associated functionality codes

The following functionality codes for the group DCAIA appear in the following table:

| Functionality | Code |
|------------------|----------|
| DCAIA protection | DCA00002 |

OM group DCAIA registers



Register TOTAL

Register Total (TOTAL)

The TOTAL register counts the termination failures that the DCA considers ineffective after the first attempt.

Register TOTAL release

The TOTAL register is introduced in NA004.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

TOTAL

Register TRMT

Register Treatment (TRMT)

The TRMT register counts termination failures that the DCA considers to be ineffective after the application of treatment.

Register TRMT release history

The TRMT register was introduced in 2004.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

TRMT2

Register ISUP

Register ISUP is integrated with the ISDN User Part (ISUP)

The ISUP register counts termination failures that the DCA considers to be ineffective after the attempt to relay that involves the relay of an ISUP message.

Register ISUP release history

The ISUP register was introduced in 2004.

Associated registers

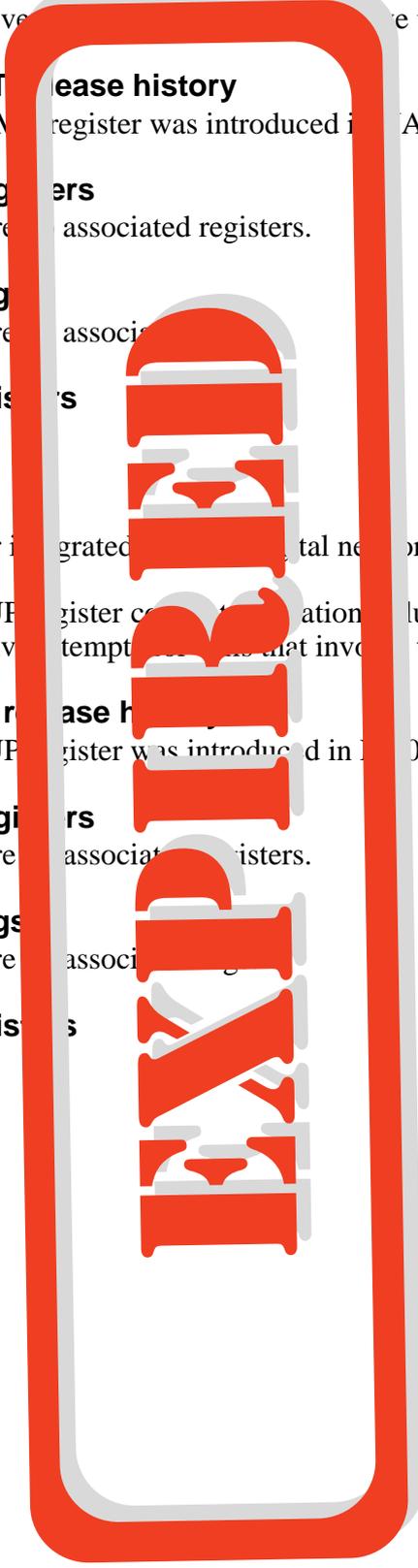
There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

ISUP2



OM group DCAMCEIA**EXPIRED PAGE. OM OBSOLETE.****OM description**

Dynamic Controlled Access (DCA) Ineffective Attempts for Mass Call Events (DCAMCEIA)

The DCAMCEIA operational measurement (OM) group, counts and classifies ineffective attempts toward directory numbers (DN) to measure switch conditions. These switch conditions relate to mass call events (MCE). The ineffective attempts are targets of MCEs. The collected counts, provide information on MCE patterns on the switch.

Release history**NA004**

The OM group DCAMCEIA was introduced in NA004.

CSP18/SN05

Extension registers TO_TRK2, TO_TRK1, TOTAL1, TRMT1, and ISUP1 were introduced.

Registers

The registers for DCAMCEIA appear on the MAP terminal as follows:

| | | | | |
|---------|---------|----------|---------|----------|
| TOTAL1 | TRMT1 | ISUP1 | FR_LINE | FR_TRUNK |
| TO_LINE | TO_TRK2 | TO_OFFER | FR_TRK2 | TO_TRK2 |
| TOTAL2 | TRMT2 | ISUP2 | | |

Group structure

The OM group DCAMCEIA provides one tuple for each office.

Key field:

The group has no key field.

Info field:

The group has no info field.

Associated OM groups

The DCAMCEIA provides information on the ineffective attempts that the DCA detects, records.

Associated functional groups

The DCAMCEIA functional groups associated with the OM group DCAMCEIA.

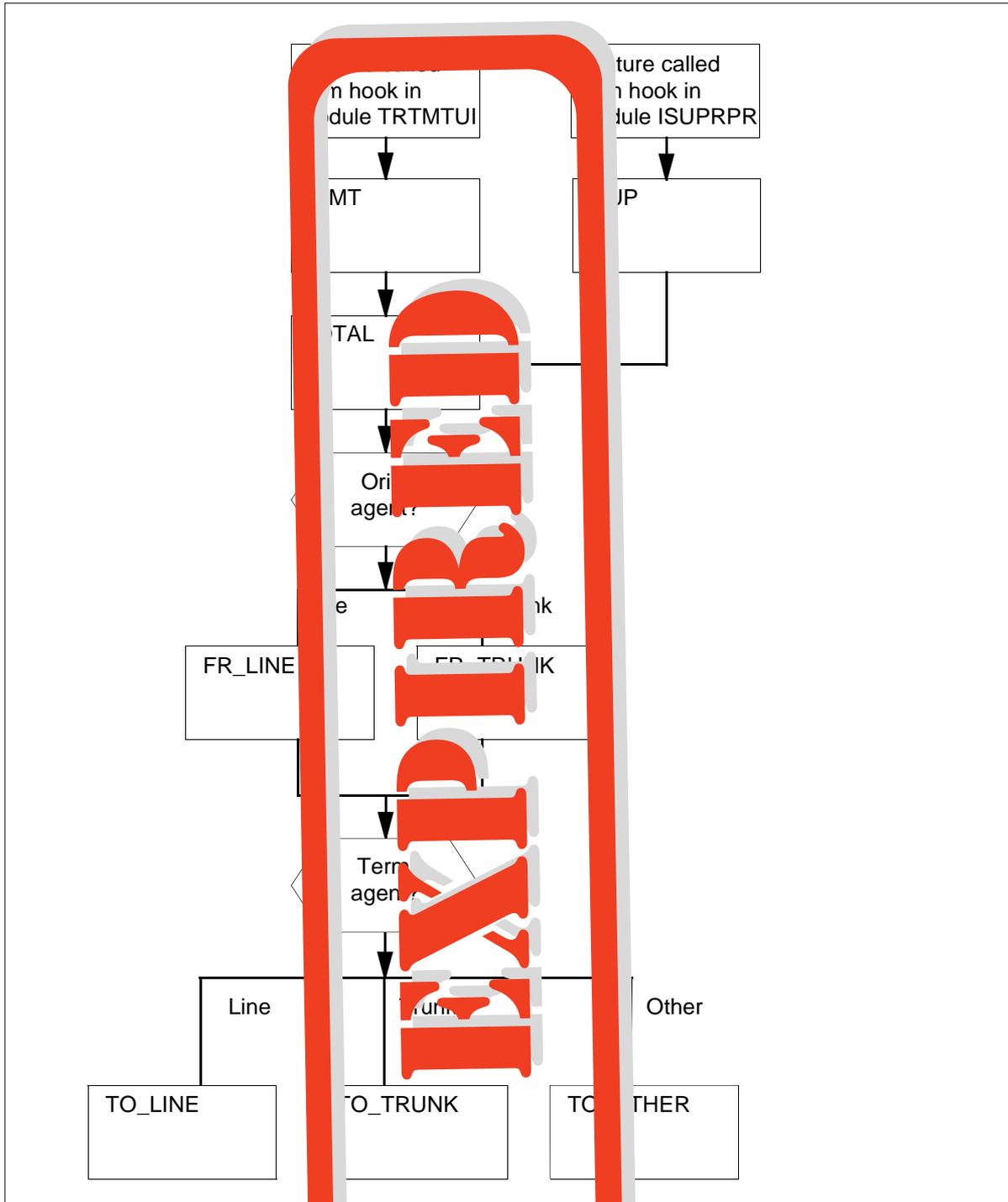
Associated functions

The functions and codes for OMI and DCAMCEIA appear in the following table:

| Functionality | Code |
|---------------|----------|
| DCA Detection | DCA00002 |



OM group DCAMCEIA registers



Register TOTAL

Register To TOTAL

The TOTAL register counts the termination failures that the DCA considers ineffective attempts toward the DN. The DN is the target of MCEs.

Register TOTAL release history

The TOTAL register was introduced in NA004.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

TOTAL1

Register TRMT

Register TRMT

The TRMT register counts the termination failures that the DCA considers ineffective attempts toward the DN. The DN is the target of MCEs for calls that involve the application of treatment.

Register TRMT release history

The TRMT register was introduced in A004.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

TRMT1

Register ISUP

Register ISUP is integrated into the International Network (ISDN) User Part (ISUP)

The ISUP register counts the termination failures that the DCA considers ineffective attempts toward the DN. The DN is the target of MCEs, for calls that involve the relay of an ISUP message.

Register ISUP release history

The ISUP register was introduced in NA004.

Associated registers

There

Associated logs

There are no associated logs.

Extension registers

ISUP

Register FR_LINE

Register FR_LINE (From Line) (LINE)

The FR_LINE register counts the termination failures that the DCA considers ineffective attempts toward DNs. These DNs are the targets of MCEs for calls that come in from a line.

Register FR_LINE repository

The FR_LINE register was introduced in NA004.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register FR_TRUNK

Register FR_TRUNK (From Trunk) (TRUNK)

The FR_TRUNK register counts termination failures that the DCA considers ineffective attempts toward DNs. These DNs are the targets of MCEs for calls that come in on a trunk.

Register FR_TRUNK repository

The FR_TRUNK register was introduced in NA004.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

FR_TRK2

Register TO_LINE

Register Line (TO_LINE)

The TO_LINE register counts the termination failures that the DCA considers ineffective attempts toward DNs. These DNs are the targets of MCEs for calls that a line completes.

Register TO_LINE release

The TO_LINE register was introduced in NA004.

Associated registers

There are associated registers.

Associated logs

There are associated logs.

Extension registers

There are extension registers.

Register TO_TRUNK

Register Trunk (TO_TRUNK)

The TO_TRUNK register counts the termination failures that the DCA considers ineffective attempts toward DNs. These DNs are the targets of MCEs for calls that a trunk completes.

Register TO_TRUNK release history

The TO_TRUNK register was introduced in NA004.

Associated registers

There are associated registers.

Associated logs

There are associated logs.

Extension registers

TO_TRK2

Register TO_OTHER

Register Other Terminator Type (TO_OTHER)

The TO_OTHER register is used to track termination failures that the DCA considers in MCEs. These DNs are the targets of MCEs. They are the targets for calls that go out on an agent that is not a line or a trunk.

Register TO_OTHER release history

The TO_OTHER register was introduced in NA004.

Associated registers

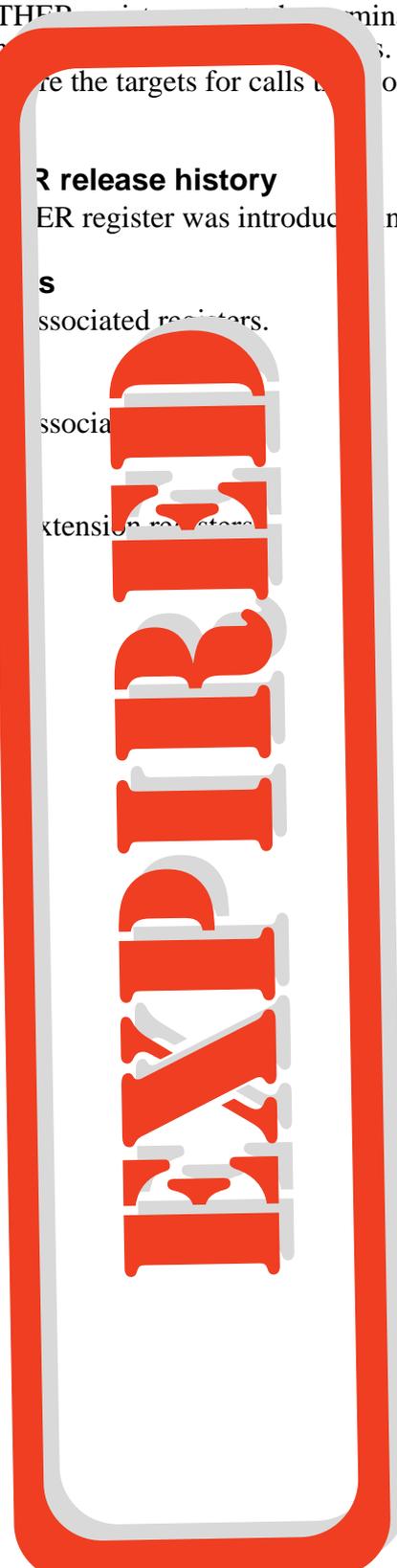
There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.



OM group DCM

OM description

The OM group Digital carrier module maintenance summary (DCM)

The OM group DCM provides maintenance measurements for digital carrier modules (DCM).

The OM group DCM contains nine registers that count the following:

- errors detected in in-service DCMs
- circuit diagnostics
- DCMs that become manual busy and system busy
- terminals that the system cuts off because DCMs become manual busy or system busy
- outside plant circuit failures

Two usage registers record if DCMs are system busy or manual busy.

Release history

The OM group DCM was introduced before BCS20.

BCS33

When you set office parameter OMINERLANGS to Y, you convert the usage count from CCS to deci-erlangs before the count appears. Use the OMSHOW command on the ACTIVE class to display the usage count. The value in the active registers remains in CCS.

BCS30

Software changed for the OM group DCM to provide use counts in CCS or deci-erlangs.

Registers

The OM group DCM registers appear on the MAP terminal as follows:

| | | | |
|----------|----------|----------|--------|
| DCMERR | DCMFLT | DCMSBU | DCMMBU |
| DCMCCTDG | DCMCCTFL | DCMMBP | DCMSBP |
| DCMMBTCO | DCMSBTCO | DCMCCTOP | |

Group structure

The OM group DCM provides one tuple for each office.

OM group DCM (continued)

Key field:

There is no Key field

Info field:

There is no Info field

Associated OM groups

The OM group PM provides maintenance measurements for each peripheral module.

The OM group PMTYP totals the registers in group PM for each peripheral module type.

Associated operational groups

There are no associated operational groups.

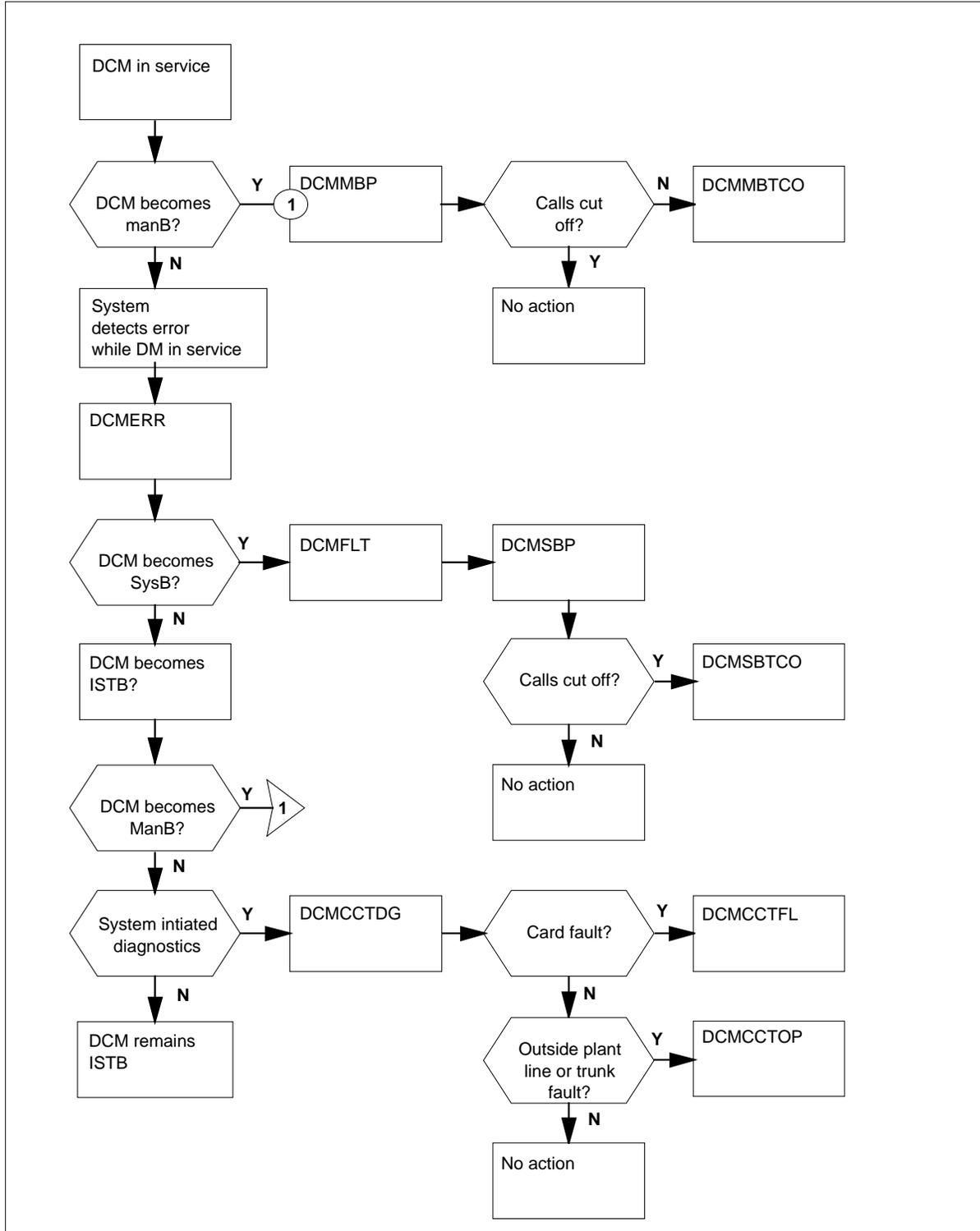
Associated functionality codes

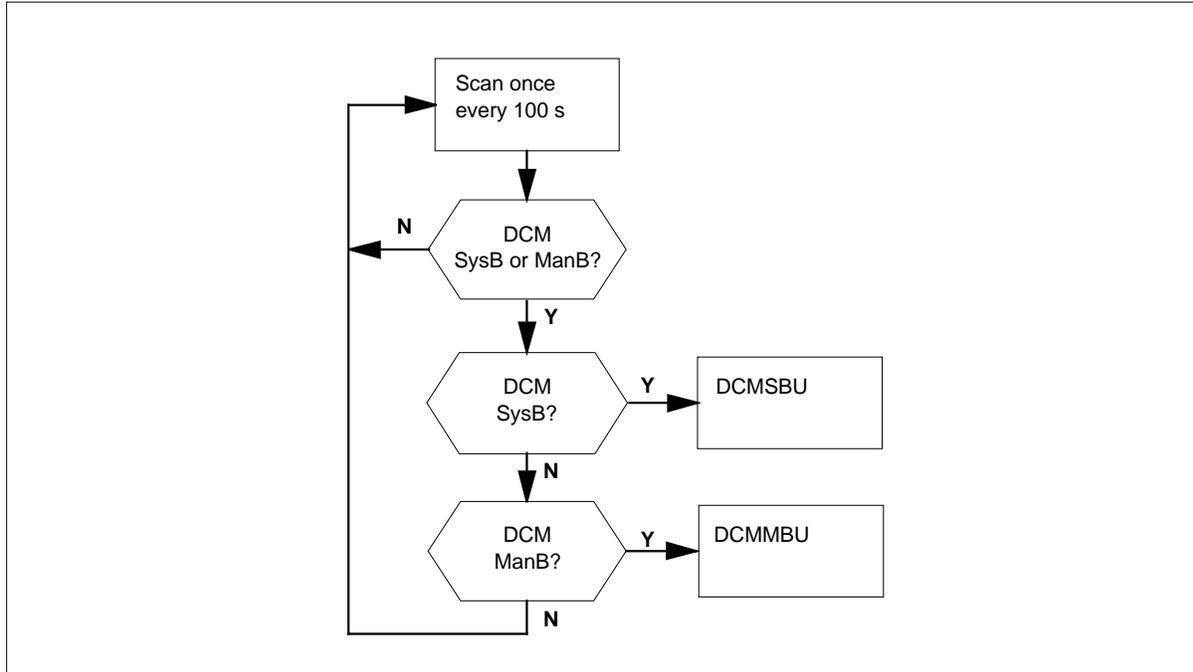
The associated functionality codes for the OM group DCM appear in the following table.

| Functionality | Code |
|---------------|----------|
| Common Basic | NTX001AA |

OM group DCM (continued)

OM group DCM registers



OM group DCM (continued)**OM group DCMuse registers****Register DCMCCTDG**

Digital carrier module (DCM) circuit diagnostics run (DCMCCTDG)

Register DCMCCTDG increases when the system sends a DMC trunk to maintenance software because of repeated problems during call processing. The maintenance software checks if:

- the system removes the DCMs DS-1 trunk card
- the DS-1 set of cards has an alarm in the local group or the remote carrier group

Register DCMCCTDG release history

Register DCMCCTDG was introduced before BCS20.

Associated registers

Register PM_PMCCTDG increases when the system sends a DCM trunk to maintenance software because of repeated problems during call processing.

Register PMTYP_PMTCTDG is the total of register PM_PMCCTDG for the peripheral module (PM) type.

OM group DCM (continued)

Associated logs

There are no associated logs.

Register DCMCCTFL

Digital carrier module (DCM) circuit diagnostics failed (DCMCCTFL)

Register DCMCCTFL increases when:

- the system refers a trunk on a DCM to maintenance software for checking because of repeated problems during call processing
- the system removed the related DS-1 line card
- the DS-1 set of cards has an alarm in the local group or the remote carrier group

Register DCMCCTFL release history

Register DCMCCTFL was introduced before BCS20.

Associated registers

Register PM_PMCCTFL increases when:

- the system sends a DCM trunk to maintenance software because of repeated problems during call processing
- the system removed the related DS-1 line card
- the DS-1 set of cards has an alarm in the local group or the remote carrier group

Register PMTYP_PMTCCTFL is the total of register PM_PMCCTFL for the peripheral module (PM) type.

Associated logs

There are no associated logs.

Register DCMCCTOP

Digital carrier module (DCM) circuit diagnostics outside plant (DCMCCTOP)

Register DCMCCTOP counts outside plant circuit failures that diagnostics called by the signaling test system detect. Register DCMCCTOP increases when the originating office does not receive a start-dial or wink signal from the far-end office. The start-dial responses to the off-hook signal that the originating office sends.

OM group DCM (continued)

Register DCMCCTOP increases when the diagnostic first detects a fault. Register DCMCCTOP does not increase when the diagnostic detects the fault on subsequent retests.

Register DCMCCTOP release history

Register DCMCCTOP was introduced before BCS20.

Associated registers

Register PM_PMCCTOP counts outside plant circuit failures diagnostics called by the signaling test system detects. Register PMCCTOP increases when the originating office does not receive a start-dial or wink signal from the far-end office. The start-dial or wink signal are responses to the off-hook signal that the originating office sends.

Register PMTYP_PMTCCTOP is the total of register PM_PMCCTOP for the PM type.

Associated logs

There are no associated logs.

Register DCMERR

Digital carrier module (DCM) errors (DCMERR)

Register DCMERR counts errors that the system detects in an in-service DCM. Register DCMERR increases when an in-service DCM:

- reports a software error, a RAM parity failure, a DCM firmware error, or DCM controller message congestion
- experiences an integrity failure
- fails a test during a routine or initializing audit
- raises a WAI (who-am-I) flag that indicates that processing in the DCM failed completely
- fails to respond to messages

Register DCMERR increases without regard for if the system takes action on the error.

Register DCMERR release history

Register DCMERR was introduced before BCS20.

Associated registers

Register PM_PMERR counts errors that the system detects in an in-service peripheral module (PM).

OM group DCM (continued)

Register PMTYP_PMTERR is the total of register PM_PMERR for the PM type.

Associated logs

There are no associated logs.

Register DCMFLT

Digital carrier module (DCM) faults (DCMFLT)

Register DCMFLT counts DCM errors that make the DCM system busy pending manual interruption or a successful system-initiated recovery attempt. Register DCMFLT increases with errors that register DCMERR increased with earlier.

Register DCMFLT release history

Register DCMFLT was introduced before BCS20.

Associated registers

Register PM_PMFLT counts peripheral module (PM) errors that make the PM system busy pending manual interruption or successful system-initiated recovery attempt.

Register PMTYP_PMTFLT is the total of register PM_PMFLT for the PM type.

Associated logs

There are no associated logs.

Register DCMMBP

Digital carrier module (DCM) transitions to manual busy (DCMMBP)

Register DCMMBP counts digital carrier modules (DCM) that are in-service or in in-service trouble, and become manual busy.

Register DCMMBP release history

Register DCM was introduced before BCS20.

Associated registers

Register PM_PMMBP counts peripheral modules (PM) that are in-service or in in-service trouble, and become manual busy.

Register PMTYP_PMTMBP is the total of register PM_PMMBP for the PM type.

OM group DCM (continued)

Associated logs

There are no associated logs.

Register DCMMBTCO

Digital carrier module (DCM) manual busy terminals cut off (DCMMBTCO)

Register DCMMBTCO counts terminals that the system cut off when the system makes an in-service DCM manual busy.

Register DCMMBTCO release history

Register DCMMBTCO was introduced before BCS20.

Associated registers

Register PM_PMMBTCO counts terminals that the system cut off when the system makes an in-service peripheral module (PM) manual busy.

Register PMTYP_PMTMBTCO is the total of register PM_PMMBTCO for the PM type.

Associated logs

There are no associated logs.

Register DCMMBU

Digital carrier module (DCM) manual busy usage (DCMMBU)

Register DCMMBU is a usage register. The scan rate is 100 s. Register DCMMBU records if a DCM is manual busy.

Register DCMMBU release history

Register DCMMBU was introduced before BCS20.

BCS33

When you set office parameter OMINERLANGS is set to Y, you convert the usage count from CCS to deci-erlangs before the count appears. Use the OMSHOW command on the ACTIVE class to display the usage count. The value held in the active registers does not alter and remains in CCS.

BCS30

Software changed for the OM group DCMMBU in BCS30 to provide use counts in CCS or deci-erlangs.

OM group DCM (continued)

Associated registers

Register PM_PMMMBU records if a peripheral module (PM) is manual busy. Register PMMMBU is a usage register. The scan rate is 100 s.

Register PMTYP_PMTMMBU is the total of register PM_PMMMBU for the PM type.

Associated logs

There are no associated logs.

Register DCMSBP

Digital carrier module (DCM) transitions to system busy (DCMSBP)

Register DCMSBP counts digital carrier modules (DCM) that are in-service or in in-service trouble, and become system busy.

Register DCMSBP release history

Register DCMSBP was introduced before BCS 20.

Associated registers

Register PM_PMSBP counts peripheral modules (PM) that are in-service or in in-service trouble, and become system busy.

Register PMTYP_PMTSBP is the total of register PM_PMSBP for the PM type.

Associated logs

There are no associated logs.

Register DCMSBTCO

Digital carrier module (DCM) system busy terminals cut off (DCMSBTCO)

Register DCMSBTCO counts terminals that are call processing busy or call processing busy deload. This register counts these terminals when the DCM C-side changes state to busy from an in-service or in-service trouble state.

C-side busy is the state on the DCM before the DCM becomes system busy.

Register DCMSBTCO release history

Register DCMSBTCO was introduced before BCS20.

OM group DCM (continued)

Associated registers

Register PM_PMSBTCO counts terminals that are call processing busy or call processing busy deload. This register counts the terminals when the peripheral module (PM) C-side busy state are from an in-service or in-service trouble state. C-side busy is the state of the PM before the PM becomes system busy.

Register PMTYP_PMTSBTCO is the total of register PM_PMSBTCO for the PM type.

Associated logs

There are no associated logs.

Register DCMSBU

Digital carrier module (DCM) system busy usage (DCMBSU)

Register DCMSBU is a usage register . The scan rate 100 s. Register DCMSBU records if a DCM is system busy.

The system makes a DCM system busy if:

- the DCM fails a routine audit
- message paths to the DCM are not available
- the system receives a minimum of 200 problem reports the DCM in one 10 min audit period

The system tests system busy DCM at 1 min intervals in an attempt to restore the DCMS

Register DCMSBU release history

Register DCMSBU was introduced before BCS20.

BCS33

When you set office parameter OMINERLANGS to Y, you convert the usage count from CCS to deci-erlangs before the count appears. Use the OMSHOW command on the ACTIVE class to display the usage count. The value in the active registers remains in CCS.

BCS30

Software changed for the OM group DCM in BCS30 to provide use counts in CCS or deci-erlangs.

Associated registers

Register PM_PMMSBU records if a peripheral module (PM) is system busy. PMMSBU is a usage register. The scan rate is 100 s.

OM group DCM (end)

Register PMTYP_PMTMSBU is the total of the register PM_PMMSBU for the PM type.

Associated logs

There are no associated logs.

OM group DCND

OM Description

Dual-tone multifrequency (DTMF) calling number delivery (DCND)

The OM group DCND provides information about the use of DTMF tones to deliver calling number data to customer premises equipment. Calling number data delivery occurs on an office-by-office base.

Release history

The OM group DCND was introduced in BCS36.

Registers

The OM group DCND registers appear on the MAP terminal as follows:

| | | | |
|----------|----------|----------|----------|
| DCNDATT | DCNDATTE | DCNDDEL | DCNDDELE |
| DCNDEANS | DCNDABND | DCNDFAIL | |

Group structure

The OM group DCND provides one tuple for each office.

Key field:

There is no Key field

Info field:

There is no Info field

Associated OM groups

There are no associated OM groups.

Associated functional groups

The functional groups that associate with OM group DCND include:

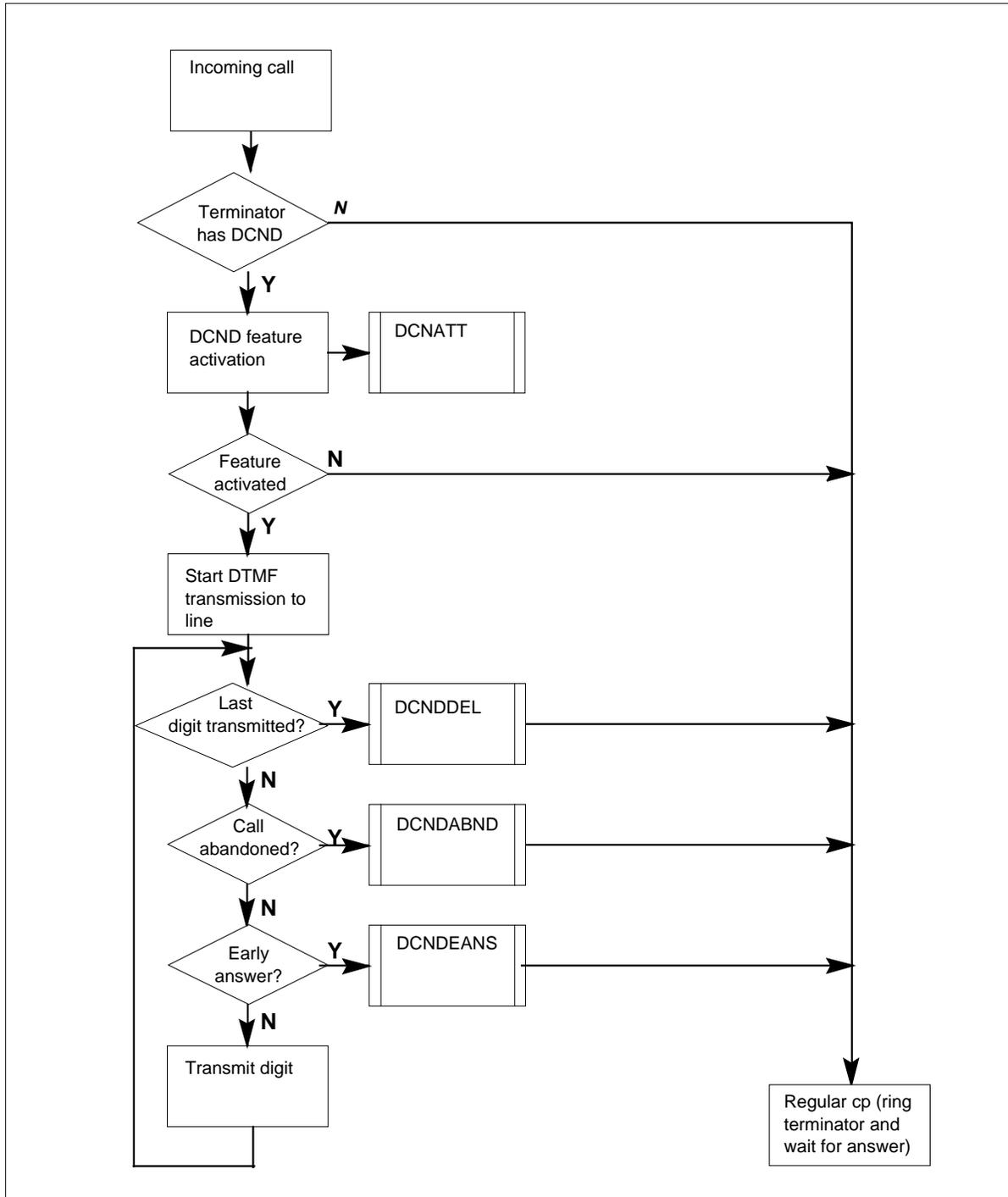
- Integrated Business Network (IBN)
- Automatic Call Distribution (ACD)
- Meridian business set (MBS)

OM group DCND (continued)

Associated functionality codes

The associated functionality codes for the OM group DCND appear in the following table.

| Functionality | Code |
|----------------------------------|----------|
| JPN ISUP Calling Number Delivery | NTXV58AA |

OM group DCND (continued)**OM group DCND registers**

OM group DCND (continued)

Register DCNDABND

DCND originator abandon (DCNDDABND)

Register DCNDABND counts the number of times the system does not deliver the calling number to the customer. The system does not deliver the calling number because the originator abandons the call before delivery is complete.

Register DCNDABND release history

Register DCNDABND was introduced in BCS36.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Register DCNDATT

DCND delivery attempts (DCNDATT)

Register DCNDATT counts the number of attempts to deliver a calling number to customer equipment with DTMF tones.

Register DCNDATT release history

Register DCNDATT was introduced in BCS36

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

Register DCNDATTE

Register DCNDDEL

DCND delivered (DCNDDEL)

Register DCNDDEL counts the number of successful attempts to deliver a calling number to customer equipment with DTMF tones.

Register DCNDDEL release history

Register DCNDDEL was introduced in BCS36.

OM group DCND (end)

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

Register DCNDDELE

Register DCNDEANS

DCND early answer (DCNDEANS)

Register DCNDEANS records the number of times the system does not deliver the calling number to the customer. The system does not deliver the calling number because the subscriber answers the call before delivery is complete.

Register DCNDEANS release history

Register DCNDEA was introduced in BCS36.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Register DCNDFAIL

DCND failure (DCNDFAIL)

Register DCNDDEL counts the number of times the system does not deliver the calling number to the customer. The system does not deliver the calling number because of actions between features or resource limitations.

Register DCNDFAIL release history

Register DCNDFAIL was introduced in BCS36.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

OM group DCOMLINK

OM description

Data com link (DCOMLINK)

The OM group DCOMLINK measures traffic and faults that occur in physical, link, and network levels of a data communications link.

Release history

The OM group DCOMLINK was introduced in BCS33.

Registers

The OM group DCOMLINK registers appear on the MAP as follows:

| | | | |
|--------|---------|-------|--------|
| PABORT | PSYNC | PDOWN | PHWERR |
| LSETUP | LDISC | LDOWN | LACKTO |
| LXMIT | LXMITOF | LRCV | LRCVOF |
| LRXMIT | LLVIO | LRVIO | NUXMIT |
| NURCV | | | |

Group structure

The OM group DCOMLINK provides one tuple for each office.

Key field:

There are no Key fields

Info field:

DCOMLOMINFOTYPE contains the data communications device type to which the OM tuple data applies.

The OM DCOMNO contains the data communications device number to which the OM tuple data applies.

The OM LINKNO contains the link on the data communications device to which the OM tuple data applies.

The OM RXMIT_TIME contains the value of the protocol retransmission timer. The value is in 10 ms increments. This value is equal to the T1 timer value in the X.25 protocol. This value can be zero for other protocol installations.

Associated OM groups

There are no associated OM groups.

OM group DCOMLINK (continued)

Associated operating groups

There are no associated associated operating groups.

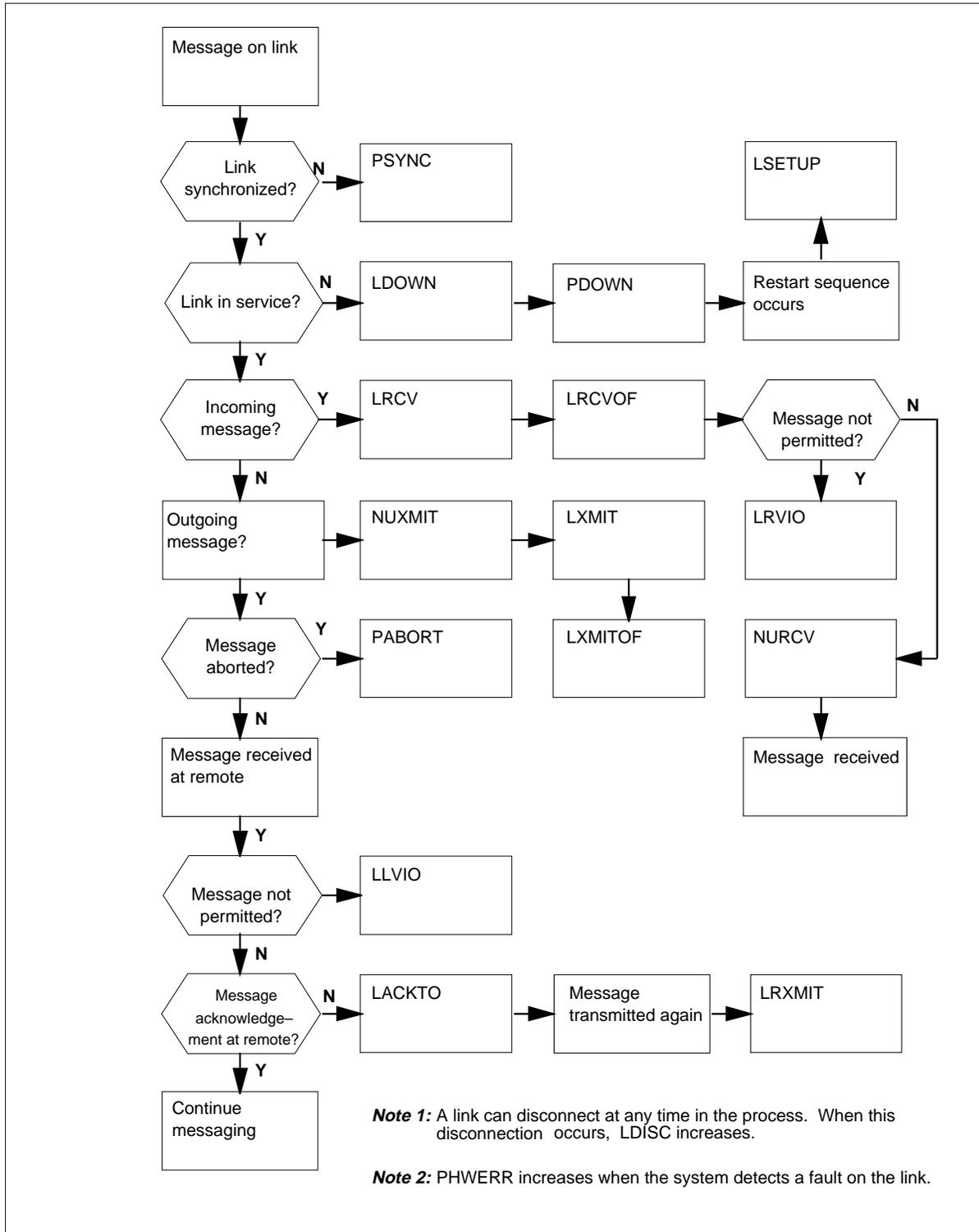
Associated functionality codes

The associated functionality codes for the OM group DCOMLINK appear in the following table.

| Functionality | Code |
|----------------------|-------------|
| LIU-COM Base | NTXQ00AA |

OM group DCOMLINK (continued)

OM group DCOMLINK registers



OM group DCOMLINK (continued)

Register LACKTO

Link acknowledge timeout (LACKTO)

Register LACKTO counts the number of times the remote does not receive an acknowledgement for a message in a specified time.

This register increases when the retransmission timer (T1) expires or times out after the timer sends an information frame. This timeout indicates that the timer did not receive acknowledgement of the frame. If this register increases a number of times, the link can enter a new state in which register LDOWN increases instead.

Register LACKTO release history

Register LACKTO was introduced in BCS33.

Associated registers

There are no associated registers.

Associated logs

There are no associated associated logs.

Register LDISC

Link disconnect

Register LDISC counts the number of link disconnects transmitted and received on the link.

Register LDISC release history

Register LDISC was introduced in BCS33.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Register LDOWN

Link down (LDOWN)

Register LDOWN counts the number of times that the link is down. The link is down as a result of not enough response from the remote level-2 peer software. This register increases by the value of the retransmission timer each

OM group DCOMLINK (continued)

time the timer expires. A setup exchange must occur for communications to start.

Register LDOWN release history

Register LDOWN was introduced in BCS33.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Register LLVIO

Link, number of local invalid messages (LLVIO)

Register LLVIO counts the number of frames that transmit on the link that the remote perceives invalid.

Register LLVIO release history

Register LLVIO was introduced in BCS33.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Register LRCV

Link, number of messages received (LRCV)

For the X.25 protocol, register LRCV counts the number of frames the remote receives.

For the asynchronous protocol, register LRCV counts the number of messages the remote receives.

Register LRCV release history

Register LRCV was introduced in BCS33.

Associated registers

There are no associated registers.

OM group DCOMLINK (continued)

Associated logs

There are no associated logs.

Register LRCVOF

Link, number of messages received (overflow) (LRCVOF)

For X.25 protocol, register LRCVOF counts the number of overflow information frames the remote receives.

For asynchronous protocol, register LRCVOF counts the number of overflow messages the remote receives.

Register LRCVOF release history

Register LRCVOF was introduced in BCS33.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Register LRVIO

Link, number of remote invalid messages (LRVIO)

For X.25 protocol, register LRVIO counts the number of invalid frames the remote receives on the link.

For asynchronous protocol, this register counts the number of invalid messages the remote receives on the link.

Register LRVIO release history

Register LRVIO was introduced in BCS33.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Register LRXMIT

Link, number of messages retransmitted (LRXMIT)

OM group DCOMLINK (continued)

Register LRXMIT counts the number of information frames that the system transmits again because the remote does not receive the frames correctly.

Register LRXMIT release history

Register LRXMIT was introduced in BCS33.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Register LSETUP

Link setup (LSETUP)

Register LSETUP counts the number of times the system executes a link setup. The local or remote system can initiate the setup.

Register LSETUP release history

Register LSETUP was introduced in BCS33.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Register LXMIT

Link, number of messages transmitted (LXMIT)

For X.25 protocol, register LXMIT counts the number of information frames the system sends to the remote.

For asynchronous protocol, register LXMIT counts the number of messages the system sends to the remote.

Register LXMIT release history

Register LXMIT was introduced in BCS33.

Associated registers

There are no associated registers.

OM group DCOMLINK (continued)

Associated logs

There are no associated logs.

Register LXMITOF

Link, number of messages transmitted (overflow) (LXMITOF)

For the X.25 protocol, register LXMITOF counts the number of overflow information frames that transmit to the remote.

For asynchronous protocol, register LXMITOF counts the number of overflow messages that transmit to the remote.

Register LXMITOF release history

Register LXMITOF was introduced in BCS33.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Register NURCV

Network, number of kilobytes of data received (NURCV)

Register NURCV counts the number of kilobytes of data that the system receives from the remote on the link.

Register NURCV release history

Register NURCV was introduced in BCS33.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Register NUXMIT

Network, number of kilobytes of data transmitted (NUXMIT)

Register NUXMIT measures the number of kilobytes of data that the system transmits to the remote on the link.

OM group DCOMLINK (continued)

Register NUXMIT release history

Register NUXMIT was introduced in BCS33.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Register PABORT

Physical abort (PABORT)

For the X.25 protocol, register PABORT counts the number of incoming frames that the system aborts on links.

For asynchronous protocol, register PABORT counts the number of break characters that the system receives.

Counts in this register indicate problems with the line, modem, or board.

Register PABORT release history

Register PABORT was introduced in BCS33.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Register PDOWN

Physical down (PDOWN)

For the X.25 protocol, register PDOWN counts the number of seconds the physical layer tries to enable a link. The physical layer tries to enable a link when the card returns to service.

For asynchronous protocol, register PDOWN counts the number of seconds the physical layer tries to enable the link. You must configure the modem control for this activity.

Counts in PDOWN indicate problems with the line, modem, or board.

OM group DCOMLINK (continued)

Register PDOWN release history

Register PDOWN was introduced in BCS33.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Register PHWERR

Physical hardware errors (PHWERR)

For the X.25 protocol, register PHWERR measures the hardware exceptions that the system detects during operations on the link.

For asynchronous protocol, register PHWERR indicates that a processing exception occurs at the hardware interface.

Counts in PHWERR indicate problems with a line, modem, or board.

Register PHWERR release history

Register PHWERR was introduced in BCS33.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Register PSYNC

Physical sync (PSYNC)

For the X.25 and asynchronous protocols, register PSYNC counts the number of times that the system loses modem signals. The system loses modem signals under the correct clock configuration.

For an electrical data terminal equipment (DTE) clock configuration, this register PSYNC increases when the system loses any of the following signals are lost:

- DCD
- DSR
- CTS

OM group DCOMLINK (end)

For an electrical DCE clock configuration on the RS232 link, register PSYNC increases when any of the following signals are lost:

- RTS
- DTR

For an electrical DCE clock configuration on the V-35 link, register PSYNC increases when the system loses RTS modem signal.

Counts in this register indicate problems with the line, modem, or board.

Register PSYNC release history

Register PSYNC was introduced in BCS33.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

OM group DCRDEST

OM description

Dynamically Controlled Routing Destination

The OM group DCRDEST provides measurements for the Dynamically Controlled Routing (DCR) feature for each office destination.

The DCR feature provides tandem routes for toll calls. The DCR feature is for calls that must go to a switch one or two links away from the originating switch. A network processor (NP) computes different tandem routes, and recommends the best route.

At normal intervals, each switch with the DCR feature sends trunk switch measurements to the NP. The NP indicates that calls to go to a DCR toll switch follow a fixed route. The calls can continue on the fixed route or go to a different tandem route. The system can block the calls.

The system provides DCRDEST for all DMS-100 Family switches with the DCR feature.

Release history

BCS20

The OM group DCRDEST was introduced before BCS20.

BCS36

The node names in table DESTKEY are the key names of the tuples of the OM incremented registers.

BCS35

Key field change to provide 253 tuples BCS35.

Registers

The registers for OM group DCRDEST appear on the MAP terminal as follows:

| | | | |
|----------|---------|----------|----------|
| FRSTOFRD | DRTEOVF | BLKRECMD | CNTRECMD |
| RECMDOVF | | | |

Group structure

The OM group DCRDEST provides one tuple for each DCR destination link name (maximum 253).

OM group DCRDEST (continued)

Key field:

NETNAME\$DEST_NODE_NAME is the office name of a destination that is accessible with links from the office.

Info field:

There is no info field

Enter data in four tables: DESTKEY, DESTNODE, DCROPT, and TKTONODE.

Table DESTKEY stores all DCR destinations, like destinations two or more DCR links away from the switch.

Table DESTNODE contains a tuple for every DCR destination that is one or two DCR links away from the switch.

The operating company uses table DCROPT to control the different modes of operation that the DCR package introduces.

Table TKTONODE lists the trunk group common language location identifiers (CLLI) of all incoming and two-way trunks. The system uses these trunks for DCR. This table also lists the CLLI of the originating office for each DCR trunk.

Associated OM groups

The OM group DCRICTRK provides information on DCR for each incoming trunk group.

The OM group DCRLINK provides information on DCR for each link.

The OM group DCRMISC provides information on DCR for each switch.

Associated functional groups

There are no associated functional groups.

OM group DCRDEST (continued)

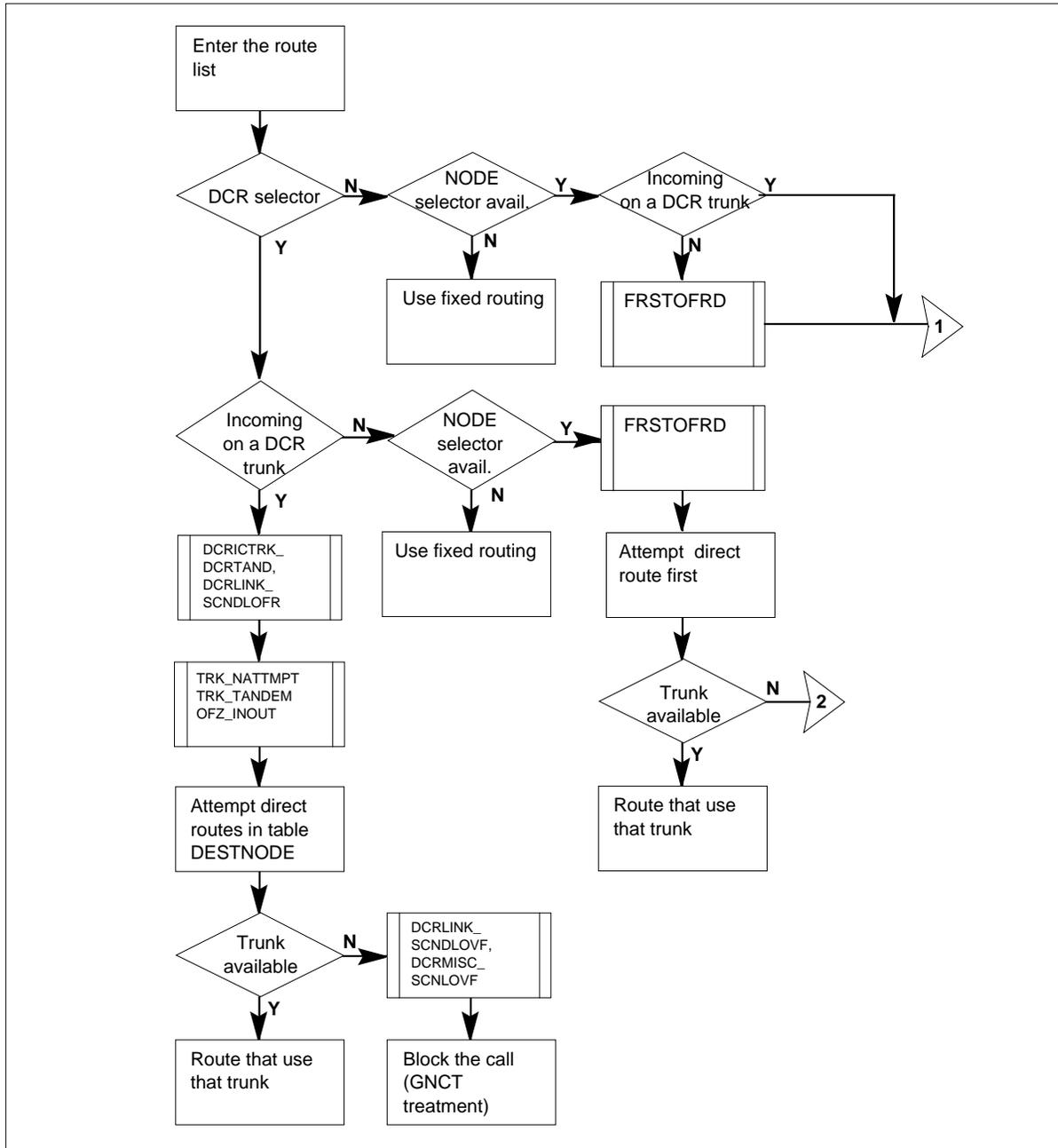
Associated functionality codes

The functionality codes for OM group DCRDEST appear in the following table.

| Functionality | Code |
|--------------------------------|-------------|
| Dynamically Controlled Routing | NTX022AA |
| Dynamically Controlled Routing | NTX022AB |

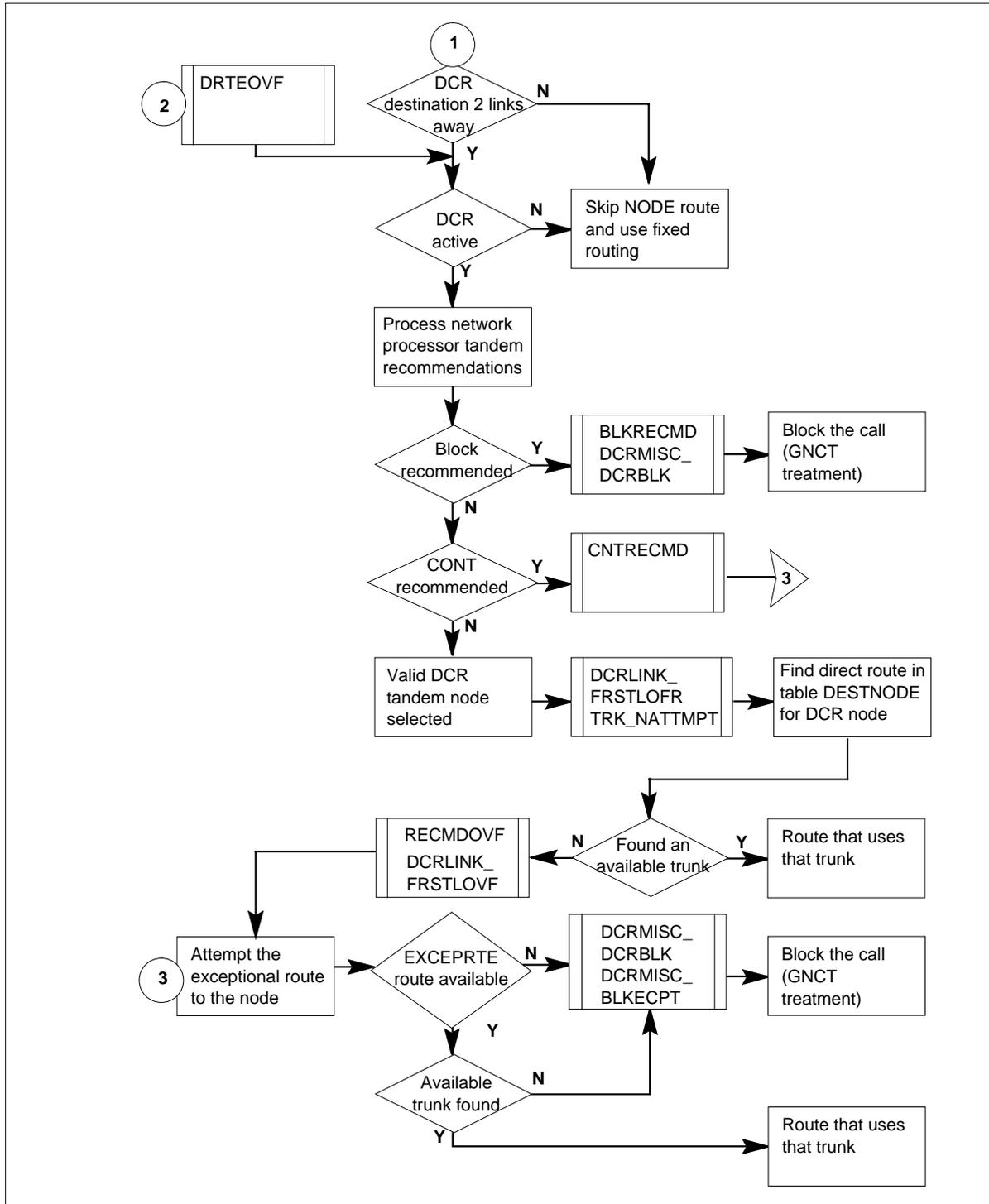
OM group DCRDEST (continued)

OM group DCRDEST registers



OM group DCRDEST (continued)

OM group DCRDEST registers



OM group DCRDEST (continued)

Register BLKRECMD

NP block call recommendation

The BLKRECMD register counts DCR calls that the system blocks on the recommendation of the network processor (NP). The system routes these calls to generalized no-circuit treatment (GNCT).

Register BLKRECMD release history

BCS20

Register BLKRECMD was introduced before BCS20.

Associated registers

Register DCRMISC_DCRBLK counts DCR calls that the system blocks because of a BLOCK recommendation from the NP. This register also counts DCR calls that the system blocks in the exceptional route list.

Registers OFZ2 and SOTS provide information on the cause of the GNCT. These registers provide information for outgoing trunks or for the outgoing side of two-way trunks.

Associated logs

The system generates LOG138 if the system routes a call to a treatment after call processing determines that the line is busy.

The system generates LOG138 if the system routes a call to a treatment after call processing determines that the line is busy.

The system does not produce these logs if the system increases register BLKRECMD when the TRAVER command is used.

Register CNTRECMD

NP CONT call recommendation

Register CNTRECMD counts DCR calls that the system continues to route with the exceptional route on the recommendation of the network processor. The system routes these calls to the exceptional route list for the correct DCR destination.

Register CNTRECMD release history

OM group DCRDEST (continued)

BCS20

Register CNTRECMD was introduced before BCS20.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Register DRTEOVF

First offered DCR call overflows

Register DRTEOVF counts first-offered DCR calls that overflow from the direct link. The direct link consists of the direct routes from the originating switch to the DCR destination switch. If the DCR is turned on in the switch, calls that this register counts follow the NP tandem recommendation.

Register DRTEOVF release history**BCS20**

Register DRTEOVF was introduced before BCS20.

Associated registers

Register TRK_NOVFLATB counts calls that overflow a trunk group and that the system routes forward because an idle trunk is not available.

Associated logs

There are no associated logs.

Register FRSTOFRD

First offered DCR calls

Register FRSTOFRD counts first-offered DCR calls. First-offered DCR calls originate at a one toll switch and are to go to another toll switch. The calls continue toward another toll switch. The number of DCR links between the switches does not determine if the calls continue.

The FRSTOFRD register continues to keep a total, if the DCR routing is or is not deactivated.

Register FRSTOFRD release history

Register FRSTOFRD was introduced before BCS20.

OM group DCRDEST (end)

Associated registers

Register TRK_NATTMPT counts outgoing calls that the system routes to the trunk group.

Associated logs

There are no associated logs.

Register RECMDOVF

NP recommended route overflows

Register RECMDOVF counts calls offered to a DCR tandem that overflow the first recommended tandem route. The DCR tandem traffic consists of calls that the path recommended by the network processor, serves. Traffic offered to a DCR tandem is incoming on DCR trunks, or fills from direct routes.

The system routes calls, that this register counts, to the exceptional route list for the correct DCIR destination. If an exceptional route list is not present, or trunks are not available, the system routes the calls to generalized no-treatment (GNCT).

RECMDOVF release history

Register RECMDOVF was introduced before BCS20.

Associated registers

Register DCRLINK_FRSTLOVF counts tandem DCR calls that overflow the first link of the two link recommended path.

Register TRK_NOVFLATB counts calls that overflow the trunk group, that the system forward because an idle trunk is not available.

Associated logs

There are no associated logs.

OM group DCRICTRK

OM description

Dynamically controlled routing incoming trunk

Register DCRICTRK provides measurements for Dynamically Controlled Routing (DCR) for each incoming trunk group.

Dynamically Controlled Routing is a feature that recommends tandem routes for toll calls that the system routes to an exact toll switch. This toll switch is one or two links away from the originating toll switch. A network processor (NP) computes other tandem routes, and recommends the best route.

At normal intervals, each switch with the DCR feature sends its trunk measurements to the NP. The NP recommends that calls for a DCR toll switch continue on the fixed route or go to another tandem route. The system can block the calls.

Register DCRICTRK is provided for all DMS-100 switches with the Dynamically Controlled Routing feature.

Release history

BCS20

The OM group DCRICTRK was introduced before BCS20.

Registers

The registers for OM group DCRICTRK appear on the MAP terminal as follows:



DCRTAND

Group structure

The OM group DCRICTRK provides one tuple for each trunk group.

Key field:

COMMON_LANGUAGE_NAME identifies all trunk groups in the switch. Register DCRICTRK includes incoming or two-way trunk groups you can enter in field TKKEY of table TKTONODE as DCR trunk groups. Enter a maximum of 2048 trunk groups as DCR trunk groups.

OM group DCRICTRK (continued)

Info field:

There is no info field.

Enter data in four tables: DESTKEY, DESTNODE, DCROPT, and TKTONODE.

Table DESTKEY stores all DCR destination, like destinations more than two DCR links away from the switch.

Table DESTNODE contains a tuple for every DCR destination that is one or two DCR links away from the switch.

The operating company uses Table DCROPT to control the modes of operation that the DCR package introduced.

Table TKTONODE lists the trunk group CLLIs of all incoming and two-way trunks used for DCR. This table also lists the CLLI of the originating office for each DCR trunk group

Associated OM groups

The OM group DCRDEST provides DCR measurements for each toll office destination.

The OM group DCRLINK provides DCR measurements for each toll link.

The OM group DCRMISC provides DCR measurements for each switch.

Associated functional groups

There are no associated functional groups.

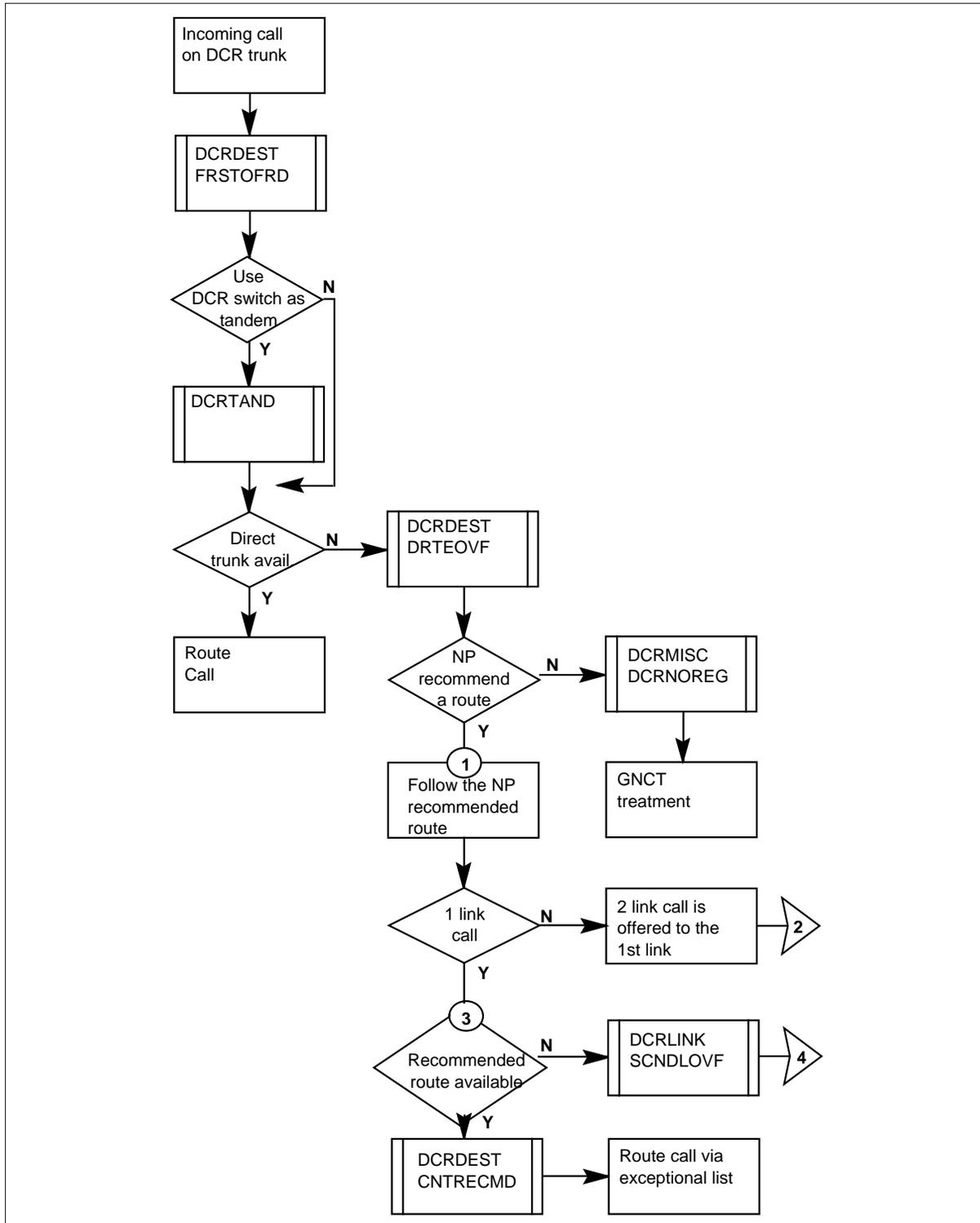
Associated functionality codes

The functionality codes for OM group DCRICTRK appear in the following table.

| Functionality | Code |
|--------------------------------|----------|
| Dynamically Controlled Routing | NTX022AA |

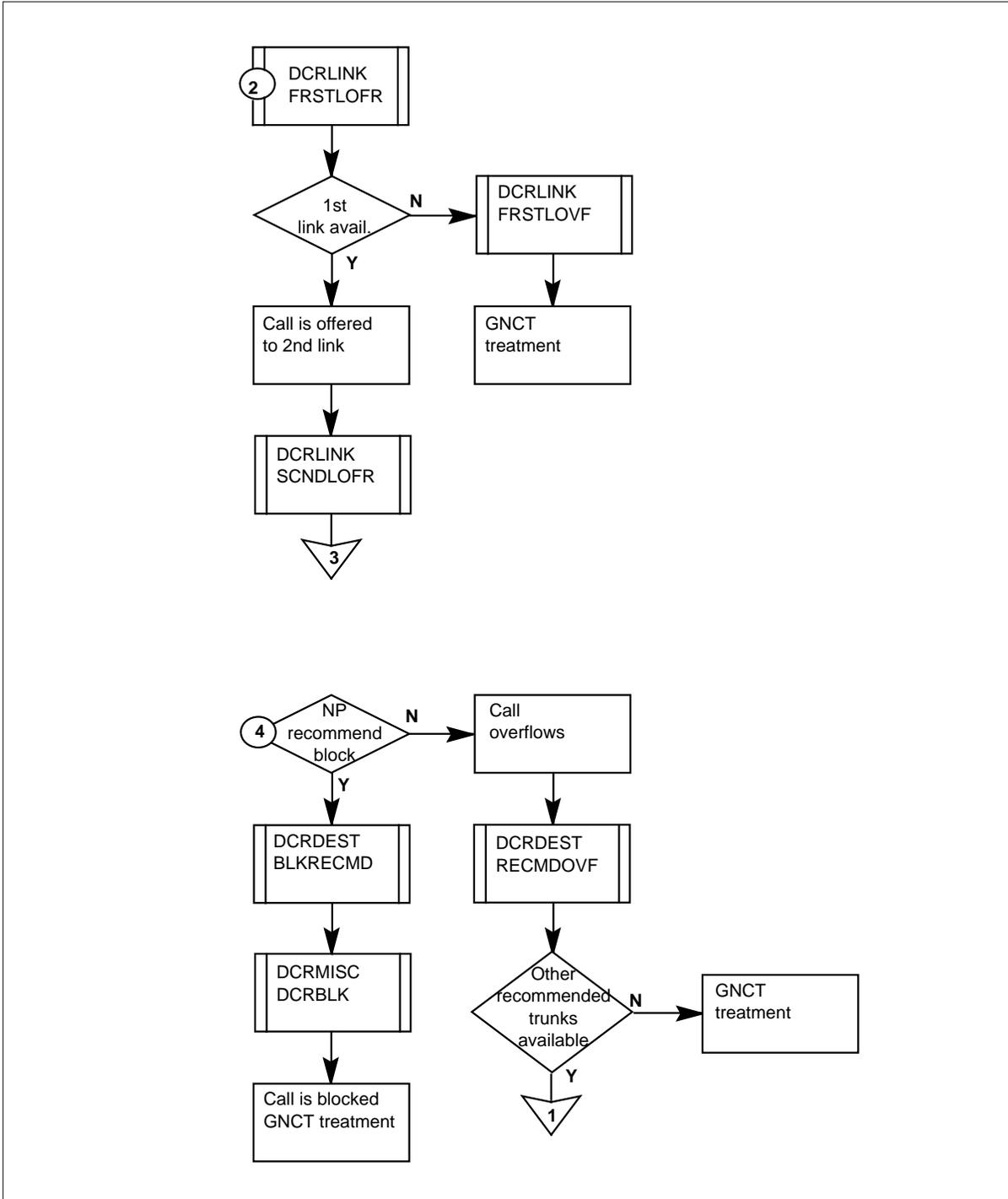
OM group DCRICTRK (continued)

OM group DCRICTRK registers



OM group DCRICTRK (continued)

OM group DCRICTRK registers



OM group DCRICTRK (end)

Register DCRTAND

Incoming dynamically controlled routing (DCR) tandem attempts

Register DCRTAND counts incoming DCR calls that attempt to use the DCR switch as a tandem office.

Register DCRTAND continues to count, when DCR routing is deactivated.

Register DCRTAND increases at the routing stage so that the register can use the CI command TRAVER (translation and routing verification). The system uses the CI command TRAVER with the no trace (NT) option.

Register DCRTAND release history

Register DCRTAND was introduced before BCS20.

Associated registers

Register TRK_NATTMPT counts outgoing calls that the system routes to the trunk group.

Register DCRLINK_SCNDLOFR counts tandem DCR calls that the register offers to the second link of the two-link recommended path.

Associated logs

There are no associated logs.

OM group DCRLINK

OM description

Dynamically Controlled Routing link status (DCRLINK)

The DCRLINK provides measurements for the Dynamically Controlled Routing (DCR) feature in each toll link.

The DCR feature provides tandem routes for toll calls. These toll calls are for a toll switch that is one or two links away from the originating toll switch. A network processor (NP) computes other possible tandem routes, and recommends the route that can succeed.

At normal intervals, each switch with the DCR feature sends the trunk measurements to the NP. The NP recommends a route for calls for a DCR toll switch.

The NP recommends one of the following routes:

- that the calls continue on the fixed route
- that the system route the calls to another tandem route
- that the system block the calls

Release history

the OM group DCRLINK was introduced before BCS20.

BCS36

The node names in table DESTNODE are the key names of the tuples of the OM increased registers.

BCS35

Key field changed to provide for 253 tuples.

Registers

the OM group DCRLINK registers appear on the MAP terminal as follows:

| | | | |
|----------|----------|----------|----------|
| FRSTLOFR | SCNDLOFR | FRSTLOVF | SCNDLOVF |
|----------|----------|----------|----------|

Group structure

the OM group DCRLINK provides one tuple for each DCR destination node name (maximum 253).

OM group DCRLINK (continued)

Key field:

The NETNAME\$DEST_NODE_NAME identifies the office names of the toll destinations that are accessible with toll links from the switch. The user assigns office names in field DESTKEY of table DESTKEY. The field contains only the destinations that are one link away from the switch.

Info field:

There is no info field.

The user must enter tables DESTKEY, DESTNODE, DCROPT, and TKTONODE.

Table DESTKEY stores all DCR destinations. These destinations include destinations that are more than two DCR links away from the switch.

Table DESTNODE contains a tuple for each DCR destination that is one or two DCR links away from the switch.

The operating company uses table DCROPT to control modes of operation that the DCR package introduces.

Table TKTONODE lists the trunk group common language location identifiers (CLLI) of all incoming and two-way trunks that DCR uses. Table TKTONODE lists the CLLI of the originating office from which the trunk group comes.

Associated OM groups

The DCRICTRK provides DCR measurements for each incoming trunk group.

The DCRDEST provides DCR measurements for each toll office destination.

The DCRMISC provides DCR measurements for each switch.

OM group DCRLINK (continued)

Associated functional groups

The following functional group associates with the OM group DCRLINK:

- All DMS-100 switches with the DCR feature have the DCRLINK.

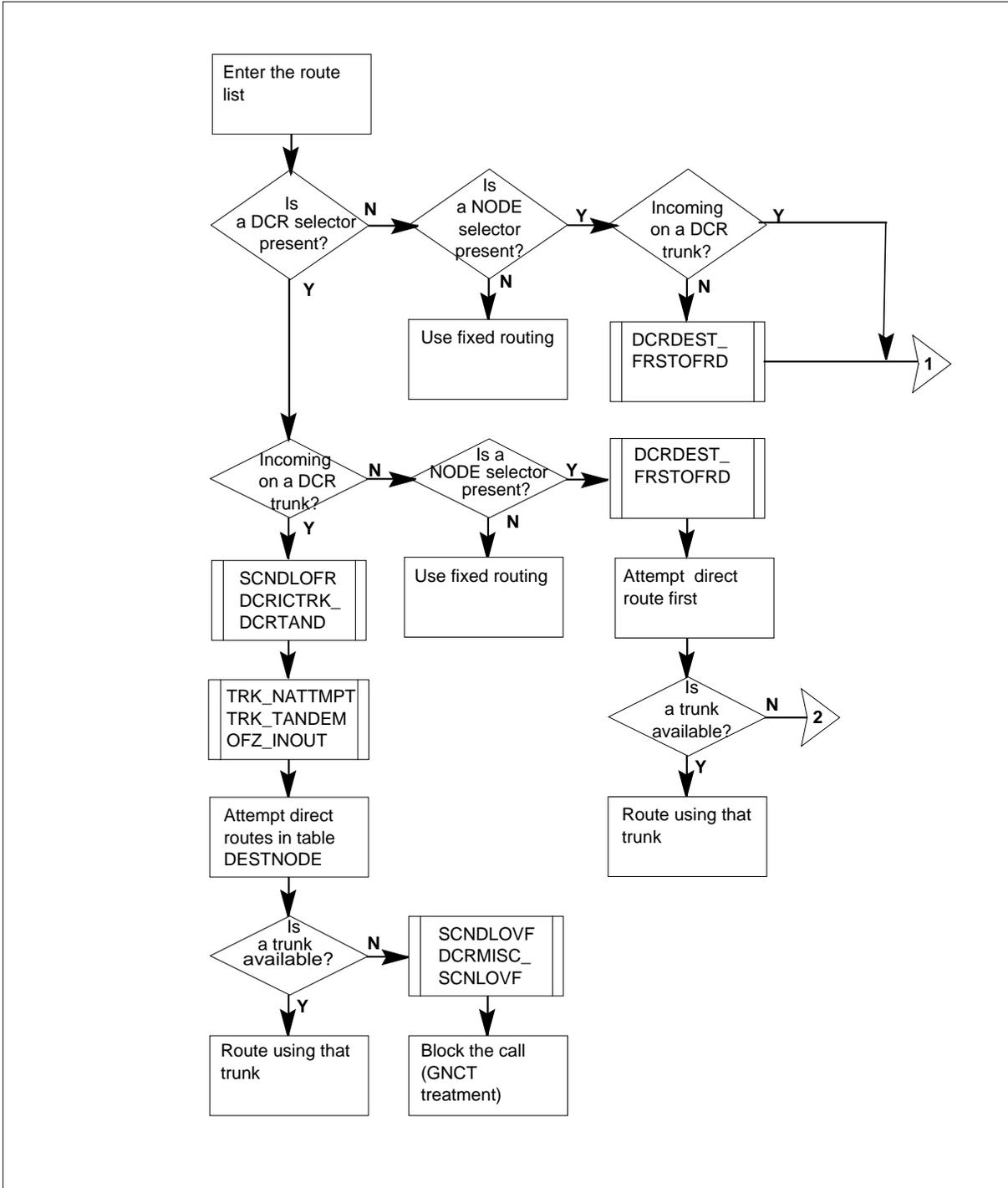
Associated functionality codes

The associated functionality codes for the OM group DCRLINK appear in the following table.

| Functionality | Code |
|--------------------------------|----------|
| Dynamically Controlled Routing | NTX022AA |
| Dynamically Controlled Routing | NTX022AB |

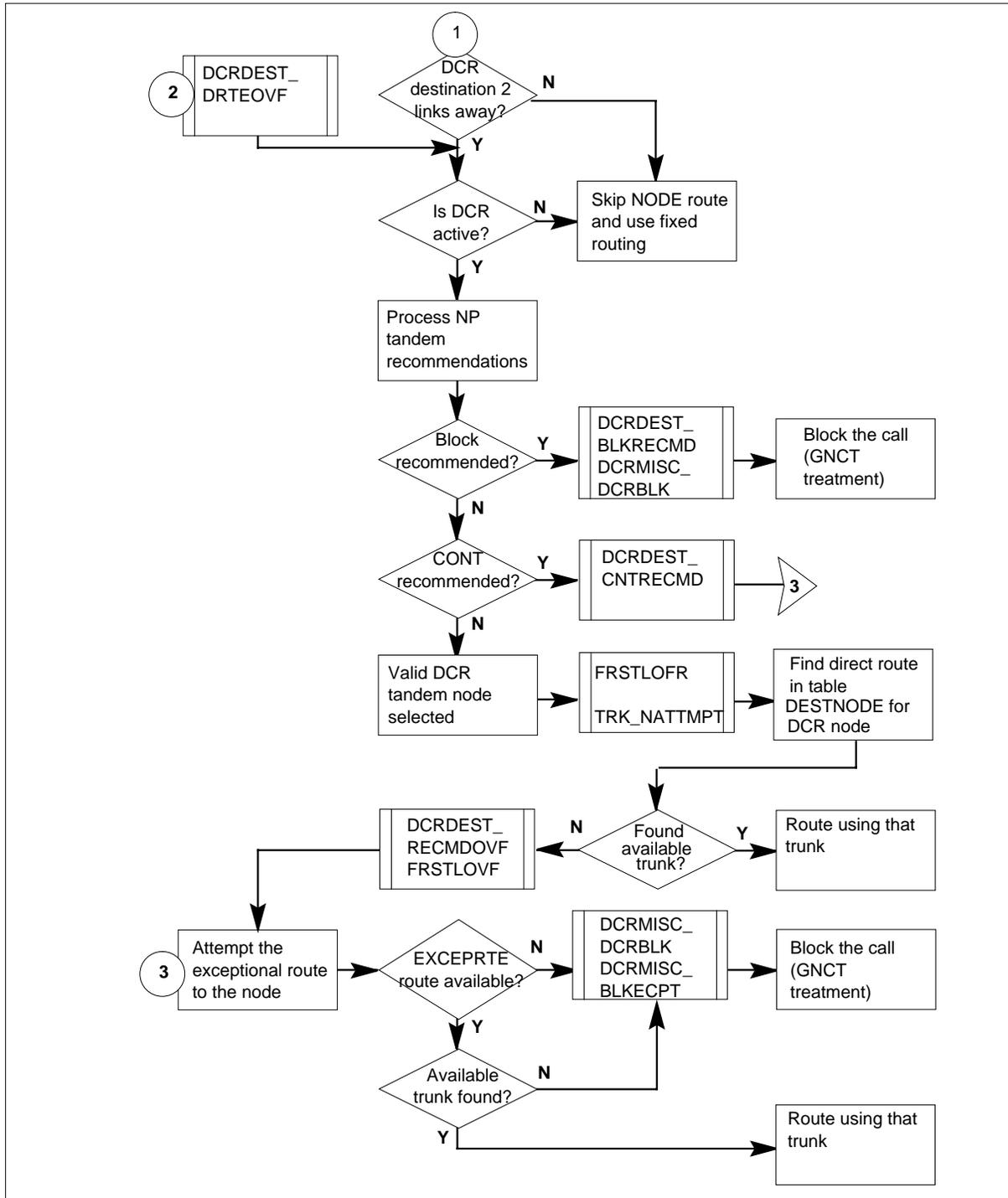
OM group DCRLINK (continued)

the OM group DCRLINK registers



OM group DCRLINK (continued)

the OM group DCRLINK registers (end)



OM group DCRLINK (continued)

Register FRSTLOFR

First link offered DCR calls (FRSTLOFR)

Register FRSTLOFR counts tandem DCR calls that the system offers to the first link of a two-link recommended path. This register increases when the system routes a call to a correct DCR tandem route. The subsystem routes the call to the DCR tandem route if the route is or is not available.

Register FRSTLOFR release history

Register FRSTLOFR was introduced before BCS20.

Associated registers

Register TRK_NATTMPT counts outgoing calls that the system routes to the trunk group.

Associated logs

There are no associated logs.

Register FRSTLOVF

First link offered DCR call overflows (FRSTLOVF)

Register FRSTLOVF counts tandem DCR calls that overflow the first link of a two-link recommended path. The system routes these calls to the special route list for the correct DCR destination. If there is no special route list or there are no trunks available, the system routes the call to generalized no-circuit treatment (GNCT).

Register FRSTLOVF release history

Register FRSTLOVF was introduced before BCS20.

Register Associated registers

Register DCRDEST_RECMDOVF counts DCR calls that overflow the first recommended tandem route.

Register TRK_NOVFLATB counts calls that overflow a trunk group. The system reroutes these calls because an idle trunk is not available.

Registers OFZ2 and SOTS provide information on the cause of the GNCT for outgoing trunks or the outgoing side of two-way trunks.

Associated logs

There are no associated logs.

OM group DCRLINK (continued)

Register SCNDLOFR

Second link offered DCR calls (SCNDLOFR)

Register SCNDLOFR counts tandem DCR calls that the system offers as the second link of a two-link recommended path.

Register SCNDLOFR continues to count when DCR deactivates.

Register SCNDLOFR increases at the routing stage. As a result, the SCNDLOFR can increase. It increases when the user uses CI command TRAVER (translation and routing verification) with the no-trace (NT) option.

Register SCNDLOFR release history

Register SCNDLOFR was introduced before BCS20.

Associated registers

Register TRK_NATTMPT counts outgoing calls that the system routes to the trunk group.

Register DCRICTRK_DCRTAND counts incoming calls that attempt to use the DCR switch as a tandem office.

Associated logs

There are no associated logs.

Register SCNDLOVF

Second link offered DCR call overflows (SCNDLOVF)

Register SCNDLOVF counts tandem DCR calls that overflow the second link of a two-link recommended path. The system routes these calls to generalized no-circuit treatment(GNCT).

Register SCNDLOVF continues to count when DCR deactivates.

Register SCNDLOVF release history

Register SCNDLOVF was introduced before BCS20.

Associated registers

Register TRK_NOVFLATB counts calls that overflow the trunk group. The system reroutes these calls because an idle trunk is not available.

Registers OFZ2 and SOTS provide information on the cause of GNCT for outgoing trunks or the outgoing side of two-way trunks.

OM group DCRLINK (end)

Associated logs

The system generates LINE138 if the system routes a call to a treatment because the line is call processing busy.

The system generates TRK138 if the system routes a call to a treatment because the trunk is call processing busy.

If SCNDLOVF increases because the operating company used the TRAVER command, the system does not generate these logs.

OM group DCRMISC

OM description

Dynamically Controlled Routing miscellaneous (DCRMISC)

The DCRMISC provides measurements for switches that use the Dynamically Controlled Routing (DCR) feature.

The DCR feature provides tandem routes for toll calls for a toll switch. The DCR provides routes for calls for a toll switch that is one or two links away from the originating toll switch. A network processor (NP) computes other possible tandem routes, and recommends the route that can succeed.

At equal intervals, each switch with the DCR feature sends the trunk measurements to the NP. The NP recommends specified routes for calls for a DCR toll switch.

The NP recommends the following action:

- the calls continue on the fixed route
- the calls route to a different tandem route
- the system block the calls

all DMS-100 switches with the DCR feature have the DCRMISC.

Release history

The OM group DCRMISC was introduced before BCS20.

CSP02

Registers MANSWTCH and AUTSWTCH were introduced.

BCS36

Table node names in table DCRNETID appear as the keys to the tuples of the OM-increase registers.

BCS35

The key field changed to provide six tuples.

BCS27

Registers BLKECPT and SCNLOVF were introduced in BCS27.

BCS22

Registers DCRNOREC and DCRBDREC were introduced in BCS22.

OM group DCRMISC (continued)

Registers

The following OM group DCRMISC registers appear on the MAP terminal as follows:

| | | | |
|---------|----------|----------|---------|
| DCRBLK | DCRNOREC | DCRBDREC | BLKECPT |
| SCNLOVF | MANSWTCH | AUTSWTCH | |

Group structure

The OM group DCRMISC provides six tuples, one for each office.

Key field:

NETNAME

Info field:

There is no info field

The user must enter tables DESTKEY, DESTNODE, DCROPT and TKTONODE.

Table DESTKEY stores all DCR destinations. These destinations can be destinations that are more than two DCR links away from the switch.

Table DESTNODE contains a tuple for every DCR destination that is one or two DCR links away from the switch.

The operating company uses DCROPT to control the different modes of operation the DCR package introduces.

Table TKTONODE lists the trunk group common language location identifiers (CLLI). Table TKTONODE lists the CLLI of all incoming and two-way trunks considered to be DCR trunks. For each DCR trunk group, the table lists the CLLI of the office from which the trunk group is incoming.

Associated OM groups

Other DCR OM groups are:

- The DCRDEST provides DCR measurements for each toll office destination.
- The DCRICTRK provides DCR measurements for each incoming trunk group.
- The DCRLINK provides DCR measurements for each toll link.

OM group DCRMISC (continued)

Associated functional groups

All DMS-100 switches with the DCR feature associate with OM group DCRMISC.

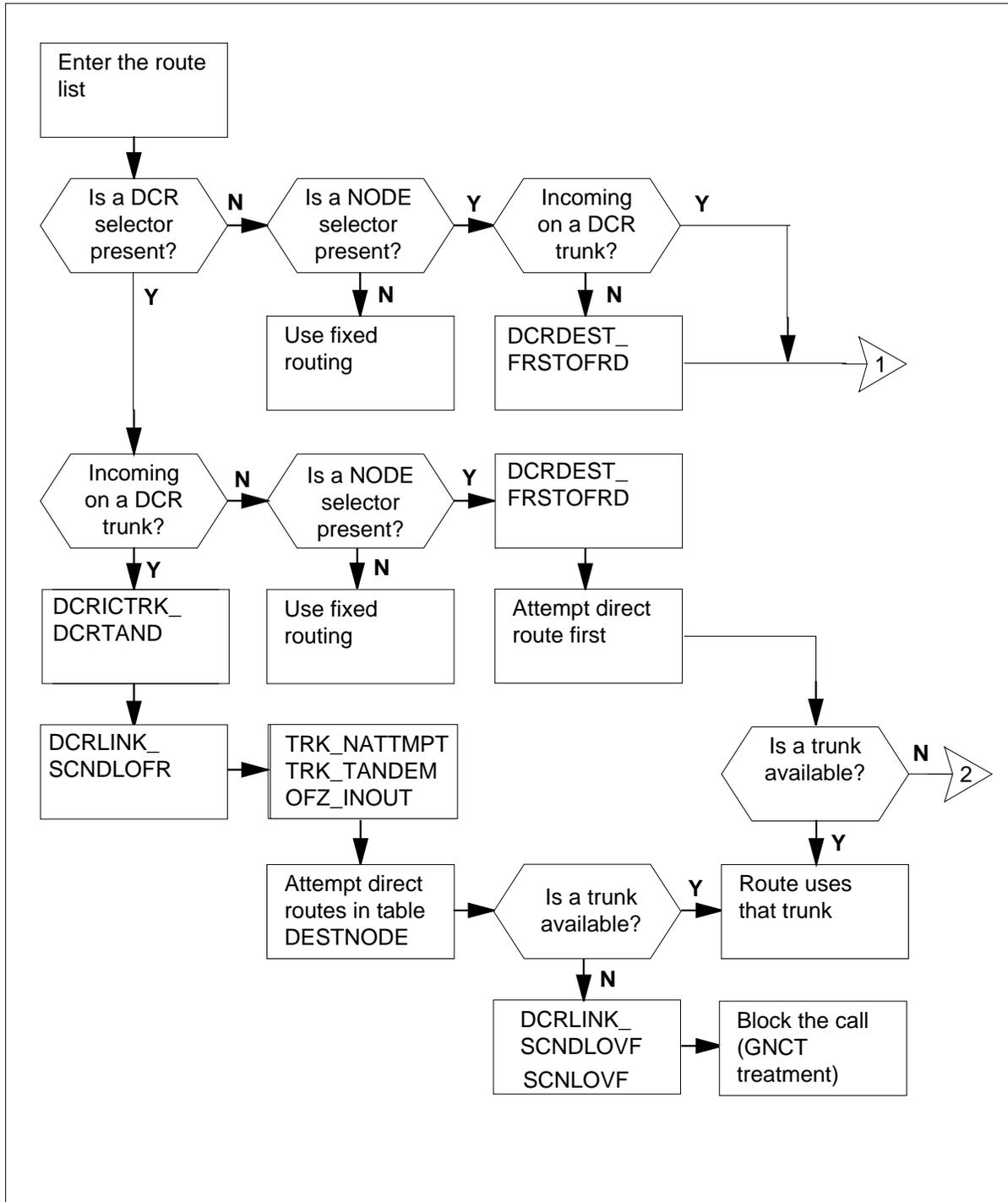
Associated functionality codes

The functionality codes associated with OM group DCRMISC appear in the following table.

| Functionality | Code |
|--|-------------|
| Dynamically Controlled Routing (DCR/HPR) | NTX022AA |
| Dynamically Controlled Routing (upgrade) | NTX022AB |

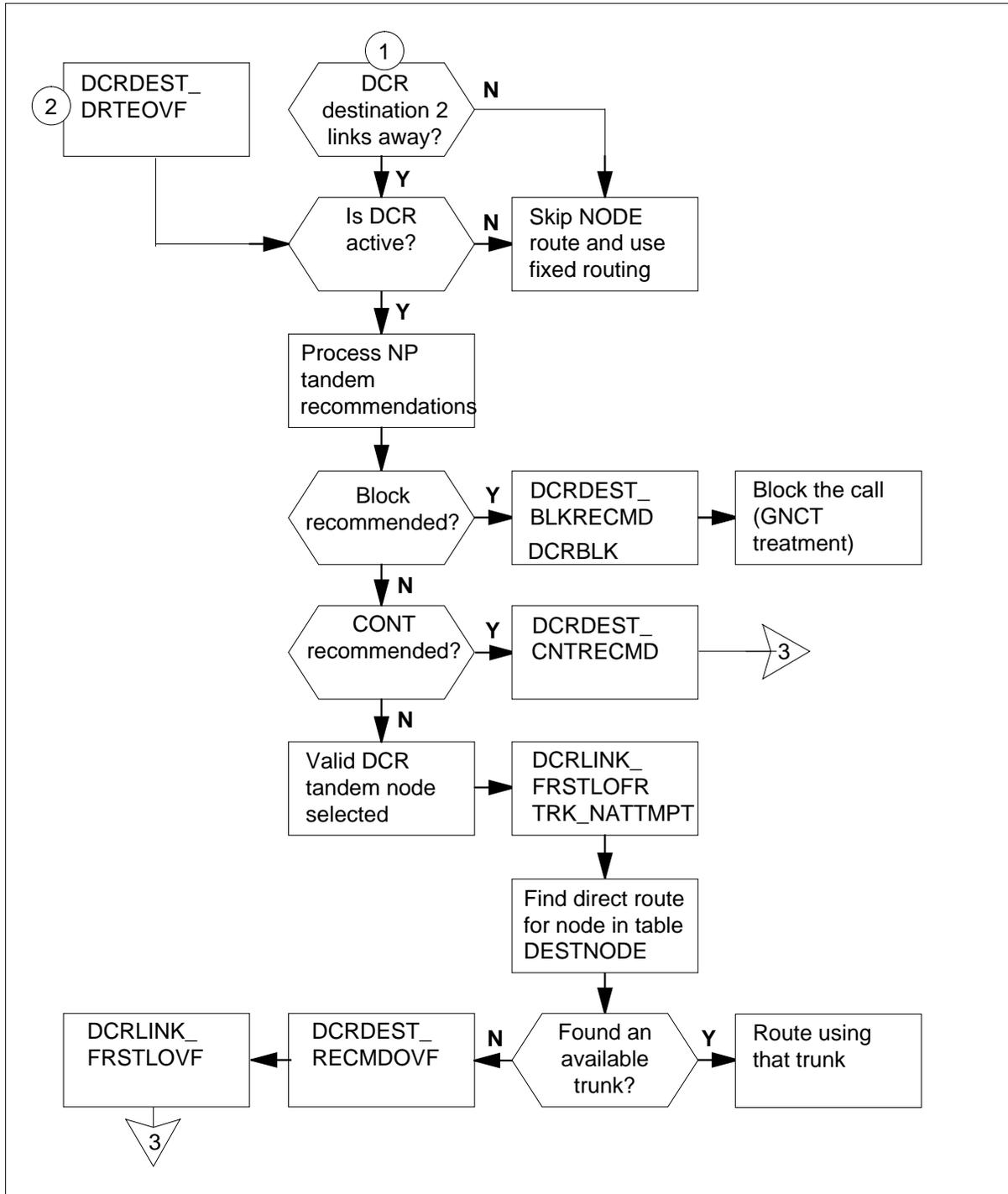
OM group DCRMISC (continued)

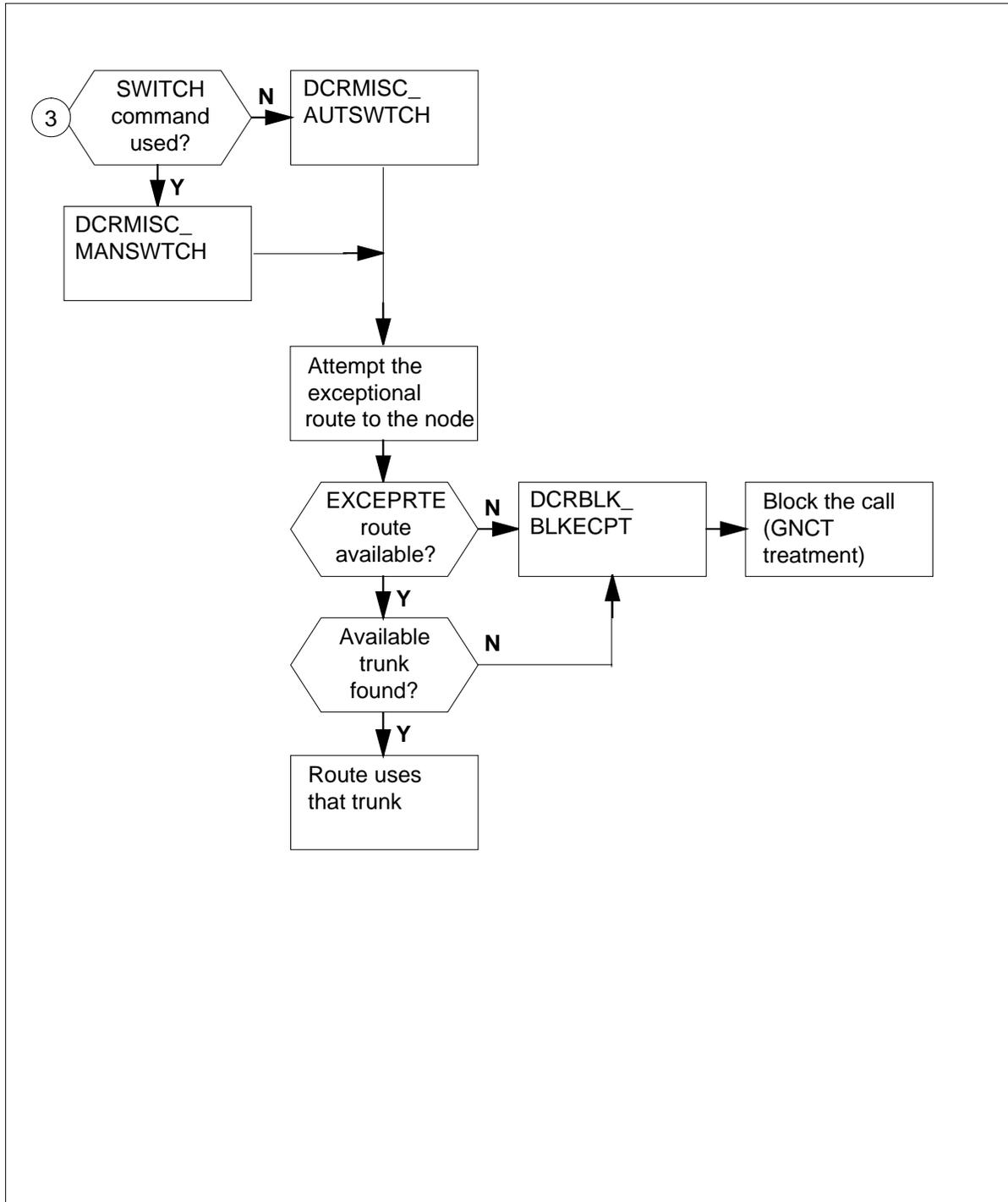
OM group DCRMISC registers



OM group DCRMISC (continued)

OM group DCRMISC registers (continued)



OM group DCRMISC (continued)**OM group DCRMISC registers (end)**

OM group DCRMISC (continued)

Register BLKECPT

Blocked Dynamically Controlled Routing calls attempting exceptional routes (BLKECPT)

Register BLKECPT counts DCR calls that the system blocks after the calls attempt DCR exceptional routes. The system blocks the calls because trunks are not available. The system can block the calls when DCR exceptional routes datafill is not present.

Register BLKECPT release history

Register BLKECPT was introduced in BCS27.

Associated registers

Register DCRBLK includes calls that the system counts in BLKECPT.

Associated logs

There are no associated logs.

Register DCRBDREC

Bad network processor recommendations (DCRBDREC)

Register DCRBDREC counts invalid recommendation packets that the network processor sends to the DMS switch. The Network processor sends the recommendation packets to the DMS switch because of sanity failures or transmission errors. The system ignores the invalid recommendations. The system uses the recommendations from the previous reporting cycle to route calls.

Register DCRBDREC release history

Register DCRBDREC was introduced in BCS22.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Register DCRBLK

DCR blocked calls (DCRBLK)

Register DCRBLK counts DCR calls that the system blocks because of a block recommendation from the network processor. The DCRBLK counts calls that the system blocks in the exceptional route list. The system blocks calls in the

OM group DCRMISC (continued)

exceptional route list because trunks are not available, or because the route list is empty.

Register DCRBLK release history

Register DCRBLK was introduced before BCS20.

Associated registers

Register DCRDEST_BLKRECMD counts DCR calls that the system blocks on the recommendation of the NP.

Associated logs

The system generates LINE138 if the system routes a call to a treatment because the line is call processing busy.

The system generates TRK138 if the system routes a call to a treatment because the trunk is call processing busy.

The system does not produce these logs if the user increments DCRBLK with the TRAVER command.

Register DCRNOREC

No network processor (NP) recommendation (DCRNOREC)

Register DCRNOREC counts reporting cycles when the NP does not make a recommendation. The NP does not make a recommendation because of a loss of communication between the switch and the NP. A failure in the NP causes loss of communication. A failure in the link between the DMS switch and the NP can cause loss of communication.

Register DCRNOREC release history

Register DCRNOREC was introduced in BCS22.

Associated registers

There are no associated logs.

Associated logs

There are no associated logs.

Register SCNLOVF

Second link overflow (SCNLOVF)

OM group DCRMISC (continued)

Register SCNLOVF counts tandem DCR calls that overflow the second link of a two-link recommended path. The system routes these calls to generalized no-circuit (GNCT) treatment.

Register SCNLOVF counts calls when the system deactivates DCR routing.

Register SCNLOVF release history

Register SCNLOVF was introduced in BCS27.

Associated registers

Register DCRLINK_SCNDLOVF counts tandem DCR calls that overflow the second link of a two-link recommended path for each DCR link.

Associated logs

The system generates LINE138 when the system routes a call to a treatment after the call is processing busy.

The system generates TRK138 when the system routes a call to a treatment after the call is processing busy.

Register MANSWTCH

Manual switch over (MANSWTCH)

Register MANSWTCH measures the number of times that a DCR network switches communication from an active link to a standby link. The DCR network switches communication because of the DCRUTIL CI command SWITCH.

Register MANSWTCH release history

Register MANSWTCH was introduced in BCS37.

Associated registers

There are no associated registers.

Associated logs

The system generates log number DCR107 when the MANSWTCH register increases.

Extension registers

There are no extension registers.

Register AUTSWTCH

Automatic switch over (AUTSWTCH)

OM group DCRMISC (end)

Register AUTSWTCH measures the number of times that a DCR network switches communication from an active link to a standby link. This action occurs for reasons other than the use of the DCRUTIL CI command SWITCH.

Register AUTSWTCH release history

Register AUTSWTCH was introduced in BCS37.

Associated registers

There are no associated registers.

Associated logs

The system generates log number DCR107 when the AUTSWTCH register increases.

Extension registers

There are no extension registers.

OM group DCTS

OM description

Destination code traffic summary

OM group DCTS records traffic data about office trunks datafilled in table DCTS. The data is sorted by destination code.

Registers record the following events for all signals:

- total traffic to a specified destination code (TRFUO)
- call attempts (NCAO)
- successful calls (NSCO)
- answered calls (NANSO)
- calls with partial dial treatments (NPDIL)
- busy signal (NBSYO)
- congestion in distant exchanges (NCONO)
- calls encountering unallocated numbers (NUNALLO)

Registers increment for the following events for P-R2 signals:

- number of subscriber line transferred signal (NSUBTRAN)
- send next digit signal not received (NONRAND)
- request category signal not received (NONRACT)
- state of the called subscriber signal not received (NONRKB)
- type of service signal not received (NONRKD)
- seizures for each destination code (NSZGO)

Registers increment for the following events for PTUP, ANSI7+, and ETSI ISUP v1 signals:

- IAM or IAI messages for an office (NIAMIAIO)
- UBM messages for an office (NNUBUBMO)
- messages not received following an FAM for an office (NNMAFAMO)

Registers increment for the following events for prefix-based traffic:

- answer to seizure ratio (ANSSZGP)
- answered calls (ANSUP)
- previously-selected trunk that is dropped after routing (GLAREP)

1-2 Operational measurements

- incoming to outgoing (trunk to trunk) conversations and connections (INCOUTCP, INCOUTP, INCOUTPU)
- calls that are routed to an alternate trunk (NALRTEP, NALRTEPU)
- blocked calls (NBLKCP)
- unanswered calls (NUNAP)
- originating to outgoing (line to trunk) conversations and connections (ORGOUTCP, ORGOUTP, ORGOUTPU)
- outgoing failures (OUTFAILP)

Release history

SN06 (DMS)

Feature 89008458, DCTS OM enhances register NSCO for China market requirement supporting CISUP (Chinese ISDN User Part) and CTUP (Chinese Telephone User Part) interworkings.

MMP15

Feature 59022332, DCTS OM enhancement, adds the following registers: ANSSZGP, ANSUP, GLAREP, INCOUTCP, INCOUTP, INCOUTPU, NALRTEP, NALRTEPU, NBLKCP, NUNAP, ORGOUTCP, ORGOUTP, ORGOUTPU, and OUTFAILP. These registers count prefix-based calls.

APC010

Feature AU2916, DCTS and Answer OM Enhancements, activates registers NONRKB, NONRKD, NONRAND, and NONRACT. These registers increment when the dialed digits begin with a destination code that is datafilled in table DCTS.

APC009

OM group DCTS was introduced to the APC100 product. Registers NB2, NB3, NONRA1, and NONRA3 were renamed NSUBTRAN, NBSYO, NONRAND, and NONRACT respectively.

BCS36

Registers NB2, NB3, NA4B4, NB5, NPDIL, NONRA1, NONRA3, NONRKB, and NONRKD were added to the DMS-100i product, to count R2 signals received and not received, as well as partial dial treatment.

BCS34

OM group DCTS was introduced to the DMS-100i product in BCS34.

Registers

OM group DCTS registers display on the MAP terminal as follows:

| | | | |
|----------|----------|----------|----------|
| NCAO | NSZGO | NIAMIAIO | NSCO |
| NANSO | TRFUO | NSUBTRAN | NBSYO |
| NCONO | NUNALLO | NPDIL | NONRAND |
| NONRACT | NONRKB | NONRKD | NNUBUBMO |
| NNMAFAMO | ANSUP | NUNAP | NBLKCP |
| GLAREP | OUTFAILP | ORGOUTP | ORGOUTCP |
| ORGOUTPU | INCOUTP | INCOUTCP | INCOUTPU |
| NALRTEP | NALRTEPU | ANSSZGP | |

Group structure

OM group DCTS provides one tuple for each destination code (maximum 1024).

The prefix-based registers (ANSSZGP, ANSUP, GLAREP, INCOUTCP, INCOUTP, INCOUTPU, NALRTEP, NALRTEPU, NBLKCP, NUNAP, ORGOUTCP, ORGOUTP, ORGOUTPU, and OUTFAILP) can be incremented only when the office parameter ACTIVATE_OMEF is Y.

Key field:

DESTINATION_CODE_NAME

This field numbers from 0 to 1023.

Info field:

None

Related OM groups

OM group DCTS is associated with group TRKDCTS.

Related functional groups

None

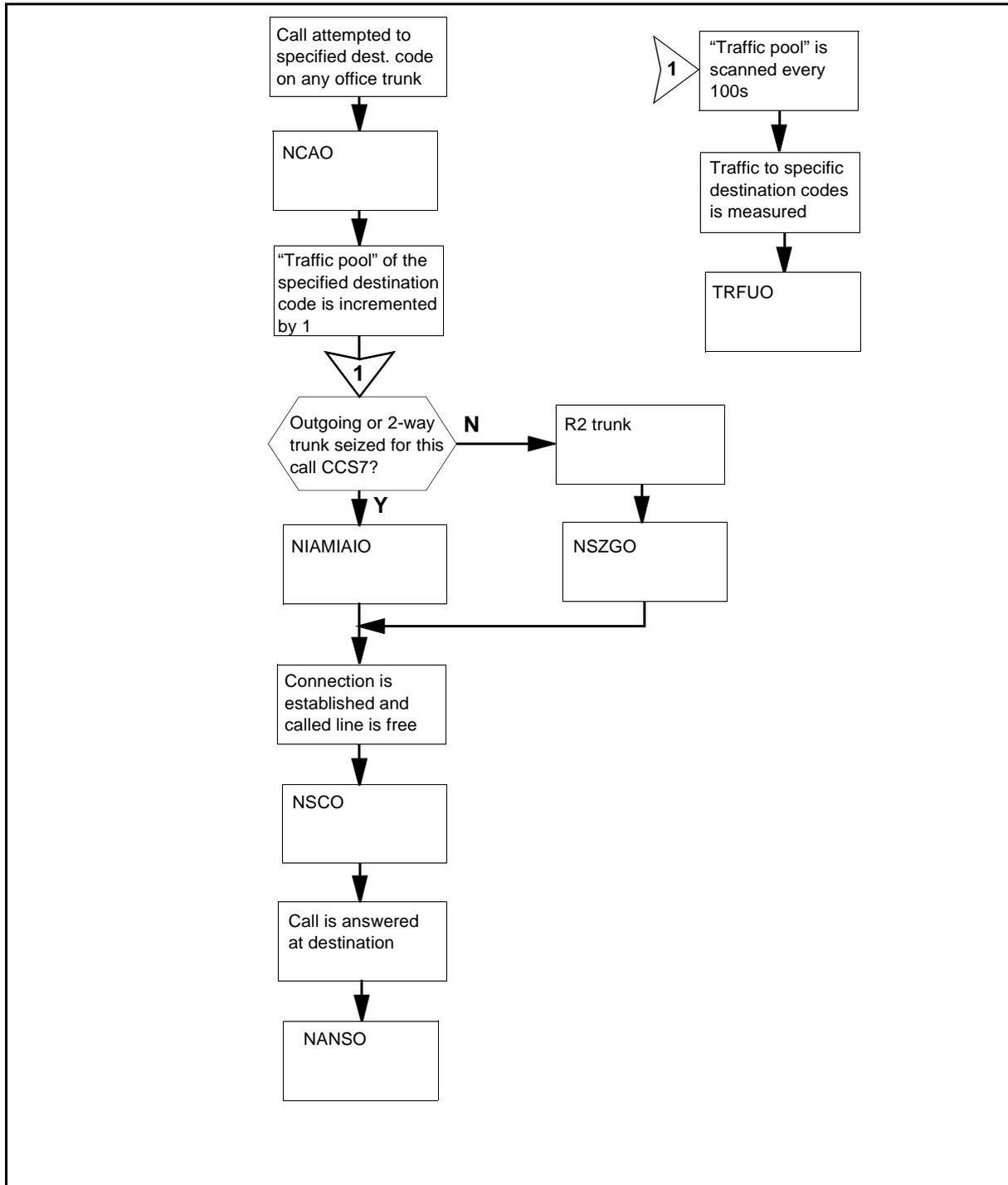
Related functionality codes

This table shows the functionality codes associated with OM group DCTS.

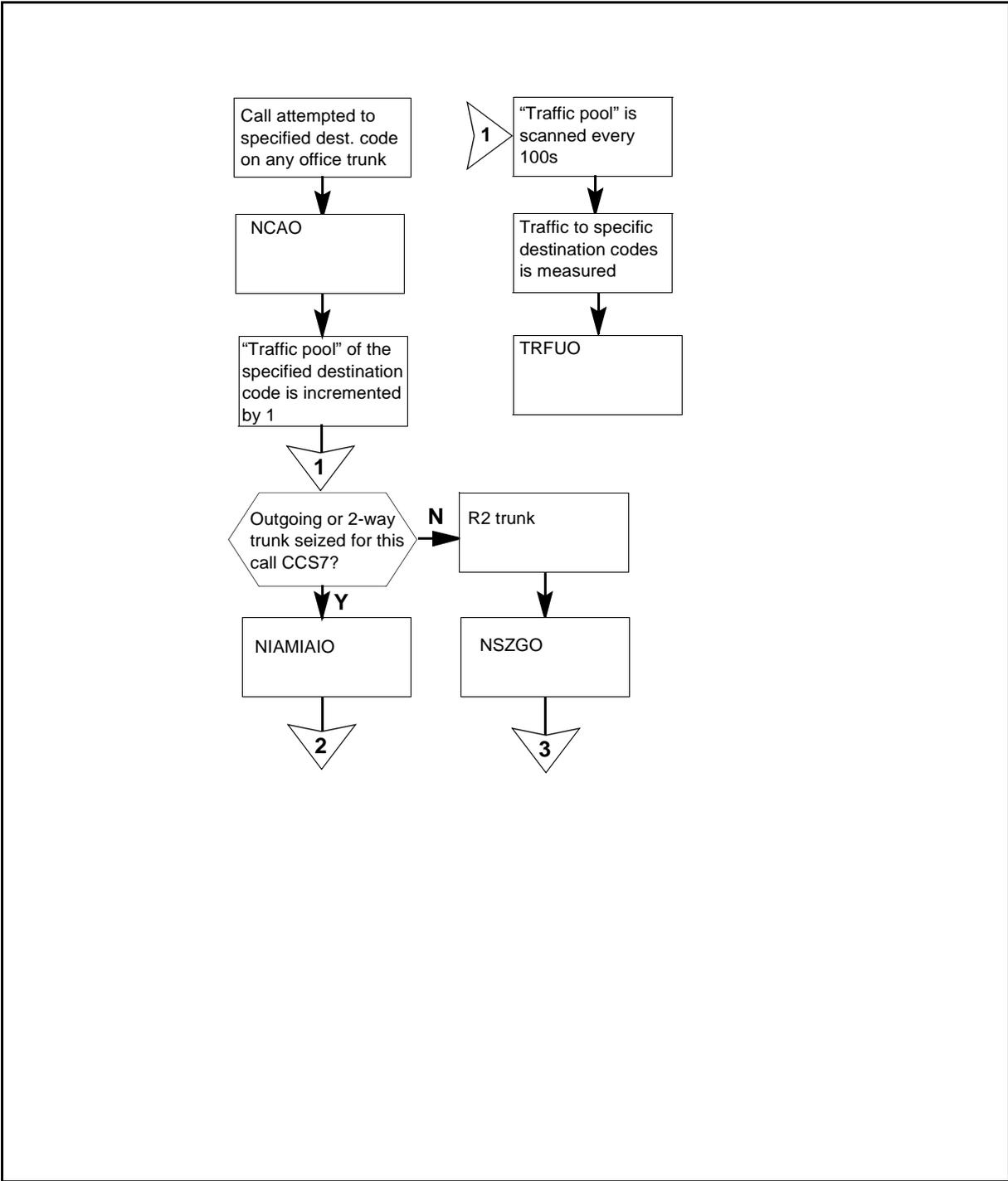
| Functionality | Code |
|----------------------|----------|
| AUS Interconnect OMs | AUS00045 |

1-4 Operation measurements

OM group DCTS registers-Call successful

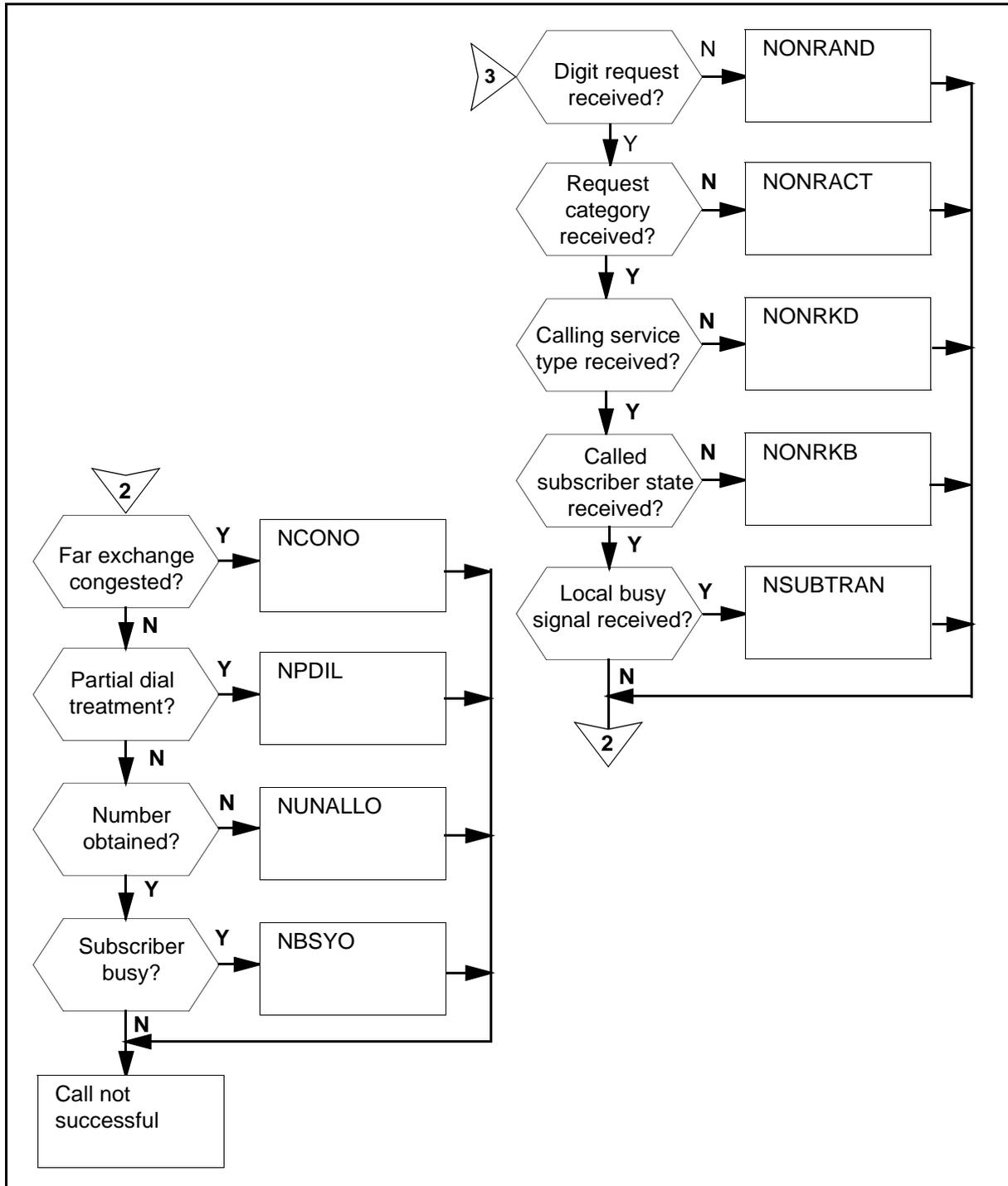


OM group DCTS registers-Call not successful

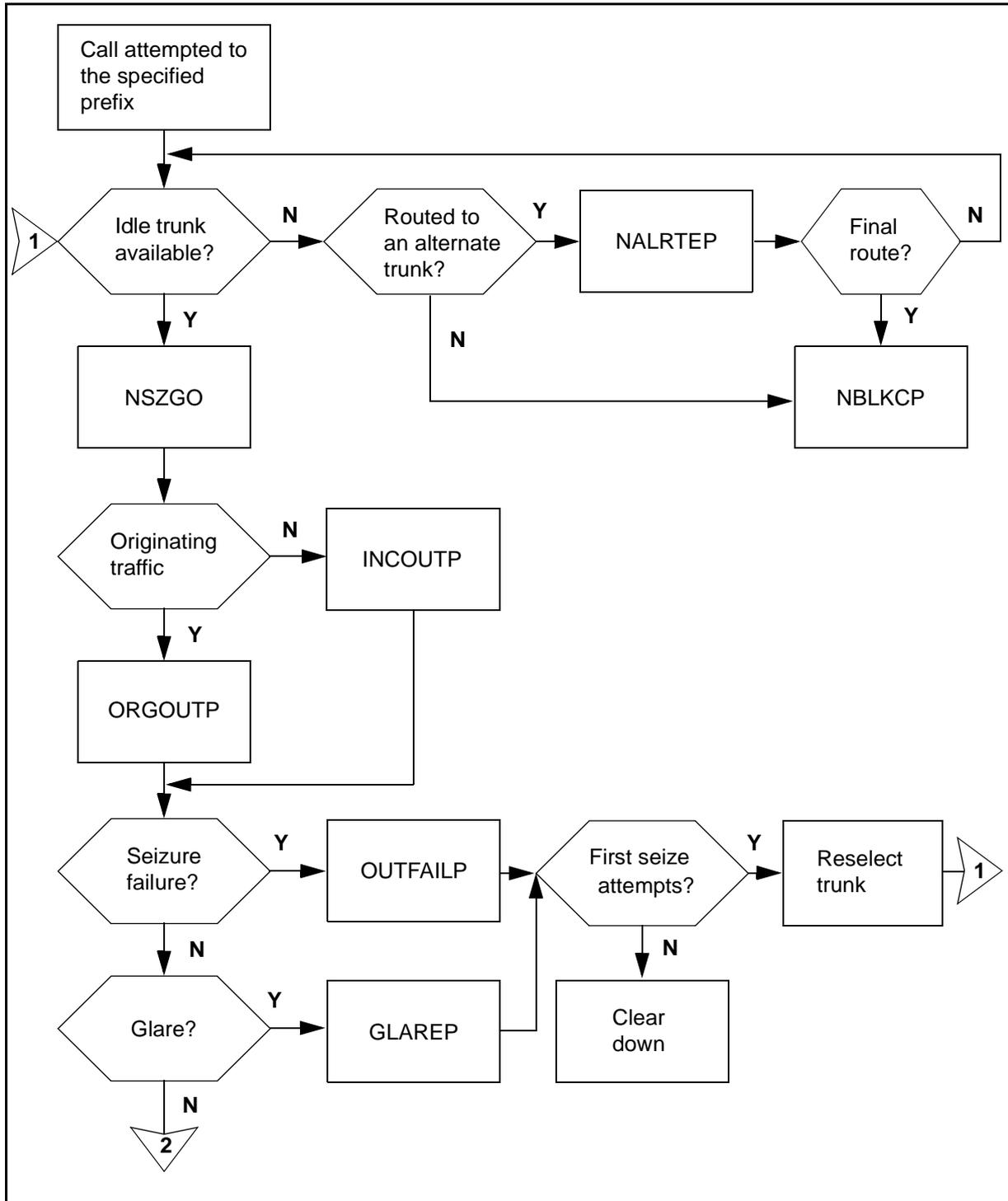


1-6 Operational measurements

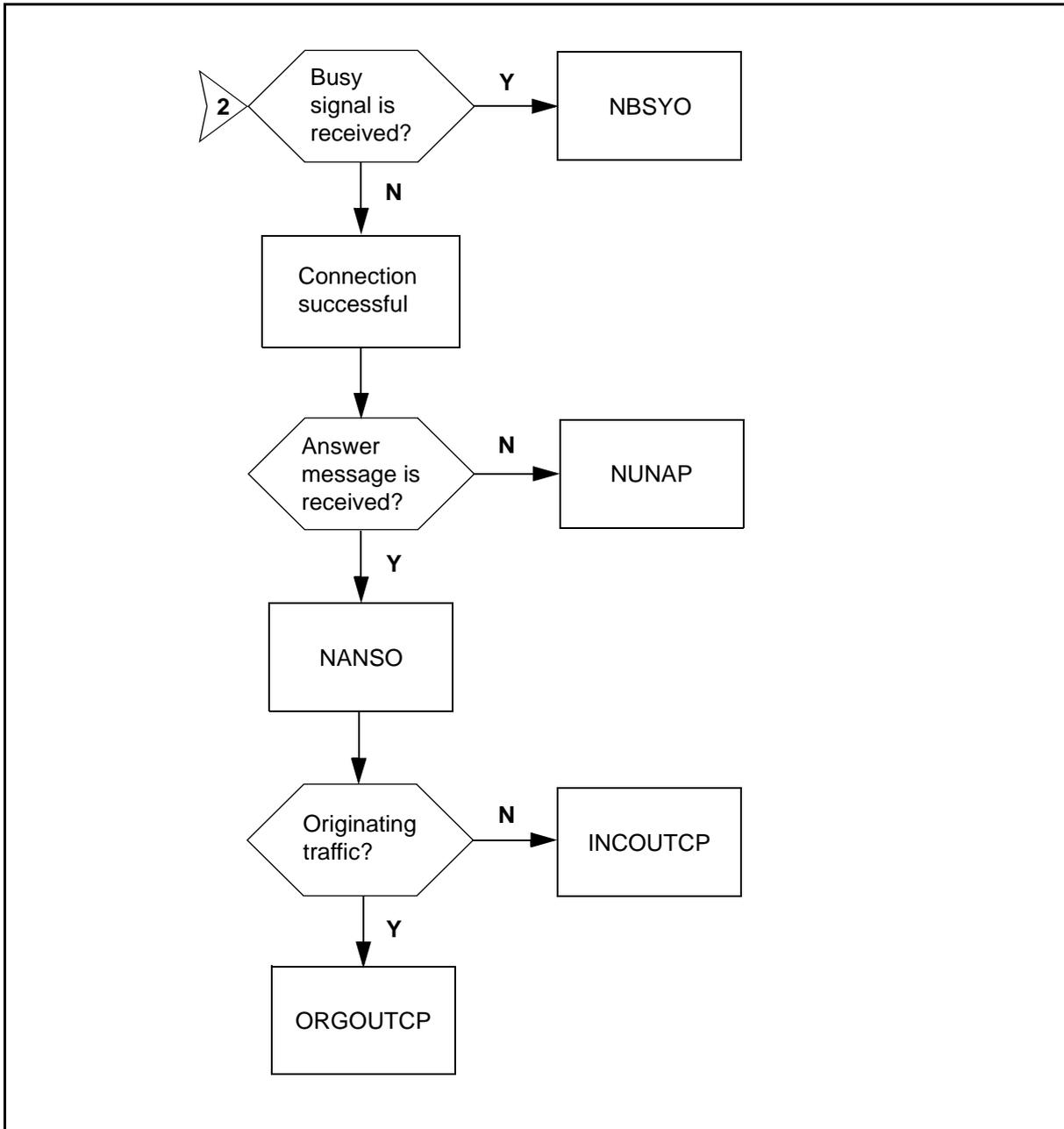
OM group DCTS registers-Call not successful (continued)



OM group DCTS registers-Prefix-based calls



OM group DCTS registers-Prefix-based calls (continued)



Register ANSSZGP

Answer to seizure ratio for prefix

ANSSZGP counts the percentage of answer to seizure ratio for the specified prefix. This register can be calculated by the formula as shown below:

$$ANSSZGP = (NANSO * 100 / NSZGO)$$

Register release history

ANSSZGP was introduced in MMP15.

Associated registers

ANSSZGP is associated with NANSO and NSZGO.

Associated logs

None

Register ANSUP

Answered calls usage register for prefixes

ANSUP provides a usage measurement of answered calls for the specified prefix. This register measures traffic in the answered state for the specified prefix.

Register release history

ANSUP was introduced in MMP15.

Associated registers

ANSUP is associated with INCOUTPU and ORGOUTPU.

Associated logs

None

Register GLAREP

Glare for prefix

GLAREP increments when a previously-selected trunk is dropped after routing to the specified prefix. The system drops this trunk because the peripheral module (PM) detects an origination before the PM can seize the trunk. The operating company gives information that indicates that outgoing calls give way to simultaneous incoming calls (glare).

The system attempts a new selection. If the system encounters glare again, the system routes the call to generalized no-circuit treatment (GNCT), and register GLAREP is incremented again.

Register release history

GLAREP was introduced in MMP15.

Associated registers

GLAREP is associated with GLARE.

Associated logs

None

Register INCOUTCP

Incoming to outgoing (trunk to trunk) conversations for prefix

INCOUTCP counts the number of answered calls from incoming traffic to outgoing traffic after routing to the specified prefix. This register increases when an answer signal is received for incoming to outgoing calls for the specified prefix.

Register release history

INCOUTCP was introduced in MMP15.

Associated registers

INCOUTCP is associated with NANSO.

Associated logs

None

Register INCOUTP

Incoming to outgoing (trunk to trunk) connections for prefix

INCOUTP counts incoming call attempts that connect to an outgoing trunk after routing to the specified prefix.

Register release history

INCOUTP was introduced in MMP15.

Associated registers

INCOUTP is associated with NSCO.

Associated logs

None

Register INCOUTPU

Number of incoming to outgoing (trunk to trunk) answered calls usage register for prefix

INCOUTPU is a usage register that shows the number of trunk to trunk answered calls for the specified prefix. This register measures traffic in the answered state for the specified prefix.

Register release history

INCOUTPU was introduced in MMP15.

Associated registers

None

Associated logs

None

Register NALRTEP

Number of alternated routed calls for prefix

NALRTEP counts the number of calls for the specified prefix that are routed to an alternate trunk because of trunk overflows. This register counts rerouted calls, but not reattempted calls.

Register release history

NALRTEP was introduced in MMP15.

Associated registers

NALRTEP is associated with NALRTE.

Associated logs

None

Register NALRTEPU

Number of alternated routed calls usage register for prefix

NALRTEPU is a usage register that shows the trunk usage for calls that are routed to an alternate trunk for the specified prefix.

Register release history

NALRTEPU was introduced in MMP15.

Associated registers

None

Associated logs

None

Register NANSO

Number of answered calls on all office trunks

NANSO increments each time a call is answered after routing to the specified destination code on any office trunk.

Register NANSO release history

NANSO was introduced to the DMS-100i product in BCS34.

NANSO was introduced to the APC100 product in APC009.

Associated registers

None

Associated logs

None

Register NBLKCP

Number of blocked calls for prefixes

NBLKCP is incremented when no idle trunk is found on the first or subsequent access attempts for the specified prefix. Register NBLKCP is incremented only for ETSI ISUP calls.

Register release history

NBLKCP was introduced in MMP15.

Associated registers

NBLKCP is associated with NOVFLATB.

Associated logs

None

Register NBSYO

Number of called subscriber busy signals

NBSYO increments each time a signal is received that indicates the called party's line is busy. Register NBSYO is incremented only for ETSI ISUP and R2 calls.

Register NBSYO release history

NB3 was introduced to the DMS-100i product in BCS36.

NBSYO was introduced to the APC100 product in APC009.

Associated registers

None

Associated logs

None

Register NCAO

Number of call attempts on all office trunks

NCAO increments each time a call attempt routes to a specified destination code on any office trunk.

Register NCAO release history

NCAO was introduced to the DMS-100i product in BCS34.

NCAO was introduced to the APC100 product in APC009.

Associated registers

None

Associated logs

None

Register NCONO

Number of congestion in distant exchange signals

NCONO increments when a signal is received that indicates congestion in a distant exchange. This register increments for any trunk.

Register NCONO release history

NA4B4 was introduced to the DMS-100i product in BCS36.

NCONO was introduced to the APC100 product in APC009.

Associated registers

None

Associated logs

None

Register NIAMIAIO

Number of Initial Address Messages (IAM) or IAMs with more Information (IAI) of the office

NIAMIAIO counts the number of IAM or IAI messages of the office.

This register increments only for PTUP, ANSI7+, and ETSI ISUP v1 calls.

Register NIAMIAIO release history

NIAMIAIO was introduced to the APC100 product in APC009.

Associated registers

None

Associated logs

None

Register NNMAFAMO

Number of non-received messages after Forward Address Messages (FAM) of the office

NNMAFAMO counts the number of 'message not received' signals after FAM of the office.

This register increments only for PTUP, ANSI7+, and ETSI ISUP v1 calls.

Register NNMAFAMO release history

NNMAFAMO was introduced to the APC100 product in APC009.

Associated registers

None

Associated logs

None

Register NNUBUBMO

Number of Unsuccessful Backward setup Messages (UBM) of the office

NNUBUBMO counts the number of UBM messages of the office.

This register increments only for PTUP, ANSI7+, and ETSI ISUP v1 calls.

Register NNUBUBMO release history

NNUBUBMO was introduced to the APC100 product in APC009.

Associated registers

None

Associated logs

None

Register NONRACT

Number of non-received request category and request-billing category signals (NONRACT)

Register NONRACT increases when a call is not complete because the system does not receive an R2 signal. The R2 signals are the request category and request-billing category signals.

Register NONRACT release history

APC010 introduced register NONRACT to the APC100 product.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Register NONRAND

Number of non-received send next digit signals (NONRAND)

Register NONRAND increases when a call is not complete because the system does not receive an R2 signal. The R2 signal is the send next digit signal.

Register NONRAND release history

APC010 introduced register NONRAND to the APC100 product.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Register NONRKB

Number of non-received state of called subscriber signals (NONRKB)

Register NONRKB increases when a call is not complete because the system does not receive an R2 signal. The R2 signal is the state of the called subscriber.

Register NONRKB release history

APC010 introduced register NONRKB to the APC100 product.

BCS36 introduced register NONRKB to the DMS-100 product.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Register NONRKD

Number of non-received type of service signals (NONRKD)

1-16 Operational measurements

Register NONRKD increases when a call is not successful. The call is not successful because the system did not receive an R2 signal that describes the calling party's type of service.

Register NONRKD release history

APC010 introduced register NONRKD to the APC100 product.

BCS36 introduced register NONRKD to the DMS-100 product.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Register NPDIL

Number of partial-dial treatments

NPDIL increments when a partial-dial treatment signal indicates incomplete dialing on all office trunks.

Register NPDIL release history

NPDIL was introduced to the DMS-100i product in BCS36.

NPDIL was introduced to the APC100 product in APC009.

Associated registers

None

Associated logs

None

Register NSCO

Number of successful calls on all office trunks

NSCO counts each connection established on any office trunk. The Subscriber Free message is received for the calls routed to a specified destination code.

NSCO is incremented for an outgoing trunk (CISUP or CTUP) when the ACM message is received on tandem.

NSCO is updated properly only when the following office parameter is turned on:

- ISDN_ACCIND in table AMAOPTS

Register NSCO release history

NSCO was introduced to the DMS-100i product in BCS34.

NSCO was introduced to the APC100 product in APC009.

NSCO was enhanced for DMS-100 product for China specific in SN06 (DMS).

Associated registers

None

Associated logs

None

Register NSUBTRAN

Number of Subscriber line Transferred signals

NSUBTRAN counts the number of subscriber line transferred messages received by the office.

This register increments only for P-R2 calls.

Register NSUBTRAN release history

NB2 was introduced to the DMS-100i product in BCS36.

NSUBTRAN was introduced to the APC100 product in APC009.

Associated registers

None

Associated logs

None

Register NSZGO

Number of seizures on all non-CCS7 trunks

NSZGO counts each time an outgoing or two-way trunk is seized for calls routed to a specified destination code.

Register NSZGO release history

NSZGO was introduced to the DMS-100i product in BCS34.

NSZGO was introduced to the APC100 product in APC009.

Associated registers

None

Associated logs

None

Register NUNALLO

Number of calls encountering unallocated number

NUNALLO counts the signals received that indicate the number is unallocated. This register increments for all office trunks.

Register NUNALLO release history

NB5 was introduced to the DMS-100i product in BCS36.

NUNALLO was introduced to the APC100 product in APC009.

Associated registers

None

Associated logs

None

Register NUNAP

Number of unanswered calls for prefixes

NUNAP increments each time a call is not answered after routing to the specified prefix. This register increases when no answer signal is received after call connection on a line or trunk that indicates that the called party does not answer.

Register release history

NUNAP was introduced in MMP15.

Associated registers

NUNAP is associated with NSCO and NANSO.

Associated logs

None

Register ORGOUTCP

Originating to outgoing (line to trunk) conversations for prefix

ORGOUTCP counts the number of answered calls from originating traffic to outgoing traffic after routing to the specified prefix. This register increases when an answer signal is received for originating to outgoing calls for the specified prefix.

Register release history

ORGOUTCP was introduced in MMP15.

Associated registers

ORGOUTCP is associated with NANSO.

Associated logs

None

Register ORGOUTP

Originating to outgoing (line to trunk) connections for prefix

ORGOUTP counts originating call attempts that connect to an outgoing trunk after routing to the specified prefix.

Register release history

ORGOUTP was introduced in MMP15.

Associated registers

ORGOUTP is associated with NSCO.

Associated logs

None

Register ORGOUTPU

Number of originating to outgoing (line to trunk) answered calls usage register for prefix

ORGOUTPU is a usage register that shows the number of line to trunk answered calls for the specified prefix. This register measures traffic in the answered state for the specified prefix.

Register release history

ORGOUTPU was introduced in MMP15.

Associated registers

None

Associated logs

None

Register OUTFAILP

Outgoing failures for prefix

OUTFAILP counts failed attempts to seize an outgoing trunk in the trunk group for the specified prefix. Attempts to seize a trunk fail because of:

- signaling problems
- seizure failures
- loss of integrity
- outgoing failures

When an attempt fails, the system releases the trunk and then again attempts to seize a trunk. The system counts each failed attempt in OUTFAILP. If a second attempt to seize a trunk fails, the system routes the call to treatment.

Register release history

OUTFAILP was introduced in MMP15.

Associated registers

OUTFAILP is associated with OUTFAIL.

Associated logs

None

Register TRFUO

Total traffic usage on all office trunks

TRFUO updates every 100s, recording the total traffic to a specified destination code on all outgoing and 2-way trunks.

Register TRFUO release history

TRFUO was introduced to the DMS-100i product in BCS34.

TRFUO was introduced to the APC100 product in APC009.

Associated registers

None

Associated logs

None

OM group DDU

OM description

Disk drive unit file and maintenance work (DDU)

Register DDU provides information on disk drive units (DDU). A DDU is an external storage device in an I/O equipment frame.

Two peg registers count errors and faults that the system detects in DDUs. Two usage registers record if DDUs are manual or system busy.

The system uses data provided by DDU to monitor the performance of DDUs.

Release history

The OM group DDU was introduced before BCS20.

BCS33

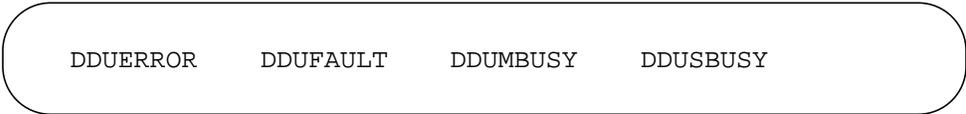
When you set office parameters DDUMBUSY and DDUSBUSY, you convert hundred call seconds (CCS) to deci-erlangs before the CCS appears. Use the OMSHOW command on the ACTIVE class to display the CCS. The value in the active register remains in CCS.

BCS30

Software changed for the OM group DDU provide use counts in CCS or deci-erlangs.

Registers

The OM group DDU registers appear on the MAP terminal as follows:



DDUERROR DDUFAULT DDUMBUSY DDUSBUSY

Group structure

The OM group DDU provides one tuple for each office.

Key field:

There is no Key field

Info field:

There is no Info field

Associated OM groups

There are no associated OM groups.

OM group DDU (continued)

Associated operating groups

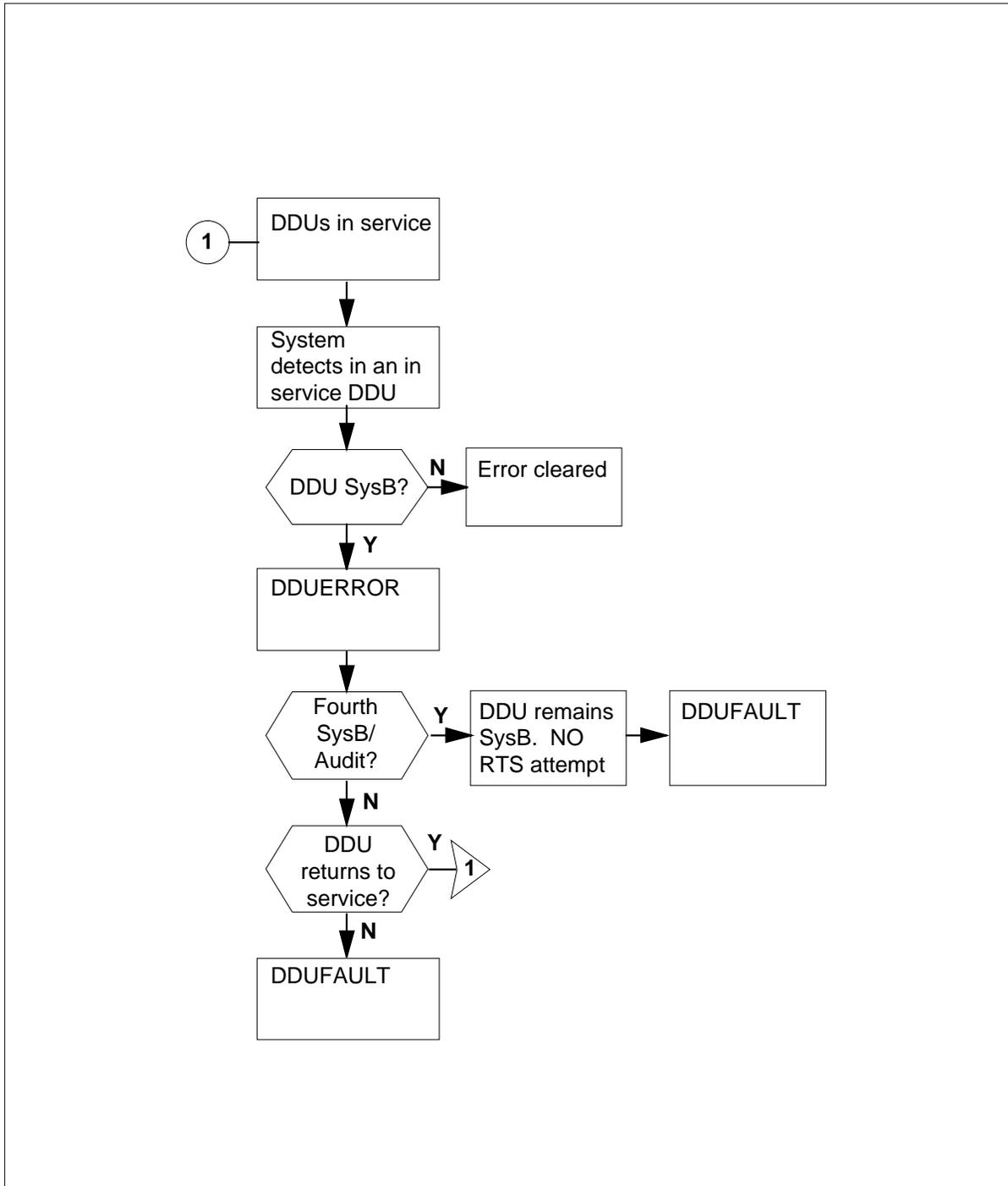
The following operating groups associate with OM group DDU:

- DMS-100 Local
- DMS-200 Toll
- DMS-250 Toll/Tandem
- DMS-300 Gateway
- DMS International
- DMS-MTX

Associated functionality codes

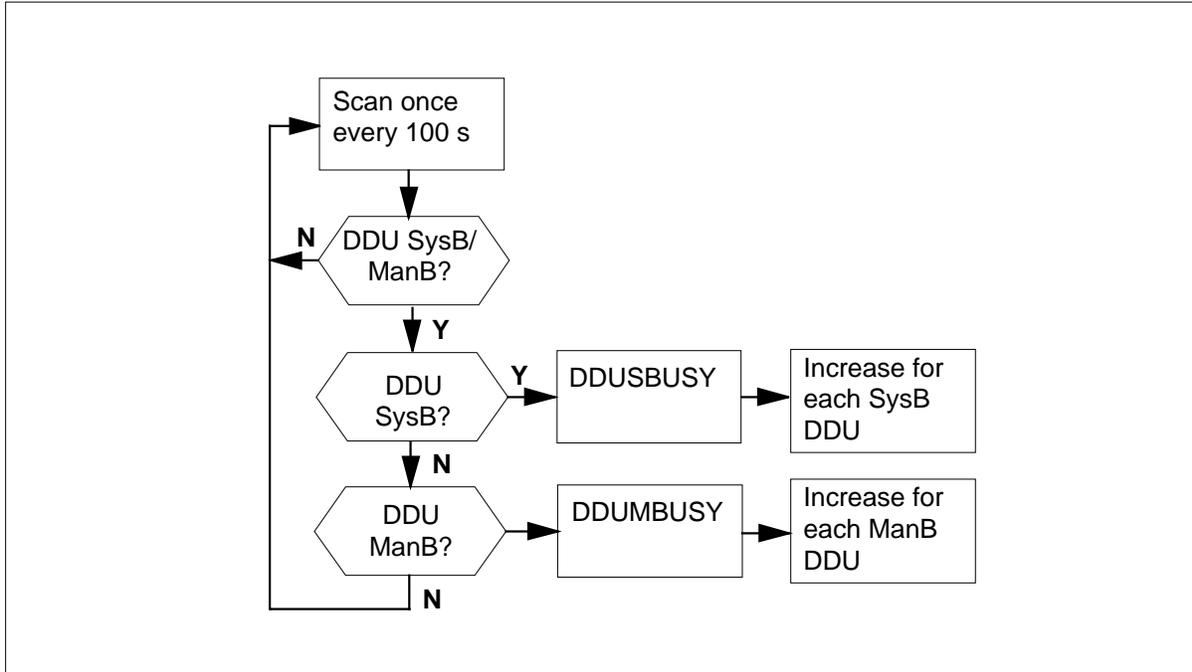
The associated functionality codes for the OM group DDU appear in the following table.

| Functionality | Code |
|--------------------------------------|----------|
| Common Basic | NTX001AA |
| International Switching Center-Basic | NTX300AA |

OM group DDU (continued)**OM group DDU registers**

OM group DDU (continued)

OM group DDUusage registers



Register DDUERROR

DDU errors (DDUERROR)

Register DDUERROR counts I/O errors that cause an in-service DDU to become system busy. Register DDUERROR counts:

- temporary errors that cause the DDU to become temporarily system busy
- faults that cause the DDU to remain system busy until an action corrects the fault

Register DDUERROR release history

Register DDUERROR was introduced before BCS20.

Associated registers

Register DDUFault counts system attempts to return to service a failed DDU.

Associated logs

The system generates DDU100 when DDU initialization is complete or software errors prevent DDU initialization.

The system generates DDU101 when the system detects I/O errors in a DDU.

OM group DDU (continued)

The system generates DDU204 when a DDU becomes system busy.

The system generates DDU205 when an attempt to return to service a DDU occurs.

The system generates IOGA101 when the I/O error handler processes a message-related fault report.

Register DDUFAULT

DDU fault (DDUFAULT)

Register DDUFAULT increases if either of the following events occurs:

- the system makes an attempt to return to service a DDU that fails after an error makes the DDU system busy
- the system makes a DDU system busy four times in a single audit cycle and the DDU remains system busy

Register DDUFAULT release history

Register DDUFAULT was introduced before BCS20.

Associated registers

Register DDU_DDUERROR counts input or output errors that make an in-service DDU system busy.

Associated logs

The system generates DDU204 when a DDU becomes system busy.

The system generates DDU205 when an attempt to return to service a DDU occurs.

The system generates DDU208 when the I/O subsystem reports that a sanity time-out occurs on a DDU.

The system generates DDU209 when a DDU becomes C-side busy because a C-side node changes state.

The system generates DDU212 when a DDU fails a system or manually initiated diagnostic.

Register DDUMBUSY

DDU manual busy usage (DDUMBUSY)

OM group DDU (continued)

Register DDUMBUSY is a usage register. The scan rate 100 s. Register DDUMBUSY increases each time the system detects a manual busy DDU.

Register DDUMBUSY release history

Register DDUMBUSY was introduced before BCS20.

BCS33

When you set office parameter OMINERLANGS to Y, you convert the usage count from CCS to deci-erlangs before the count appears. Use the OMSHOW command on the ACTIVE class to convert the usage count. The value in the active registers remains in CCS.

BCS30

Software changed for register DDUMBUSY in BCS30 to provide use counts in CCS or in deci-erlangs.

Associated registers

There are no associated registers.

Associated logs

The system generates DDU203 when you attempt to make a DDU manual busy.

Register DDUSBUSY

DDU system busy usage (DDUSBUSY)

Register DDUSBUSY is a usage register. The scan rate is slow 100 s. Register DDUSBUSY increases each time the system detects a system busy DDU.

DDUSBUSY release history

Register DDUSBUSY was introduced before BCS20.

BCS33

When you set office parameter OMINERLANGS to Y, you convert the usage count from CCS to deci-erlangs before the count appears. Use the OMSHOW command on the ACTIVE class to display the usage count. The value in the active registers remains in CCS.

BCS30

Software changed for register DDUSBUSY in BCS30 provide usage counts either in CCS or in deci-erlangs.

Associated registers

There are no associated registers.

OM group DDU (end)

Associated logs

The system generates DDU204 when a DDU becomes system busy.

OM group DMCT

OM description

Denied malicious call termination (DMCT)

The OM group DMCT provides information about the use of denied malicious call termination (DMCT) list editing and call screening abilities. The DMCT feature allows Meridian Digital Centrex (MDC) subscribers or automatic call distribution (ACD) groups. The DMCT feature allows the groups and subscribers to specify callers from whom the subscribers and groups do not want to receive calls. The system routes these callers to an announcement that indicates the subscriber does not accept their call.

Nine registers that record information about calls that the DMCT feature denies. The nine registers also record information the system collects when a subscriber changes a DMCT screening list.

Release history

The OM group DMCT was introduced in BCS35.

Registers

The OM group DMCT registers appear on the MAP terminal as follows:

| | | | |
|----------|----------|---------|----------|
| DMCTLATT | DMCTENTR | DMCTREG | DMCTDREG |
| DMCTNIL | DMCTDUP | DMCTINV | DMCTDENY |
| DMCTNOID | | | |

Group structure

The OM group DMCT provides one tuple for each office.

Key field:

There is no Key field

Info field:

There is no Info field

Associated OM groups

There are no associated OM groups.

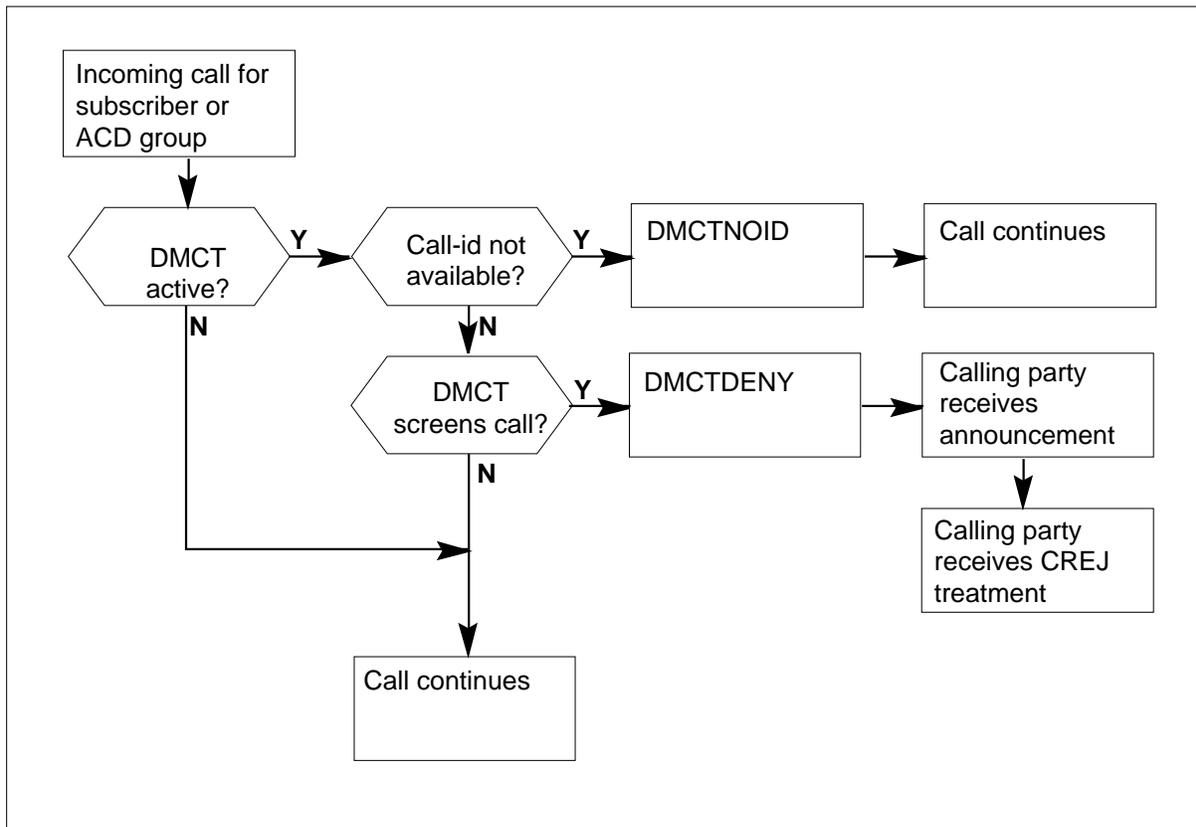
OM group DMCT (continued)**Associated operating groups**

The following operating groups associate with OM group DMCT:

- Integrated Business Network (IBN)
- Automatic Call Distribution (ACD)
- Electronic Business Set (EBS)

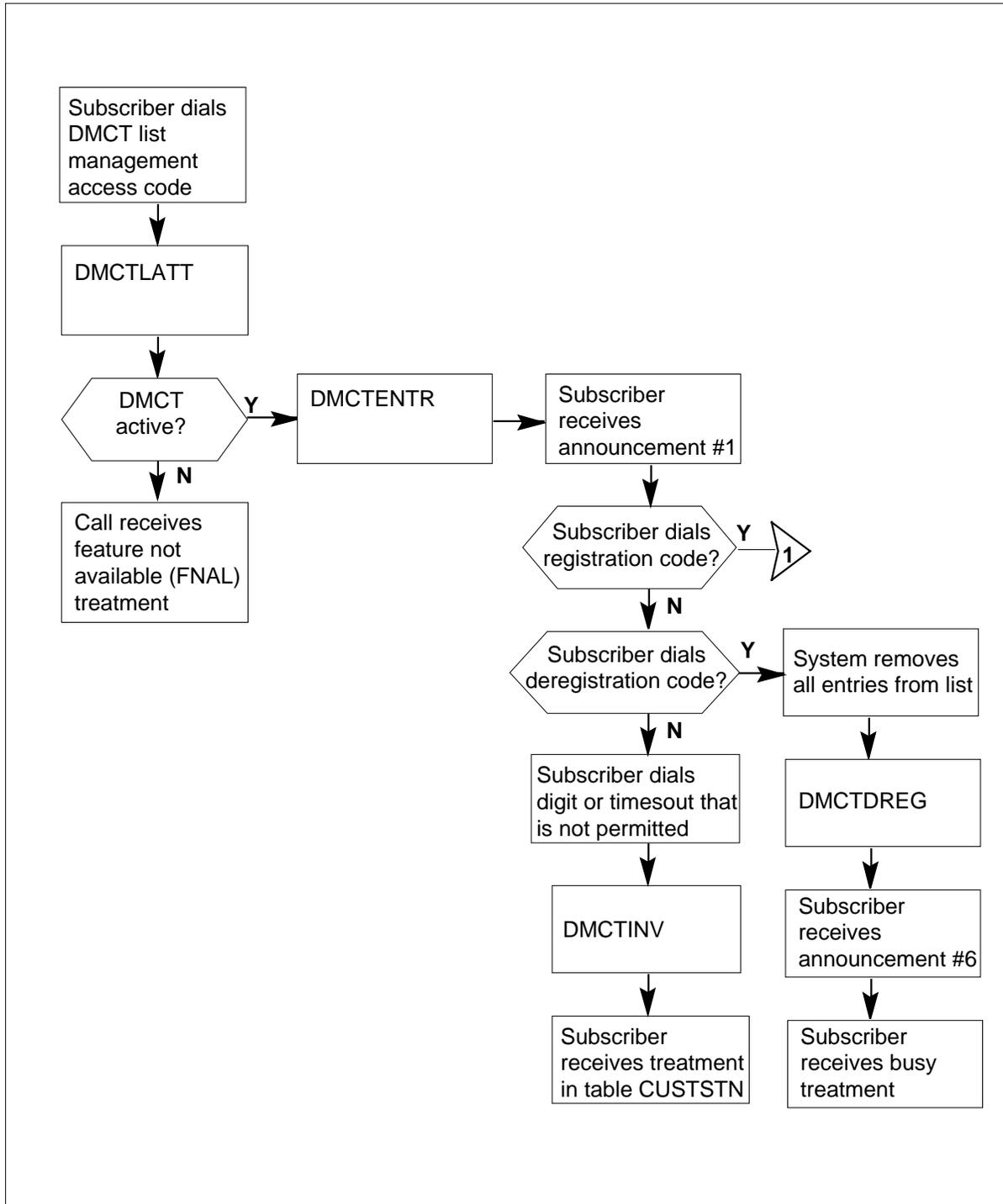
Associated functionality codes

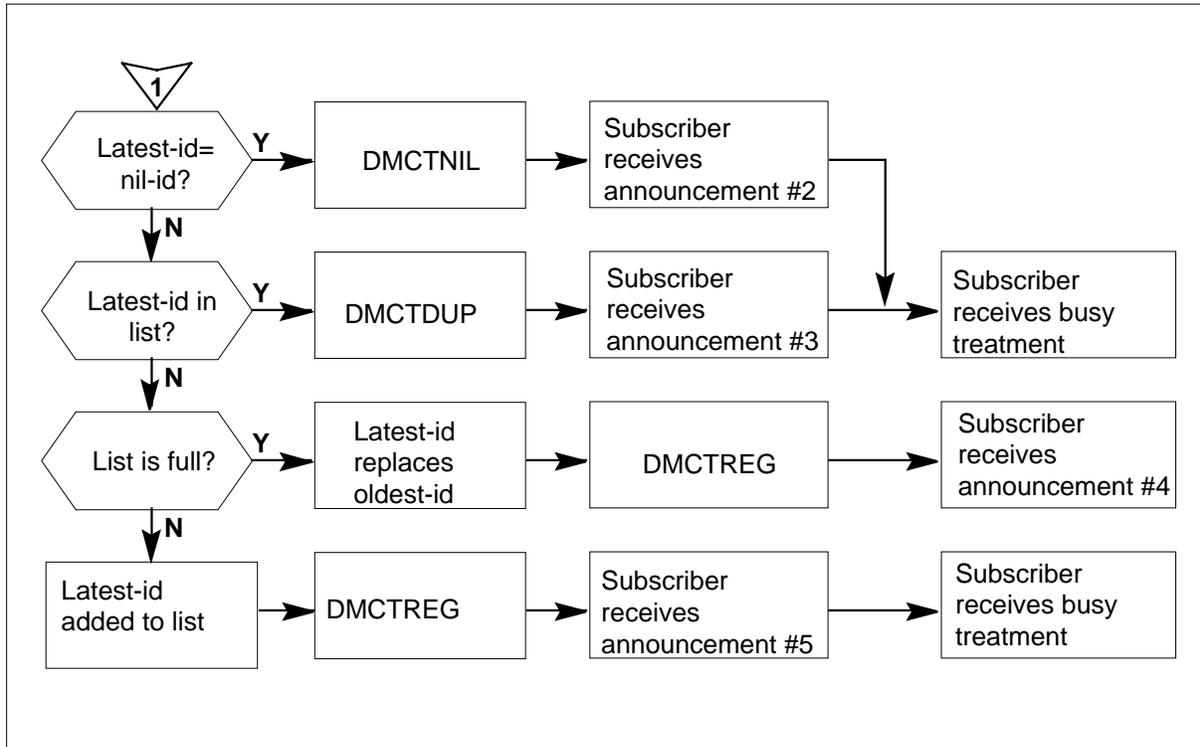
There are no associated functionality codes.

OM group DMCT registers - call screening

OM group DMCT (continued)

OM group DMCT registers - list management



OM group DMCT (continued)**OM group DMCT registers - list management (continued)****Register DMCTDENY**

DMCT call denied (DCMTDENY)

Register DMCTDENY increases each time the system denies a call because of DMCT screening. The caller receives an announcement that indicates that the subscriber does not accept the call. The system routes the call to call rejected treatment.

Register DMCTDENY release history

Register DMCTDENY was introduced in BCS35.

Associated registers

There are no associated registers.

Associated logs

There are no associated registers.

Extension registers

There are no extension registers.

OM group DMCT (continued)

Register DMCTDREG

DMCT deregistration (DMCTDREG)

Register DMCTDREG increases for each attempt to deregister a DMCT screening list. Deregistration of a DMCT list involves removal of all caller-ids that the list contains.

Register DMCTDREG release history

Register DMCTDREG was introduced in BCS35.

Associated registers

Register DMCTDUP increases for each attempt to register a caller-id that already appears in DMCT screening list of the subscriber.

Register DMCTENTR increases for each successful attempt to initiate a DMCT list management session.

Register DMCTINV increases each time a subscriber dials a command code that is not permitted in a DMCT list management session.

Register DMCTNIL increases for each attempt to register a nil caller-id on a DMCT screening list.

Register DMCTREG increases for each successful attempt to add a latest-id to a DMCT screening list.

$DMCTDREG = DMCTENTR - DMCTREG - DMCTNIL - DMCTDUP - DMCTINV$

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register DMCTDUP

DMCT caller-id already on list (DMCTDUP)

Register DMCTDUP increases for each attempt to register a caller-id that already appears in DMCT screening list of the subscriber.

Register DMCTDUP release history

DMCTDUP is added to BCS35.

OM group DMCT (continued)

Associated registers

DMCTDREG increases for each attempt to cancel a DMCT screening list.

DMCTENTR increases for each successful attempt to initiate a DMCT list management session.

DMCTINV increases each time a subscriber dials an invalid command code within a DMCT list management session.

DMCTNIL increases for each attempt to register a nil caller-id on a DMCT screening list.

DMCTREG increases for each successful attempt to add a latest-id to a DMCT screening list.

$DMCTDUP = DMCTENTR - DMCTREG - DMCTNIL - DMCTDREG - DMCTINV$

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register DMCTENTR

DMCT list editing (DCMTENTR)

Register DMCTENTR increases for each successful attempt to initiate a DMCT list management session. In this session, a subscriber can add or remove a caller-id from the DMCT screening list.

Register DMCTENTR release history

Register DMCTENTR was introduced in BCS35.

Associated registers

Register DMCTLATT increases for each attempt to initiate a DMCT list management session.

$DMCTENTR \text{ \& } DMCTLATT$

Register DMCTDREG increases for each attempt to deregister a DMCT screening list.

OM group DMCT (continued)

Register DMCTDUP increases for each attempt to register a caller-id that already appears in DMCT screening list of the subscriber.

Register DMCTINV increases when a subscriber dials a command code that is not permitted in a DMCT list management session.

Register DMCTNIL increases for each attempt to register a nil caller-id on a DMCT screening list.

Register DMCTREG increases for each successful attempt to add a latest-id to a DMCT screening list.

$DMCTENTR = DMCTREG + DMCTDREG + DMCTNIL + DMCTDUP + DMCTINV$

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register DMCTINV

DMCT invalid command code (DMCTINV)

Register DMCTINV increases when a subscriber dials an invalid command code in a DMCT list management session. Register DMCTINV also increases when a subscriber does not dial during the timeout period. An invalid command code refers to a code other than the registration or removal code.

Register DMCTINV release history

Register DMCTINV was introduced in BCS35.

Associated registers

Register DMCTDREG increases for each attempt to deregister a DMCT screening list.

Register DMCTDUP increases for each attempt to deregister a caller-id that already appears in the DMCT screening list of the subscriber.

Register DMCTENTR increases for each successful attempt to initiate a DMCT list management session.

Register DMCTNIL increases for each attempt to register a nil caller-id on a DMCT screening list.

OM group DMCT (continued)

Register DMCTREG increases for each successful attempt to add a latest-id to a DMCT screening list.

DMCTINV = DMCTENTR - DMCTREG - DMCTNIL - DMCTDUP - DMCTDREG

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register DMCTLATT

DMCT list attempt (DMCTLATT)

Register DMCTLATT increases for each attempt to initiate a DMCT list management session.

Register DMCTLATT release history

Register DMCTLATT was introduced in BCS35.

Associated registers

Register DMCTENTR increases for each successful attempt to initiate a DMCT list management session.

DMCTLATT DMCTENTR

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register DMCTNIL

DMCT caller-id not available (DMCTNIL)

Register DMCTNIL increases for each attempt to register a nil caller-id on a DMCT screening list. A nil-id refers to a caller that the system cannot register because of not enough identification information.

Register DMCTNIL release history

Register DMCTNIL was introduced in BCS35.

OM group DMCT (continued)

Associated registers

Register DMCTDREG increases for each attempt to deregister a DMCT screening list.

Register DMCTDUP increases for each attempt to register a caller-id that already appears in DMCT screening list of the subscriber.

Register DMCTENTR increases for each successful attempt to initiate a DMCT list management session.

Register DMCTINV increases when a subscriber dials an invalid command code in a DMCT list management session.

Register DMCTREG increases for each successful attempt to add a latest-id to a DMCT screening list.

$DMCTNIL = DMCTENTR - DMCTREG - DMCTDREG - DMCTDUP - DMCTINV$

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register DMCTNOID

DMCT no caller-id (DMCTNOID)

Register DMCTNOID increases each time a call for DMCT screening does not have a caller-id. This event occurs when an agent that does not have a caller-id places a call. The agent places the call to a subscriber or ACD agent that has the DMCT feature active.

Register DMCTNOID release history

Register DMCTNOID was introduced in BCS35.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

OM group DMCT (end)

Register DMCTREG

DCMT registration (DCMTREG)

Register DMCTREG increases for each successful attempt to add a latest-id to a DMCT screening list. The latest-id refers to the current caller when the system saves the identification of the caller.

Register DMCTREG release history

Registration DMCTREG was introduced in BCS35.

Associated registers

Register DMCTDREG increases for each attempt to deregister a DMCT screening list.

Register DMCTDUP increases for each attempt to register a caller-id that already appears in the DMCT screening list of the subscriber.

Register DMCTENTR increases for each successful attempt to initiate a DMCT list management session.

Register DMCTINV increases when a subscriber dials an invalid command code in a DMCT list management session.

Register DMCTNIL increases for each attempt to register a nil caller-id on a DMCT screening list.

$DMCTREG = DMCTENTR - DMCTDREG - DMCTNIL - DMCTDUP - DMCTINV$

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

OM group DRCW

OM description

Distinctive Ringing/Call Waiting (DRCW)

The OM group DRCW monitors use of the Distinctive Ringing/Call Waiting (DR/CW) feature. You can obtain this feature alone or as part of the common access group of features.

The OM group DRCW contains four registers for common access counts. Common access counts include DR/CW access attempts, successful activations and deactivations, and denials. The 12 peg registers that remain provide the following counts:

- attempts to invoke a DR/CW screen list editing (SLE) session
- calls that the system denies access to DR/CW SLE because of system failure or not enough resources
- calls that the system denies access to DR/CW SLE because the DR/CW feature is not assigned or is not available
- activation of the DR/CW feature
- deactivation of the DR/CW feature
- calls that the system screen because the DR/CW feature is active
- attempts to provide distinctive call waiting tone
- calls for which the system applies distinctive ringing
- attempts to provide DR/CW tone that fail because not enough system resources are present
- calls that the DR/CW screening list does not screen because the incoming directory number is not available
- calls that the DR/CW screening list does not screen because the screening list is not available

The DR/CW feature contains one usage register that records if a line uses DR/CW SLE.

Release history

The OM group DRCW was introduced in BCS30.

BCS35

Registers DRCWAUNV, DRCWDENYC, DRCWDUNV, and DRCWUNIV were introduced in BCS30 for universal access.

OM group DRCW (continued)**Registers**

The OM group DRCW registers appear on the MAP terminal as follows:

| | | | |
|----------|----------|----------|----------|
| DRCWEATT | DRCWEDEN | DRCWEOVF | DRCWACT |
| DRCWDACT | DRCWEUSG | DRCWSAT | DRCWSAT2 |
| DRCWSDEN | DRCWSBLK | DRCWRING | DRCWTATT |
| DRCWTOVF | DRCWUNIV | DRCWDENY | DRCWAUNV |
| DRCWDUNV | | | |

Group structure

The OM group DRCW provides one tuple for each office.

Key field:

There are no Key fields.

Info field:

There are no Info fields.

Associated OM groups

There are no associated OM groups.

Associated operating groups

The MDC operating group associates with OM group DRCW.

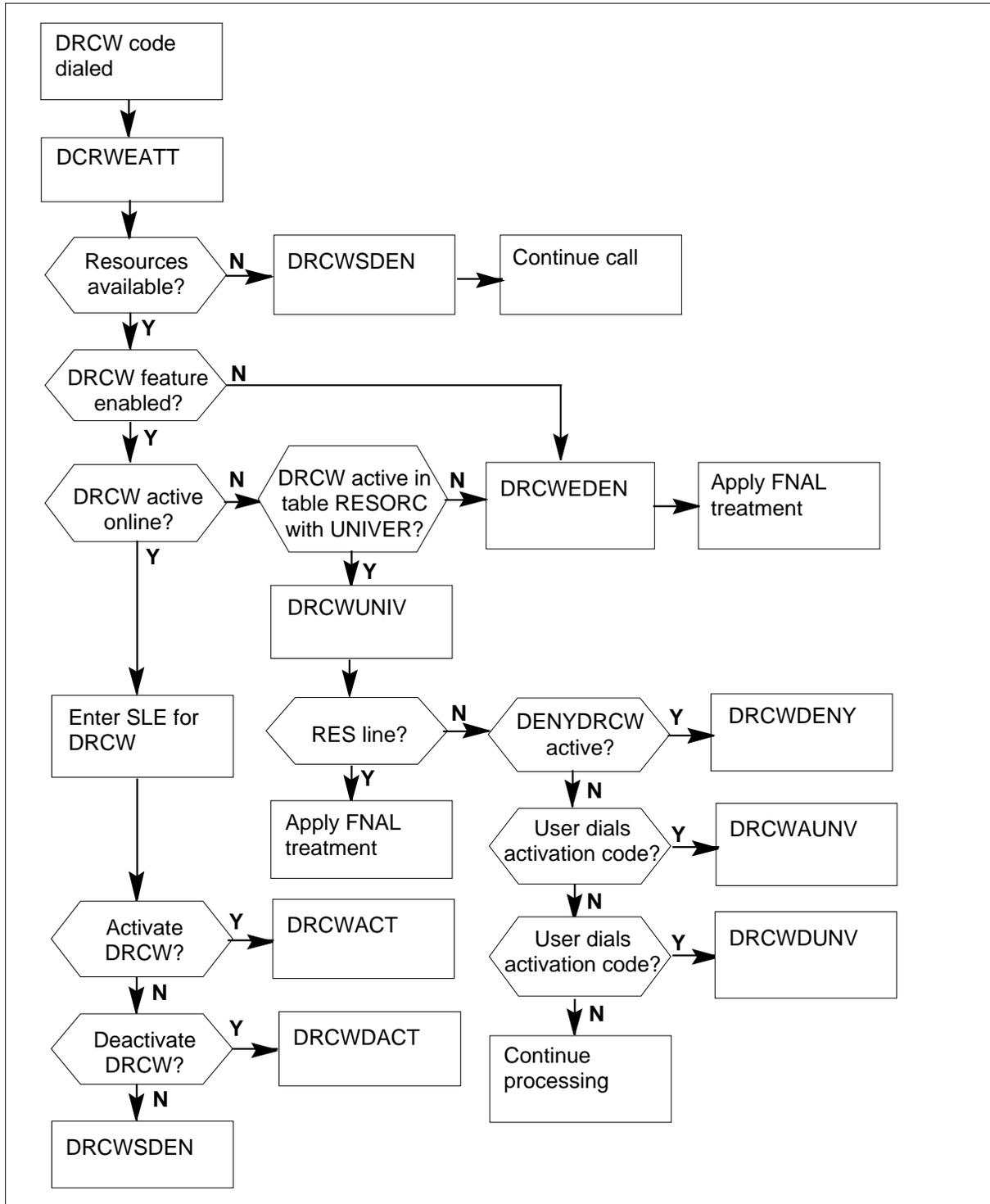
Associated functionality codes

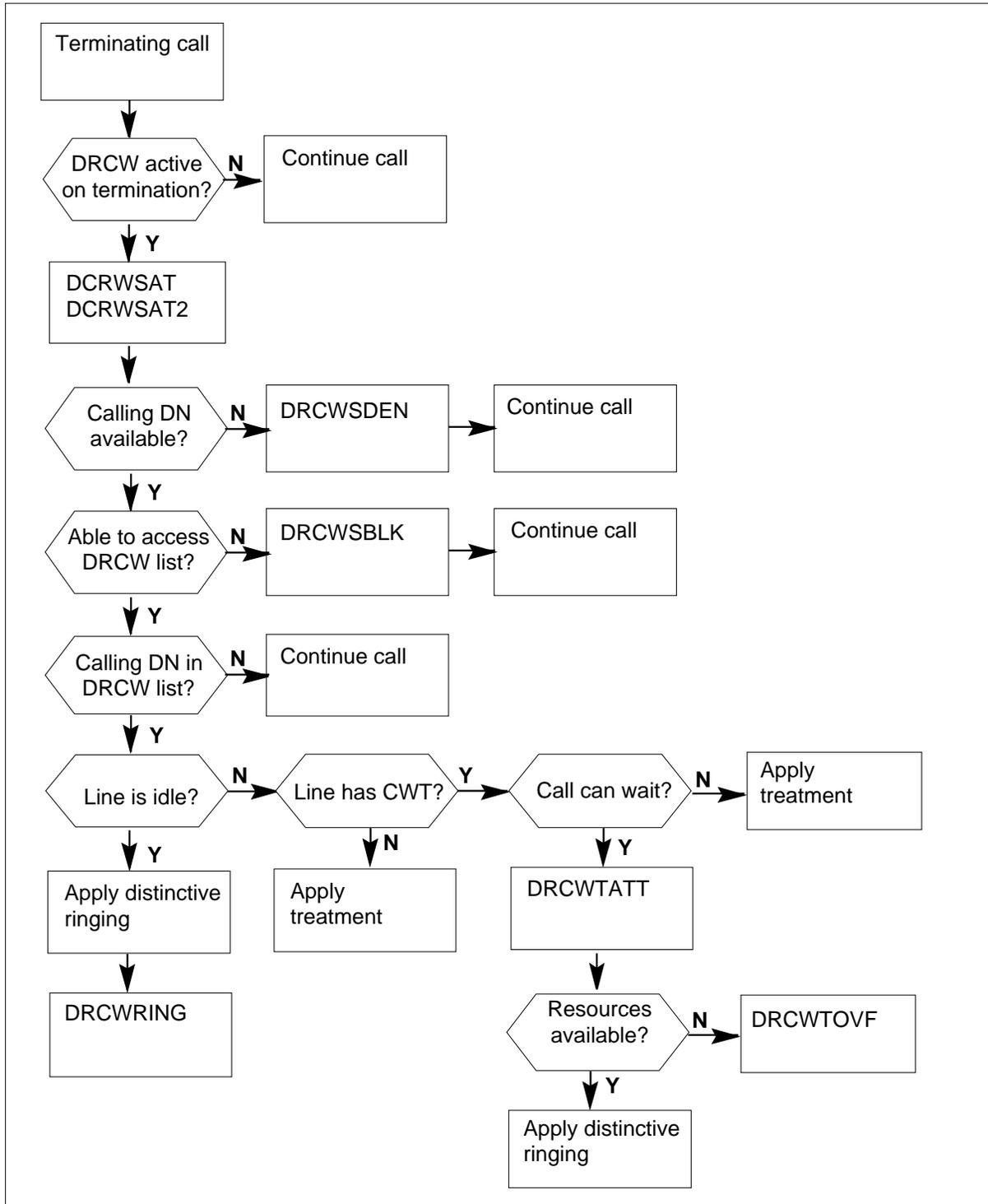
The associated functionality codes for OM group DRCW appear in the following table.

| Functionality | Code |
|--|----------|
| CLASS: Distinctive Ringing/Call Waiting | NTXA42AA |

OM group DRCW (continued)

OM group DRCW registers: accessing screening list editing



OM group DRCW (continued)**OM group DRCW registers: invoking**

OM group DRCW (continued)

Register DRCWACT

DRCW activation (DRCWACT)

Register DRCWACT counts activations of the Distinctive Ringing/Call Waiting (DR/CW) feature.

Register DRCWACT release history

Register DRCWACT was introduced in BCS30.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register DRCWAUNV

DRCW activation universal (DRCWAUNV)

Register DRCWAUNV counts the number of times a common user activates the Distinctive Ringing/Call Waiting (DR/CW) feature.

Register DRCWAUNV release history

Register DRCWAUNV was introduced in BCS35.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register DRCWDACT

DRCW deactivation (DRCWDACT)

Register DRCWDACT counts releases of the Distinctive Ringing/Call Waiting (DR/CW) feature.

OM group DRCW (continued)

Register DRCWDACT release history

Register DRCWDACT was introduced in BCS30.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register DRCWDENY

DRCW universal access denials (DRCWDENY)

Register DRCWDENY counts the number of times the system denies the Distinctive Ringing/Call Waiting (DR/CW) to a common user. The system denies the feature DR/CW to a common user because the DRCWDENY option is in effect.

Register DRCWDENY release history

Register DRCWDENY was introduced in BCS35.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register DRCWDUNV

DRCW deactivation universal (DRTCWDUNV)

Register DRTCWDUNV counts the number of times a common user deactivates the Distinctive Ringing/Call Waiting (DR/CW) feature.

Register DRCWDUNV release history

Register DRCWDUNV was introduced in BCS35.

Associated registers

There are no associated registers.

OM group DRCW (continued)

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register DRCWEATT

DRCW editing attempts (DRTCWEATT)

Register DRTCWEATT counts attempts to invoke a distinctive ringing/call waiting (DR/CW) screen list editing (SLE) session.

Register DRCWEATT release history

Register DRCWEATT was introduced in BCS30.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register DRCWEDEN

DRCW editing denials (DRCWEDEN)

Register DRCWEDEN counts calls that the system denies access to distinctive ringing/call waiting (DR/CW) screen list editing (SLE). The system denies access because the DR/CW feature is not assigned or is not available. The system routes the call when the feature is not assigned, or is not active in the office. The system routes the call to the feature not allowed (FNAL) treatment.

Register DRCWEDEN release history

Register DRCWEDEN was introduced in BCS30.

Associated registers

There are no associated registers.

Associated logs

The system generates LINE 138 when the system routes a call to a treatment after the call is call processing busy.

OM group DRCW (continued)

Extension registers

There are no associated registers.

Register DRCWEOVF

DRCW editing overflow (DRCWEOVF)

Register DRCWEOVF counts calls that the system denies access to distinctive ringing/call waiting (DR/CW) screen list editing (SLE). The system denies access because of system failure or not enough resources.

As a result of not enough hardware resources, the system routes the call to the no service circuit (NOSC) treatment. As a result of not enough software resources, the system routes the call to the no software resource (NOSR) treatment.

Register DRCWEOVF release history

Register DRCWEOVF was introduced in BCS30.

Associated registers

There are no associated registers.

Associated logs

The system generates LINE 138 when the system routes a call to a treatment after the call is call processing busy.

Extension registers

There are no associated registers.

Register DRCWEUSG

DRCW editing usage (DRCWEUSG)

Register DRCWEUSG is a usage register. The scan rate is 10 s. Register DRCWEUSG records if a line uses distinctive ringing/call waiting (DR/CW) screen list editing (SLE).

Register DRCWEUSG release history

Register DRCWEUSG was introduced in BCS30.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

OM group DRCW (continued)

Extension registers

There are no extension registers.

Register DRCWRING

DRCW ring provided (DRCWRING)

Register DRCWRING counts calls for which the system applies distinctive ringing.

Register DRCWRING release history

Register DRCWRING was introduced in BCS30.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register DRCWSAT

DRCW screening attempt (DRCWSAT)

Register DRCWSAT counts calls that the system screens because the Distinctive Ringing/Call Waiting (DR/CW) feature is active.

Register DRCWSAT release history

Register DRCWSAT was introduced in BCS30.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

DRCWSAT2

Register DRCWSBLK

DRCW screening blocked (DRCWSBLK)

OM group DRCW (continued)

Register DRCWSBLK counts calls that the distinctive ringing/call waiting (DR/CW) screening list does not screen. The DR/CW screening list does not screen the calls because the screening list is not available.

Register DRCWSBLK release history

Register DRCWSBLK was introduced in BCS30.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register DRCWSDEN

DRCW screening denials (DRCWSDEN)

Register DRCWSDEN counts calls that the distinctive ringing/call waiting (DR/CW) screening list does not screen. The DR/CW screening list does not screen the calls because the incoming directory number is not available.

Any multiparty line that calls a line with the DRCW feature increases this register. This register increases because a multiparty line does not have automatic number identification (ANI).

Register DRCWSDEN release history

Register DRCWSDEN was introduced in BCS30.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register DCRWTATT

DRCW tone attempt (DRCWTATT)

Register DRCWTATT counts attempts to provide distinctive call waiting tone.

OM group DRCW (continued)

Register DCRWTATT release history

Register DCRWTATT was introduced in BCS30.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register DRCWTOVF

DRCW tone overflow (DRCWTOVF)

Register DRCWTOVF counts attempts to provide distinctive ringing/call waiting (DR/CW) tone that fail. The attempts fail because not enough system resources are present. The system routes the call to busy (BUSY) treatment.

Register DRCWTOVF release history

Register DRCWTOVF was introduced in BCS30.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register DRCWUNIV

DRCW universal access attempts (DRCWUNIV)

Register DRCWUNIV counts attempts by a common user to access the Distinctive Ringing/Call Waiting (DR/CW) feature.

Register DRCWUNIV release history

Register DRCWUNIV was introduced in BCS35.

Associated registers

There are no associated registers.

OM group DRCW (end)

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

OM group DS1CARR

OM description

DS-1 digital carrier maintenance summary (DS1CARR)

The OM group DS1CARR provides information about maintenance thresholds and out-of-service (OOS) thresholds. This OM group provides this information for digital trunks on digital peripheral modules (PM). When the DS-1 exceeds OOS thresholds, the system removes the DS-1 from service until the DS-1 is manually returned to service. Trunks on the DS-1 carrier are set to the carrier fail state. You can set each DS-1 carrier to NOT TO BE REMOVED or leave the DS-1 carrier alone. You perform this procedure when the DS-1 carrier reaches the OOS threshold. If you set the DS-1 carrier to NOT TO BE REMOVED, the system only generates a log. The CARRIER level of the MAP terminal displays this information on the DS-1 carrier.

For remote line module (RLM) or line concentrating module (LCM) link errors, the OM group DS1CARR provides monitoring for the:

- central control (CC) or host end
- remote end of a DS-1 carrier, except for the following registers:
 - DS1SBU
 - DS1MBU
 - DS1PBU
 - DS1CBU

The system reports one set of registers for each carrier port of each digital PM.

If a carrier system is busy, all trunks that the carrier system serves change to the carrier fail state. Register TRK_SBU records system busy use for each trunk group.

Maintenance thresholds are 1 bit in 107 for bit error rate, 17 accumulated losses of frame, or 4 accumulated slips.

The OOS thresholds are 1 bit in 103 for bit error rate, 511 accumulated losses of frame, or 255 accumulated slips. A carrier that becomes busy because of bit error must wait to return to service. The carrier cannot return to service until the measured long-term rate of the system drops below 1 bit in 105.

Release history

The OM group DS1CARR was introduced before BCS20.

OM group DS1CARR (continued)**BCS33**

Number of tuples in the OM group DS1CARR increases. The increase allows the addition of the compact remote cluster controller (RCC2). The increase also allows the addition of the direct fiber interface (DFI)-type compact peripheral module measurement.

BCS32

The OM group DS1CARR expanded to include the DS-1 links associated with subscriber carrier module (SCM) access node type PM. The DFI and RCC2 were introduced to the information field description.

BCS31

The PM type FRIU was introduced to the DS1OMINFO field. Registers DS1SLP and DS1PBU are always zero for PM type FRIU.

BCS30

Software changed to provide use counts in CCS or deci-erlangs.

BCS29

Register DS1ECF was introduced.

BCS25

Register DS1BPV was deleted.

BCS24

Register DS1BPV was set to zero, and registers DS1BER, DS1ES, DS1SES, DS1UAS and DS1AIS were introduced.

Registers

The OM group DS1CARR registers appear on the MAP terminal as follows:

| | | | |
|---------|---------|--------|--------|
| DS1LCGA | DS1RCGA | DS1LOF | DS1SLP |
| DS1SBU | DS1MBU | DS1PBU | DS1CBU |
| DS1BER | DS1ES | DS1SES | DS1UAS |
| DS1AIS | DS1ECF | | |

Group structure

The OM group DS1CARR provides one tuple for each DS-1 carrier on the host peripheral. This OM group also provides two tuples for each remote control cluster (RCC). One tuple is for the carrier on the P-side and one tuple is for the carrier on the C-side.

OM group DS1CARR (continued)

Key field:

There is no key field.

Info field:

The DS1OMINF information field identifies a terminal on a given digital PM.

The information field contains the following:

- site of the PM
- PM type
- external PM sequence number
- DS-1 carrier number (0 to 19) in the PM
- carrier direction (C or P). The carrier direction indicates if the PM port is on the central side (C-side) or peripheral side (P-side) of the carrier.

Associated OM groups

There are no associated OM groups.

Associated functional groups

The following operating groups associate with the OM group DS1CARR:

- RLM
- LCM

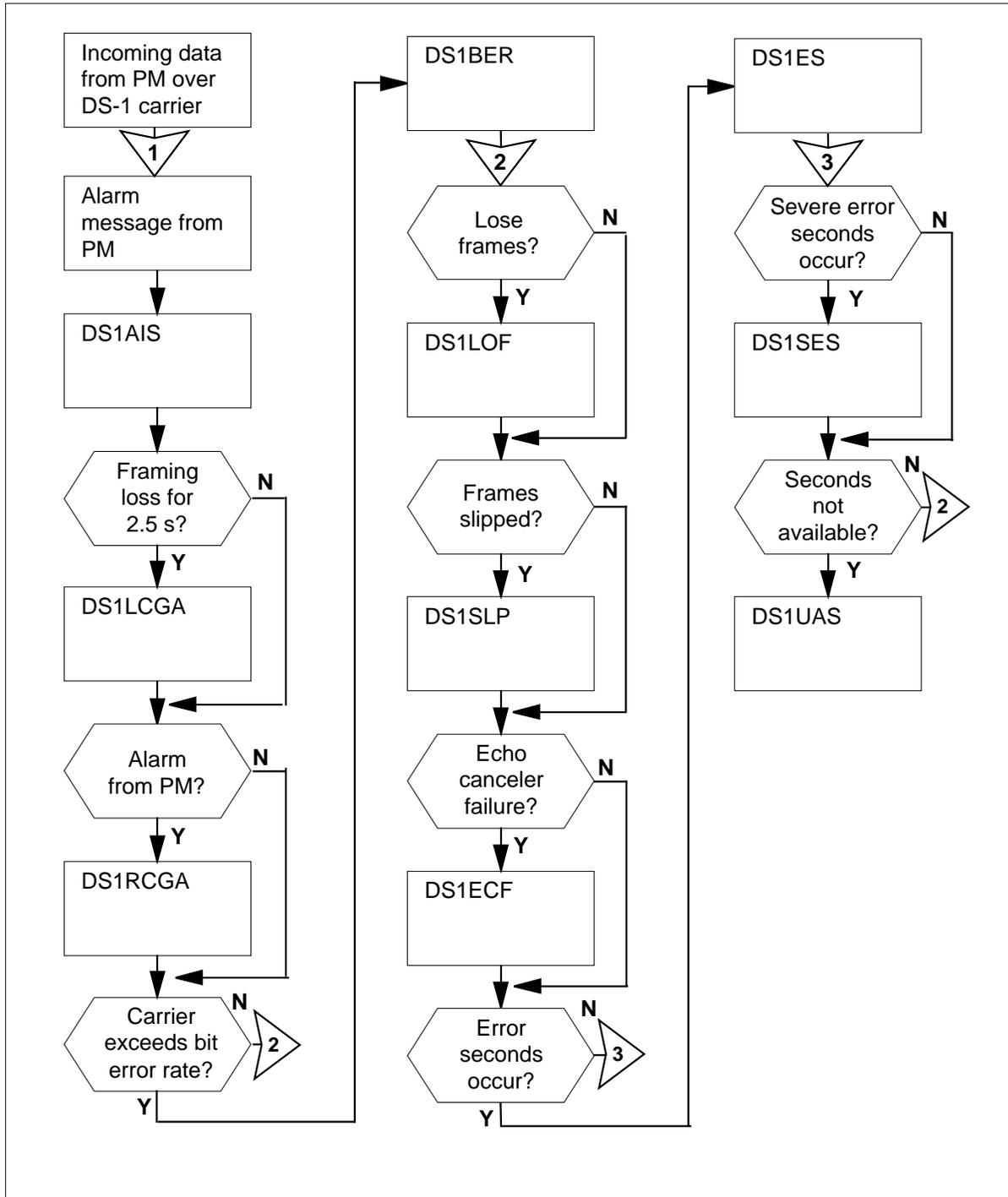
Associated functionality codes

The associated functionality codes for OM group DS1CARR appear in the following table.

| Functionality | Code |
|-------------------------------|----------|
| Common Basic | NTX001AA |
| Frame Relay Basic | NTXF25AA |
| CNS Integrated Echo Cancellor | NTXG24AA |

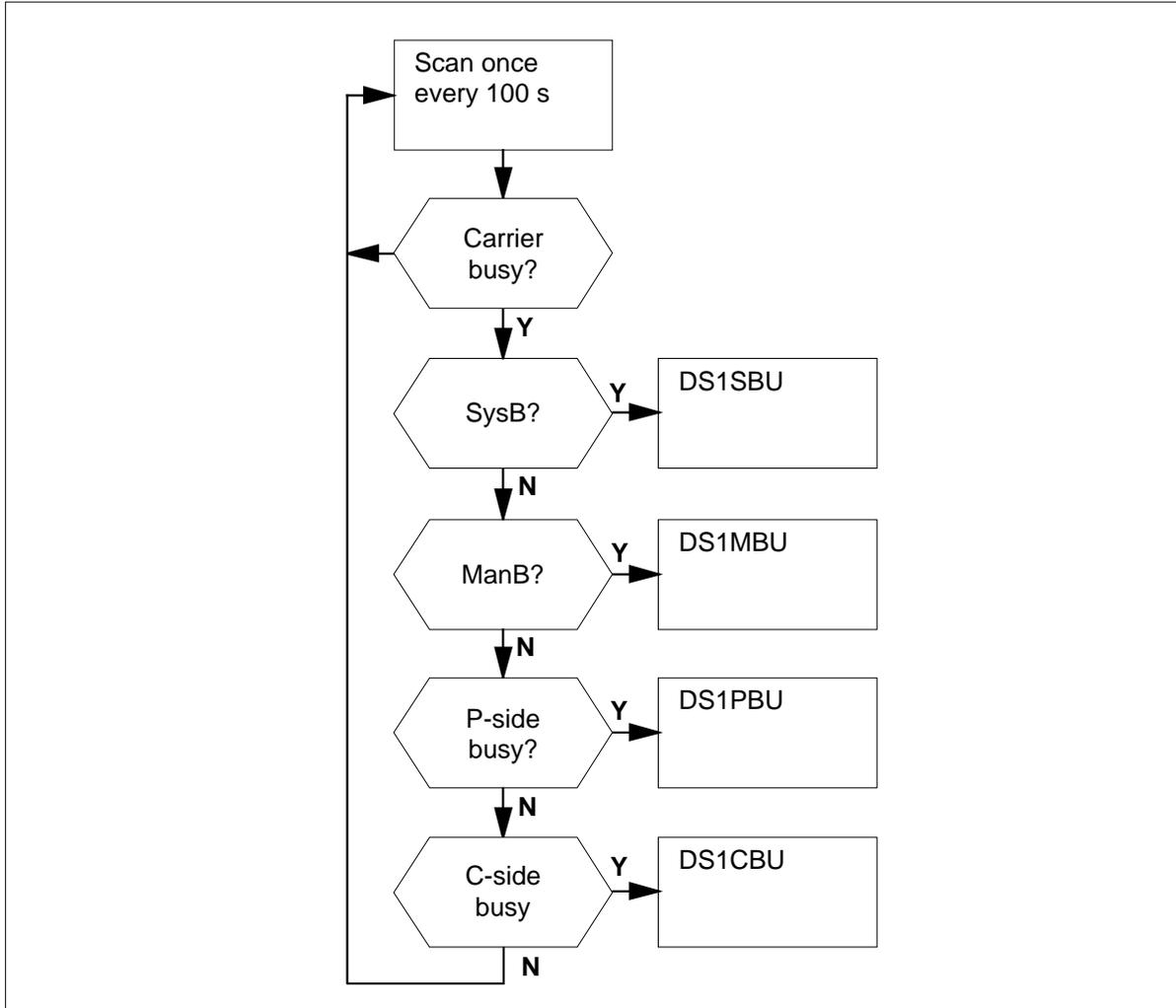
OM group DS1CARR (continued)

OM group DS1CARR registers



OM group DS1CARR (continued)

OM group DS1CARR usage registers



Register DS1AIS

DS-1 alarm indication signals (DS1AIS)

Register DS1AIS counts messages the system receives from the PM and indicates that the PM receives an alarm indication signal.

Register DS1AIS release history

Register DS1AIS was introduced in BCS24.

Associated registers

There are no associated registers.

OM group DS1CARR (continued)

Associated logs

There are no associated logs.

Register DS1BER

DS-1 bit error rate (DS1BER)

Register DS1BER counts messages that the system receives from the PM. The messages indicate that the bit error rate exceeds maintenance or OOS thresholds.

Register DS1BER release history

Register DS1BER was introduced in BCS24.

Associated registers

Information in DS1BPV before BCS24 is now in register DS1BER.

Associated logs

There are no associated logs.

Register DS1CBU

C-side busy usage (DS1CBU)

Register DS1CBU is a usage register. The scan rate is 100 s. Register DS1CBU records if the DS-1 carrier is C-side busy. The DS-1 carrier is C-side busy because the C-side PM of the carrier is OOS.

Register DS1CBU release history

Register DS1CBU was introduced before BCS20.

BCS30

Software changed to provide use counts in CCS or deci-erlangs.

Associated registers

There are no associated registers.

Associated logs

The PM subsystem generates PM107 when a PM changes state to C-side busy because of a system request.

Register DS1ECF

DS-1 echo canceller failure (DS1ECF)

OM group DS1CARR (continued)

Register DS1ECF counts the number of echo canceller failures in the DS-1 carrier during a 10 min audit cycle.

Register DS1ECF release history

Register DS1ECF was introduced in BCS29.

Associated registers

There are no associated registers.

Associated logs

The trunk maintenance subsystem generates TRK109 when a test on a DS-1 fails.

Register DS1ES

DS-1 error seconds (DS1ES)

Register DS1ES counts DS-1 error seconds during XMS-based peripheral module (XPM) audits. Table CARRMTC identifies error second thresholds.

Register DS1ES release history

Register DS1ES was introduced in BCS24.

BCS28

Software changed to include counts for remote cluster controller central side (C-side) carriers.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Register DS1LCGA

Local carrier group alarm (DS1LCGA)

Register DS1LCGA increases when the system receives a local carrier group alarm message from the PM.

The system reports a local carrier group alarm when the system loses framing on incoming data for 2.5 s. The alarm clears when the system regains framing for 10 s. While the alarm is active, the CC maintains the carrier system as system busy.

OM group DS1CARR (continued)

DS1LCGA release history

Register DS1LCGA was introduced in BCS20.

Associated registers

There are no associated registers.

Associated logs

The PM subsystem generates PM 109 when a T1 carrier becomes system busy.

The trunk maintenance subsystem generates PM109 when a test on a DS-1 fails.

Register DS1LOF

Loss of frame (DS1LOF)

Register DS1LOF counts occurrences of frame loss on the incoming side of the associated digital carrier.

The system obtains counts of frame loss when an audit runs at midnight. The system schedules audits to run at 10 min intervals, at a lower priority than operational measurement transfers. The audit reports frame losses during any given period. The number of frame losses that the audit reports can be high or low by 10 min increments.

The CARRIER display at a MAP terminal shows the number of frame losses accumulated from midnight. If the system returned to service after midnight, the CARRIER display shows the number of frame losses accumulated from the return to service. The system updates the carrier display every 6.5 s.

Register DS1LOF release history

Register DS1LOF was introduced before BCS20.

Associated registers

There are no associated registers.

Associated logs

The system generates PM110 when the DS-1 carrier exceeds maintenance or OOS thresholds.

Register DS1MBU

Manual busy usage (DS1MBU)

OM group DS1CARR (continued)

Register DS1MBU is a usage register. The scan rate is 100 s. Register DS1MBU records if a DS-1 carrier is manual busy.

Register DS1MBU release history

Register DS1MBU was introduced before BCS20.

BCS30

Software changed to provide use counts in CCS or deci-erlangs.

Associated registers

There are no associated registers.

Associated logs

The PM subsystem generates PM105 when a digital carrier module (DCM) is made manual busy.

The trunk maintenance subsystem generates TRK182 when problems occur during digitone reception for an incoming call over a trunk. The trunk maintenance subsystem also generates TRK182 when the system cannot determine the call destination.

Register DS1PBU

Peripheral side (P-side) busy usage (DS1PBU)

Register DS1PBU is a usage register. The scan rate is 100 s. Register DS1PBU records if a DS-1 carrier is P-side busy. A carrier is P-side busy when the carrier remote (P-side) PM is OOS.

Register DS1PBU release history

Register DS1PBU was introduced before BCS20.

BCS31

Register DS1PBU is always zero for PM type FRIU.

BCS30

Software changed to provide use counts in CCS or deci-erlangs.

Associated registers

There are no associated registers.

Associated logs

The PM subsystem generates PM183 when a P-side link becomes system busy.

OM group DS1CARR (continued)

Register DS1RCGA

Remote carrier group alarm (DS1RCGA)

Register DS1RCGA counts remote carrier group alarm messages that the system receives from the PM.

The system reports a remote DS-1 carrier group alarm when DIGIT TWO is zero for all incoming words for 450 ms. The alarm clears when the system removes the far-end DIGIT TWO forcing signal for 75 ms. When the alarm is active, the CC keeps the carrier system system busy.

Register DS1RCGA release history

Register DS1RCGA was introduced before BCS20.

Associated registers

There are no associated registers.

Associated logs

The PM subsystem generates PM109 when a T1 carrier line becomes system busy.

The trunk maintenance subsystem generates TRK109 when a test on a DS-1 fails.

Register DS1SBU

System busy usage (DS1SBU)

Register DS1SBU is a usage register. The scan rate is 100 s. Register DS1SBU records if a DS-1 carrier is system busy when:

- a removal from service occurs at the CARRIER level at a MAP. The DS-1 carrier exceeds the bipolar violation, accumulated frame loss, accumulated slip count, or OOS threshold.
- the carrier group alarm is active
- you remove a trunk card before you manually busy the carrier system
- the supporting digital PM is busy
- the system loses a carrier serving an RLM high data link controller that handles signaling traffic to and from the RLM

A carrier system becomes busy when the carrier reaches an OOS threshold. A carrier system remains OOS until you manually return the carrier to service.

OM group DS1CARR (continued)

Register DS1SBU release history

Register DS1SBU was introduced before BCS20.

BCS30

Software changed to provide use counts in CCS or deci-erlangs.

Associated registers

There are no associated registers.

Associated logs

The PM subsystem generates PM109 when a T1 carrier becomes system busy.

The trunk maintenance subsystem generated TRK109 when a test on a DS-1 fails.

Register DS1SES

DS-1 severe error seconds (DS1SES)

Register DS1SES counts DS-1 severe error seconds during XPM audits. Table CARRMTC identifies severe error second thresholds.

Register DS1SES release history

Register DS1SES was introduced in BCS24.

BCS28

Software changed to include counts for remote cluster controller central side (C-side) carriers.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Register DS1SLP

Frame slip (DS1SLP)

Register DS1SLP counts occurrences of frame slip on an associated digital carrier. Frame slip occurs as a result of overrun or underrun of the incoming bit stream.

The system obtains counts of frame loss when an audit runs at midnight. The system schedules audits to run at 10-minute intervals, at a lower priority than

OM group DS1CARR (end)

operational measurement transfers. The audit reports frame losses during any given period. The number of frame losses that the audit reports can be high or low by 10 min increments.

The CARRIER display at a MAP terminal shows the number of frame losses accumulated from midnight. If the system returned to service after midnight, the CARRIER display shows the number of frame losses accumulated from the return to service. The system updates the carrier display every 6.5 s.

Register DS1SLP release history

Register DS1SLP was introduced in BCS20.

BCS31

Register DS1SLP is always zero for PM type FRIU.

Associated registers

There are no associated registers.

Associated logs

The system generates PM112 one time every 24 hours for each DCM. The system generates PM112 when the CC resets the T1 carrier slip counter to 0.

Register DS1UAS

DS-1 unavailable seconds (DS1UAS)

Register DS1UAS counts DS-1 unavailable seconds during XPM audits.

The unavailable seconds is the duration that the DS-1 is not available for use.

DS1UAS release history

Register DS1UAS was introduced in BCS24.

BCS28

Software changed to include counts for remote cluster controller central side (C-side) carriers.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

OM group DSCWID

OM Description

Deluxe Spontaneous Call Waiting Identification (DSCWID)

The OM group DSCWID provides statistics on the use of distribution options that DSCWID subscribers select to treat an incoming call. A DSCWID subscriber receives call-waiting party identification and uses SOFTKEY options to select a treatment for the waiting call.

The telephone company defines the soft-key labels with a script. The system downloads the script to customer premises equipment (CPE) that complies with Analog Digital Services Interface (ADSI). Different soft-key labels can appear. The soft-key labels that appear depend on the script in the CPE. The register names in this OM group do not always match the soft-key labels.

Registers

The OM group DSCWID registers appear on the MAP terminal as follows:

| | | | |
|----------|----------|----------|----------|
| DSCWDANS | DSCWDRTN | DSCWDDRP | DSCWDANN |
| DSCWDHLD | DSCWDFWD | DSCWDDTM | DSCWDCNF |
| DSCWDDPF | DSCWDDPL | DSCWDTIM | DSCWDRER |
| 0 | 1 | 5 | 1 |
| 0 | 0 | 1 | 1 |
| 1 | 1 | 0 | 4 |

Group structure

The OM group DSCWID provides one tuple for each office.

Key field:

There is no key field.

Info field:

There is no info field.

Associated OM groups

Register CSCWDACT increases when a DSCWID subscriber uses the cancel spontaneous call-waiting identification (CSCWID) access code. Register CSCWDACT is in the CND OM group. A DSCWID subscriber uses the CSCWID access code to deactivate DSCWID.

Registers SCWDATTS and SCWCOMP in the CNDXPM OM group increase for successful SCWID and DSCWID call setup data transmission in XPMs.

OM group DSCWID (continued)

Associated functional groups

The RES Display Functionality and Privacy functional group associates with the OM group DSCWID.

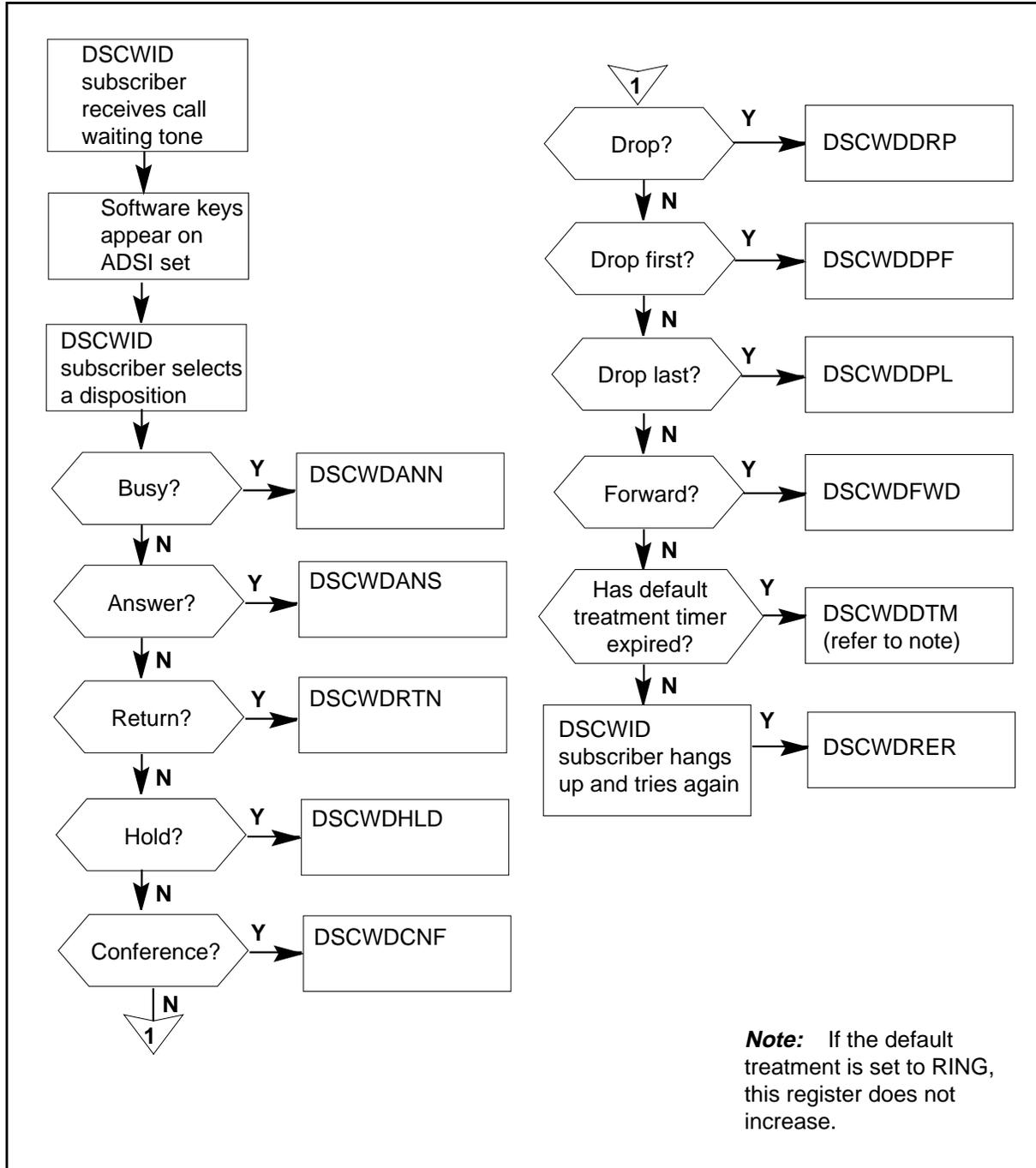
Associated functionality codes

The following table lists the associated functionality codes for the OM group DSCWID.

| Functionality | Code |
|------------------------------|-------------|
| RES Call Waiting Deluxe (TR) | RES00040 |

OM group DSCWID (continued)

OM group DSCWID registers



Register DSCWDANN

Deluxe Spontaneous Call Waiting Identification (DSCWDANN)

OM group DSCWID (continued)

Register DSCWDANN increases when a DSCWID subscriber selects the BUSY announcement option on the soft-key display.

Register DSCWDANN release history

Register DSCWDANN was introduced in NA004.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register DSCWDANS

Deluxe Spontaneous Call Waiting Identification Answer (DSCWDANS)

Register DSCWDANS increases when a DSCWID subscriber selects the ANSWER option on the soft-key display to answer a waiting call. The subscriber places the active call on hold.

Register DSCWDANS release history

Register DSCWDANS was introduced in BCS34.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register DSCWDCNF

Deluxe Spontaneous Call Waiting conference (DSCWDCNF)

Register DSCWDCNF increases when a DSCWID subscriber selects the CONF option on the soft-key display. The CONF option is only visible when a call is waiting or on hold.

OM group DSCWID (continued)

Note: Call conferencing can occur from the alerted state before the subscriber answers the waiting caller. Register DSCWDCNF increases and registers DSCWDANS and DSCWDCNF do not increase. This condition occurs when the subscriber answers the waiting party as a latent function of call conferencing.

Register DSCWDCNF release history

Register DSCWDCNF was introduced in NA004.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register DSCWDDRP

Deluxe Spontaneous Call Waiting Identification drop (DSCWDDRP)

Register DSCWDDRP increases when a DSCWID subscriber selects the DROP option on the soft-key display. The DROP option is only visible when a call is waiting or on hold. The DROP option disconnects the active party and immediately connects the subscriber to the waiting party. When the DROP option connects the subscriber to the waiting party, the DSCWID session ends. The DSCWID session ends because the subscriber only received one call.

Register DSCWDDRP release history

Register DSCWDDRP was introduced in BCS34.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

OM group DSCWID (continued)

Register DSCWDDPF

Deluxe Spontaneous Call Waiting Identification Drop First (DSCWDDPF)

Register DSCWDDPF increases when a DSCWID subscriber selects the DROPFRST option on the soft-key display. The DROPFRST option is only visible after the subscriber selects the CONFERENCE option. This selection allows the DSCWID subscriber to disconnect the first party. The subscriber returns to a steady two-party state.

Register DSCWDDPF release history

Register DSCWDDPF was introduced in NA004.

Associated registers

Register DSCWDCONF associates with register DSCWDDPF.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register DSCWDDPL

Deluxe Spontaneous Call Waiting Identification Drop Last (DSCWDDPL)

Register DSCWDDPL increases when a DSCWID subscriber selects the DROPLAST option on the soft-key display. The DROPLAST option is only visible after the subscriber selects the CONFERENCE option. This selection allows the DSCWID subscriber to disconnect the second party. The subscriber returns to a steady two-party state.

Register DSCWDDPL release history

Register DSCWDDPL was introduced in NA004.

Associated registers

Register DSCWDCONF associates with register DSCWDDPL

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

OM group DSCWID (continued)

Register DSCWDDTM

Deluxe Spontaneous Call Waiting Identification Default Treatment (DSCWDDTM)

Register DSCWDDTM increases when the DMS-100 applies the forward or announcement default treatment. Register DSCWDDTM does not increase if the default treatment rings.

Register DSCWDDTM release history

Register DSCWDDTM was introduced in NA004.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register DSCWDHLD

Deluxe Spontaneous Call Waiting Identification Hold (DSCWDHLD)

Register DSCWDHLD increases when a DSCWID subscriber selects the HOLD option on the soft-key display. This selection provides an announcement to the waiting party before the system places the waiting party on hold. The subscriber and the active party remain connected.

Note: The HOLD announcements are not always entered in field HOLDANNC of table RESOFC. If a HOLD announcement is not present, DSCWID HOLD attempts do not interrupt the audible ring of the waiting party. Register DSCWDHLD does not increase because HOLD does not occur.

Register DSCWDHLD release history

Register DSCWDHLD was introduced in NA004.

Associated registers

There are no associated registers.

OM group DSCWID (continued)

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register DSCWDFWD

Deluxe Spontaneous Call Waiting Identification Forward (DSCWDFWD)

Register DSCWDFWD increases when a DSCWID subscriber selects the FWD option on the soft-key display. A DSCWID subscriber selects the FWD option to forward the waiting call to another destination. The subscriber and the active party remain connected. The subscriber must have the Call Forwarding Don't Answer (CFD/CFDA) feature with a valid destination specified. If the subscriber does not have this feature, the FWD condition does not appear on the soft-keys.

Register DSCWDFWD release history

Register DSCWDFWD was introduced in NA004.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register DSCWDRER

Deluxe Spontaneous Call Waiting Identification RERING (DSCWDRER)

Register DSCWDRER increases when the system rings a DSDWIK subscriber again. The system rings the subscriber again when the subscriber hung up without answering the waiting or held party.

Register DSCWDRER release history

Register DSCWDRER was introduced in BCS34.

Associated registers

There are no associated registers.

OM group DSCWID (continued)

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register DSCWDRTN

Deluxe Spontaneous Call Waiting Identification return (DSCWDRTN)

Register DSCWDRTN increases when a DSCWID subscriber selects the RETURN option on the soft-key display. The RETURN option is only visible after the subscriber selects the HOLD or the ANSWER option. The RETURN option allows the DSCWID subscriber to toggle between the waiting party and the active party.

Register DSCWDRTN release history

Register DSCWDRTN was introduced in BCS34.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register DSCWDTIM

Deluxe Spontaneous Call Waiting Identification time (DSCWDTIM)

Register DSCWDTIM increases when the system sends a call setup message that does not contain calling information delivery (CID). The call setup message contains date and time data only.

Register DSCWDTIM release history

Register DSCWDTIM was introduced in NA004.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

OM group DSCWID (end)

Extension registers

There are no extension registers.

Release history

The OM group DSCWID was introduced in BCS34.

OM group DSINWTS

OM Description

Direct signaling inward area telecommunications service (DSINWTS)

The OM group DSINWTS counts activities for the common channel interoffice signaling (CCIS) inward area telecommunications service (INWATS) originating screen office (OSO) signaling application.

The system sends enquiries for the OM group INWATS to the INWATS data bases in the CCIS network. For each request, the system allocates an idle call register from a queue of 64 auxiliary call registers. If CCIS blocking does not occur, the system transmits an INWATS enquiry message. The system stores the call ID, terminal ID, and mailbox ID in the register. The data base can contain the answer to the enquiry. If this condition occurs, the system dispatches, decodes and formats the reply into a high-level message. The call process requires this reply. The system sends the high-level message to the call process according to information stored in the auxiliary call register. The auxiliary call register is not in operation.

Release history

The OM group DSINWTS was introduced in BCS20.

Registers

The OM group DSINWTS registers appear on the MAP terminal as follows:

| | | | |
|----------|----------|----------|----------|
| QUERIES | NOAUXREG | ABANDONS | VCNTLINE |
| NONSBNPA | BUSYLINE | DBOVL | MISCERR |
| VCNTNXX | SUCREPLY | NWMBLK | MTPBLK |

Group structure

The OM group DSINWTS provides one tuple for each office.

Key field:

There is no key field.

Info field:

There is no info field.

Associated OM groups

The OM group DSMTP counts activities for the performance of the CCIS direct signaling message transfer part (MTP).

OM group DSINWTS (continued)

Associated functional groups

The following functional groups associate with OM group DSINWTS:

- CCIS
- INWATS

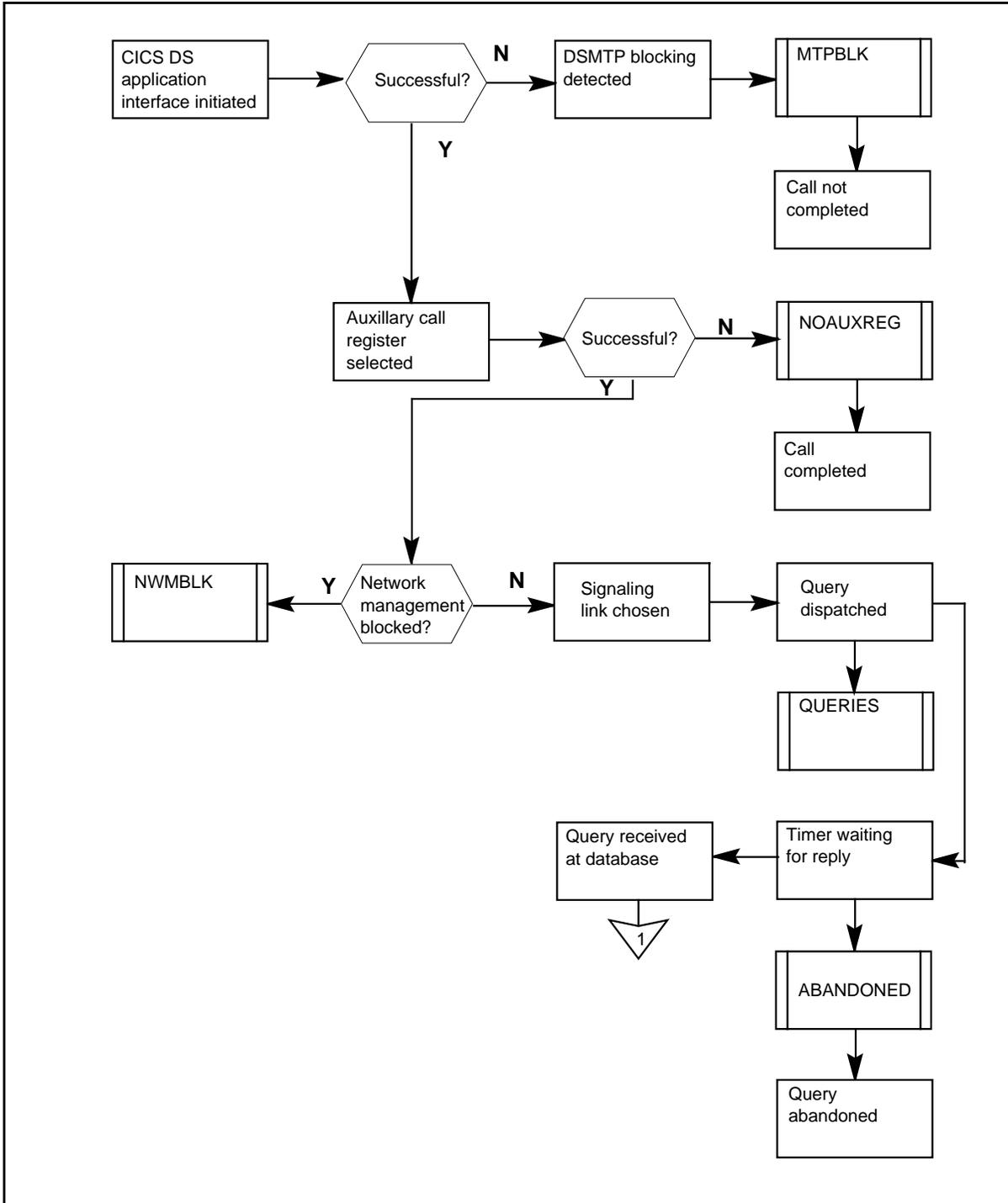
Associated functionality codes

The functionality codes for OM group DSINWTS appear in the following table.

| Functionality | Code |
|-----------------------|-------------|
| CCIS Direct Signaling | NTX197AA |
| CCIS - INWATS OSO | NTX157AA |

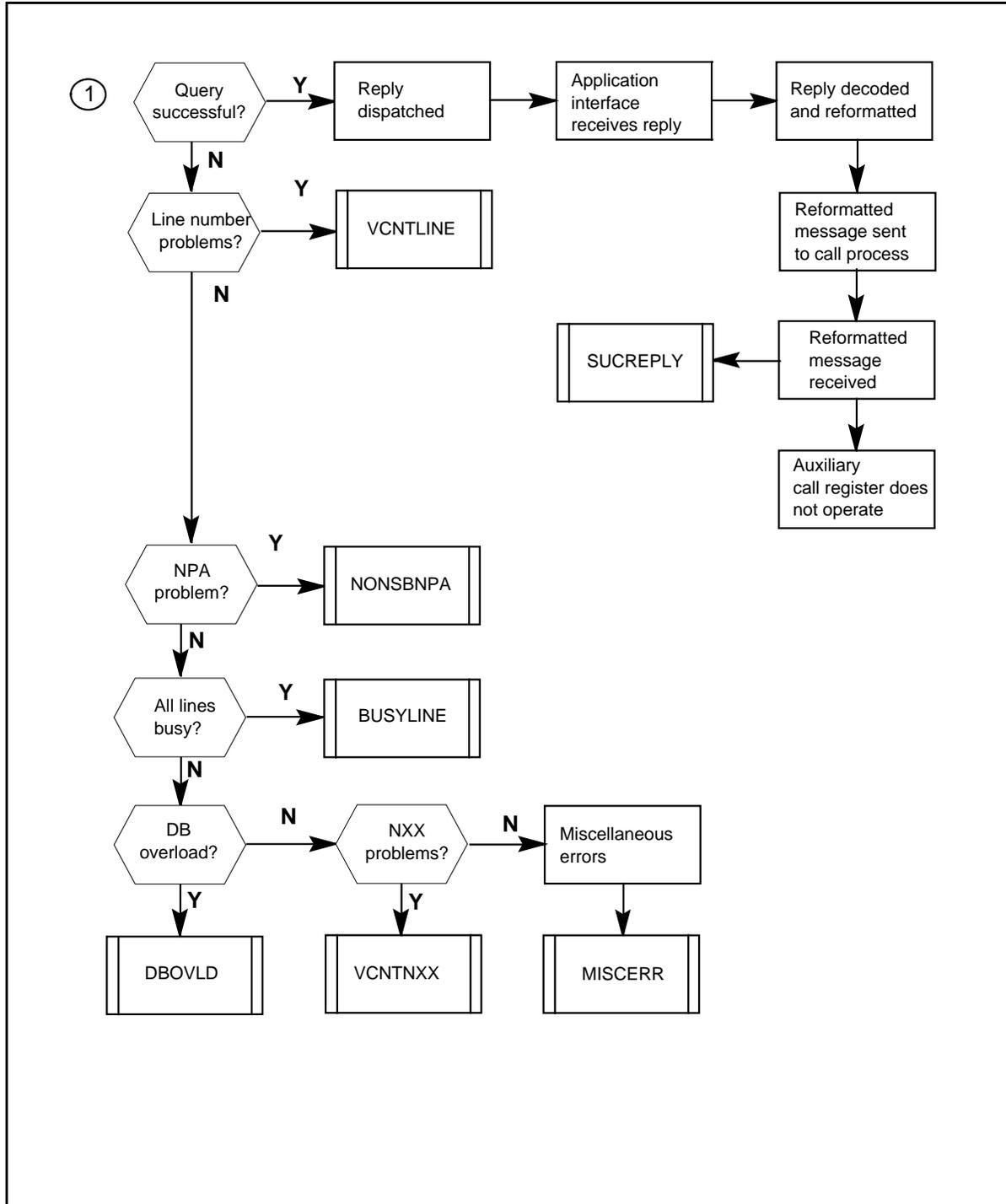
OM group DSINWTS (continued)

OM group DSINWTS registers



OM group DSINWTS (continued)

OM group DSINWTS registers



OM group DSINWTS (continued)

Register ABANDONS

Abandons (ABANDONS)

Register ABANDONS counts INWATS calls that the system abandons before the events that follow occur:

- reception of a reply message from the INWATS data base
- reception of a CCIS failure message
- a query timeout. The maximum timeout time is 2 s.

Register ABANDONS release history

Register ABANDONS was introduced before BCS20.

Associated registers

Successful INWATS queries to the database = Queries -
(DSINWATS_ABANDONS + DSINWATS_VCNTLINE +
DSINWATS_NONSBNPA + DSINWATS_BUSYLINE + DSINWATS_
DBOVL + DSINWATS_MISCERR + DSINWATS_VCNTNXX)

Associated logs

There are no associated logs.

Register BUSYLINE

Busy line (BUSYLINE)

Register BUSYLINE counts INWATS queries at the data base that fail because all the lines are busy.

Register BUSYLINE release history

Register BUSYLINE was introduced before BCS20.

Associated registers

Successful INWATS queries to the database = Queries -
(DSINWATS_ABANDONS + DSINWATS_VCNTLINE +
DSINWATS_NONSBNPA + DSINWATS_BUSYLINE + DSINWATS_
DBOVL + DSINWATS_MISCERR + DSINWATS_VCNTNXX)

Associated logs

There are no associated logs.

Register DBOVL

Data base overload (DBOVL)

OM group DSINWTS (continued)

Register DBOVLD counts INWATS queries at the data base that fail because the originating screen office (OSO) is overloaded.

Register DBOVLD release history

Register DBOVLD was introduced before BCS20.

Associated registers

Successful INWATS queries to the database = Queries -
(DSINWATS_ABANDONS + DSINWATS_VCNTLINE +
DSINWATS_NONSBNPA + DSINWATS_BUSYLINE + DSINWATS_
DBOVLD + DSINWATS_MISCERR + DSINWATS_VCNTNXX)

Associated logs

There are no associated logs.

Register MISCERR

Miscellaneous errors (MISCERR)

Register MISCERR counts INWATS queries at the data base that fail because of miscellaneous errors.

Register MISCERR release history

Register MISCERR was introduced before BCS20.

Associated registers

Successful INWATS queries to the database = Queries -
(DSINWATS_ABANDONS + DSINWATS_VCNTLINE +
DSINWATS_NONSBNPA + DSINWATS_BUSYLINE + DSINWATS_
DBOVLD + DSINWATS_MISCERR + DSINWATS_VCNTNXX)

Associated logs

There are no associated logs.

Register MTPBLK

Message transfer part block

Register MTPBLK counts INWATS calls that fail because of CCIS DS message transfer part blocking.

OM group DSINWTS (continued)

These calls include temporary code control blocks that are in effect because of either of the following conditions:

- reception of CCIS failure reply messages
- reception of CCIS processor signaling congestion messages
- other CCIS network failures

Register MTPBLK release history

Register MTPBLK was introduced before BCS20.

Associated registers

Associated registers include DSMTP_NTWKOVLD or DSMTP_NTWKBLK.

Associated logs

There are no associated logs.

Register NOAUXREG

No auxiliary register (NOAUXREG)

Register NOAUXREG counts INWATS calls that the system abandons an auxiliary call register is not available. For each INWATS application, the system allocates 64 auxiliary call registers.

Register NOAUXREG release history

Register NOAUXREG was introduced before BCS20.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Register NONSBNPA

Nonsubscribed numbering plan area (NONSBNPA)

Register NONSBNPA counts INWATS requests that fail because the NPA from which the call originates does not have subscribers.

Register NONSBNPA release history

Register NONSBNPA was introduced before BCS20.

OM group DSINWTS (continued)

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Register NWMBLK

Network management blocked (NWMBLK)

Register NWMBLK counts INWATS calls that fail because the system applies network management call gapping code controls to the calls.

Register NWMBLK release history

Register NWMBLK was introduced before BCS20.

Associated registers

There are no associated registers.

Associated logs

The system generates log NWM113 when this register increases.

Register QUERIES

Queries (QUERIES)

Register QUERIES counts INWATS queries sent to the originating screen office (OSO) data base.

Register QUERIES release history

Register QUERIES was introduced before BCS20.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Register SUCREPLY

Successful reply (SUCREPLY)

Register SUCREPLY counts successful INWATS replies.

Register SUCREPLY release history

Register SUCREPLY was introduced before BCS20.

OM group DSINWTS (end)

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Register VCNTLINE

Vacant line (VCNTLINE)

Register VCNTLINE counts INWATS queries at the data base that fail because of an empty line number.

Register VCNTLINE release history

Register VCNTLINE was introduced before BCS20.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Register VCNTNXX

Vacant NXX (VCNTNXX)

Register VCNTNXX counts INWATS queries at the data base that fail because of an empty NXX code.

Register VCNTNXX release history

Register VCNTNXX was introduced before BCS20.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

OM group DSMCCS

OM Description

Direct signaling mechanized calling card services (DSMCCS)

The OM group DSMCCS provides information about the direct signaling mechanized calling card service (MCCS). The MCCS feature sends billing queries to a billing validation center (BVC) database. This feature uses common channel interoffice signaling (CCIS) to send these queries. A query has a maximum response time of two seconds.

The OM group DSMCCS registers count the following:

- queries that are successful
- queries that are not successful
- responses that successful queries receive from the database
- events for MCCS applications

The following are MCCS application types:

- calling card verification (CCV)
- billed number screening (BNS)
- originating station treatment (OST)

The calling card number consists of the billing number and a personal identification number (PIN). The billing number is in the form of NPA-XXX or RAO-(O/1)XX. The RAO is the revenue accounting office that assigned the billing number. An unrestricted PIN is correct for calls to all destinations and for station or personal calls. A restricted PIN is only correct for station calls to the billing number.

Originating station treatment (OST) applies to all customer-dialed calls. An announcement system provides spoken instructions and prompts. The following are OST types:

- no customer dialed MCCS (route to operator)
- alerting tone
- alerting tone and prompt announcement

The operating company specifies the type of OST to apply to a call in table MCCSOST. The system automatically connects and bills the call to the calling card number.

OM group DSMCCS (continued)

When the calling card requires operator help, the system sends a calling card verification (CCV) query to the BVC database. Parameter TOPS_MCCS_CCV appears in table OFCOPT. This parameter indicates that MCCS CCV applies to operator-handled calling card billing.

The customer can use billed number screening (BNS) to designate a directory number. The customer specifies a number at which the customer will not accept collect or third-number billing. The BNS feature denies the call. The BNS feature also prevents collect or third-number billing to a public telephone. When an operator attempts to key a number as collect or third-number billing, a BNS query of a BVC occurs. This query occurs to determine if restrictions apply. Parameter TOPS_MCCS_BNS in table OFCOPT indicates that MCCS BNS applies to billed number screening.

Release history

The OM group DSMCCS was introduced before BCS20.

Registers

The OM group DSMCCS registers appear at the MAP terminal as follows:

| | | | |
|----------|----------|----------|----------|
| MCCSQRY | MCCSNAXR | MCCSABND | MCCSMERR |
| MCCSDBOV | MCCSVCNT | MCCSNEQ | CCVINVL |
| CCVDND | CCVMMTCH | CCVPRES | CCVPNRES |
| OSTUNSPC | OSTOPER | OSTTONE | OSTANNC |
| MCCSMTPB | MCCSDBBK | MCCSDBTM | BPTNEQ |
| BPTNWNQ | BNWNNEQ | BOKAY | BCOLDEN |
| B3RDDEN | BCOL3DEN | BSEMIPB | BPBCOIN |
| BPBNCOIN | BNWN | | |

Group structure

The OM group DSMCCS provides one tuple for each type.

Key field:

BVC_FUNCTION_TYPE. Billing validation center direct signaling MCCS application type:

- originating station treatment (OST)
- calling card verification (CCV)
- billed number screening (BNS)

Info field:

There are no Info fields.

OM group DSMCCS (continued)

Associated OM groups

There are no associated OM groups.

Associated functional groups

The following are associated functional groups for the OM group DSMCCS:

- MCCS Mechanized Calling Card Service
- TOPS Traffic Operator Position System

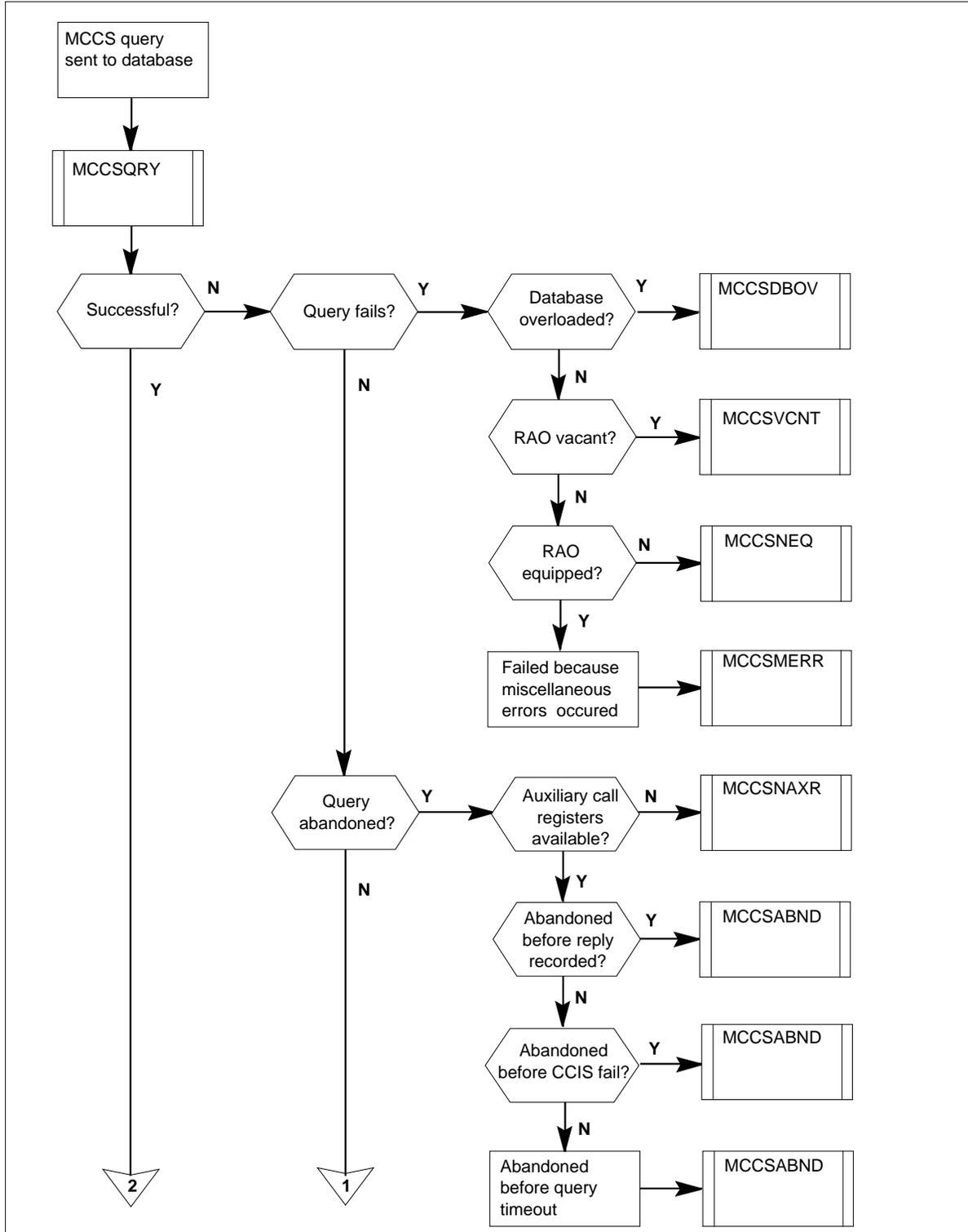
Associated functionality codes

The associated functionality codes for the OM group DSMCCS appear in the following table:

| Functionality | Code |
|-----------------------|----------|
| CCIS Direct Signaling | NTX197AA |

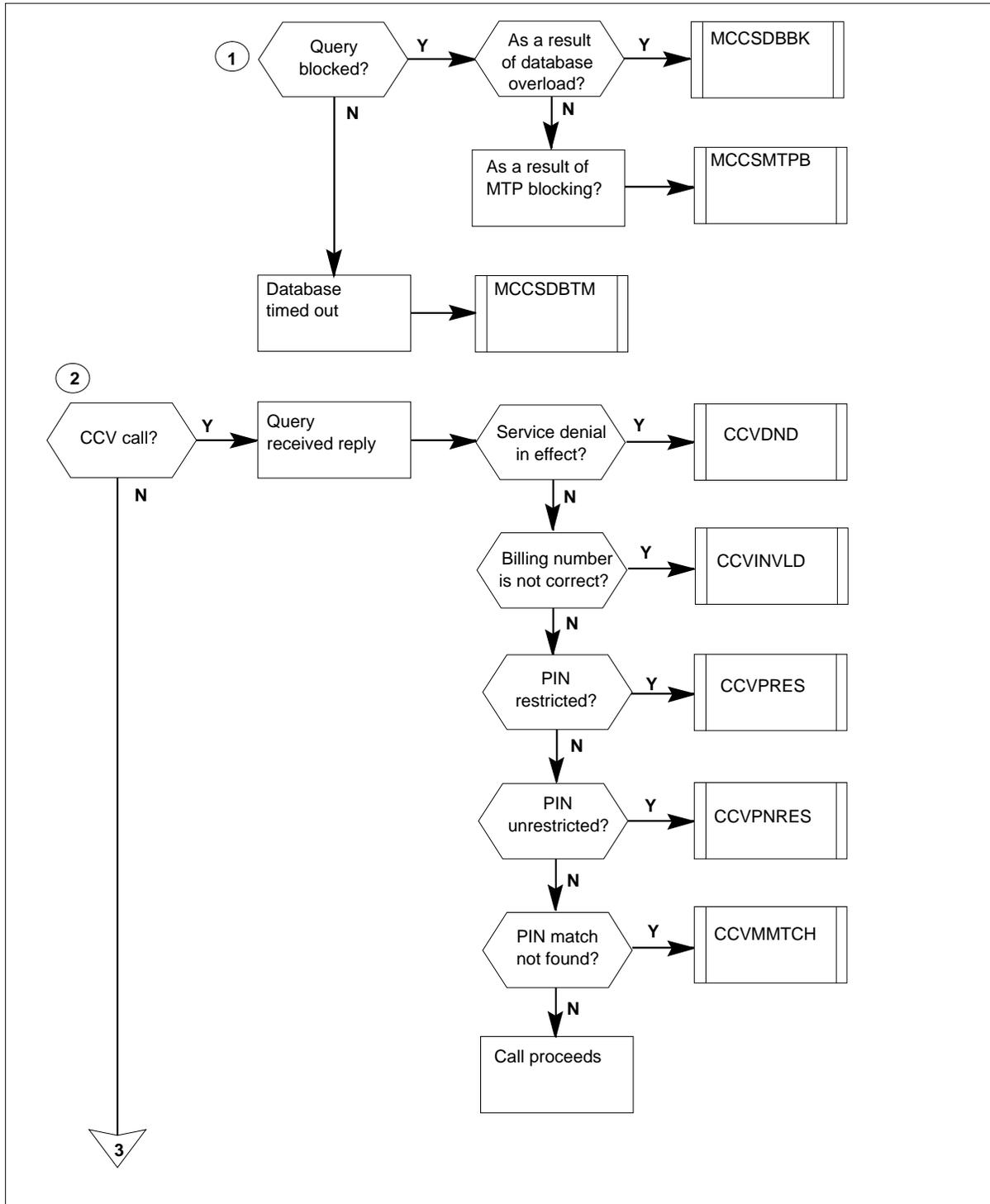
OM group DSMCCS (continued)

OM group DSMCCS registers



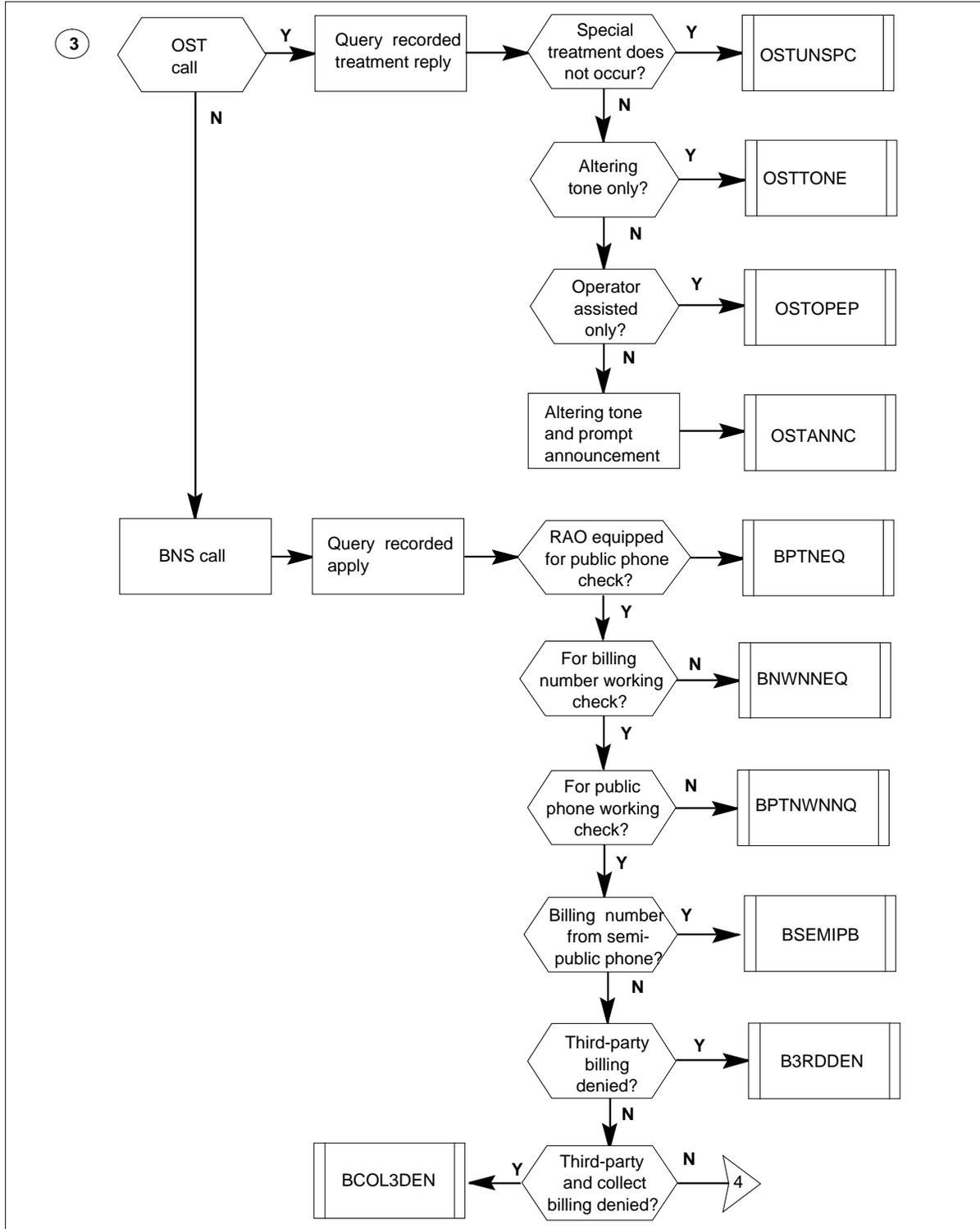
OM group DSMCCS (continued)

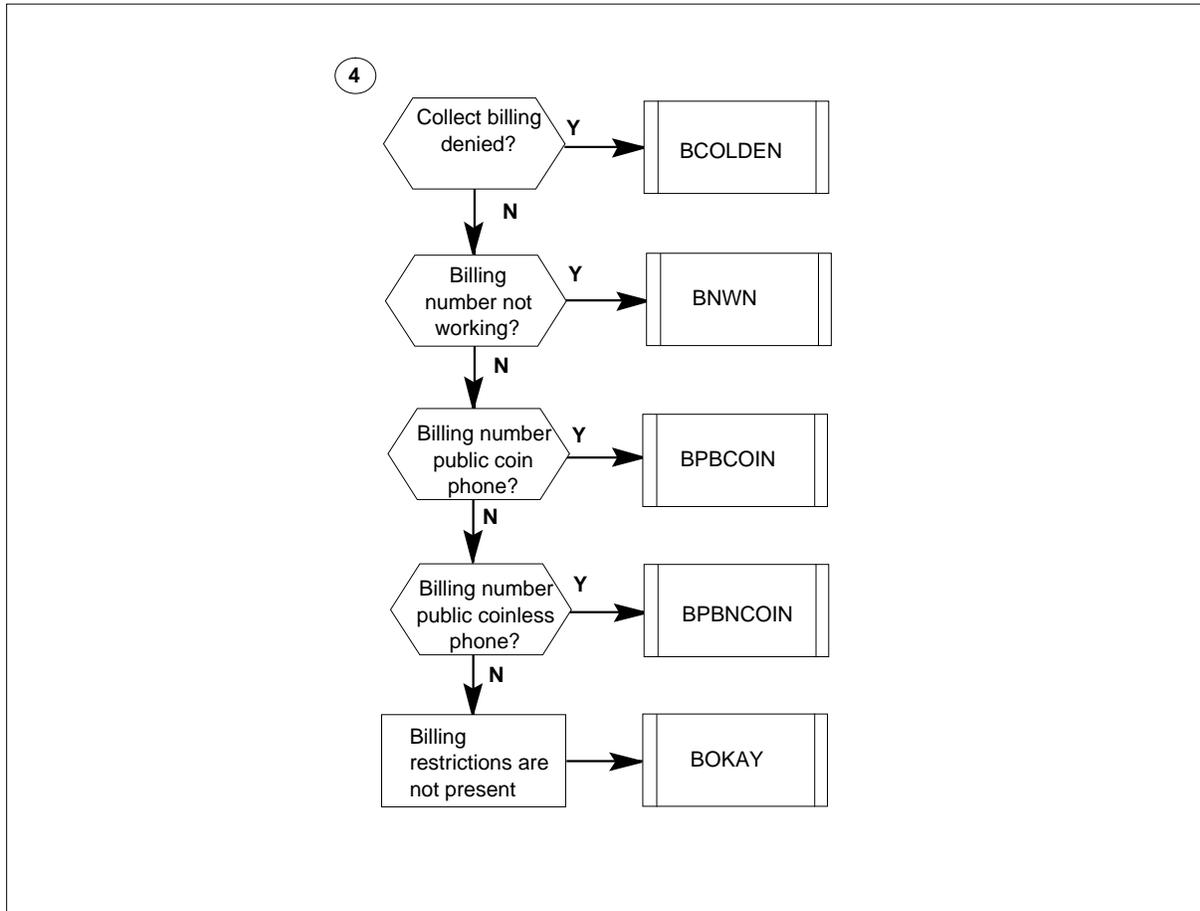
OM group DSMCCS registers (continued)



OM group DSMCCS (continued)

OM group DSMCCS registers (continued)



OM group DSMCCS (continued)**OM group DSMCCS registers (continued)****Register B3RDDEN**

Billed number screening third denied (B3RDDEN)

Register B3RDDEN counts billed number screening (BNS) queries to the database. This register counts BNS queries when the response indicates that the system denied third-party billing.

Register B3RDDEN release history

Register B3RDDEN was introduced in BCS20.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

OM group DSMCCS (continued)

Register BCOL3DEN

Billed number screening collect third denied (BCOL3DEN)

Register BCOL3DEN counts billed number screening (BNS) queries to the database. This register counts BNS queries when the response indicates that the system denied third-party billing and collect billing.

Register BCOL3DEN release history

Register BCOL3DEN was introduced in BCS20.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Register BCOLDEN

Billed number screening collect denied (BCOLDEN)

Register BCOLDEN counts billed number screening (BNS) queries to the database. This register counts BNS queries when the response indicates that the system denied collect billing.

Register BCOLDEN release history

Register BCOLDEN was introduced before BCS20.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Register BNWN

Billed number screening nonworking number (BNWN)

Register BNWN counts billed number screening (BNS) queries to the database. This register counts BNS queries when the response indicates that the billed number does not work.

Register BNWN release history

Register BNWN was introduced before BCS20.

OM group DSMCCS (continued)

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Register BNWNNEQ

Billed number screening nonworking number not equipped (BNWNNEQ)

Register BNWNNEQ counts billed number screening (BNS) queries to the database. The response to these queries indicates that the database is not equipped to check if the billing number works.

Register BNWNNEQ release history

Register BNWNNEQ was introduced before BCS20.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Register BOKAY

Billed number screening okay (BOKAY)

Register BOKAY counts billed number screening (BNS) queries to the database. This register counts BNS queries when the response indicates that known billing restrictions are not present.

Register BOKAY release history

Register BOKAY was introduced before BCS20.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Register BPBCOIN

Billed number screening public coin (BPBCOIN)

OM group DSMCCS (continued)

Register BPBCOIN counts billed number screening (BNS) queries to the database. This register counts BNS queries when the response indicates the billing number is a public coin telephone.

Register BPBCOIN release history

Register BPBCOIN was introduced before BCS20.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Register BPBNCOIN

Billed number screening public no coin (BPBNCOIN)

Register BPBNCOIN counts billed number screening (BNS) queries to the database. The response to these queries indicates that the billing number is from a public telephone without coins.

Register BPBNCOIN release history

Register BPBNCOIN was introduced before BCS20.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Register BPTNEQ

Billed number screening public telephone not equipped (BPTNEQ)

Register BPTNEQ counts billed number screening (BNS) queries to the database. The response to these queries indicates a database that is unequipped to check if the billing number is from a public telephone.

Register BPTNEQ release history

Register BPTNEQ was introduced before BCS20.

Associated registers

There are no associated registers.

OM group DSMCCS (continued)

Associated logs

There are no associated logs.

Register BPTNWNNQ

Billed number screening public telephone nonworking number not equipped (BPTNWNNQ)

Register BPTNWNNQ counts billed number screening (BNS) queries to the database. The response to these queries indicates that the database is unequipped to check if the billing number is from a public telephone. The database is also unequipped to check if the billing number is a working number.

Register BPTNWNNQ release history

Register BPTNWNNQ was introduced before BCS20.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Register BSEMIPB

Billed number screening semi-public (BSEMIPB)

Register BSEMIPB counts billed number screening (BNS) queries to the database. The response to these queries indicates that the billing number is from a semi-public coin telephone.

Register BSEMIPB release history

Register BSEMIPB was introduced before BCS20.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Register CCVDND

Calling card verification denied (CCVDND)

OM group DSMCCS (continued)

Register CCVDND counts calling card verification (CCV) queries to the database. This register counts CCV queries when the response indicates that service denial is in effect for a correct billing number.

Register CCVDND release history

Register CCVDND was introduced before BCS20

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Register CCVINVLD

Calling card verification invalid (CCVINVLD)

Register CCVINVLD counts calling card verification (CCV) queries to the database. This register counts CCV queries when the response indicates that the billing number is not correct.

Register CCVINVLD release history

Register CCVINVLD was introduced before BCS20.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Register CCVMMTCH

Calling card verification match (CCVMMTCH)

Register CCVMMTCH counts calling card verification (CCV) queries to the database. The response to these queries indicates that a PIN match is not found for a correct billing number.

Register Register CCVMMTCH release history

Register CCVMMTCH was introduced before BCS20.

Associated registers

There are no associated registers.

OM group DSMCCS (continued)

Associated logs

There are no associated logs.

Register CCVPNRES

Calling card verification personal identification number unrestricted (CCVPNRES)

Register CCVPNRES counts calling card verification (CCV) queries to the database. This register counts CCV queries when the response indicates that the PIN is not restricted.

Register CCVPNRES release history

Register CCVPNRES was introduced before BCS20.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Register CCVPRES

Calling card verification personal identification number restricted (CCVPRES)

Register CCVPRES counts calling card verification (CCV) queries to the database. This register counts CCV queries when the response indicates that the PIN is restricted.

Register CCVPRES release history

Register CCVPRES was introduced before BCS20.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Register MCCSABND

Mechanized calling card service abandoned (MCCSABND)

OM group DSMCCS (continued)

Register MCCSABND counts mechanized calling card service (MCCS) calls that are abandoned before the following:

- a reply message is received from the MCCS database
- a common channel interoffice system (CCIS) failure message is received
- a query time-out (two seconds) occurs.

Register MCCSABND release history

Register MCCSABND was introduced before BCS20.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Register MCCSDBBK

Mechanized calling card service database blocked (MCCSDBBK)

Register MCCSDBBK counts mechanized-calling card service (MCCS) queries to the database that the system blocks. The system blocks these queries to the database because the database is overloaded.

Register MCCSDBBK release history

MCCSDBBK was introduced before BCS20.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Register MCCSDBOV

Mechanized calling card service database overload (MCCSDBOV)

Register MCCSDBOV counts mechanized-calling card service (MCCS) queries to the database that fail because the database is overloaded.

Register MCCSDBOV release history

Register MCCSDBOV was introduced before BCS20.

Associated registers

There are no associated registers.

OM group DSMCCS (continued)

Associated logs

There are no associated logs.

Register MCCSDBTM

Mechanized calling card service database time-out (MCCSDBTM)

Register MCCSDBTM counts mechanized-calling card service (MCCS) queries to the database that do not receive a reply in two seconds.

Register MCCSDBTM release history

Register MCCSDBTM was introduced before BCS20.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Register MCCSMERR

Mechanized calling card service miscellaneous errors (MCCSMERR)

Register MCCSMERR counts mechanized-calling card service (MCCS) queries to the database that fail because of processing errors.

Register MCCSMERR release history

Register MCCSMERR was introduced before BCS20.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Register MCCSMTPB

Mechanized calling card service message transfer part blocking (MCCSMTPB)

Register MCCSMTPB counts mechanized-calling card service (MCCS) calls that are not completed. These calls are not completed because of direct

OM group DSMCCS (continued)

signaling message transfer part blocking. The following cause direct signaling message transfer part blocking:

- reception of failure reply messages
- reception of processor signaling congestion messages
- other network failures

Register MCCSMTPB release history

Register MCCSMTPB was introduced before BCS20.

Associated registers

Registers DSMTP_NTWKOVLD or DSMTP_NTWKBLK also increase when the network fails.

Associated logs

There are no associated logs.

Register MCCSNAXR

Mechanized calling card service no auxiliary registers (MCCSNAXR)

Register MCCSNAXR counts mechanized-calling card service (MCCS) queries to the database that are abandoned. These queries are abandoned because an auxiliary call register is not available.

For each MCCS application, 64 auxiliary call registers are allocated.

Register MCCSNAXR release history

Register MCCSNAXR was introduced before BCS20.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Register MCCSNEQ

Mechanized calling card service unequipped (MCCSNEQ)

Register MCCSNEQ counts mechanized-calling card service (MCCS) queries that fail. These MCCS queries fail because an unequipped revenue accounting office is present in the database.

OM group DSMCCS (continued)

Register MCCSNEQ release history

Register MCCSNEQ was introduced before BCS20.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Register MCCSQUR

Mechanized calling card service queries (MCCSQRY)

Register MCCSQRY counts mechanized-calling card service (MCCS) queries the system sends to the billing correction center database.

Register MCCSQRY release history

Register MCCSQRY was introduced before BCS20.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Register MCCSVCNT

Mechanized calling card vacant (MCCSVCNT)

Register MCCSVCNT counts mechanized-calling card service (MCCS) queries that fail. These MCCS queries fail because the revenue accounting office database is empty.

Register MCCSVCNT release history

Register MCCSVCNT was introduced before BCS20.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Register OSTANNC

Originating station treatment announcement (OSTANNC)

OM group DSMCCS (continued)

Register OSTANNC counts originating station treatment (OST) queries to the database. This register counts these OST queries when the response indicates the application of alerting tone and prompt announcement treatment.

Register OSTANNC release history

Register OSTANNC was introduced before BCS20.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Register OSTOPHER

Originating station treatment operator (OSTOPER)

Register OSTOPER counts originating station treatment (OST) queries to the database. This register counts these OST queries when the response indicates the application of operator assisted only treatment.

Register OSTOPHER release history

Register OSTOPHER was introduced before BCS20.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Register OSTTONE

Originating station treatment tone (OSTTONE)

Register OSTTONE counts originating station treatment (OST) queries to the database. This register counts these OST queries when the response indicates the application of alerting tone only treatment.

Register OSTTONE release history

Register OSTTONE was introduced before BCS20.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Register OSTUNSPC

Originating station treatment no special (OSTUNSPC)

Register OSTUNSPC counts originating station treatment (OST) queries to the database. This register counts these OST queries when the response indicates that the application of special treatment is not required.

Register OSTUNSPC release history

Register OSTUNSPC was introduced before BCS20.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

OM group DSMTP

OM Description

Direct signaling message transfer part (DSMTP)

The Om group DSMTP provides information on the performance of the CCIS direct signaling message transfer part (MTP) system. Registers count conditions that are not normal in the CCIS network. These conditions do not allow direct signaling messages to reach the destination. These conditions can result from local or network problems. Network problems include network blocking or congestion. These problems do not allow the system to route a message.

Release history

Introduction of the OM group DSMTP was introduced before BCS20.

Registers

The OM group DSMTP registers appear on the MAP terminal as follows:

| | | | |
|----------|---------|---------|---------|
| NORTEDAT | NTWKOVL | NTWKBLK | DESTNEQ |
| NOSIGRTE | MISRTE | NOREPLY | |

Group structure

The OM group DSMTP provides one tuple for each office.

Key field:

There are no key fields.

Info field:

There are no info fields.

Associated OM groups

The DSINWTS registers count activities for the CCIS INWATS originating screen office (OSO).

Associated functional groups

The functional group CCIS associates with OM group DSMTP.

OM group DSMTP (continued)

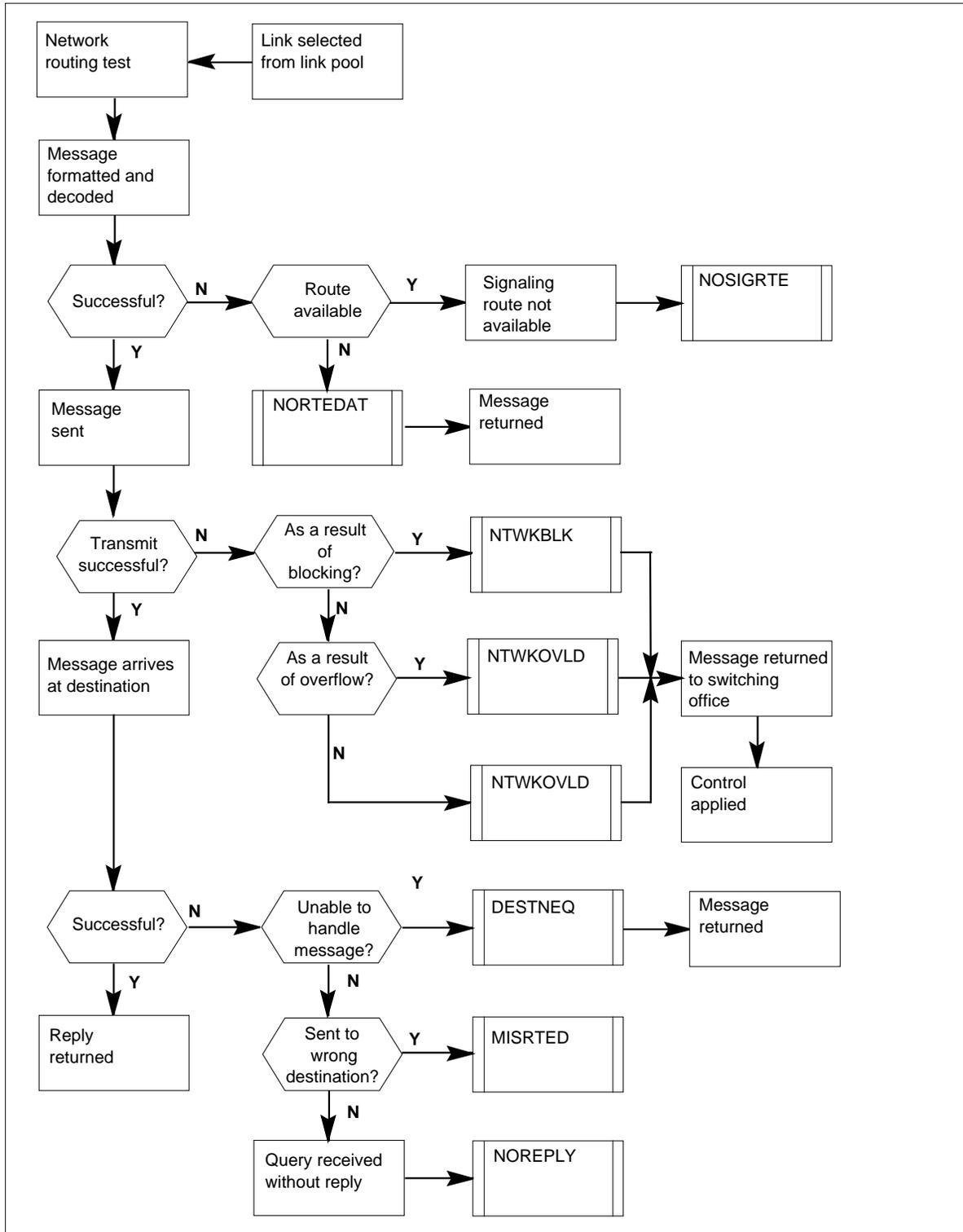
Associated functionality codes

The associated function codes for OM group DSMTP appear in the following table:

| Functionality | Code |
|-----------------------|-------------|
| CCIS Direct Signaling | NTX197AA |

OM group DSMTP (continued)

OM group DSMTP registers



OM group DSMTTP (continued)

Register DESTNEQ

Destination not equipped (DESTNEQ)

Register DESTNEQ counts the direct signaling messages the network returned. The network returned these messages because the destination does not have the information needed to answer the messages.

Register DESTNEQ release history

Introduction of Register DESTNEQ was introduced before BCS20.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Register MISRTED

Misrouted (MISRTED)

Register MISRTED counts direct signaling messages that the system received at the wrong node. The system received these messages at the wrong node because either of the following conditions occurred:

- The system addressed the messages to an application type that is not complete.
- The messenger contained a function number that was not correct.

Register MISRTED release history

Introduction of register MISRTED was introduced before BCS20.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Register NOREPLY

No reply (NOREPLY)

Register NOREPLY counts direct signaling queries that did not receive replies 10s after the system sent the query to the data base.

OM group DSMTP (continued)

Register NOREPLY release history

Introduction of register NOREPLY was introduced before BCS20.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Register NORTE DAT

No route data (NORTE DAT)

Register NORTE DAT counts direct signaling messages that the network returned because the messages did not contain routing data.

Register NORTE DAT release history

Introduction of register NORTE DAT was introduced before BCS20.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Register NOSIG RTE

No signaling route (NOSIG RTE)

Register NOSIG RTE counts direct signaling messages that the system cannot transmit. The system cannot transmit these direct signaling messages because an outgoing signaling route is not available. Link failures or link overloads or far-end processor overloads can cause this condition.

Register NOSIG RTE release history

Introduction of register NOSIG RTE was introduced before BCS20.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Register NTWK BLK

Network blocking (NTWK BLK)

OM group DSMTTP (end)

Register NTKWBLK counts direct signaling messages the network returns because of network blocking.

Register NTKWBLK release history

Introduction of register NTKWBLK was introduced before BCS20.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Register NTKOVLD

Network overload (NTKOVLD)

Register NTKOVLD counts direct signaling messages that the network returns because of network overload.

Register NTKOVLD release history

Introduction of the NTKOVLD was introduced before BCS20.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

OM group DSPRMAN

OM description

Expanded OM name: Digital Signal Processor (DSP) Resource Module (RM) Resource Management (RMAN)

This group of OMs contains measures for continuity test (COT), dual tone multifrequency (DTMF), and tone synthesizer (TONESYN) resource events and usage statistics on the DMS-Spectrum Peripheral Module (SPM) in the trunking application. These resources exist only on DSP RMs on a SPM node.

There is one report per SPM node in a DMS switch. Although resource pools are provisioned and configured for each RM, OM reports are given for the node-level pools and not the RM-level pools.

This group of measures is used primarily to check capacity: most of the measures relate to the usage of resources on a SPM node. The report can also be used to measure trouble due to the number of lost resources.

Resources can be lost if an attempt is made to spare a failed RM, but there is no spare RM. Non-restorable resources (COT, DTMF, TONESYN) are always lost when an uncontrolled sparing action occurs. For controlled sparing actions, in-use non-restorable resources are released (that is, they are gracefully relinquished by call processing).

A "non-restorable" if spared, cannot be restored to call processing; therefore, it is lost to call processing. However, it is added to the resource pools when the RM it resides on comes in service (such as, DTMF, COT, and TONESYN). A "restorable resource," if spared, can be restored to call processing with the same state it was in prior to the sparing action (such as, ECAN and DTMF when they are used in FTR mode).

"Controlled sparing" (also called "unforced sparing") is a type of sparing action that occurs if a command is entered at the MAP terminal to deload an RM. The non-restorable resources on the RM are deloaded before the RMs are spared. "Uncontrolled sparing" is a sparing action that occurs as the result of a hardware fault that is detected by RM device maintenance or if a sparing action has been forced at the MAP terminal. The non-restorable resources on the RM are not deloaded before the RM hardware is spared.

"Deloading resources" refers to waiting for resources to be released by call processing before taking a sparing action. Deloading an RM refers to the process of allowing resources in use to be released under normal call processing circumstances. Deloading does not take place in an uncontrolled sparing scenario.

OM group DSPRMAN (continued)

DSPRMAN contains 21 peg registers that count the following events for COT, DTMF, TONESYN, and MF:

- available resource low-water-mark threshold violations
- resources lost
- resources denied
- resources utilized
- the highest number of resources allocated

OM group DSPRMAN is reported to the computing module (CM) from SPM using the SPM OM Transport System (SOTS). SOTS uses the distributed data manager (DDM) of the DMS switch to transport the data.

The interval for collection periods can be changed through office parameters. For example, if table OFCOPT parameter OMHISTORY is set to Y, parameter OMXFER in table OFCENG is disabled and the collection/transfer period for OMs is 5 minutes. When the collection period is 30 minutes, data is collected every 15 minutes. The data from each 15-minute transfer is combined to make a composite set of measurements for the one 30-minute collection.

When collecting OMs from peripherals, the OM base software on the CM gets the data for the active registers one minute before the end of the collection period. While still under control of the OM base software, all active registers become holding registers at the end of the collection period and the active registers are cleared.

For this reason, when using the CI command OMSHOW to see OM data, the active registers usually display as all zeroes, except for the last minute of the collection period. Look at the data in the holding registers. View the real-time data for the active registers directly on the SPM. Use the CM tool REMLOGIN to remotely login to the SPM. Then, at the SPM, change to the directory OMUTILS and use the CI command PRINT to see the active data.

Release history

OM group DSPRMAN was introduced in SPM01 (CSP09).

Registers

OM group DSPRMAN registers display on the MAP terminal as follows:

OM group DSPRMAN (continued)

| | | | |
|----------|----------|----------|----------|
| COTLOW | COTLOST | COTDENY | COTUTIL |
| COTHI | COTFAIL | DTMFLOW | DTMFLOST |
| DTMFDENY | DTMFUTIL | DTMFHI | MFLOW |
| MFLOST | MFDENY | MFUTIL | MFHI |
| TONELow | TONELOST | TONEDENY | TONEUTIL |
| TONELHI | | | |

Group structure

OM group DSPRMAN

Key field:

nil_type_id

Info field:

sots_NODE_INFO

Associated OM groups

ECANRMAN

OM groups ECANRMAN and DSPRMAN contain operational measurements for resources managed by SPM resource management. OM counts are accumulated and reported for each of the different resource types.

Note: There is no mathematical relationship between OM groups ECANRMAN and DSPRMAN.

Associated functional groups

Not applicable

Associated functionality codes

Not applicable

OM logic flow or pseudocode

When SPM resource management requests a resource be attached to a trunk/call, the following high-level steps are followed. These steps result in OMs.

OM group DSPRMAN (continued)

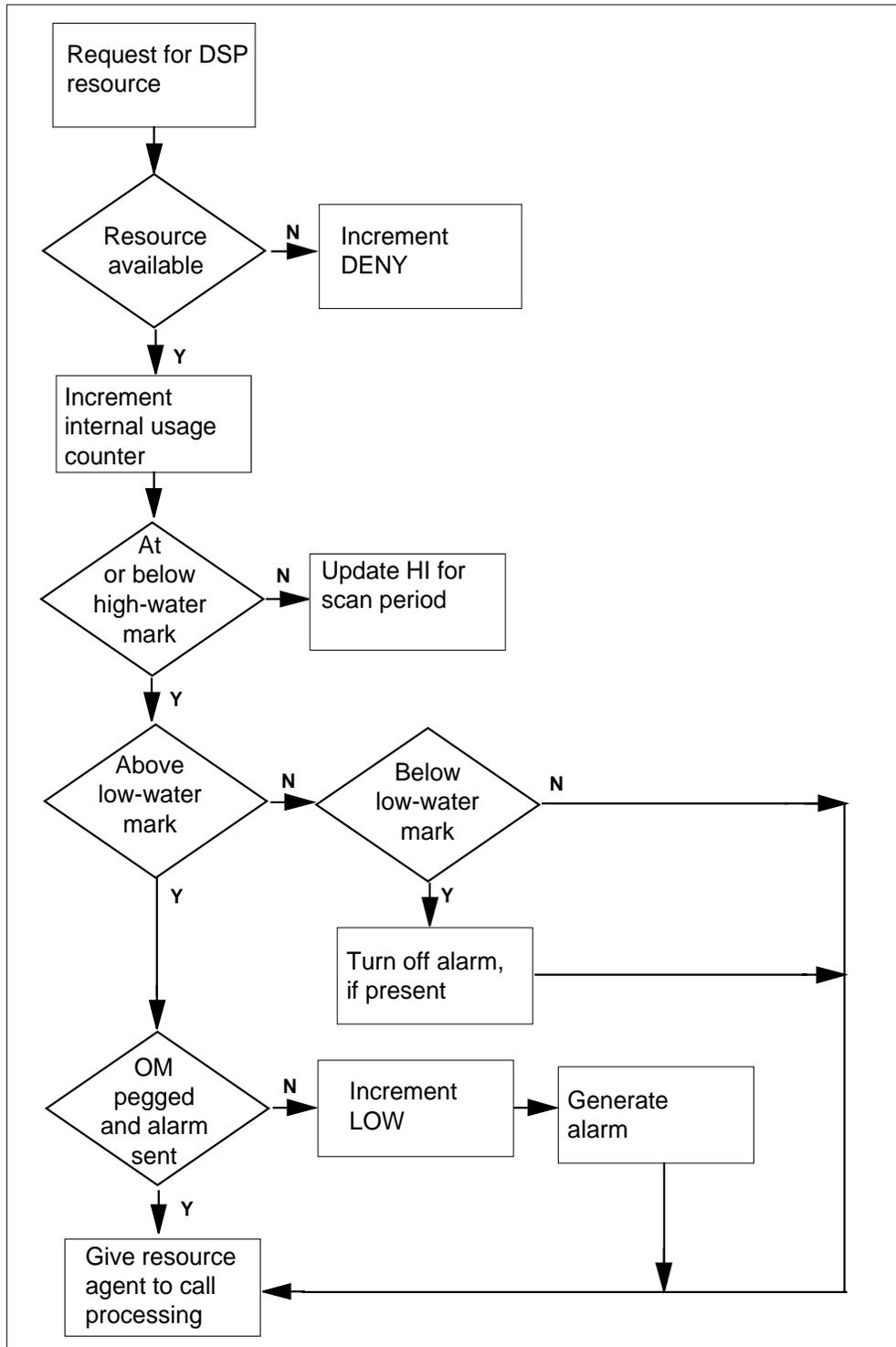
- If a resource is available in the pool, resource management increments an internal usage count pertaining to the resource type. If the total allocated is greater than the current value of the high-water-mark, the high-water-mark register is set to the higher value.
- If a resource is not available for use in the pool, resource management increments the DENY register pertaining to the resource type.
- If a resource has been allocated/given to a user (call processing), and if the number of free resources in the pool is at or below the low-water-mark threshold on the pool, resource management increments the LOW register count pertaining to the resource type requested. An alarm may also generate.
- If resource management must take a resource away from a user (call processing) due to an RM sparing action, resource management increments the LOST register pertaining to the resource type. All non-restorable resources are always lost in uncontrolled sparing actions.
- DTMF, COT, and TONESYN are non-restorable resources.
- DTMF in reorigination mode is a restorable resource.
- If call processing does not relinquish a non-restorable resource, in order to complete the sparing action, resource management takes the non-restorable resource away from call processing. This results in resource management incrementing the LOST register for each resource type for each lost non-restorable resource.

On the local SPM's active common equipment module (CEM), at the end of a 100-second scan period, resource management calculates the percentage utilization of the resources in each of the resource pools and again computes the average for all previous scan periods since the beginning of the current collection period. This value is written to the OM register for percentage utilization of the resource type.

At the end of a transfer/collection period, all registers are zeroed.

The following illustrates a request for DSP resources.

OM group DSPRMAN (continued)

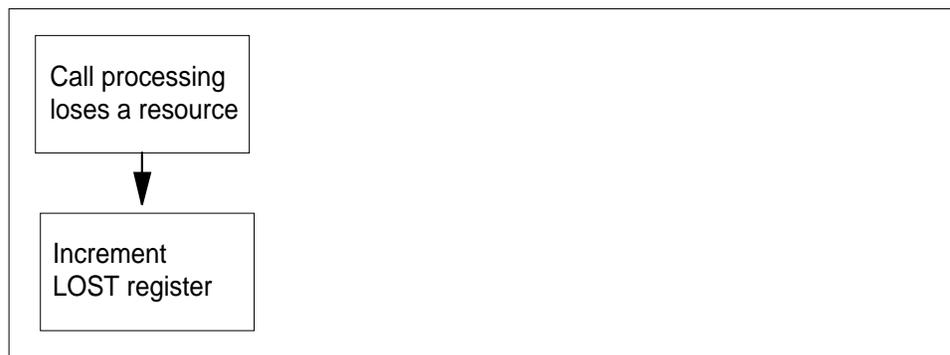


OM group DSPRMAN (continued)

The following illustrates a loss of a DSP resource due to an RM sparing action.

Note 1: COTs are non-restorable resources, so they are lost in the event of sparing an RM. However, the CCS7 protocol allows retest of COT, so the lost resources get replaced/restored.

Note 2: The only restorable resource in DSP is the DTMF resource in reorigination mode.



Register COTLOW

Expanded register name: COT low-water-mark threshold violations on the node-level COT pool

This register counts the low-water-mark threshold violations on the SPM node-level pool of COT resources since the last collection period. Crossing the threshold once indicates a potential for resource exhaustion on the node. Crossing the threshold more than once in a collection period indicates the user (call processing) is operating around the threshold for extended periods.

Operating around the threshold for extended periods indicates insufficient COT resources on the node. The corrective action is to provision another RM or another SPM to support the call rate and call mix.

Register COTLOW release history

Register COTLOW was introduced in SPM01 (CSP09).

Associated registers

COTUTIL

OM group DSPRMAN (continued)

The percentage of COTs at the node level is considered high whenever the low-water-mark threshold is crossed. Compute it using the threshold value and the queue size obtained from the SPM node-level MAP terminal.

Associated logs

SPM350 is an alarmed log and has a default status of minor.

Extension registers

Not applicable

Register COTLOST

Expanded register name: Number of COT resources lost by or taken away from resource management users

This register counts the COT resources taken away from or lost by resource management users (such as call processing).

Register COTLOST release history

Register COTLOST was introduced in SPM01 (CSP09).

Associated registers

Not applicable

Associated logs

Not applicable

Extension registers

Not applicable

Register COTDENY

Expanded register name: COT requests denied

Register COTDENY release history

Register COTDENY was introduced in SPM01 (CSP09).

Associated registers

COTUTIL should be 100% before COTDENY increments the peg register.

Associated logs

Not applicable

Extension registers

Not applicable

OM group DSPRMAN (continued)

Register COTUTIL

Expanded register name: Percent utilization of COT resources

COTUTIL calculates the percentage of the total COT resources in the node-level pool allocated to users of resource management (such as call processing). COTUTIL is the average percentage utilization for all scan periods during a collection/transfer period. COTUTIL does not indicate the total number in use at the end of a scan or transfer period.

Note: It is output as a peg register at the CM, but it represents COT resource usage. As far as the OM subsystem is concerned, it is only a pegged count. The percentage statistic is computed locally on the SPM by the resource management at 100-second scan intervals. A local peg is updated, and at the end of the collection period, the average of averages for all scan intervals is output at the CM as a peg register.

Register COTUTIL release history

Register COTUTIL was introduced in SPM01 (CSP09).

Associated registers

Not applicable

Associated logs

Not applicable

Extension registers

Not applicable

Register COTHI

Expanded register name: High-water-mark for COT allocations from the COT pool

COTHI counts the highest number of COT resources allocated from the node-level pool during a collection/transfer period. Its value starts at zero at the beginning of each collection/transfer period for the node. An update occurs when there is a new high-water-mark in the collection period. This occurs when the total number of resources allocated from the COT pool exceeds the previous high-water-mark for the pool.

Register COTHI release history

Register COTHI was introduced in SPM01 (CSP09).

OM group DSPRMAN (continued)

Associated registers

Not applicable

Associated logs

Not applicable

Extension registers

Not applicable

Register COTFAIL

Expanded register name: COT failed for the CCS7 trunk

This register counts the CCS7 COT failures seen for trunks on each SPM node. These events are reported by the DSP application running on the RM. They are pegged on the active CEM of each SPM.

Register COTFAIL release history

Register COTFAIL was introduced in SPM01 (CSP09).

Associated registers

Not applicable

Associated logs

Not applicable

Extension registers

Not applicable

Register DTMFLOW

Expanded register name: DTMF low-water-mark threshold violations on the node-level DTMF pool

This register counts the low-water-mark threshold violations on the SPM node-level pool of DTMF resources since the last collection period. Crossing the threshold once indicates a potential for resource exhaustion on the node. Crossing the threshold more than once in a collection period indicates the user (call processing) is operating around the threshold for extended periods.

Operating around the threshold for extended periods indicates insufficient DTMF resources on the node. The corrective action is to provision another RM or another SPM to support the call rate and call mix.

OM group DSPRMAN (continued)

Register DTMFLOW release history

Register DTMFLOW was introduced in SPM01 (CSP09).

Associated registers

DTMFUTIL

The percentage of DTMFs at the node level is considered high whenever the low-water-mark threshold is crossed. Compute it using the threshold value and the queue size obtained from the SPM node-level MAP terminal.

Associated logs

SPM350 is an alarmed log and has a default status of minor.

Extension registers

Not applicable

Register DTMFLOST

Expanded register name: DTMF resources lost by or taken away from resource management users

This register counts the DTMF resources taken away from users of SPM resource management (such as call processing) due to sparing actions.

Register DTMFLOST release history

Register DTMFLOST was introduced in SPM01 (CSP09).

Associated registers

Not applicable

Associated logs

Not applicable

Extension registers

Not applicable

Register DTMFDENY

Expanded register name: DTMF resources denied

Register DTMFDENY release history

Register DTMFDENY was introduced in SPM01 (CSP09).

OM group DSPRMAN (continued)

Associated registers

DTMFUTIL should be 100% before DTMFDENY increments the peg register.

Associated logs

Not applicable

Extension registers

Not applicable

Register DTMFUTIL

Expanded register name: Percent utilization of DTMF resources

DTMFUTIL calculates the percentage of the total DTMF resources in the node-level pool allocated to users of resource management (such as call processing). DTMFUTIL is the average percentage utilization for all scan periods during a collection/transfer period. It does not indicate the total number in use at the end of a scan or transfer period.

Note: It is output as a peg register at the CM, but it represents DTMF resource usage. As far as the OM subsystem is concerned, it is only a pegged count. The percentage statistic is computed locally on the SPM by the resource management at 100-second scan intervals. A local peg is updated and at the end of the collection period the average of averages for all scan intervals is output at the CM as a peg register.

Register DTMFUTIL release history

Register DTMFUTIL was introduced in SPM01 (CSP09).

Associated registers

Not applicable

Associated logs

Not applicable

Extension registers

Not applicable

Register DTMFHI

Expanded register name: High-water-mark for DTMF allocations from the DTMF pool

OM group DSPRMAN (continued)

DTMFHI counts the highest number of DTMF resources allocated from the node-level pool during a collection/transfer period. Its value starts at zero at the beginning of each collection/transfer period for the node. An update occurs when there is a new high-water-mark in the collection period. This occurs when the total number of resources allocated from the DTMF pool exceeds the previous high-water-mark for the pool.

Register DTMFHI release history

Register DTMFHI was introduced in SPM01 (CSP09).

Associated registers

Not applicable

Associated logs

Not applicable

Extension registers

Not applicable

Register TONELOW

Expanded register name: TONESYSN low-water-mark threshold violations on the node-level TONESYSN pool

This register counts the low-water-mark threshold violations on the SPM node-level pool of TONE resources since the last collection period. Crossing the threshold once indicates a potential for resource exhaustion on the node. Crossing the threshold more than once in a collection period indicates the user (call processing) is operating around the threshold for extended periods.

Operating around the threshold for extended periods indicates insufficient TONE resources on the node. The corrective action is to provision another RM or another SPM to support the call rate and call mix.

Register TONELOW release history

Register TONELOW was introduced in SPM01 (CSP09).

Associated registers

TONEUTIL

The percentage of TONEs at the node level is considered high whenever the low-water-mark threshold is crossed. Compute it using the threshold value and the queue size obtained from the SPM node-level MAP terminal.

OM group DSPRMAN (continued)

Associated logs

SPM350 is an alarmed log and has a default status of minor.

Extension registers

Not applicable

Register TONELOST

Expanded register name: Number of TONESYSN resources taken away from or lost by resource management users

This register counts the TONE resources taken away from users of SPM resource management (such as call processing) due to sparing actions.

Register TONELOST release history

Register TONELOST was introduced in SPM01 (CSP09).

Associated registers

Not applicable

Associated logs

Not applicable

Extension registers

Not applicable

Register TONEDENY

Expanded register name: TONESYSN resources denied

Register TONEDENY release history

Register TONEDENY was introduced in SPM01 (CSP09).

Associated registers

TONEUTIL should be 100% before TONEDENY increments the peg register.

Associated logs

Not applicable

Extension registers

Not applicable

Register TONEUTIL

Expanded register name: Percent utilization of TONESYSN resources

OM group DSPRMAN (continued)

TONEUTIL calculates the percentage of the total TONE resources in the node-level pool allocated to users of resource management (such as call processing). TONEUTIL is the average percentage utilization for all scan periods during a collection/transfer period. It does not indicate the total number in use at the end of a scan or transfer period.

Note: It is output as a peg register at the CM but it represents TONE resource usage. As far as the OM subsystem is concerned, it is only a pegged count. The percentage statistic is computed locally on the SPM by the resource management at 100-second scan intervals. A local peg is updated and at the end of the collection period the average of averages for all scan intervals is output at the CM as a peg register.

Register TONEUTIL release history

Register TONEUTIL was introduced in SPM01 (CSP09).

Associated registers

Not applicable

Associated logs

Not applicable

Extension registers

Not applicable

Register TONEHI

Expanded register name: High-water-mark for TONESYSN resource allocations from the TONESYSN pool

TONEHI counts the highest number of TONE resources allocated from the node-level pool during a collection/transfer period. Its value starts at zero at the beginning of each collection/transfer period for the node. An update occurs when there is a new high-water-mark in the collection period. This occurs when the total number of resources allocated from the TONE pool exceeds the previous high-water-mark for the pool during the collection period.

Register TONEHI release history

Register TONEHI was introduced in SPM01 (CSP09).

Associated registers

Not applicable

Associated logs

Not applicable

OM group DSPRMAN (continued)

Extension registers

Not applicable

Register MFLOW

Expanded register name: Multifrequency (MF) low-water-mark threshold violations on the node-level MF pool

This register counts the low-water-mark threshold violations on the SPM node-level pool of MF resources since the last collection period. Crossing the threshold once indicates a potential for resource exhaustion on the node. Crossing the threshold more than once in a collection period indicates the user (call processing) is operating around the threshold for extended periods.

Operating around the threshold for extended periods indicates insufficient MF resources on the node. The corrective action is to provision another RM or another SPM to support the call rate and call mix.

Register MFLOW release history

Register MFLOW was introduced in SPM01 (CSP09).

Associated registers

MFUTIL

The percentage of MFs at the node level is considered high whenever the low-water-mark threshold is crossed. Compute it using the threshold value and the queue size obtained from the SPM node-level MAP terminal.

Associated logs

SPM350 is an alarmed log and has a default status of minor.

Extension registers

Not applicable

Register MFLOST

Expanded register name: Number of MF resources lost by or taken away from resource management users

This register counts the MF resources taken away from users of SPM resource management (such as call processing) due to sparing actions.

Register MFLOST release history

Register MFLOST was introduced in SPM01 (CSP09).

OM group DSPRMAN (continued)

Associated registers

Not applicable

Associated logs

Not applicable

Extension registers

Not applicable

Register MFDENY

Expanded register name: MF resources denied (call processing failed to allocate for a call)

Register MFDENY release history

Register MFDENY was introduced in SPM01 (CSP09).

Associated registers

MFUTIL should be 100% before MFDENY increments the peg register.

Associated logs

Not applicable

Extension registers

Not applicable

Register MFUTIL

Expanded register name: Average percent utilization of MF resources

MFUTIL calculates the percentage of the total MF resources in the node-level pool allocated to users of resource management (such as call processing). MFUTIL is the average percentage utilization for all scan periods during a collection/transfer period. It does not indicate the total number in use at the end of a scan or transfer period.

Note: It is output as a peg register at the CM, but it represents MF resource usage. As far as the OM subsystem is concerned, it is only a pegged count. The percentage statistic is computed locally on the SPM by the resource management at 100-second scan intervals. A local peg is updated, and at the end of the collection period, the average of averages for all scan intervals is output at the CM as a peg register.

Register MFUTIL release history

Register MFUTIL was introduced in SPM01 (CSP09).

OM group DSPRMAN (end)

Associated registers

Not applicable

Associated logs

Not applicable

Extension registers

Not applicable

Register MFHI

Expanded register name: High-water-mark for MF allocations from the MF pool

MFHI counts the highest number of MF resources allocated from the node-level pool during a collection/transfer period. Its value starts at zero at the beginning of each collection/transfer period for the node. An update occurs when there is a new high-water-mark in the collection period. This occurs when the total number of resources allocated from the MF pool exceeds the previous high-water-mark for the pool.

Register MFHI release history

Register MFHI was introduced in SPM01 (CSP09).

Associated registers

Not applicable

Associated logs

Not applicable

Extension registers

Not applicable

OM group DTSR

OM description

Dial tone speed recording (DTSR)

The OM group DTSR provides information for the host site register. The DTSR provides information on the ability of the switch to return a dial tone for a host site in 3 s. The OM group SITE records results for remote sites.

Two NT feature packages provide OMs for DTSR tests:

- The NTX901AA provides OMs for offices with line modules (LM)
- The NTX270AA provides OMs for offices equipped with LMs and line concentrating modules (LCM), remote concentrator terminals (RCT), or remote concentrator SLC-96 (RCS)

During normal switch operation, the DTSR system simulates a series of call originations. The dial tone speed test sends commands to two LMs at each site every 4 s. These two commands cause the LMs to send messages to the central control (CC). The messages appear to be originations from a dial pulse (DP) and a digitone line, respectively. The central processor uses the normal processing code to find a path through the originating LM. The CC sends the LM a message to tell the LM that setup is complete. For digitone calls, the central processor uses the code to find a dual-tone multifrequency (DTMF) receiver and a network path to the DTMF.

Network blockage does not cause a delay in the dial tone unless the call is a digitone call that requires a receiver.

The LM returns a message that indicates if the LM takes more than 3 s to pass dial tone to the false line. If the CC does not receive the message before the next test must run, the CC scores the delay count register. The CC scores the delay count register when it gets a message that shows a delay of more than 3 s. A different LM directs each call. The false source of these calls alternates between line drawers in the LM.

The DTSR counts appear in pairs. The first counts all test calls. The second counts test calls with a dial tone delay that exceeds 3 s.

The DTSTESTC is the total number of test call originations that the DTSR generates for each call from dial pulse and digitone lines. The DTSDLYPC is the number of test call originations that take longer than 3 s to receive a dial tone.

OM group DTSR (continued)

The DTSR on LCMs, RCTs, or RCS involves timing of calls. Originations are timed from the point when the system detects the origination in the LM to the point when the dial tone returns.

The system updates counts from LCMs, RCTs, or RCS every 15 min. The assigned OM transfer period does not affect the update.

The DTSR deactivates if a switch has digitone receiver overflow. The DTSR automatically deactivates during degradation if you see the office parameter DTSR_AUTO_DEACTIVATION_ENABLE is set to TRUE in table OFCENG.

The DTSR deactivates in both host and remote locations. The deactivation affects the values in groups DTSR and SITE. The DTSR automatically activates again when the degradation passes. The OM groups are affected in the same way as a DTSR deactivated manually from a MAP terminal. The system generates log DTSR100 when DTSR deactivates. The system generates log DTSR101 when DTSR returns to service.

Registers in this group do not increase when DTSR deactivates during a degradation.

Release history

The OM group DTSR was introduced before BCS20.

BCS35

Register DELAY includes counts for calls abandoned after dial tone delay.

BCS32

Group expanded to include DTSR statistics for intelligent peripheral equipment type line controlling devices (LCD) and the lines for LCDs.

Registers

For offices that have LMs, the OM group DTSR registers appear on the MAP terminal as follows:

| | |
|----------|----------|
| DTSTESTC | DTSDLYPC |
|----------|----------|

For offices that have LCMs, RCTs, or RCS, the OM group DTSR registers appear on the MAP terminal as follows:

OM group DTSR (continued)

| TOTAL | TOTAL_2 | DELAY | DEL_2 |
|-------|---------|-------|-------|
|-------|---------|-------|-------|

Group structure

For offices that have LMs, the OM group DTSR provides one tuple for each receiver type.

Key field:

The key field for offices equipped with LMs is OLD_DTSTR_KEY

For offices that have LCMs, RCTs, or RCS, each key type has one tuple.

Key field:

The key field for offices that have LCMs, RCTs, or RCS is DTSTR_KEY.

The key types are as follows:

LMDP

Line Module Dial Pulse

LMDT

Line Module Digitone

LCMDP

LCM Dial Pulse

LCMDT

LCM Digitone

LCMKS

LCM KS

RCTDP

Remote Concentrator Terminal Dial Pulse

RCTDT

Remote Concentrator Terminal Digitone

RCSDP

RCS Dial Pulse

RCSDT

RCS Digitone

Info field:

There are no Info fields

Associated OM groups

The SITE OM group provides information about traffic-related counts and DTSR results for remote sites.

OM group DTSR (continued)

The SITE2 OM group provides information about traffic-related counts and DTSR results. Offices with lines that connect to RCS sites and remote carrier urban sites receive this information.

The SITE3 OM group provides statistics for DTSR on intelligent peripheral equipment (IPE) for analog and digital lines.

The RADR OM group provides information on availability of receivers.

Associated functional groups

The following functional groups associate with OM group DTSR:

- NT-40
- SuperNode

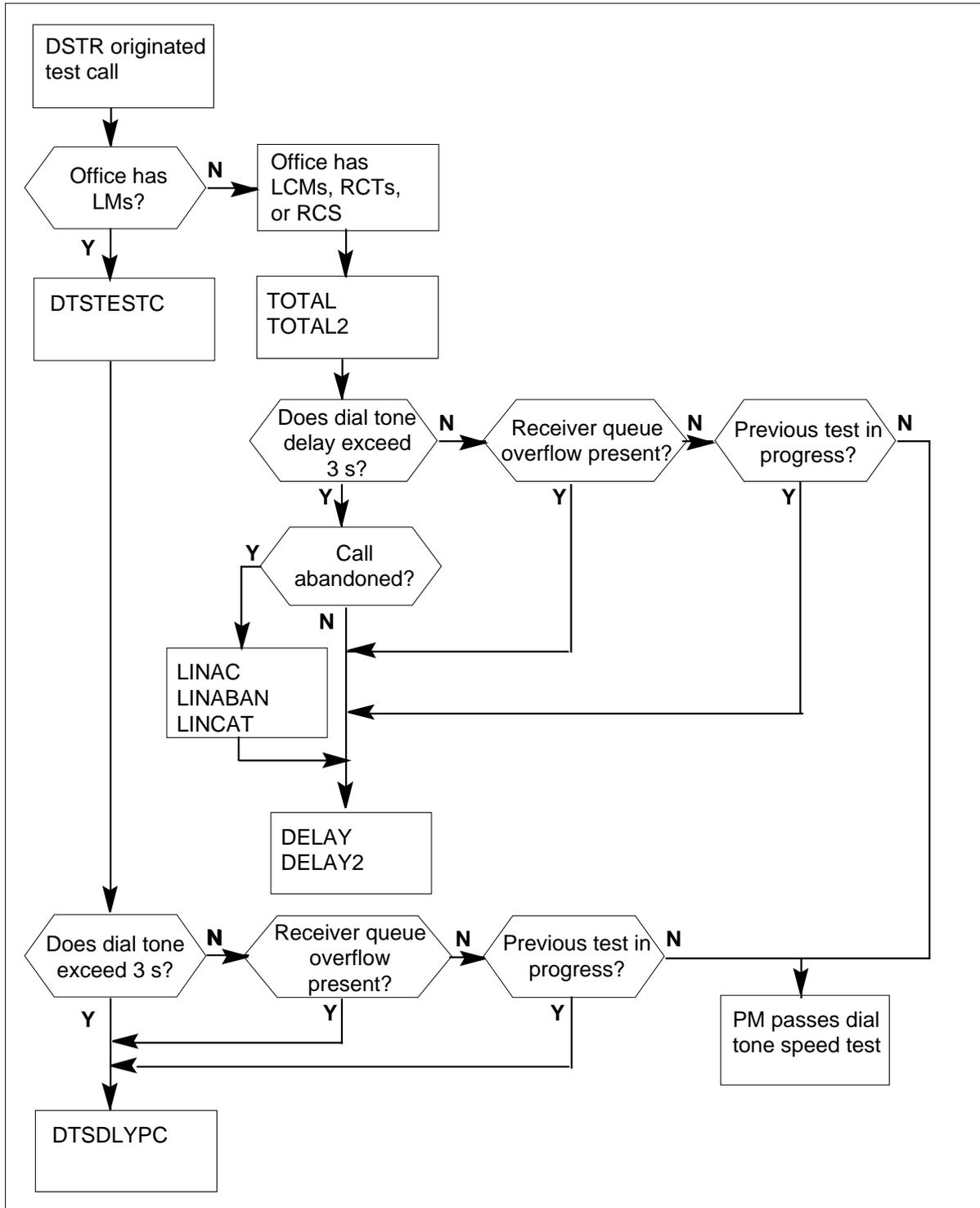
Associated functionality codes

The associated functionality codes for OM group DTSR appear in the following table:

| Functionality | Code |
|------------------------------------|----------|
| Local Features I | NTX901AA |
| New Peripheral Maintenance Package | NTX270AA |

OM group DTSR (continued)

OM group DTSR registers



OM group DTSR (continued)

Register DELAY

Total number of calls with delay (DELAY)

For LMDP and LMDT lines, register DELAY counts test calls that have one of the following conditions:

- dial tone delay that exceeds 3 s. An abandoned call does not affect this count
- DTMF receiver queue overflow
- a previous DTSR test on the LM that is still in progress

A test starts on one LM for each site every 4 s.

Under normal conditions, the number of delayed call originations is small. A high number of delayed calls indicates high switch use or a problem condition, like LM trouble or channel blockage. A high delay count for LMDT lines can indicate that there are not enough receivers available.

For LCMDP, LCMDT, LCMKS, RCTDP, RCTDT, RCSDP, and RCSDT lines, DELAY counts sample calls that have one of the following conditions:

- dial tone delay that exceeds 3 s
- overflow in the DTMF receiver
- an earlier DTSR test on the LM that is still in progress

For LCMs, RCTs, or RCS, DTSR measures the time of actual calls. The system times originations from the time of detection in the LM to the time the dial tone returns.

Counts from the LCMs, RCTs, or RCS lines are updated every 15 min. The assigned OM transfer period does not affect the update.

Under normal conditions, the number of delayed call originations is small. A high number of delayed calls indicates high switch use or a problem condition, like channel blockage. A high delay count for LCMs, RCTs, or RCS lines can indicate that there are not enough receivers available.

Register DELAY release history

Register DELAY was introduced before BCS20.

BCS35

Calls abandoned after dial tone delay was added in BCS35.

OM group DTSR (continued)

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

Register DELAY_2 (does not apply to LMDP or LMĐT)

Register DTSDLYPC

Delayed test call originations (DTSDLYPC)

Delayed test call originations (DTSDLYPC) counts test calls that have one of the following conditions:

- dial tone delay that exceeds 3 s
- receiver queue overflow
- an earlier DTSR test on the LM that is still in progress

A test starts on one LM for each site every 4 s.

Under normal conditions, the number of delayed call originations is small. A high number of delayed calls indicates high switch use or a problem condition, like LM trouble or channel blockage.

A high DTSDLPC count for digitone lines can indicate that there are not enough receivers available.

Register DTSDLYPC release history

Register DTSDLYPC was introduced before BCS20.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register DTSTESTC

Number of test calls (DTSTESTC)

OM group DTSR (end)

Number of test calls (DTSTESTC) counts test calls.

Register DTSTESTC increases after the system determines the result of the test.

Register DTSTESTC release history

Register DTSTESTC was introduced before BCS20.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register TOTAL

Total number of test calls (TOTAL)

Total number of test calls (TOTAL) counts test calls on LMDP and LMDT lines.

This register increases after the result of the test is determined.

For offices that have LCMs, RCTs, or RCS lines, DTSR measures the time of calls. The system times originations from the time of detection in the LM to the time the dial tone returns.

The system updates the count of total calls every 15 min.

Register TOTAL release history

Register TOTAL was introduced before BCS20.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

Register TOTAL_2 (does not apply to LMDP and LMDT)

OM group DTSRPM

OM description

Dial tone speed recording on a peripheral module basis

Dial tone speed recording on a peripheral module base (DTSRPM) provides information on dial tone speed recording (DTSR). The DTSRPM provides information on DTSR for each peripheral module (PM) and for all line concentrating devices (LCD) in the switch.

The DTSR on new peripherals measures the time of calls. The system times originations from the time of detection in the line module (LM) to the time the dial tone returns.

The extended PMs collect DTSR statistics from each LCD. Each LCD is packaged in a message and sent to the central control (CC). The CC stores the statistics for each LCD.

Release history

The OM group DTSRPM was introduced in BCS24.

BCS35

Registers DPLDLY, DGTDLTY, and KSDLY include counts for calls abandoned after dial tone delay

BCS34

Registers KSTOT and KSDLY activate to count dial tone speed recording for Meridian business sets (MBS). The MBSs attach to remote carrier DMS-1 urban (RCU).

BCS32

Group expands to include DTSR statistics for intelligent peripheral equipment type LCDs and associated lines.

Registers

The OM group DTSRPM registers appear on the MAP terminal as follows:

| | | | |
|--------|--------|--------|--------|
| DPLTOT | DPLDLY | DGTTOT | DGTDLY |
| KSTOT | KSDLY | | |

Group structure

OM group DTSRPM provides one tuple for each LCD.

OM group DTSRPM (continued)

Key field:

There is no Key field.

Info field:

DTSRPM_OMINFO contains the following four parts:

- LCD number, a number in the range 0 to 255
- site number, a number in the range 0 to 63
- LCD type
- bay or unit number, a number in the range 0 to 999

Associated OM groups

The DTSR OM group provides information on the ability of the switch to return a dial tone for a host site in 3 s.

The SITE OM group provides information about traffic-related counts and DTSR results for remote sites.

The SITE2 OM group provides information about traffic-related counts. The SITE2 OM group provides DTSR results for offices with lines that connect to remote concentrator SLC-96 sites and remote carrier urban sites.

The SITE3 OM group provides statistics for DTSR on intelligent peripheral equipment (IPE) for analog and digital lines.

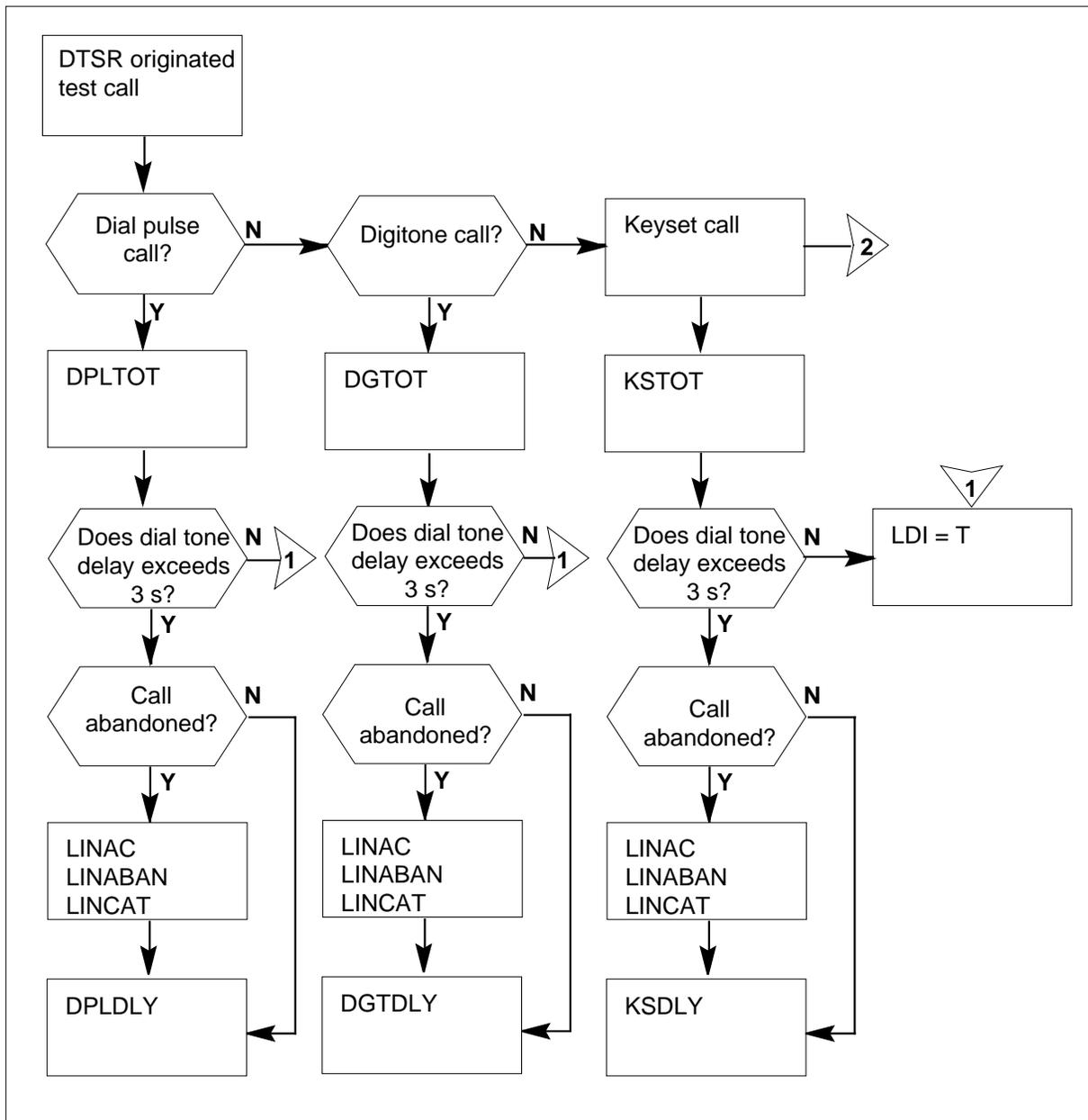
Associated functional groups

The line concentrating devices (LCD) functional group associates with OM group DTSRPM.

Associated functionality codes

The associated functionality codes for OM group DTSRPM appear in the following table.

| Functionality | Code |
|-------------------|----------|
| Local Features II | NTX901AA |

OM group DTSRPM (continued)**OM group DTSRPM registers****Register DGTDLY**

Total number of digitone calls with a 3 s dial tone delay (DGTDLY)

The Digitone call delay (DGTDLY) counts calls that have Digitone signaling. The DGTDLY counts calls that have dial tone delays longer than 3 s during a given period of time.

OM group DTSRPM (continued)

For line concentrating modules and remote concentrating terminals, registers increase every 5 or 15 min. The time between increments depends on if the office has Engineering and Administrative Data Acquisition System/Network Management (EADAS/NM). For LMs and RLMs, this register increases every 4 s.

Register DGTDLY release history

Register DGTDLY was introduced in BCS24.

BCS35

Calls abandoned after dial tone delay was added in BCS35.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register DGTTOT

Total number of calls made on Digitone lines (DGTTOT)

The total number of calls made on Digitone lines (DGTTOT) counts calls. Register DGTTOT counts calls made on lines with Digitone signaling during a given period of time.

For line concentrating modules and remote concentrating modules, registers increase every 5 or 15 min. The time between increments depends on if the office has Engineering and Administrative Data Acquisition System/Network Management (EADAS/NM). For LMs and RLMs, this register increases every 4 s.

Register DGTTOT release history

Register DGTTOT was introduced in BCS24.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

OM group DTSRPM (continued)

Extension registers

There are no extension registers.

Register DPLDLY

Total number of dial pulse calls that are delayed (DPLDLY)

The total number of dial pulse calls that are delayed (DPLDLY) counts calls. Register DPLDLY counts calls with dial tone delays of more than 3 s made over a given period of time. The calls are made on lines with dial pulse (DP) signaling.

For line concentrating modules and remote concentrating terminals, registers increase every 5 or 15 min. The time between increments depends on if the office has Engineering and Administrative Data Acquisition System/Network Management (EADAS/NM). For LMs and RLMs, this register increases every 4 s.

Note: When P-side channel blocking occurs in an XPM, dial tone cannot be given, no matter how long the subscriber stays off hook. Registers DPLTOT and DPLDLY will include attempts and delays caused by the channel blockage to DT lines as well as DP lines.

Register DPLDLY release history

Register DPLDLY was introduced in BCS24.

BCS35

Calls abandoned after dial tone delay was included in BCS35

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register DPLTOT

Total number of dial pulse calls (DPLTOT)

Total number of dial pulse calls (DPLTOT) counts calls made on lines with DP signaling during a given period of time.

OM group DTSRPM (continued)

For line concentrating modules and remote concentrating terminals, registers increase every 5 or 15 min. The time between increments depends on if the office has Engineering and Administrative Data Acquisition System/Network Management (EADAS/NM). For LMs and RLMs, this register increases every 4 s.

Note: When P-side channel blocking occurs in an XPM, dial tone cannot be given, no matter how long the subscriber stays off hook. Registers DPLTOT and DPLDLY will include attempts and delays caused by the channel blockage to DT lines as well as DP lines.

Register DPLTOT release history

Register DPLTOT was introduced in BCS24.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register KSDLY

The total number of key-set calls with a 3 s dial tone delay (KSDLY)

The total number of key-set calls with a 3 s dial tone delay (KSDLY) counts calls. The KSDLY counts calls that have a dial tone delay of longer than 3 s during a given period of time. The calls are made on lines with key-set signaling.

For line concentrating modules and remote concentrating terminals, registers increase every 5 or 15 min. The time between increments depends on if the office has Engineering and Administrative Data Acquisition System/Network Management (EADAS/NM). For LMs and RLMs, this register increases every 4 s.

Register KSDLY release history

Register KSDLY was introduced in BCS24.

BCS35

Calls abandoned after dial tone delay was included in BCS35.

OM group DTSRPM (end)

BCS34

The system activates register KSDLY to count dial tone speed recording for Meridian business sets (MBS). The MBSs attach to remote carrier DMS-1 urban (RCU).

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register KSTOT

The total number of calls from key-set lines (KSTOT)

The total number of calls from register KSTOT counts calls made on lines with key-set signaling during a certain period of time.

For line concentrating modules and remote concentrating terminals, registers increase every 5 or 15 min. The time between increments depends on if the office has Engineering and Administrative Data Acquisition System/Network Management (EADAS/NM). For LMs and RLMs, this register increases every 4 s.

Register KSTOT release history

Register KSTOT was introduced in BCS24.

BCS34

The system activates the KSDLY to count dial tone speed recording for Meridian business sets (MBS). The MBSs attach to remote carrier DMS-1 urban (RCU).

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

OM group DUAQ

OM description

Dial-up autoquote

DUAQ counts activities of the dial-up autoquote feature.

When a hotel-originated call ends and the receiving device is identified as dial-up autoquote (DUAQ), the billing record is placed in a DUAQ queue. Once the collection threshold of records held is reached or the holding time for each hotel queue expires, a route to the DUAQ device is determined based on the device number and the device directory number (DEVND).

A digital modem is connected to an outgoing trunk on the route. The DEVND is sent on the route to obtain a network connection with the DUAQ device and an ANSWER message is received in reply. ANSWER is followed by a CARRIER message and an acknowledge (ACK) message from the DUAQ device. The billing records are transmitted to the hotel. When the last record is transmitted, the network path is released. Whenever billing records are ready for transmission, the network path is reestablished.

Release history

OM group DUAQ was introduced prior to BCS20.

Registers

OM group DUAQ registers display on the MAP terminal as follows:

| | | | |
|----------|----------|----------|----------|
| DAQATT | DAQNODM | DAQNOTRK | DAQNOANS |
| DAQNOCAR | DAQNOACK | DAQTXERR | DAQSUCC |

Group structure

OM group DUAQ provides one tuple for each office.

Key field:

None

Info field:

None

Associated OM groups

DUAQMOD provides counts for DUAQ modems.

OM group DUAQ (continued)

Associated functional groups

The TOPS functional group is associated with OM group DUAQ.

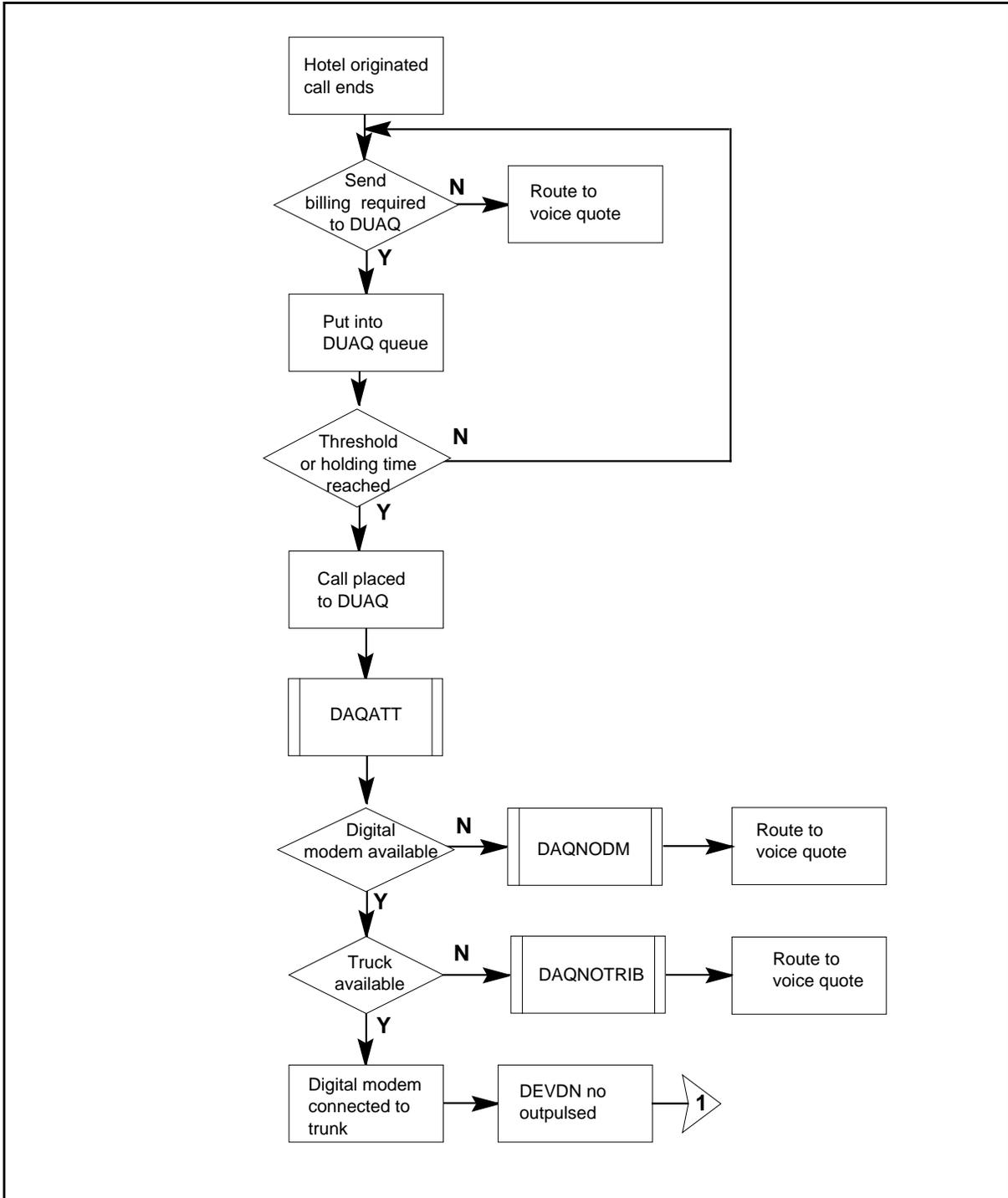
Associated functionality codes

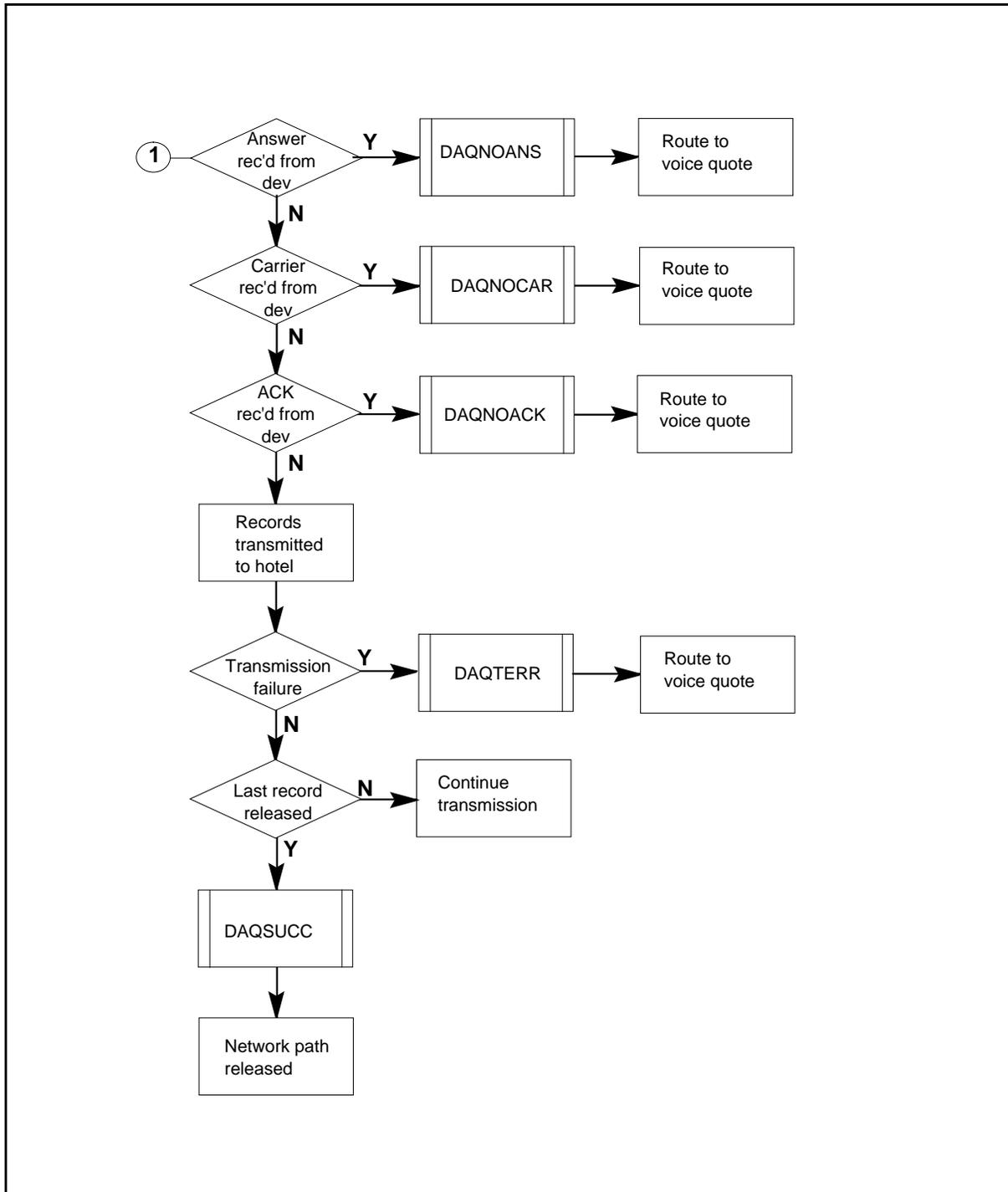
The functionality codes associated with OM group DUAQ are shown in the following table.

| Functionality | Code |
|------------------------|-------------|
| TOPS Dial-up Autoquote | NTX140AA |

OM group DUAQ (continued)

OM group DUAQ registers



OM group DUAQ (continued)**OM group DUAQ registers (continued)**

OM group DUAQ (continued)

Register DAQATT

Dial-up autoquote attempts

DAQATT counts call attempts at dial-up autoquote devices.

Register DAQATT release history

DAQATT was introduced prior to BCS20.

Associated registers

None

Associated logs

None

Extension registers

None

Register DAQNOACK

Dial-up autoquote no acknowledgement

DAQNOACK is incremented when the dial-up autoquote device does not respond with acknowledgement. After a maximum number of attempts, specified by DUAQ_MAX_RETRY, the recording units are routed to a hotel billing information center (HOBIC) operator, who verbally informs the hotel of the billing records.

Register DAQNOACK release history

DAQNOACK was introduced prior to BCS20.

Associated registers

None

Associated logs

None

Extension registers

None

Register DAQNOANS

Dial-up autoquote no answer

DAQNOANS is incremented when the dial-up autoquote devices do not answer. After a maximum number of attempts, specified by

OM group DUAQ (continued)

DUAQ_MAX_RETRY, the recording units are routed to a HOBIC operator, who verbally informs the hotel of the billing record.

Register DAQNOANS release history

DAQNOANS was introduced prior to BCS20.

Associated registers

None

Associated logs

None

Extension registers

None

Register DAQNOCAR

Dial-up autoquote no carrier

DAQNOCAR is incremented when a carrier is not received from DUAQ devices. After a maximum number of attempts, specified by DUAQ_MAX_RETRY, the recording units are routed to a HOBIC operator, who verbally informs the hotel of the billing record.

Register DAQNOCAR release history

DAQNOCAR was introduced prior to BCS20.

Associated registers

None

Associated logs

None

Extension registers

None

Register DAQNODM

Dial-up autoquote no digital modem

DAQNODM is incremented when a digital modem is unavailable for dial-up autoquote device calls. When this register is incremented, the recording units are routed to a HOBIC operator, who verbally informs the hotel of the billing record.

OM group DUAQ (continued)

Register DAQNODM release history

DAQNODM was introduced prior to BCS20.

Associated registers

None

Associated logs

None

Extension registers

None

Register DAQNOTRK

Dial-up autoquote no trunk

DAQNOTRK is incremented when a trunk is unavailable for dial-up autoquote calls. When this register is incremented, the recording units are routed to a HOBIC operator, who verbally informs the hotel of the billing record.

Register DAQNOTRK release history

DAQNOTRK was introduced in BCS20.

Associated registers

None

Associated logs

None

Extension registers

None

Register DAQSUCC

Dial-up autoquote successful

DAQSUCC counts dial-up autoquote calls that were completed successfully.

Register DAQSUCC release history

DAQSUCC was introduced prior to BCS20.

Associated registers

None

OM group DUAQ (end)

Associated logs

None

Extension registers

None

Register DAQTXERR

Dial-up autoquote transmission error

DAQTXERR is incremented when failure occurs during transmission of records to dial-up autoquote devices. After a maximum number of attempts, specified by DUAQ_MAX_RETRY, the recording units are routed to a HOBIC operator, who verbally informs the hotel of the billing record.

Register DAQTXERR release history

DAQTXERR was introduced prior to BCS20.

Associated registers

None

Associated logs

None

Extension registers

None

OM group DUAQMOD

OM description

Dial-up autoquote modem

DUAQMOD counts dial-up autoquote (DUAQ) modem activities.

Modems that are available for DUAQ application are placed in availability queues. Modems that are unavailable for DUAQ application may be manual busy, system busy, or trunk busy. When a request for a DUAQ modem is received and a suitable modem is available, the request is satisfied immediately. If no free modem is available, a message is sent to the network.

Release history

OM group DUAQMOD was introduced prior to BCS20.

Registers

OM group DUAQMOD registers display on the MAP terminal as follows:

| | | | |
|---------|----------|---------|---------|
| DUAQREQ | DUAQFAIL | DUAQMBU | DUAQSBU |
| DUAQTRU | | | |

Group structure

OM group DUAQMOD provides one tuple per dial-up autoquote modem baud rate.

Key field:

BD300: DUAQ modems at 300 baud rate. BD1200: DUAQ modems at 1200 baud rate in table DQMODEM.

Info field:

Number of modems of each type that are available

Associated OM groups

DUAQ counts activities for the dial-up autoquote feature.

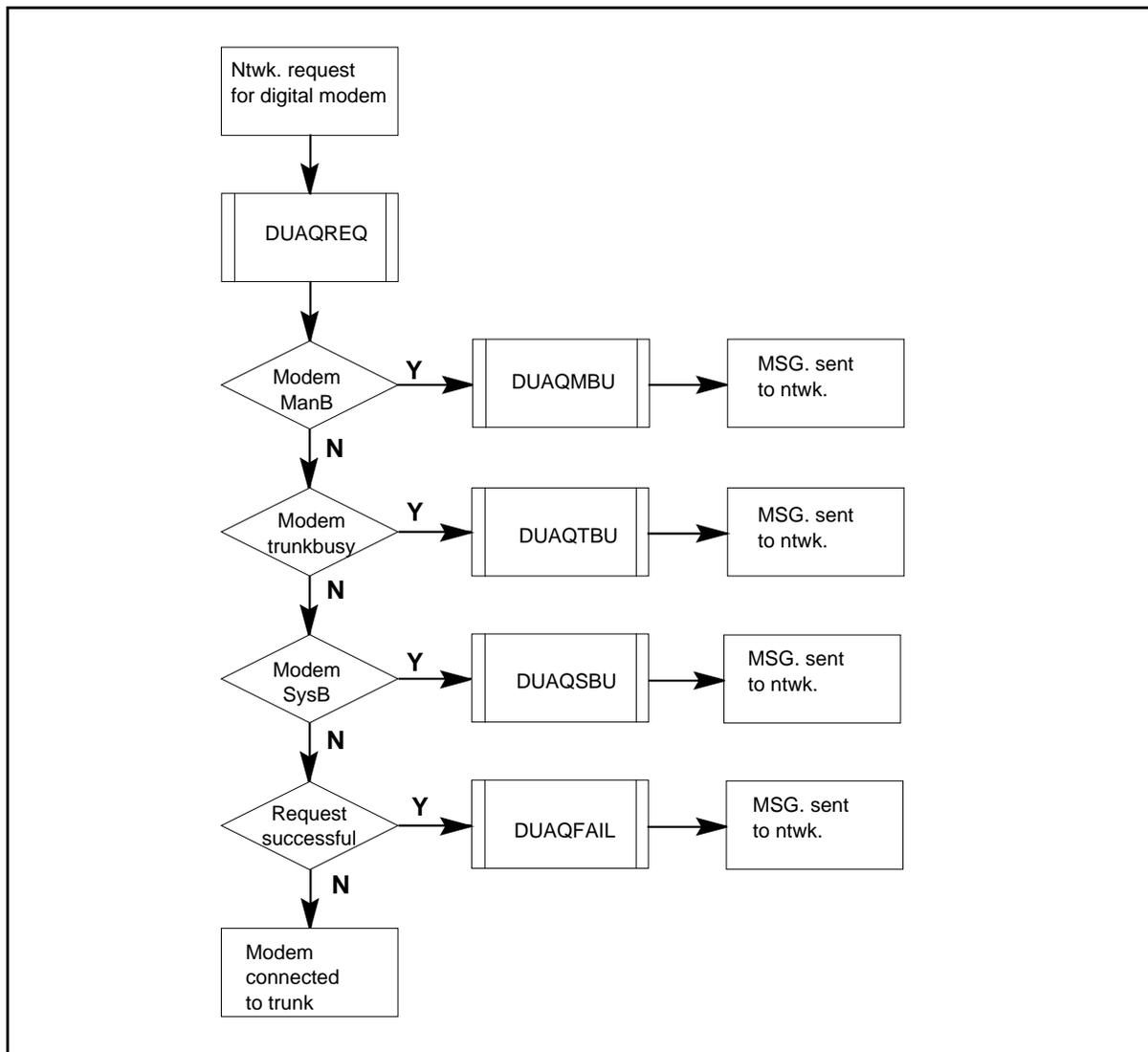
Associated functional groups

The TOPS functional group is associated with OM group DUAQMOD.

OM group DUAQMOD (continued)**Associated functionality codes**

The functionality codes associated with OM group DUAQMOD are shown in the following table:

| Functionality | Code |
|------------------------|----------|
| TOPS Dial Up Autoquote | NTX140AA |

OM group DUAQMOD registers

OM group DUAQMOD (continued)

Register DUAQFAIL

Dial-up autoquote fail

DUAQFAIL counts failed dial-up autoquote modem requests for an available modem, the calling procedure identification (cp_id) of the incoming trunk, or a link to the call process. The failed request is reported to the calling procedure. No further action is taken.

Register DUAQFAIL release history

DUAQFAIL was introduced prior to BCS20.

Associated registers

None

Associated logs

None

Extension registers

None

Register DUAQMBU

Dial-up autoquote manual busy.

DUAQMBU counts dial-up autoquote modems that are manual busy. Manual busy states are manual busy and network management busy.

Register DUAQMBU release history

DUAQMBU was introduced prior to BCS20.

Associated registers

None

Associated logs

None

Extension registers

None

Register DUAQREQ

Dial-up autoquote request

DUAQREQ counts requests for dial-up autoquote modems, regardless of the request outcome.

OM group DUAQMOD (continued)

Register DUAQREQ release history

DUAQREQ was introduced prior to BCS20.

Associated registers

None

Associated logs

None

Extension registers

None

Register DUAQSBU

Dial-up autoquote system-busy

DUAQSBU is a usage register. The scan rate is slow: 100 seconds. DUAQSBU records dial-up autoquote modems that are system busy. System busy states are system busy, remote busy, carrier fail, and deloaded.

Register DUAQSBU release history

DUAQSBU was introduced prior to BCS20.

Associated registers

None

Associated logs

None

Extension registers

None

Register DUAQTRU

Dial-up autoquote trunk-busy

DUAQTRU is a usage register. The scan rate is slow: 100 seconds. DUAQTRU records whether dial-up autoquote modems are trunk busy. Trunk busy states are call processing busy, call processing deload, initialize, and lockout.

Register DUAQTRU release history

DUAQTRU was introduced prior to BCS20.

OM group DUAQMOD (end)

Associated registers

None

Associated logs

None

Extension registers

None

OM group DUTLGEN

OM description

DMS universal transport layer (DUTLGEN)

The OM group DUTLGEN measures activity within the DMS universal transport layer in an office, including:

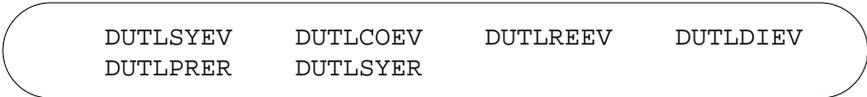
- system events
- connect events
- refuse events
- disconnect events
- protocol errors
- system errors

Release history

The OM group DUTLGEN was introduced in BCS27.

Registers

The OM group DUTLGEN registers appears on the MAP terminal as follows:



DUTLSYEV DUTLCOEV DUTLREEV DUTLDIEV
DUTLPRER DUTLSYER

Group structure

The OM group DUTLGEN provides one tuple per office.

Key field:

There is no Key field.

Info field:

There is no Info field.

Associated OM groups

The OM group DAISGEN - similar information for data access/information services

Associated functional groups

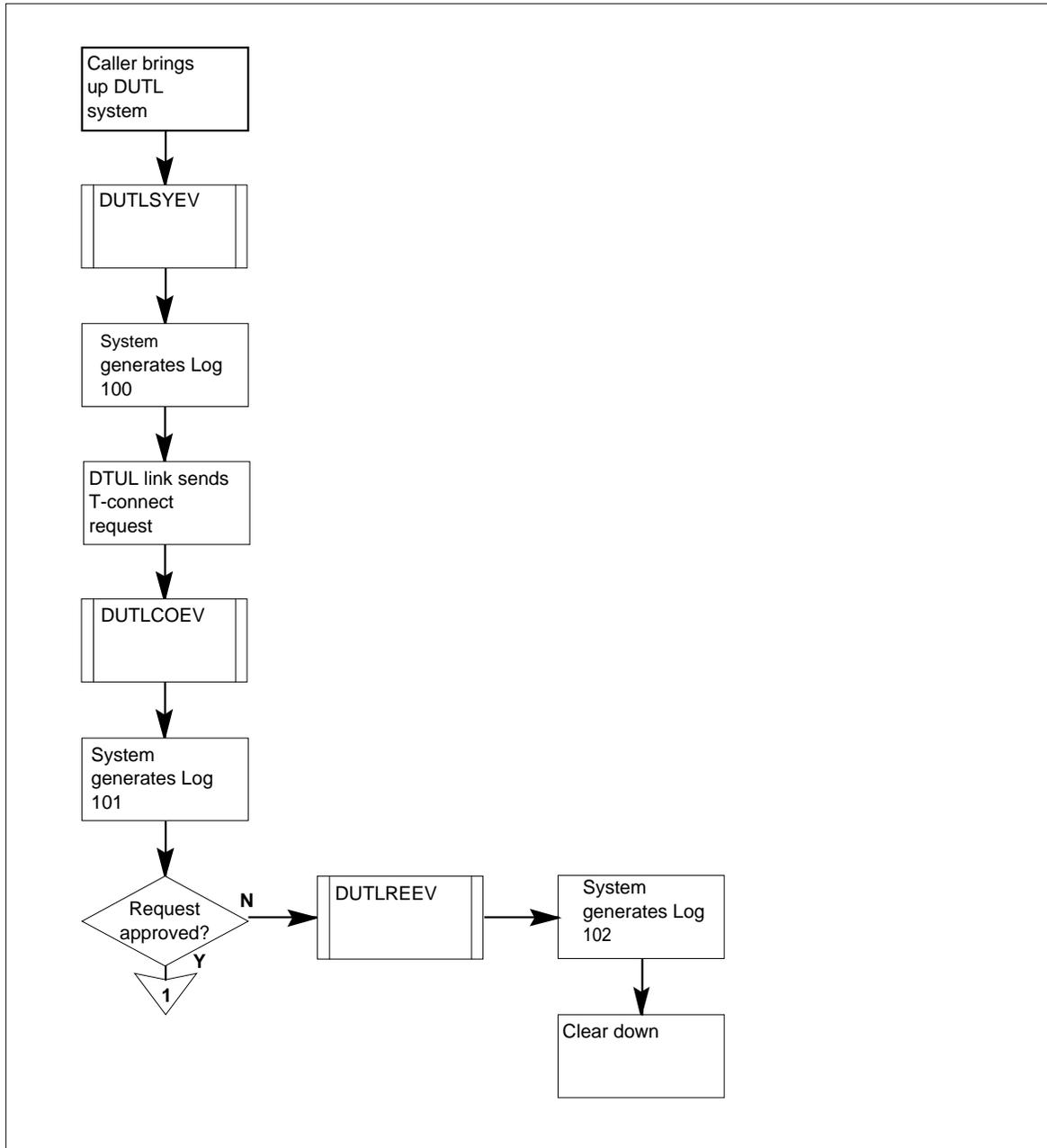
The functional group Enhanced Input Output Controller associates with the OM group DUTLGEN.

OM group DUTLGEN (continued)

Associated functionality codes

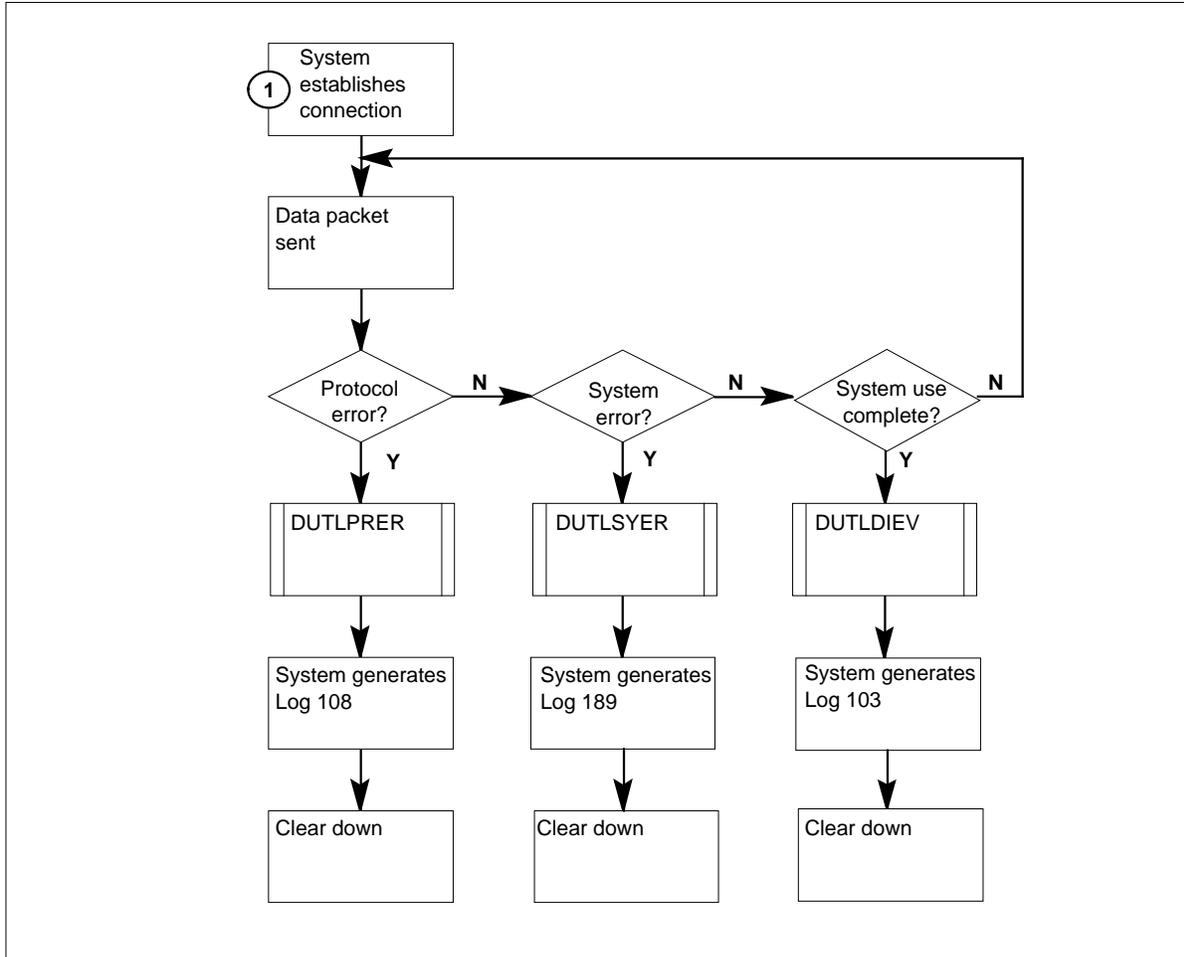
The associated functionality codes for the OM group DUTLGEN appear in the following table.

| Functionality | Code |
|---------------------------|-------------|
| CNS-Data Access Interface | NTXG13AA |

OM group DUTLGEN (continued)**OM group DUTLGEN registers**

OM group DUTLGEN (continued)

OM group DUTLGEN registers (continued)



Register DUTLCOEV

DMS universal transport layer connect events (DUTLCOEV)

Register DUTLCOEV counts the number of connect events that occur in the DMS universal transport layer. An example of a connect event is a T-connect request.

Register DUTLCOEV release history

Register DUTLCOEV was introduced in BCS27.

Associated registers

There are no associated registers.

OM group DUTLGEN (continued)

Associated logs

The system generates the DUTL101 when a connect event occurs. The log report includes date, time, and explanatory text.

Register DUTLDIEV

DMS universal transport layer disconnect events (DUTLDIEV)

Register DUTLDIEV counts the number of disconnect events that occur in the DMS universal transport layer. An example of a disconnect event is the close of a network connection.

Register DUTLDIEV release history

Register DUTLDIEV was introduced in BCS27.

Associated registers

There are no associated registers.

Associated logs

The system generates the DUTL103 when a disconnect event occurs. The log report includes date, time, and explanatory text.

Register DUTLPRER

DMS universal transport layer protocol errors (DUTLPRER)

Register DUTLPRER counts the number of protocol errors that occur in the DMS universal transport layer.

Register DUTLPRER release history

Register DUTLPRER was introduced in BCS27.

Associated registers

There are no associated registers.

Associated logs

The system generates the DUTL198 when a protocol error occurs. The log report includes date, time, and explanatory text.

Register DUTLREEV

DMS universal transport layer refuse events (DUTLREEV)

Register DUTLREEV counts the number of refuse events that occur in the DMS universal transport layer. A refuse event occurs when a session request for connection receives a disconnect message.

OM group DUTLGEN (end)

Register DUTLREEV release history

Register DUTLREEV was introduced in BCS27.

Associated registers

There are no associated registers.

Associated logs

The system generates the DUTL102 when a refuse event occurs. The log report includes date, time, and explanatory text.

Register DUTLSYER

DMS universal transport layer system errors (DUTLSYER)

Register DUTLSYER counts the number of system errors that occur in the DMS universal transport layer.

Register DUTLSYER release history

Register DUTLSYER was introduced in BCS27

Associated registers

There are no associated registers.

Associated logs

The system generates the DUTL199 when a system error occurs. The log report includes date, time, and explanatory text.

Register DUTLSYEV

DMS universal transport layer system events (DUTLSYEV)

Register DUTLSYEV counts the number of system events that occur in the DMS universal transport layer. An example of a system event is bringing the network up.

Register DUTLSYEV release history

Register DUTLSYEV was introduced in BCS27.

Associated registers

There are no associated registers.

Associated logs

The system generates the DUTL100 when a system event occurs. The log report includes date, time, and explanatory text.

OM group EACARR

OM description

Equal access carrier measurements (EACARR)

The EACARR provides information on equal access measurements for each carrier that connects to the access tandem (AT). The EACARR makes measurements for each InterLATA carrier (IC) or international carrier (INC).

Release history

OM group EACARR was introduced before BCS20.

BCS24

Registers EADOMES and EAINTL were modified to include Feature Group C (FGC) carriers in BCS24. Registers EADOMPIC, EADOMXXX, EAINTPIC, and EAINTPIC were introduced in BCS24.

Registers

OM group EACARR registers appear on the MAP terminal as follows:

| | | | |
|----------|----------|----------|----------|
| EAWNKFL | EADOMES | EAINTL | EAINTRM |
| EAACKFL | EADOMPIC | EADOMXXX | EAINTPIC |
| EAINTPIC | | | |

Group structure

OM group EACARR provides one tuple for each carrier.

Key field:

IC_INC_CARRIER_NAME

Info field:

There is no info field

The CARRNAME in table OCCINFO defines the carrier names.

Associated OM groups

OM group EATSMS associates with OM group EACARR.

The TRK group OM contains operational measurements on the trunks between the end office and the AT.

Associated functional groups

The Access Tandem functional group associates with OM group EACARR.

OM group EACARR (continued)

Associated functionality codes

The functionality codes associated with OM group EACARR appear in the following table.

| Functionality | Code |
|-------------------------|-------------|
| Equal Access End Office | NTX186AA |
| Access Tandem Switch | NTX386AA |

OM group EACARR (continued)

The following office parameters in table OFCSTD define timeout periods.

- EA_REC_MAX_WK_TIME
- EA_REC_SUB_PRE_WK_TIME
- EA_REC_1ST_PRE_WK_TIME

Register EAACKFL release history

Register EAACKFL was introduced before BCS20.

BCS27

Software changed to contain call failures or call abandons in ISUP access tandem FGD signaling.

Associated registers

One of EADOMES, EAINTL or EAINTRM increases when EAACKFL increases.

Register EAACKFL does not count calls that increase in EAWNKFL.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register EADOMES-U.S. only

Equal access domestic calls (EADOMES)

Register EADOMES counts incoming domestic equal access and LATA equal access system (LEAS) IC/INC calls. These carriers are both Primary InterLATA (PIC) and non-PIC carriers. The EADOMES counts incoming calls to the access tandem for a specified carrier. When the system attempts to complete a call, the register increases even if the call does not complete. This register also counts domestic calls that originate from the equal access end office (EAEO) to that carrier.

Register EADOMES release history

Register EADOMES was introduced before BCS20.

BCS24

Modified to include Feature Group C (FGC) carriers in BCS24.

OM group EACARR (continued)

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register EADOMPIC

Equal access domestic PIC calls (EADOMPIC)

Register EADOMPIC counts originating equal access and LATA equal access system (LEAS) domestic PIC calls destined for a specified carrier.

Register EADOMPIC release history

Register EADOMPIC was introduced in BCS24.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register EADOMXXX

Equal access domestic non-PIC calls (EADOMXXX)

Register EADOMXXX counts originating equal access and LEAS domestic non-PIC calls destined for a specified carrier.

Register EADOMXXX release history

Register EADOMXXX was introduced in BCS24.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

OM group EACARR (continued)

Extension registers

There are no extension registers.

Register EAINTL-U.S. only

Equal access international calls (EAINTL)

Register EAINTL counts incoming international equal access and LEAS, both PIC and non-PIC calls. The EAINTL counts the calls to the access tandem that are for a specified carrier. When the system attempts to complete a call, the register increases even if the call does not complete.

This register increases for all international calls from the equal access end office (EAEO) to a specified carrier.

Register EAINTL release history

Register EAINTL was introduced before BCS20.

BCS24

Modified to contain Feature Group C (FGC) carriers in BCS24.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register EAINTRM

Equal access incoming interim calls (EAINTRM)

Register EAINTRM counts incoming interim (950-YXXX) calls to the access tandem that are for a specified carrier. Register EAINTRM also counts 950-YXXX calls that originate from the EAEO to the same carrier. When the system attempts to complete a call, the register increases even if the call cannot complete.

Register EAINTRM release history

Register EAINTRM was introduced before BCS20.

Associated registers

There are no associated registers.

OM group EACARR (continued)

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register EAINTPIC

Equal access international PIC calls (EAINTPIC)

Register EAINTPIC counts originating equal access and LEAS international PIC calls destined for a specified carrier.

Register EAINTPIC release history

Register EAINTPIC was introduced in BCS24.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register EAINXXX

Equal access international non-PIC calls (EAINXXX)

Register EAINXXX counts originating equal access and LEAS international non-PIC calls destined for a specified carrier.

Register EAINXXX release history

Register EAINXXX was introduced in BCS24.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers

OM group EACARR (end)

Register EAWNKFL-U.S. only

Equal access wink failures (EAWNKFL)

Register EAWNKFL counts timeouts that occur before the first start pulsing wink from the InterLATA carrier (IC). Register EAWNKFL counts timeouts on domestic and international calls.

The following office parameters in table OFCSTD define timeout periods:

- EA_REC_MAX_WK_TIME
- EA_REC_SUB_PRE_WK_TIME
- EA_REC_1ST_PRE_WK_TIME

Register EAWNKFL release history

Register EAWNKFL was introduced before BCS20.

BCS27

Software changes to contain call failures or call abandons in ISUP access tandem FGD signaling.

Associated registers

One of registers EADOMES, EAINTL, or EAINTRM increases when EAWNKFL increases.

Register EAWNKFL does not count calls that cause EAACKFL to increase.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

OM group EASHRTRK-U.S. only

OM description

Equal access shared trunk group traffic measurements (EASHTRK)

The OM group EASHTRK counts outgoing calls and overflows on trunk groups from end offices. The EASHTRK counts access tandems that carry calls for multiple interexchange carriers (IEC).

An equal access end office and an access tandem use shared trunk groups. These trunk groups are shared because they carry calls to and from more than one interexchange carrier.

Release history

The OM group EASHRTRK-U.S. was introduced before BCS20.

Registers

The OM group EASHRTRK-U.S. registers appear on the MAP terminal as follows:

```
STGOPEG      STGUSG      STGOVFL
```

Group structure

The OM group EASHRTRK-U.S. Each Interexchange carrier receives one tuple.

Key field:

IC_INC_CARRIER_NAME. This field contains the name of the other common carrier that receives its name in the OCCNAME field of table OCCNAME.

Info field:

There is no Info field.

Associated OM groups

TRK provides information on trunk traffic for each trunk group.

Associated functional groups

The functional group Access Tandem associates with OM group EASHRTRK-U.S.

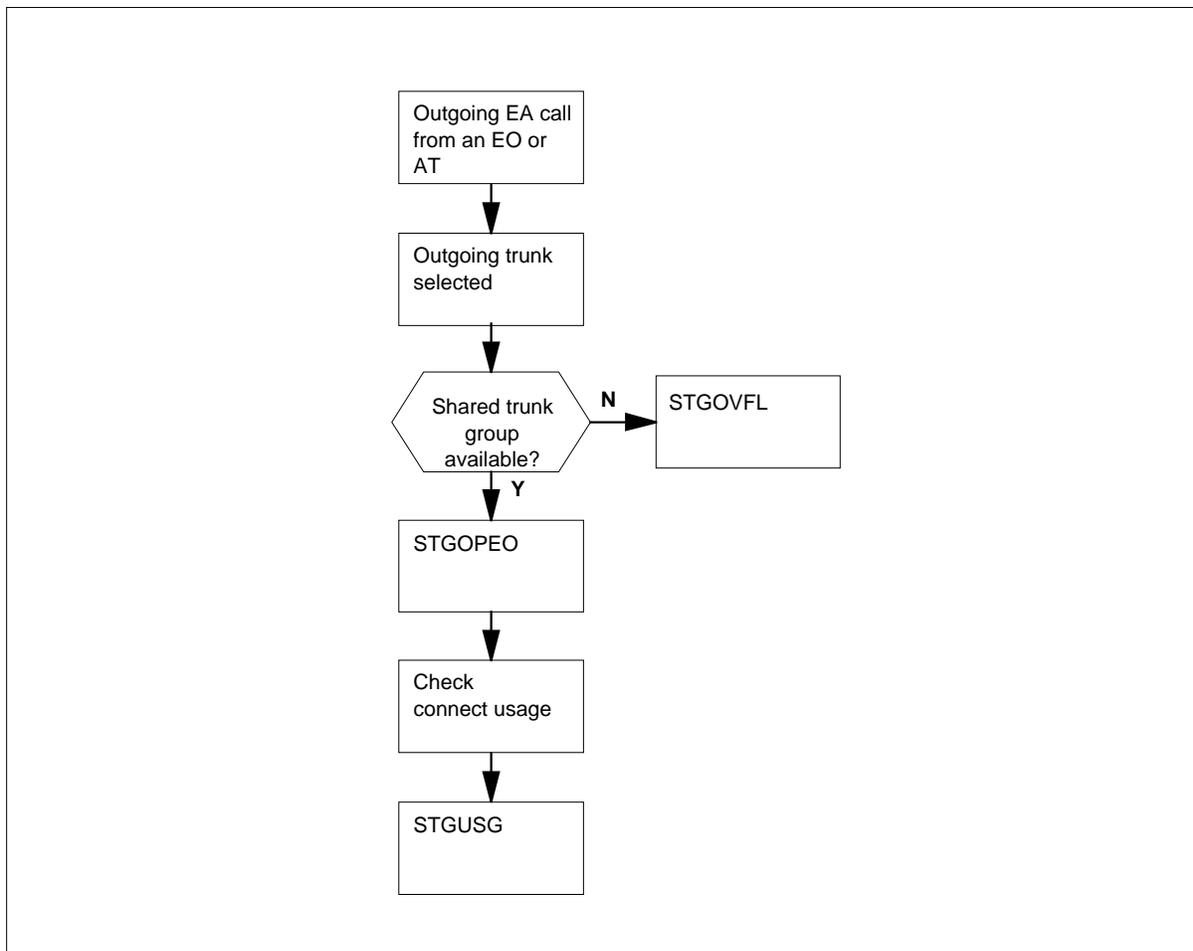
OM group EASHRTRK-U.S. only (continued)

Associated functionality codes

The associated functionality codes for the OM group EASHRTRK-U.S. appear in the following table.

| Functionality | Code |
|-----------------------------|----------|
| IA EADAS Network Management | NTX455AA |

OM group EASHRTRK-U.S. registers



Register STGOPEG

Shared trunk group outgoing count (STGOPEG)

OM group EASHRTRK-U.S. only (continued)

Register STGOPEG counts outgoing calls on a shared trunk group. The register increases after the system selects an available outgoing trunk, makes an internal network connection, and seizes the trunk.

Register STGOPEG release history

Register STGOPEG was introduced before BCS20.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Register STGOVFL

Shared trunk group call attempt overflows (STGOVFL)

Register STGOVFL counts call attempts that overflow the last shared trunk group in the routing chain.

This register increases when the system encounters the pseudo-CLLI STGOVFL in a route list. Enter the pseudo-CLLI STGOVFL in all route lists. The route lists must contain shared trunk groups from the equal access end office (EAEO) to the access tandem (AT). Enter the pseudo-CLLI STGOVFL at the end of the route list to represent the last shared trunk group route to the AT.

Register STGOVFL release history

Register STGOVFL was introduced before BCS20.

Associated registers

There are no associated registers.

Associated logs

The All Trunks Busy (ATB) subsystem generates the ATB100 when the following events occur:

- an attempt to seize a trunk to a numbering plan area (NPA) or central office (CO) blocks
- the call advances to another route

This report means that all trunks allocated to an NPA or CO are busy.

Register STGUSG

Shared trunk group connect usage (STGUSG)

OM group EASHRTRK-U.S. only (end)

Register STGUSG is a use register. The scan rate is 100 s. Register STGUSG records if the trunk groups connect an end office that has an access tandem.

Register STGUSG release history

Register STGUSG was introduced before BCS20.

Associated registers

There are no associated registers.

Associated logs

There are no associated registers.

OM group EATSMS

OM description

Equal access traffic separation/traffic analysis (EATSMS)

This group provides information about call attempts, call set-up time, and call connection time. The EATSMS provides information at carrier separation number and outgoing trunk separation number intersections. The EATSMS counts calls that the system cannot deliver to that intersection because an outgoing trunk is not available.

The EATSMS group separates traffic from one point to the next point. The EATSMS can separate three components of each call:

- point-to-point attempt increase
- set-up time
- point-to-point connect time

The EATSMS group separates carrier and trunk group traffic into the following call types:

- intraLATA-interstate
- interLATA-intrastate
- interLATA-interstate call types

The other common carrier separation number (OCCSEPNO) in table OCCINFO identifies a carrier for traffic separation. The range of values for OCCSEPNO is 0 to 127.

Field TRAFSNO indicates the outgoing trunk group in tables TRKGRP, ANNS, TONES, or STN.

Table OCCTSINT indicates four fields for each instance of carrier and trunk group. The fields are:

- LDSRA for intraLATA-intrastate calls
- LDIRA for intraLATA-interstate calls
- LDSER for interLATA-intrastate calls

Release history

The OM group EATSMS was introduced before BCS20.

Registers

The OM group EATSMS registers appear on the MAP terminal as follows:

OM group EATSMS (continued)

| | | | |
|----------|----------|----------|---------|
| OCCTSPEG | OCCTSPG2 | OCCTSOVF | OCCTSSU |
| OCCTSSU2 | OCCTSCU | OCCTSCU2 | |

Group structure

The OM group EATSMS registers provide one tuple for each key, OCCTS_REG_NOS.

Key field:

OCCTS_REG_NOS is an integer in the range 0 to 2047 as

assigned to the carrier and trunk group intersection in fields

LDSRA, LDIRA, LDSER, and LDIER in table OCCTSINT.

Info field:

Does not apply

The following office parameters apply:

- The NO_OCCTS_OM_REGISTERS in table OFCENG specifies the maximum number of OM registers allocated for EA traffic separation.
- The OCCT_DEFAULT_REG_LOG in table OFCVAR controls the production of the default register log report EATS100. The system generates this log when traffic is sent to the default register.
- The OCCTS_ENHANCED_FEATURE appears in table OFCENG. To activate the EA traffic separation option set this feature to Y (yes). The size of the maximum matrix is 128 by 128 and the OM register allocation is 2048.

Associated OM groups

The TFCANA group provides information on call attempts, call set-up time, and call connect time at source-traffic-separation and destination-traffic-separation intersections.

Associated functional groups

The operating group Access Tandem associates with the OM group EATSMS.

OM group EATSMS (continued)

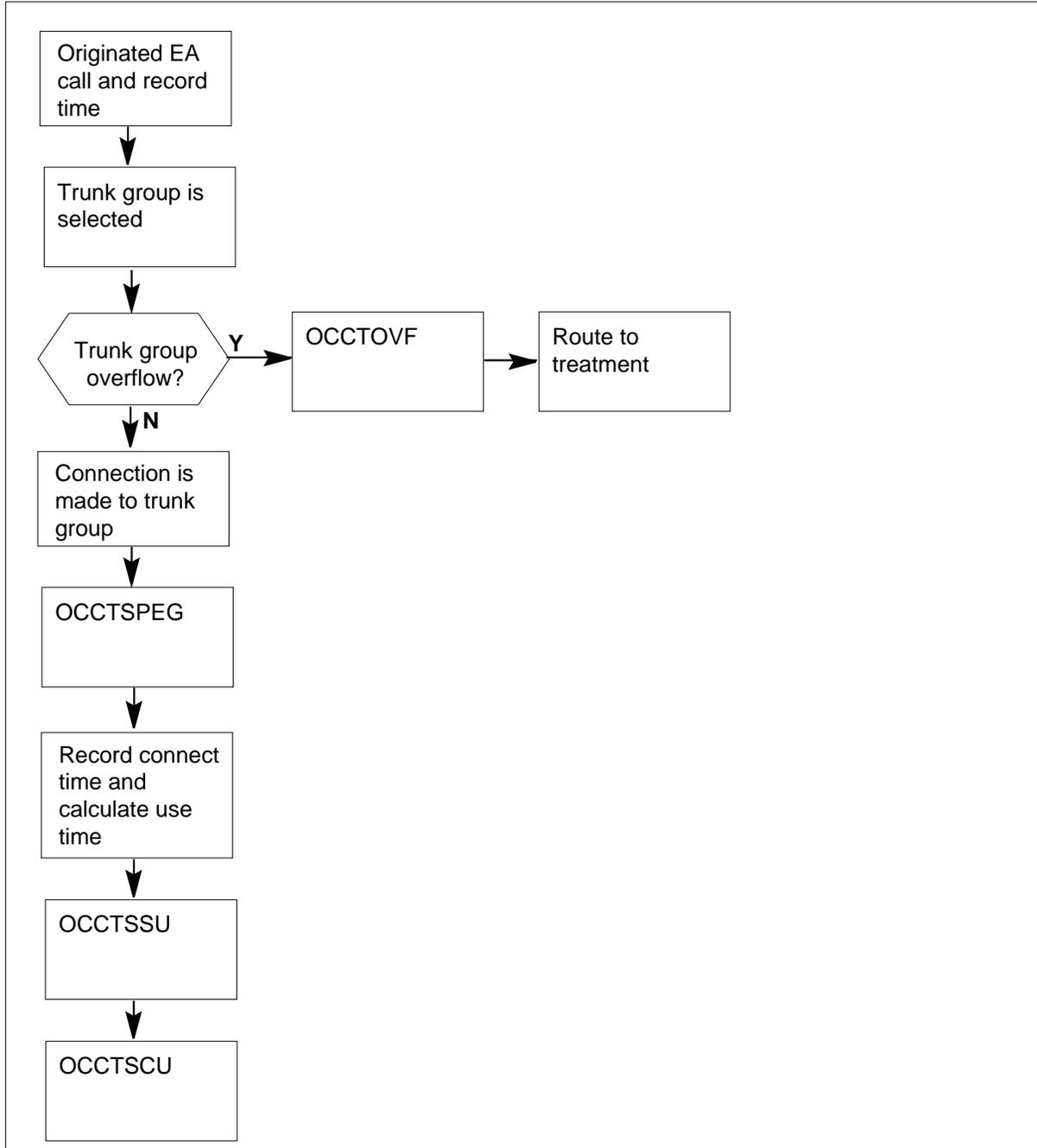
Associated functionality codes

The functionality codes associated with OM group EATSMS appear in the following table.

| Functionality | Code |
|-----------------------------------|-------------|
| Traffic Separation Increase Count | NTX085AA |
| Traffic Separation Use | NTX087AA |

OM group EATSMS (continued)

OM group EATSMS registers



Register OCCTSCU

OCC traffic separation connect usage

OM group EATSMS (continued)

This register is a use register. This register has a slow scan rate of 100 seconds. The OCCTSCU register records connections at carrier and trunk group intersections.

First the system collects set-up use at the intersection then the system can collect connect use. At the attempt point, the state of the call is set. On call connection the use scan begins to accumulate at the carrier and trunk group intersection.

There is no connect use for partial dial abandon calls. For overlap carrier selected calls, the system collects connect use for partial dial timeout calls. The system collects connect use at the carrier and treatment intersection when there is interdigit timeout.

Register OCCTSCU release history

OCCTSCU was introduced before BCS20.

Associated registers

Does not apply

Associated logs

Does not apply

Extension registers

OCCTSCU2

Register OCCTSOVF

OCC traffic separation overflow

The OCCTSOVF register counts overflow calls from a carrier and trunk group intersection.

Register OCCTSOVF release history

OCCTSOVF was introduced before BCS20.

Associated registers

Does not apply

Associated logs

Does not apply

Extension registers

Does not apply

OM group EATSMS (continued)

Register OCCTSPEG

OCC traffic separation peg count

The OCCTSPEG register counts network connections at each carrier and trunk group intersection.

The carrier and treatment intersection counts partial dial timeout. Use the generic separation number 1 for partial dial abandon calls. Partial dial abandon calls are only counted if the call contains associated overlap carrier call selection (OCS). Calls are also counted when the call has equal access, or the system seizes the trunk.

When the system cannot determine if the call is an equal access call, the system does not count the false state abandon

Register OCCTSPEG release history

OCCTSPEG was introduced prior to BCS20.

Associated registers

Does not have

Associated logs

Does not have

Extension registers

OCCTSPEG2

Register OCCTSSU

OCC traffic separation set-up usage

The OCCTSSU register is a record of the use set-up at each carrier and trunk group intersection. The set-up use is the number of seconds, between origination and connection of a call.

The Set-up count begins when the origination message arrives in the central control. For MF/DTMF trunks, this is the time of seizure. When the network connects to the first available destination terminal, the system calculates the time from origination to connection to a second. The system adds to the register at the carrier and trunk group intersection.

The system collects set-up use for partial dial timeout calls at the carrier and treatment intersection.

OM group EATSMS (end)

The system collects set-up use for false start abandon calls at the carrier by 7 intersection. The system collects set-up use for partial dial abandon calls at the carrier by 1 intersection.

For overlap carrier selected calls, the system collects set-up use at the carrier and trunk group intersection. The system collects this information as soon as enough digits are available to route the call. The system collects the information before all digits are collected. The set-up use is not collected at the carrier by 1 or carrier and treatment intersections even if the call is abandoned.

Register OCCTSSU release history

OCCTSSU was introduced prior to BCS20.

Associated registers

Does not apply

Associated logs

Does not apply

Extension registers

OCCTSSU2

OM group EBSMSGCT

OM description

Electronic business system message center (EBSMSGCT).

The OM group EBSMSGCT registers provide information about the use of an electronic business set (EBS) as a message center. The registers count the following:

- attempts to activate or deactivate a message that waits on a set
- attempts to query the message waiting status of a set
- failures of message waiting queries because of feature restrictions

The system routes calls to the EBS if calls are not answered at the original destination. The EBS uses a single key operation to activate or deactivate message waiting indications at user stations. An EBS that functions as a message center has two function pairs of key/liquid crystal display (LCD). One pair is for message waiting indication (MWIDC) and one pair is for message waiting query (MWQRY). The message center user can have a 500/2500 set or a business set that has message waiting capability.

The system routes an indirect call to the message center because the called DN had one of the following features activated:

- Call Forward Don't Answer (CFD)
- Call Forward Busy (CFB)
- Call Forward All Calls

When the message center operator answers an indirect call, the MWIDC LCD displays the message waiting indication at the called station. If the MWIDC LCD is on, the message center did not already activate the called station. If the MWIDC LCD flashes, the message center already activated the call center. If the MWIDC LCD winks, the called station is disabled or does not have message waiting indication. Press the MWIDC key to activate the message waiting indication at the called station. The key will activate the message waiting indication if the MWIDC LCD is on and the caller left a message. The MWIDC LCD of the operator turns off.

A caller places a direct call to retrieve messages. When the message center operator answers a direct call, the MWIDC LCD indicates if messages are queued for the calling party. If the MWIDC LCD is on, the message waiting indication at the calling station is not already activated. The MWIDC LCD flashes to indicate an already activated message waiting indication at the

OM group EBSMSGCT (continued)

calling station. The MWIDC LCD winks to indicate one of the following problems:

- the calling station is disabled or not equipped with message waiting
- the caller is not known
- an attendant has extended the calling party

Press the MWIDC key to deactivate the message waiting indication at the calling station when the MWIDC LCD flashes. The MWIDC LCD turns off. If the MWIDC LCD is on or winks, the message waiting indication at the calling station is disabled or not active. The operator must cancel the message waiting indication at the calling station if the station does not have a message waiting indicator. The operator presses the MWQRY key to cancel the message waiting indication. The MWIDC LCD turns off and the MWQRY LCD winks. The message center operator dials the directory number of the calling station and presses the MWQRY key. The MWQRY LCD turns off.

Release history

The OM group EBSMSGCT was introduced in BCS22.

Registers

The OM group EBSMSGCT registers appear on the MAP terminal as follows:

| | | |
|--------|--------|---------|
| IDCATT | QRYATT | QRYFAIL |
|--------|--------|---------|

Group structure

The OM group EBSMSGCT provides one tuple for each key.

Key field:

key to EBSMSGCT. Identifies a maximum of 4096 customer groups.

Info field:

customer name as defined in field CUSTNAME in table CUSTHEAD.

Associated OM groups

There are no associated OM groups.

Associated functional groups

The associated functional groups for OM group EBSMSGCT are as follows:

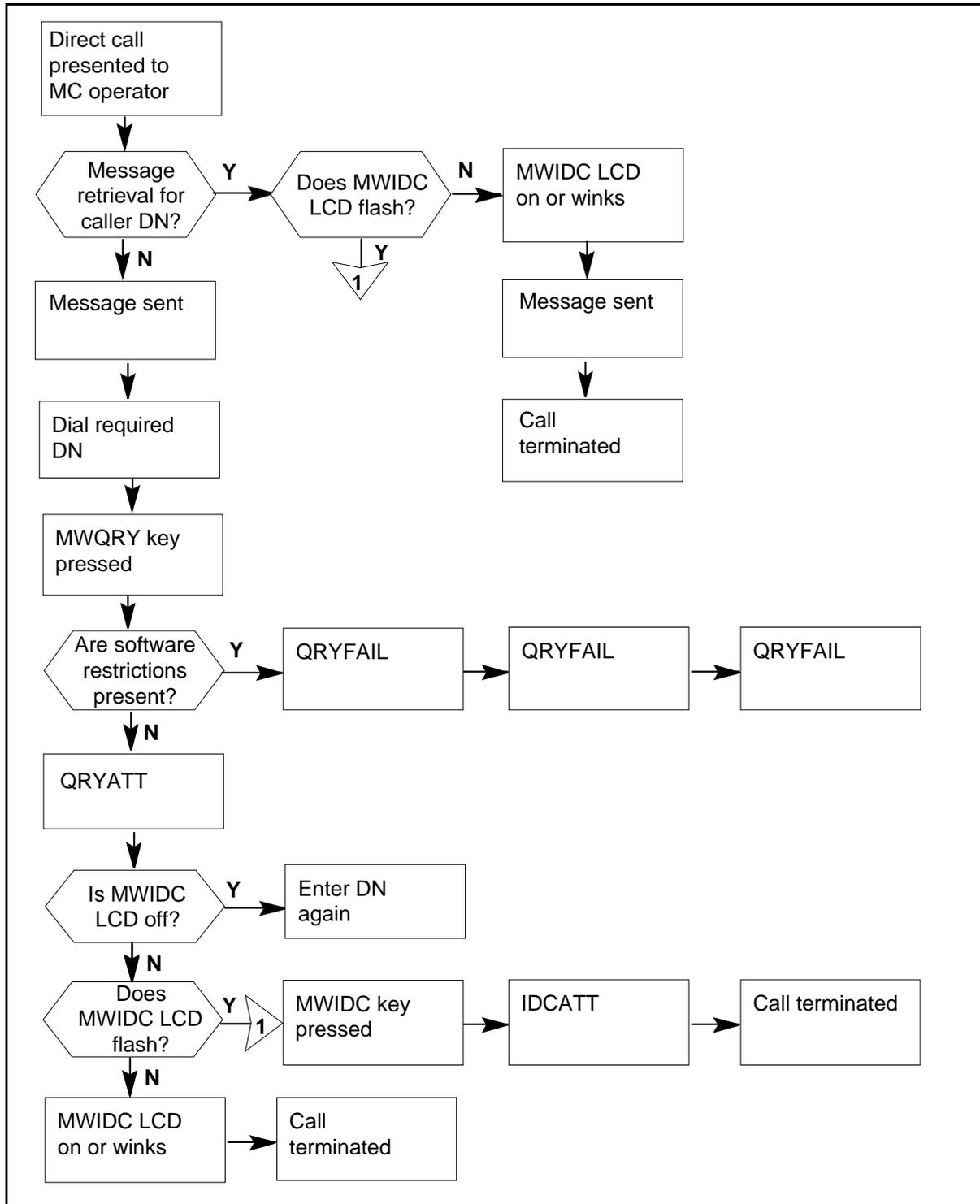
- EBS Electronic Business Set
- IBN Integrated Business System

OM group EBSMSGCT (continued)

Associated functionality codes

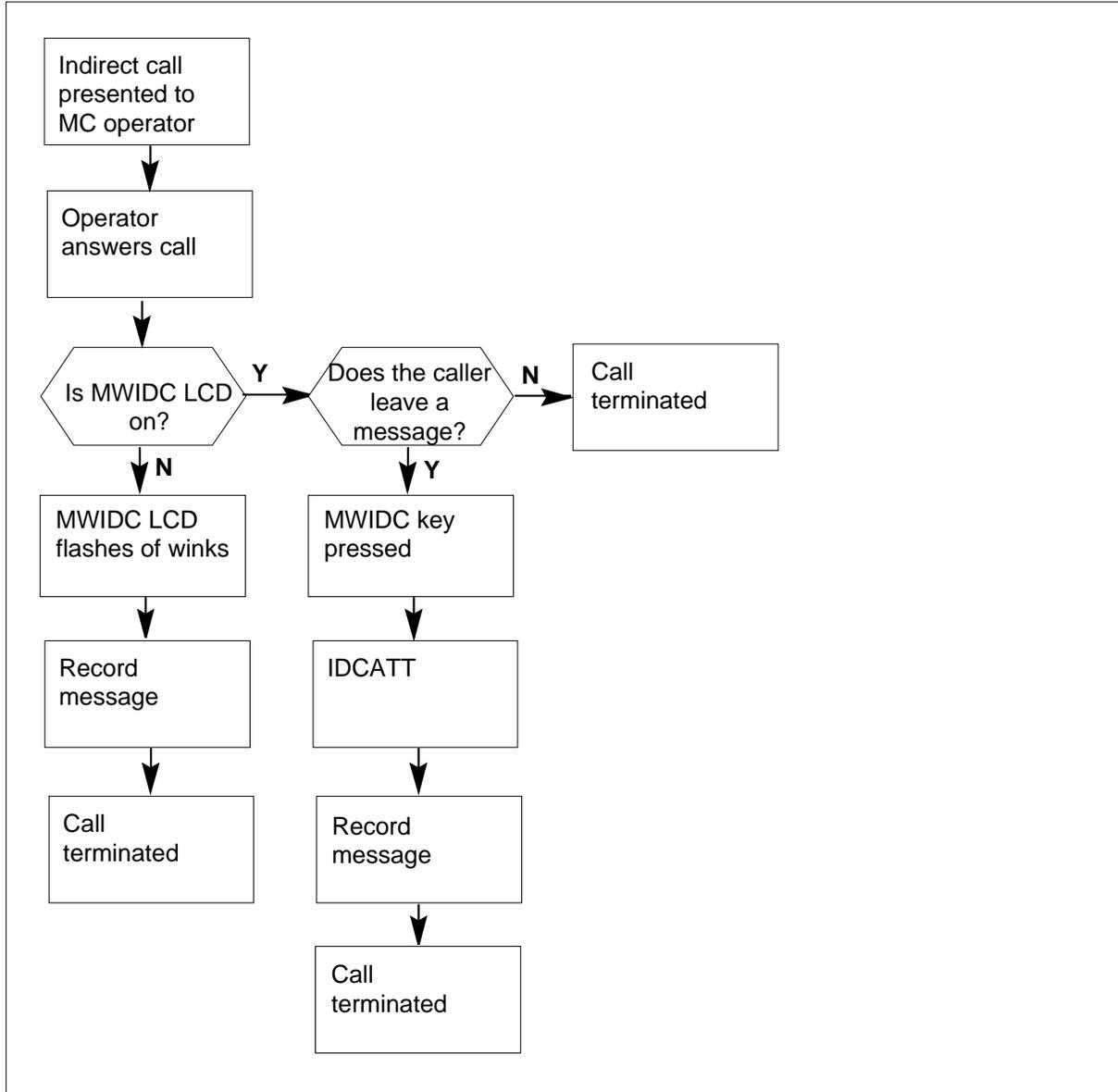
The associated functionality codes for OM group EBSMSGCT appear in the following table.

| Functionality | Code |
|-------------------------|-------------|
| EBS as a Message Center | NTX822AA |

OM group EBSMSGCT (continued)**OM group EBSMSGCT registers: direct call**

OM group EBSMSGCT (continued)

OM group EBSMSGCT registers: indirect call



Register IDCATT

Indication attempts (IDCATT).

Register IDCATT counts attempts to activate or deactivate message waiting on an electronic business set. Press the message waiting indication (MWIDC) key to activate or deactivate messages waiting on an electronic business set.

OM group EBSMSGCT (continued)

Register IDCATT release history

The IDCATT was introduced in BCS22.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register QRYATT

Query attempts (QRYATT).

Register QRYATT counts attempts to query the message waiting statue of an electronic business set. Press the message waiting query (MWQRY) key to query the message waiting state of an electronic business set.

Register QRYATT release history

The QRYATT was introduced in BCS22.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register QRYFAIL

Query failures (QRYFAIL).

Register QRYFAIL counts message waiting query sequences that are attempted on indirect calls.

Register QRYFAIL release history

The QRYFAIL was introduced in BCS22.

Associated registers

There are no associated registers.

OM group EBSMSGCT (end)

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

OM group EIN2

OM description

European Intelligent Network 2

The EIN2 OM group is an extension of the EIN and EIN1 OM groups. It contains the OM registers for the international IN Call Party Handling (CPH) and bearer capability functionalities.

The register naming convention used in OM group EIN2 allows the user to determine the direction of the operation that contained the error. The last two letters of the register name indicate this direction as follows:

- A register ending in “SC” indicates the operation was in the Service Switching Function (SSF) to Service Control Function (SCF) direction.
- A register ending in “CS” indicates the operation was in the SCF to the SSF direction.
- A register ending in “CR” indicates the operation was in the SCF to Specialized Resource Function (SRF) direction.

Release history

CSP18/SN05

59039615

New registers/OMs EINURCC and EINCFCC introduced in CSP18/SN05

SN04 (DMS)

59033609

New register EINRTRGA is introduced by feature 59033609.

59033629

New register EINAUTOC is introduced by feature 59033629.

MMP16

Five new registers (EINCPHCU, EINCPH4T, EINCPH5T, EINCPH6T, EINCPH7T) were made available for CPH monitoring purposes.

EUR008

Registers EINEDP2H and EINCGAPH were introduced in EUR008.

EUR006

OM group EIN2 was introduced in EUR006.

OM group EIN2 (continued)

Registers

The OM group EIN2 registers are displayed on the MAP terminal as follows:

| EIN2 | | | | |
|---|----------|----------|----------|----------|
| CLASS: ACTIVE | | | | |
| START:1997/11/12 11:30:00 TUE; STOP: 1997/11/12 11:59:31; | | | | |
| SLOWSAMPLES: 1 ; FASTSAMPLES: 6 ; | | | | |
| | EINUKLSC | EINUKCSC | EINUKLCS | EINUKCCS |
| | EINEDP8H | EINCTRBC | EINCPH9T | EINEDP2H |
| | EINCGAPH | EINACRPP | EINACRPS | EINRTRGA |
| 0 | 3 | 0 | 2 | 0 |
| | 1 | 0 | 5 | 4 |
| | 6 | 0 | 0 | |

Group structure

OM group EIN2

Key field:

0 (single key OM group)

Info field:

None

Associated OM groups

AIN, EIN and EIN1 OM groups are also used to record information about international IN calls.

Associated functional groups

The following functional group is associated with OM group EIN2:

- International IN SSP Rel 4.0

Associated functionality codes

The functionality codes associated with OM group EIN2 are shown in the following table.

| Functionality | Code |
|----------------------------------|----------|
| PBXA INAP DPNSS/DASS2 capability | PBXA0011 |
| PBXA INAP ETSI ISUP capability | INCA0005 |

OM group EIN2 (continued)

| Functionality | Code |
|-----------------------------------|-------------|
| DSSP CS2 Call Party Handling | DSSP0015 |
| CS1R EDP2 and Collect Information | DSSP0016 |
| CS1R Call Gapping | DSSP0017 |

Register EINUKLSC

Register Unknown LegID in an intelligent network application protocol (INAP) operation is sent from the SSF to the SCF.

This OM records the number of times an INAP operation is sent from the SSF to the SCF when the operation causes an error with the reason Unknown LegID. This occurs, for example, if the operation contains a legID parameter that is inappropriate for the current Call Segment Association (CSA) on the SSP.

In a stable two-party call with a controlling leg and a passive leg with a Leg ID of p1, an operation sent from the SSF with a legID of p2 causes an error flagged by the SCF.

Register EINUKLSC release history

Register EINUKLSC was introduced in EUR006.

Associated registers

None.

Associated logs

None.

Extension registers

None.

Register EINUKCSC

Register Unknown Call Segment ID error is returned for an INAP operation sent from the SSF to the SCF.

This OM records the number of times an INAP operation is sent from the SSF to the SCF when the operation causes an error with the reason Unknown Call Segment ID. This occurs, for example, if the operation contains a callSegmentID parameter which is inappropriate for the current CSA on the SSP.

OM group EIN2 (continued)

For example, in a stable two-party call having a single call segment with csID of 1, an operation sent from the SSF with a CallSegmentID parameter specifying a csID of 2 causes an error flagged by the SCF.

Register EINUKCSC release history

Register EINUKCSC was introduced in EUR006.

Associated registers

None

Associated logs

None

Extension registers

None

Register EINUKLCS

Register Unknown LegID error is returned for an operation sent from the SCF to the SSF.

This OM records the number of times an INAP operation is sent from the SCF to the SSF when the operation causes an error with the reason unknown LegID. This occurs, for example, if the operation contains a legID parameter that is inappropriate for the current CSA on the SSP.

For example, in a stable two-party call with a controlling leg and a passive leg with a Leg ID of p1, an operation sent from the SCF with a legID of p2 causes an error flagged by the SSF.

Register EINUKLCS release history

Register EINUKLCS was introduced in EUR006.

Associated registers

None

Associated logs

Log EIN305 is generated when this register is pegged.

Extension registers

None

OM group EIN2 (continued)

Register EINUKCCS

Register unknown call segment ID error returned for an INAP operation sent from the SCF to the SSF.

This OM records the number of times an INAP operation is sent from the SCF to the SSF when the operation causes an error with the reason Unknown Call Segment ID. This occurs, for example, if the operation contains a callSegmentID parameter which is inappropriate for the current CSA on the SSP.

For example, in a stable two-party call with a single call segment with csID of 1, an operation sent from the SCF with a callSegmentID parameter specifying a csID of 2 causes an error flagged by the SSF.

Register EINUKCCS release history

Register EINUKCCS was introduced in EUR006.

Associated registers

None

Associated logs

Log EIN305 is generated when this register is pegged.

Extension registers

None

Register EINEDP8H

Register EDP-8 (o_Mid_Call) was encountered on the call.

This OM records the number of times the o_Mid_Call event detection point (EDP-8) was encountered. EDP-8 detects the mid-call event of the calling party pressing the # key.

Register EINEDP8H release history

Register EINEDP8H was introduced in EUR006.

Associated registers

None

Associated logs

None

OM group EIN2 (continued)

Extension registers

None

Register EINCPH9T

Register “EIN ITU IN Call Party Handling EDP-9 hit as Transparent” records the number of times EDP-9 (o_Disconnect) is encountered when armed as Transparent during a call that is beyond the “Stable 2-party” state.

The CS-2 Call Party Handling functionality requires the EDP-9 (o_Disconnect) to be armed on all call legs for the duration of the call so the SCO can maintain the integrity of the CSA of a call instance.

If a calling party disconnects in the M-Party Setup, Call On Hold, or Stable M-Party CVS, and o_Disconnect is set to transparent, the ENCPC9T OM is pegged.

Enforcement of Event Detection Point (EDP) arming in CPH is optional using table SERVINFORM datafill. Entry NO_CPH_RULES within the INFO_INAP field is used to make the arming of failure EDPs optional. If datafilled, then the Called Party Handling (CPH) enforcement rules will NOT take effect (OFF). By default, this option will not be datafilled, meaning that the enforcement rules will be turned ON.

Register EINCPH9T release history

Register EINCPH9T was introduced in EUR006.

Associated registers

None

Associated logs

None

Extension registers

None

Register EINCTRBC

This OM records the number of times a ConnectToResource (CTR) INAP operation is sent from the SCF to the SSF for calls that have an InitialDP bearerCapability parameter specifying 64 kbits/s unrestricted data.

The CTR operation allows in-band interaction between a calling party and the integrated Specialized Resource Function (SRF) of the SSP. This is inappropriate for data calls, which is disconnected and sent to treatment.

OM group EIN2 (continued)

Register EINCTRBC release history

Register EINCTRBC was introduced in EUR006.

Associated registers

None.

Associated logs

Log EIN305 is generated when this register is pegged.

Extension registers

None.

Register EINEDP2H

Register World Trade IN EDP-2 counts the number of times EDP-2 (Collect_Info) is encountered.

Register EINEDP2H release history

Register EINEDP2H was introduced in EUR008.

Associated registers

None

Associated logs

Log EIN301 is generated when this register is pegged.

Extension registers

None

Register EINCGAPH

Register World Trade IN Call Gapping counts the number of times a call matched Call Gapping criteria on the DMS-100 SSP, and the InitialDP for the call was therefore blocked.

Register EINCTRBC release history

Register EINCGAPH was introduced in EUR008.

Associated registers

None

Associated logs

Log EIN602 is generated when this register is pegged.

OM group EIN2 (continued)

Extension registers

None

Register EINACRPP

Register EIN Apply Charging Report Pending records the number of times the ApplyCharging operation is received and successfully processed by the DMS-100 SSP, causing an ApplyChargingReport operation to be pending.

Note: Although the EINACRPP OM register is visible with the OMSHOW command, the ApplyCharging functionality is not implemented in EUR008.

Register EINACRPP release history

Register EINACRPP was introduced in EUR008.

Associated registers

EINACRPS

Associated logs

Log EIN301 is generated when this register is pegged.

Extension registers

None

Register EINACRPS

Register EIN Apply Charging Report Sent records the number of times the DMS-100 SSP successfully sends an ApplyChargingReport operation to the SCP.

Note: Although the EINACRPS OM register is visible with the OMSHOW command, the ApplyCharging functionality is not implemented in EUR008.

Register EINACRPS release history

Register EINACRPS was introduced in EUR008.

Associated registers

EINACRPP

Associated logs

Log EIN301 is generated when this register is pegged.

Extension registers

None

OM group EIN2 (continued)

Register EINCPHCU

Register “EIN ITU IN Call Party Handling Clean Up” records the number of times a call is sent to treatment because a clean-up of a non-IN call could not be completed.

Register EINCPHCU release history

Register EINCPHCU was introduced in MMP16.

Associated registers

None

Associated logs

None

Extension registers

None

Register EINCPH4T

Register “EIN ITU IN Call Party Handling EDP-4 hit as Transparent” records the number of times EDP-4 (Route_Select_Failure) is encountered when armed as Transparent during a call that is beyond the “Stable 2-party” state.

Enforcement of Event Detection Point (EDP) arming in CPH is optional using table SERVINFORM datafill. Entry NO_CPH_RULES within the INFO_INAP field is used to make the arming of failure EDPs optional. If datafilled, then the Called Party Handling (CPH) enforcement rules will NOT take effect (OFF). By default, this option will not be datafilled, meaning that the enforcement rules will be turned ON.

Register EINCPH4T release history

Register EINCPH4T was introduced in MMP16.

Associated registers

None

Associated logs

None

Extension registers

None

OM group EIN2 (continued)

Register EINCPH5T

Register “EIN ITU IN Call Party Handling EDP-5 hit as Transparent” records the number of times EDP-5 (o_Busy) is encountered when armed as Transparent during a call that is beyond the “Stable 2-party” state.

Register EINCPH5T release history

Register EINCPH5T was introduced in MMP16.

Associated registers

None

Associated logs

None

Extension registers

None

Register EINCPH6T

Register “EIN ITU IN Call Party Handling EDP-6 hit as Transparent” records the number of times EDP-6 (o_No_Answer) is encountered when armed as Transparent during a call that is beyond the “Stable 2-party” state.

Enforcement of Event Detection Point (EDP) arming in CPH is optional using table SERVINFO datafill. Entry NO_CPH_RULES within the INFO_INAP field is used to make the arming of failure EDPs optional. If datafilled, then the Called Party Handling (CPH) enforcement rules will NOT take effect (OFF). By default, this option will not be datafilled, meaning that the enforcement rules will be turned ON.

Register EINCPH6T release history

Register EINCPH6T was introduced in MMP16.

Associated registers

None

Associated logs

None

Extension registers

None

OM group EIN2 (continued)

Register EINCPH7T

Register “EIN ITU IN Call Party Handling EDP-7 hit as Transparent” records the number of times EDP-7 (o_Answer) is encountered when armed as Transparent during a call that is beyond the “Stable 2-party” state.

Enforcement of Event Detection Point (EDP) arming in CPH is optional using table SERVINFO datafill. Entry NO_CPH_RULES within the INFO_INAP field is used to make the arming of failure EDPs optional. If datafilled, then the Called Party Handling (CPH) enforcement rules will NOT take effect (OFF). By default, this option will not be datafilled, meaning that the enforcement rules will be turned ON.

Register EINCPH7T release history

Register EINCPH7T was introduced in MMP16.

Associated registers

None

Associated logs

None

Extension registers

None

Register EINRTRGA

This OM is pegged whenever a new IN call leg is allowed to trigger and clears the existing dialogue.

Register EINRTRGA release history

Register EINRTRGA is introduced in SN04.

Associated registers

None

Associated logs

None

Extension registers

None

OM group EIN2 (end)

Register EINAUTOC

This register is added to record the number of times that Auto-Continue is invoked.

Register EINAUTOC release history

Register EINAUTOC is introduced in SN04.

Associated registers

None

Associated logs

None

Extension registers

None

Register EINURCC (Unknown Resource)

This register/OM is pegged when the SCF request or cancels monitoring of a line or resource that the SSF has no knowledge of.

Register EINURCC release history

Register EINURCC is introduced in CSP18/SN05.

Associated registers

None

Associated logs

None

Extension registers

None

Register EINCFCC (Cancel Failed)

This register/OM indicates that the SCF requested a cancellation of monitoring on a line or resource that was not monitored. The monitoring period may have expired or may have previously been cancelled.

Register EINCFCC release history

Register EINCFCC is introduced in CSP18/SN05.

Associated registers

None

Associated logs

None

Extension registers

None

OM group EIOC

OM description

Enhanced input/output controller

The EIOC provides information on the reliability of the enhanced input/output controller (EIOC) link hardware and software. An EIOC is a DMS peripheral used for the downstream processing of DMS generated data, including billing data. EIOC links are the cards that connect the DMS and the EIOC.

- EIOCMBU records manual busy use for the EIOC links
- EIOCSBU records system busy use for the EIOC links
- EIOCERR counts hardware and software errors in the EIOC links. Only errors that generate EIOC error logs are counted
- EIOCFLT counts failures of an EIOC link to recover from a system busy state

The SPMS also monitors EIOC links in index EIOCPERF. The index provides a summary based on calculations the EIOC registers.

The registers in EIOC are the total counts for an office. To identify problems on individual links, check the associated logs.

Release history

The OM group EIOC was introduced in BCS26.

Registers

The OM group EIOC registers display on the MAP terminal as follows:

EIOCERR EIOCFLT EIOCMBU EIOCSBU

Group structure

The OM group EIOC provides one tuple for each office.

Key field:

There is no key field.

Info field:

There is no info field.

The EIOC links are entered in table EIOCLINK.

OM group EIOC (continued)

Associated OM groups

There are no associated OM groups.

Associated functional groups

- Enhanced Input/Output Controller
- Central Message Controller
- SPMS

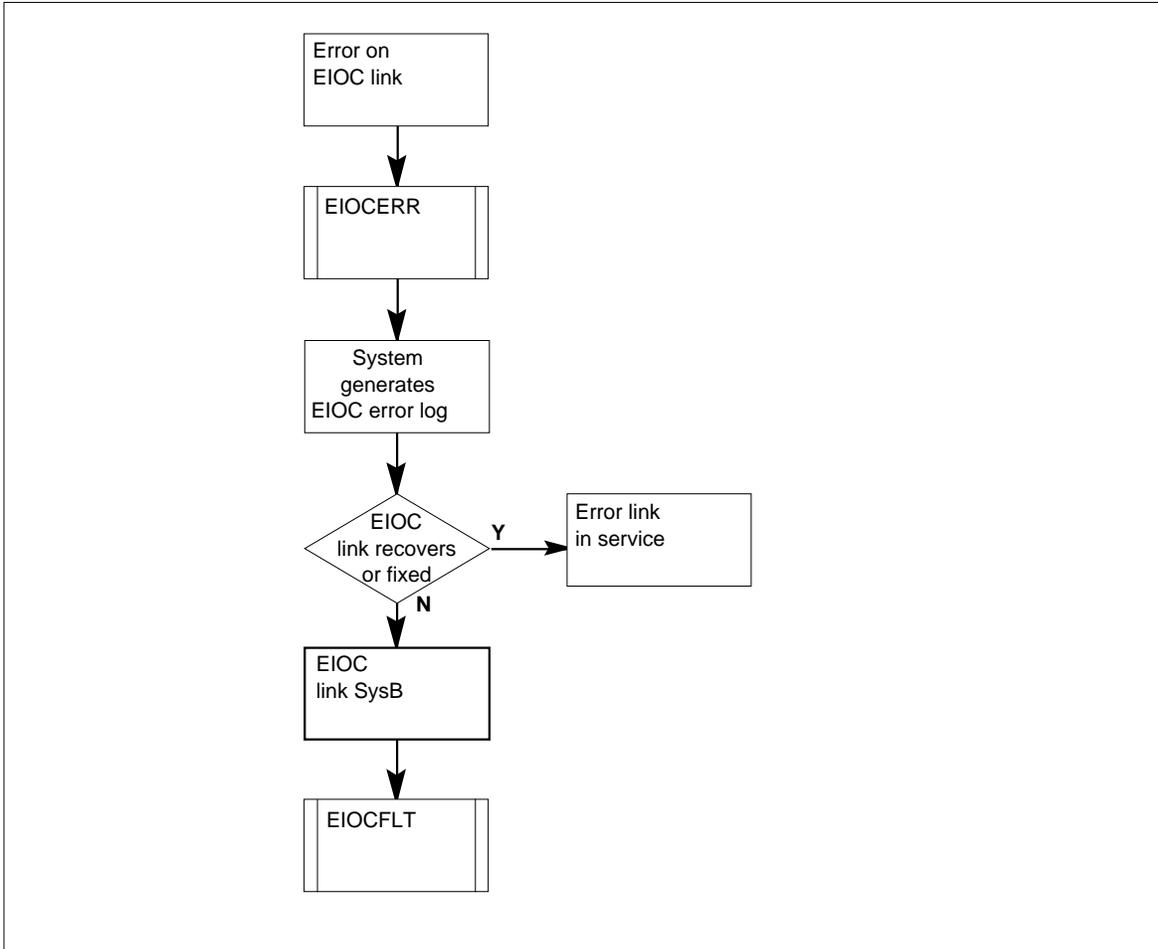
Associated functionality codes

The functionality codes that associate with OM group EIOC appear in the following table.

| Functionality | Code |
|--|----------|
| CNS EIOC MAP Implementation and Node Maintenance | NTXG06AA |

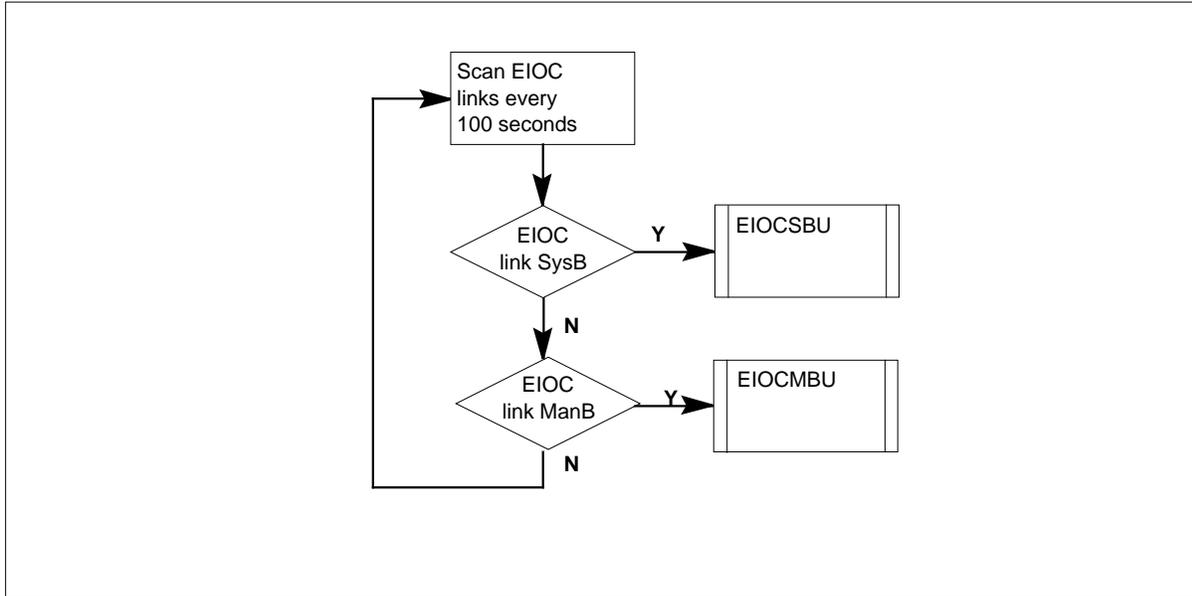
OM group EIOC (continued)

OM group EIOC registers



OM group EIOC (continued)

OM group EIOC registers: usage registers



Register EIOCERR

Enhanced input/output controller errors

The EIOCERR counts errors detected on an in-service EIOC link. Errors are detected during audits or normal operations. If an error persists, the defective EIOC link card is set to system busy.

When EIOCERR increments, the system generates a log report. The log report identifies the EIOC link and the type of problem. The following is a list of associated logs.

Register EIOCERR release history

The EIOCERR was introduced in BCS26.

Associated registers

There are no associated registers.

Associated logs

The EIO115 and EIO116 indicate EIOC software errors.

The system generates the EIO117 when a hardware error occurs in an EIOC link or central message controller (CMC).

OM group EIOC (continued)

The system generates the EIO121 when there is a change of state caused by an EIOC link audit.

Register EIOCFLT

Enhanced input/output controller faults

The EIOCFLT increments when an EIOC link does not recover after an error. When EIOCFLT increments, the system generates an EIOC error log.

Determine the cause of the problem by checking the error log reports (EIO115, EIO116, EIO117 or EIO121).

Register EIOCFLT release history

The EIOCFLT was introduced in BCS26.

Associated registers

- the EIOC link is still system busy
- the error is not fixed manually
- the error is not recovered by the system

Associated logs

The system generates the EIO124 when there is EIOC link failure of Sequential Loopback Message Test during RTS or TST.

The system generates the EIO125 when there is EIOC link failure of Pattern Loopback Message Test during RTS or TST.

The system generates the EIO127 there is EIOC link failure of Status Register Test during RTS or TST.

Register EIOCMBU

Enhanced input/output controller manual busy

The EIOCMBU is a use register. The scan rate is slow: 100 s. The EIOCMBU records whether EIOC link cards are manual busy.

Register EIOCMBU release history

The EIOCMBU was introduced in BCS26.

Associated registers

There are no associated registers.

OM group EIOC (end)

Associated logs

The system generates logs EIO101 to EIO109 when an EIOC link is set to manual busy at the EIOC MAP level.

Register EIOCSBU

Enhanced input/output controller system busy (EIOCSBU)

The EIOCSBU is a use register. The scan rate is 100 s. Register EIOCSBU records if EIOC link cards are system busy.

Register EIOCSBU release history

Register EIOCSBU was introduced in BCS26.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

OM group EIUETHER

OM description

Ethernet interface unit Ethernet (EIUETHER)

The OM group EIUETHER provides information about traffic at the Ethernet protocol level.

The OM group EIUETHER contains 22 registers that count the following:

- bytes that the Ethernet interface receives
- error-free unicast packets that the Ethernet interface receives
- error-free broadcast packets that the Ethernet interface receives
- received packets that the system discards because of resource limitations
- received packets that contain errors
- received packets that the system discards because the packets contain protocol that is not supported or not recognized
- bytes that are transmitted out of the Ethernet interface
- packets that are transmitted to a unicast Ethernet address
- packets that are transmitted to a broadcast Ethernet address
- outbound packets that the system discards because of resource limitations
- outbound packets that do not transmit because they contain errors

The system keeps the peg counts in the EIU. The system transfers peg counts to central control (CC) 1 min before the transfer of active registers to holding registers. The active count is normally zero. The active count increases before the system transfers active registers to holding registers.

Release history

The OM group EIUETHER was introduced in BCS31.

TL07

Node type ELIU was added to the group structure.

BCS34

Registers record traffic information at the media access (MAC) protocol level. The OM data is in long word format.

Registers

The OM group EIUETHER registers appear on the MAP terminal as follows.

OM group EIUETHER (continued)

| | | | |
|----------|----------|----------|----------|
| EIURXBYT | EIURXBY2 | EIURXPKT | EIURXPK2 |
| EIURXBCA | EIURXBC2 | EIURXDIS | EIURXDI2 |
| EIURXERR | EIURXER2 | EIURXUPP | EIURXUP2 |
| EIUTXBYT | EIUTXBY2 | EIUTXPKT | EIUTXPK2 |
| EIUTXBCA | EIUTXBC2 | EIUTXDIS | EIUTXDI2 |
| EIUTXERR | EIUTXER2 | | |

Group structure

The OM group EIUETHER provides one tuple for each Ethernet interface unit (EIU) that is entered in table LIUINV. The OM group also provides one tuple for each Ethernet link interface unit (ELIU) that is entered in table LIUINV.

Key field:

There are no Key fields.

Info field:

NCMNODE_INFO (value between 0 and 750)

Associated OM groups

There are no associated OM groups.

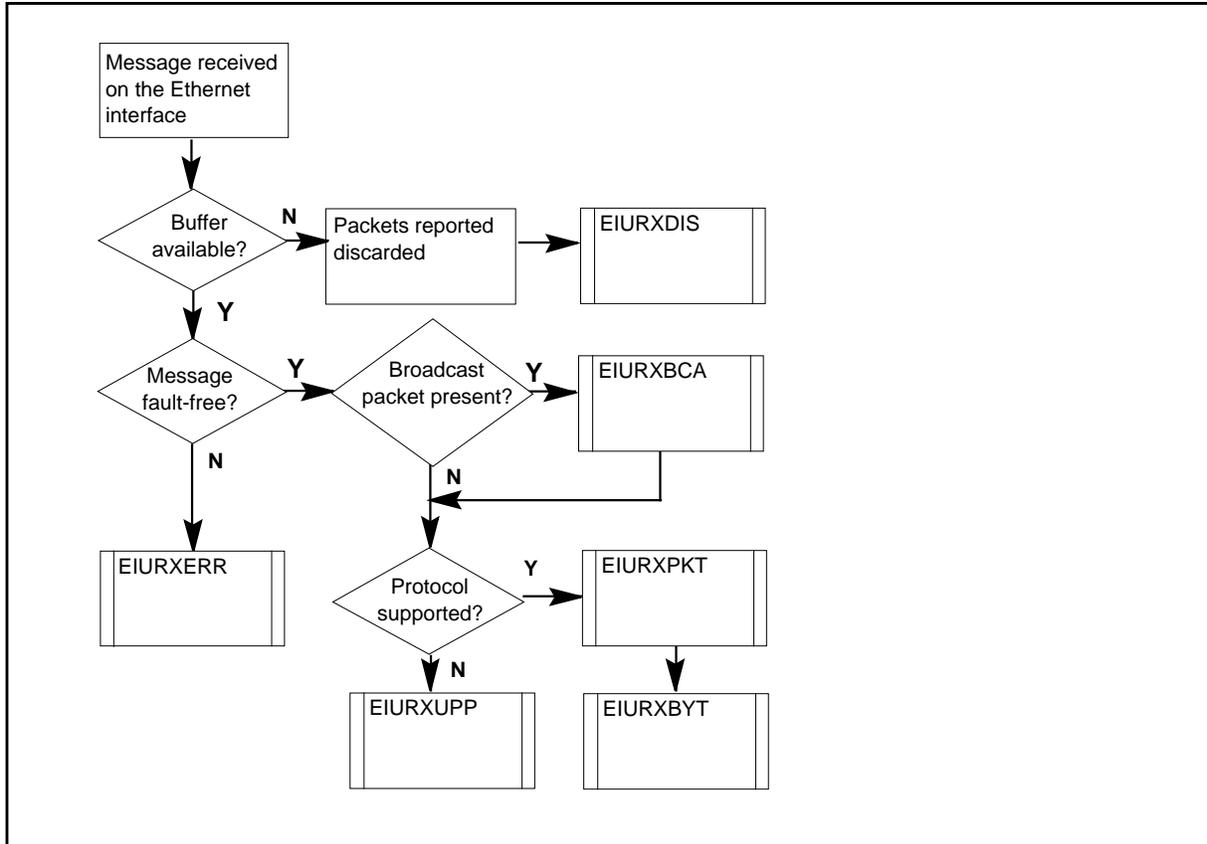
Associated functional groups

There are no associated functional groups.

Associated functionality codes

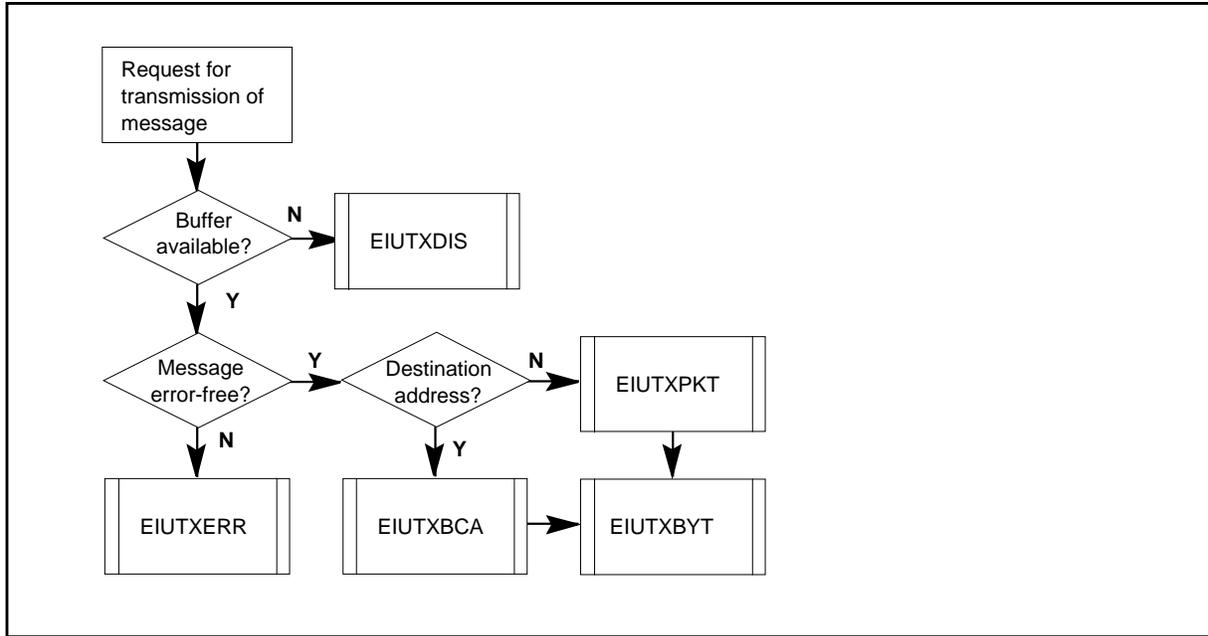
The associated functionality codes for OM group EIUETHER appear in the following table.

| Functionality | Code |
|-------------------------|----------|
| Ethernet Interface Unit | NTXFO5AA |

OM group EIUETHER (continued)**OM group EIUETHER registers: message reception**

OM group EIUETHER (continued)

OM group EIUETHER registers: message transmission



Register EIURXBCA

EIU receive broadcasts (EIURXBCA)

Register EIURXBCA counts fault-free broadcast packets that the Ethernet interface receives.

Register EIURXBCA release history

Register EIURXBCA was introduced in BCS31.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

EIURXBC2

Register EIURXBYT

EIU receive bytes (EIURXBYT)

Register EIURXBYT counts separate bytes that the Ethernet interface receives in broadcast packets or unicast packets.

OM group EIUETHER (continued)

Register EIURXBYT release history

Register EIURXBYT was introduced in BCS31.

BCS34

Register EIURXBYT was added to the count for MAC protocol level.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

EIURXBY2

Register EIURXDIS

EIU receive discards (EIURXDIS)

Register EIURXDIS counts the number of times the system reports packets discarded because of resource limitations. An example of a resource limitation is not enough buffer space in the EIU.

Register EIURXDIS release history

Register EIURXDIS was introduced in BCS31.

BCS34

Register EIURXDIS was added to the count for MAC protocol level.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

EIURXD12

Register EIURXERR

EIU receive error (EIURXERR)

Register EIURXERR counts packets that the Ethernet interface receives. These packets contain a cyclic redundancy check error or a framing error.

OM group EIUETHER (continued)

Register EIURXERR release history

Register EIURXERR was introduced in BCS31.

BCS34

Register EIURXERR was added to the count for MAC protocol level.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

EIURXER2

Register EIURXPKT

EIU receive packet (EIURXPKT)

Register EIURXPKT counts error-free unicast packets that the Ethernet interface receives.

Register EIURXPKT release history

Register EIURXPKT was introduced in BCS31.

BCS34

Register EIURXPKT was added to the count for MAC protocol level.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

EIURXP2

Register EIURXUPP

EIU receive unknown protocol packets (EIURXUPP)

Register EIURXUPP counts discarded packets that the Ethernet interface receives. The system discards these packets because they contain protocol that is not known or not supported.

OM group EIUETHER (continued)

Register EIURXUPP release history

Register EIURXUPP was introduced in BCS31.

BCS34

Register EIURXUPP was added to the count for MAC protocol level.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

EIURXUP2

Register EIUTXBCA

EIU transmit broadcasts (EIUTXBCA)

Register EIUTXBCA counts packets that are transmitted to a broadcast Ethernet address.

Register EIUTXBCA release history

Register EIUTXBCA was introduced in BCS31.

BCS34

Register EIUTXBCA was added to the count for MAC protocol level.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

EIUTXBC2

Register EIUTXBYT

EIU transmit bytes (EIUTXBYT)

Register EIUTXBYT counts separate fault-free bytes that the Ethernet interface transmits in broadcast or unicast packets.

OM group EIUETHER (continued)

Register EIUTXBYT release history

Register EIUTXBYT was introduced in BCS31.

BCS34

Register EIUTXBYT was added to the count for MAC protocol level.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

EIUTXBY2

Register EIUTXDIS

EIU transmit discards (EIUTXDIS)

Register EIUTXDIS counts outbound packets that the system discards before transmission because of resource limitations. An example of a resource limitation is not enough buffer space in the EIU.

Register 0EIUTXDIS release history

Register EIUTXDIS was introduced in BCS31.

BCS34

Register EIUTXDIS was added to the count for MAC protocol level

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

EIUTXD12

Register EIUTXERR

EIU transmit errors (EIUTXERR)

OM group EIUTETHER (end)

Register EIUTXERR counts outbound packets that are not transmitted for one of the following reasons:

- The threshold for number of retries has been exceeded.
- The carrier was lost during transmission.
- A late collision occurred during transmission.

Register EIUTXERR release history

Register EIUTXERR was introduced in BCS31.

BCS34

Register EIUTXERR was added to the count for MAC protocol level

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

EIUTXER2

Register EIUTXPKT

EIU transmit packets (EIUTXPKT)

Register EIUTXPKT counts fault-free packets that are transmitted to a unicast Ethernet address.

Register EIUTXPKT release history

Register EIUTXPKT was introduced in BCS31.

BCS34

Register EIUTXPKT was added to the count for MAC protocol level

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

EIUTXPK2

OM group ENETMAT

OM description

Enhanced network matrix card (ENETMAT)

The OM group ENETMAT monitors the performance of enhanced network (ENET) matrix cards. Operational measurements for ENET matrix cards are divided into two sets:

- crosspoint (XPT) cards, like NT9X35
- link paddle boards (PB), like NT9X40 and NT9X41

Register ENETMAT contains 12 peg registers that count the following events:

- errors in ENET XPT cards
- faults in ENET XPT cards
- ENET partitioning that occurs because an ENET XPT card is system busy
- ENET partitioning that occurs because an ENET XPT card is manual busy
- peripheral modules (PM) that are isolated because an ENET XPT card is system busy
- PMs that are isolated because an ENET XPT card is manual busy
- errors in ENET link PBs
- faults in ENET link PBs
- ENET partitioning that occurs because an ENET link PB is system busy
- ENET partitioning that occurs because an ENET link PB is manual busy
- PMs that are isolated because an ENET link PB is system busy
- PMs that are isolated because an ENET link PB is manual busy

Register ENETMAT also contains nine use registers that record the following events:

- an XPT card is system busy
- an XPT card is manual busy
- an XPT card is offline
- ENET partitioning occurred because an ENET XPT card is out of service
- a PM is isolated because an ENET XPT card is out of service
- a link PB is system busy
- a link PB is manual busy

OM group ENETMAT (continued)

- ENET partitioning occurs because an ENET link PB is out of service
- a PM is isolated because an ENET link PB is out of service

Release history

The OM group ENETMAT was introduced in BCS31.

BCS34

Registers ENCDPARU and ENPBPAPU are set to zero.

Registers

The OM group ENETMAT registers appear on the MAP terminal as follows:

| | | | |
|-----------|-----------|----------|----------|
| ENCDEER | ENCDFLT | ENSBCDU | ENMBCDU |
| ENOFCDU | ENCDPARU | ENSCDPAR | ENMCDPAR |
| ENCDISOU | ENSCDISO | ENMCDISO | ENPBERR |
| ENPBFLT | ENSBPBU | ENMBPBU | ENPBPAPU |
| ENSPBPAPU | ENMPBPAPU | ENPBISOU | ENSPBISO |
| ENMPBISO | | | |

Group structure

The OM group ENETMAT provides one tuple per office.

Key field:

There are no Key fields.

Info field:

There are no Info fields.

Associated OM groups

The ENETSYS monitors the performance of the ENET system cards.

The ENETPLNK monitors the performance of the ENET peripheral side (P-side) links.

The ENETOCC provides information on the CPU occupancy of each in-service ENET in a DMS-100 family switch.

OM group ENETMAT (continued)

Associated functional groups

The following functional groups associate with the OM group ENETMAT:

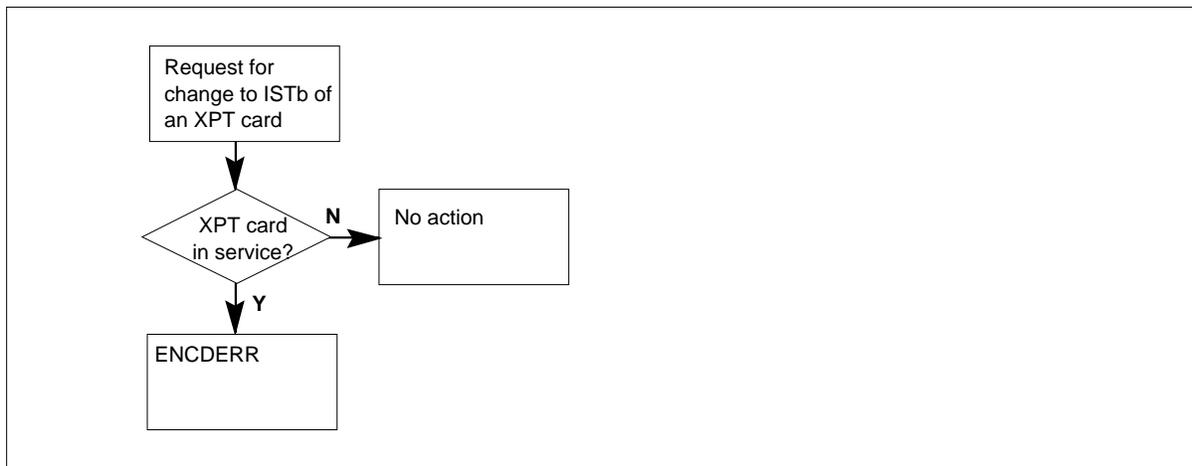
- SuperNode offices that have ENET

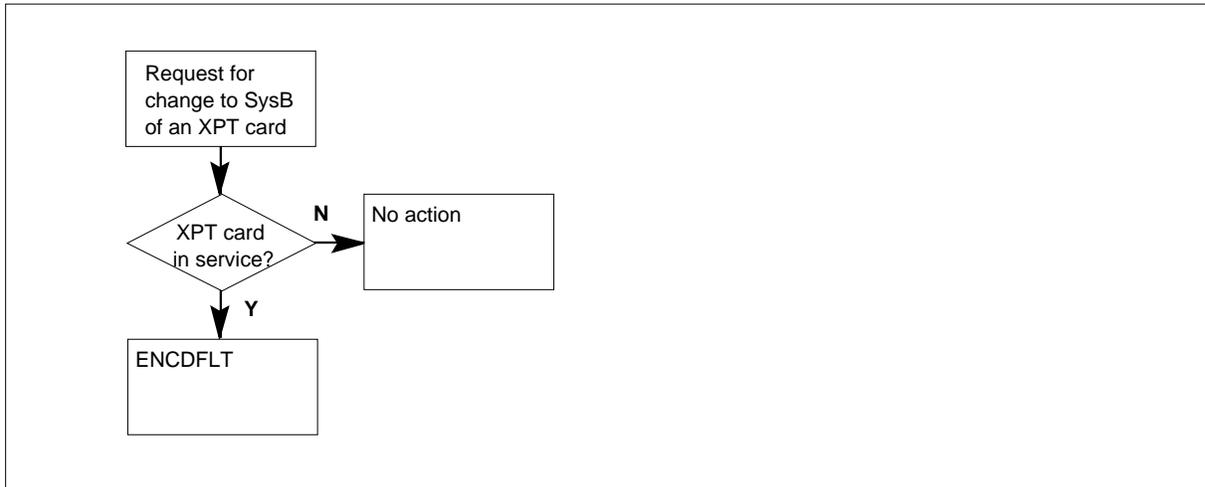
Associated functionality codes

The associated functionality codes for the OM group ENETMAT appear in the following table.

| Functionality | Code |
|---------------|----------|
| ENET - Basic | NTXE01AA |

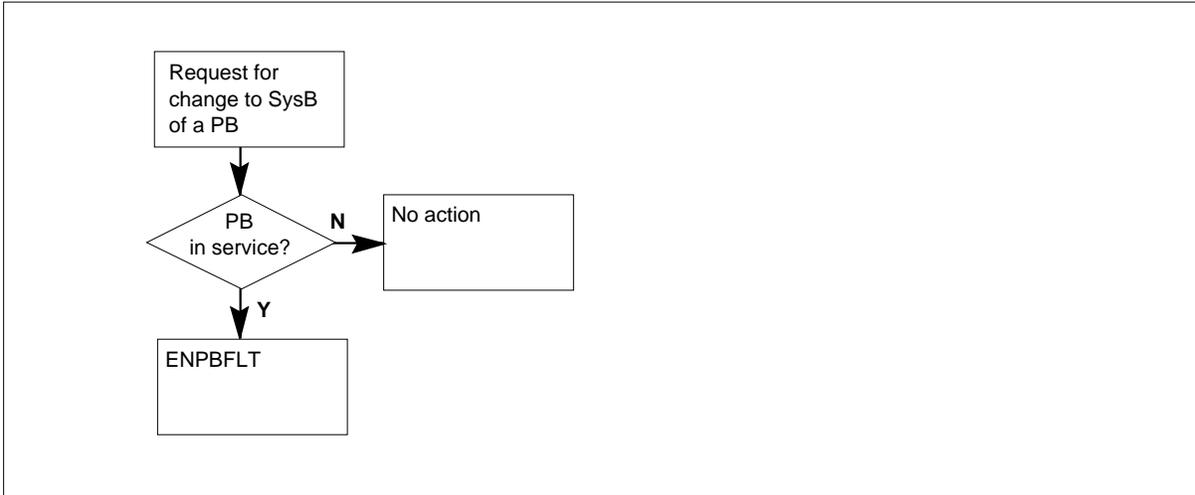
OM group ENETMAT registers: XPT card errors



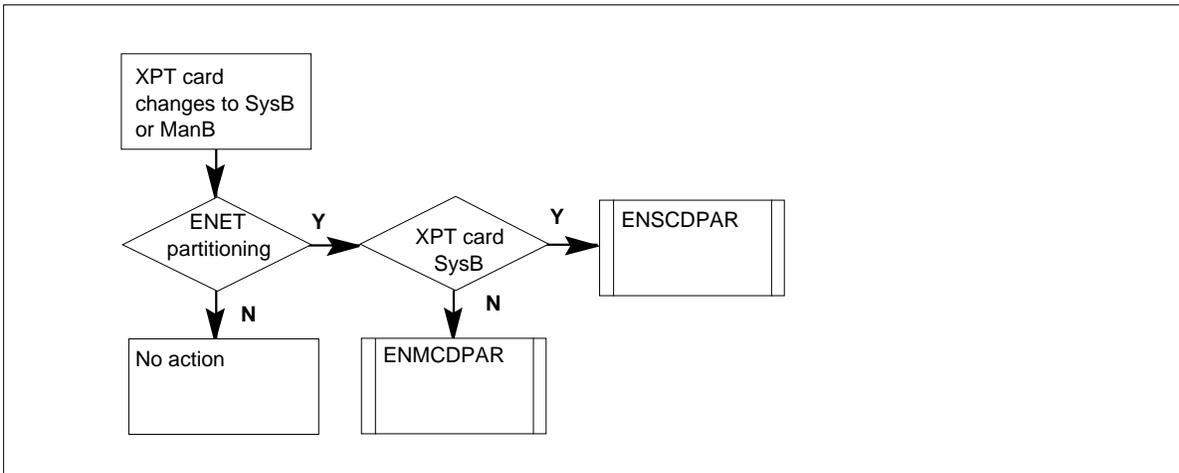
OM group ENETMAT (continued)**OM group ENETMAT registers: XPT card faults****OM group ENETMAT registers: PB error**

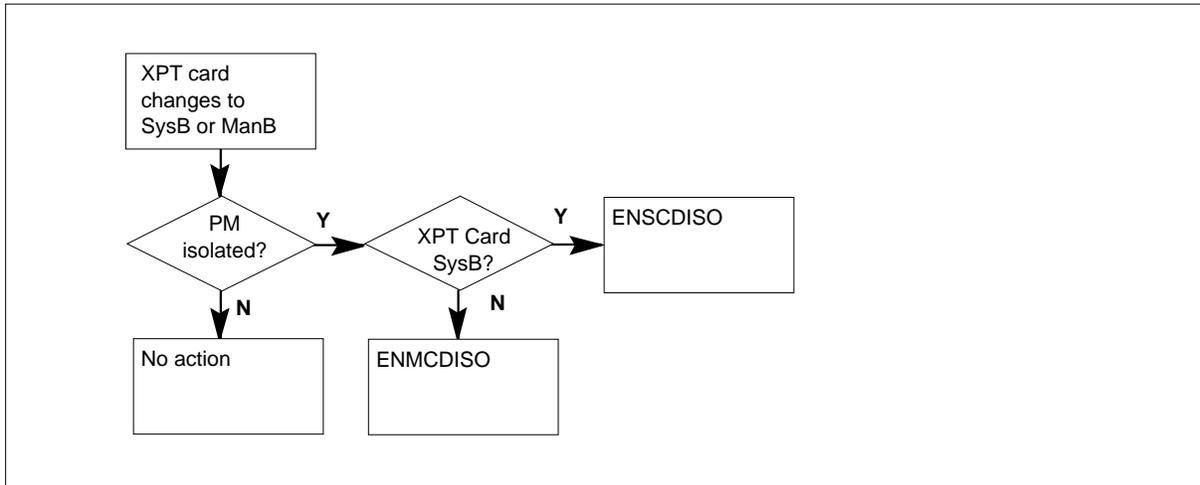
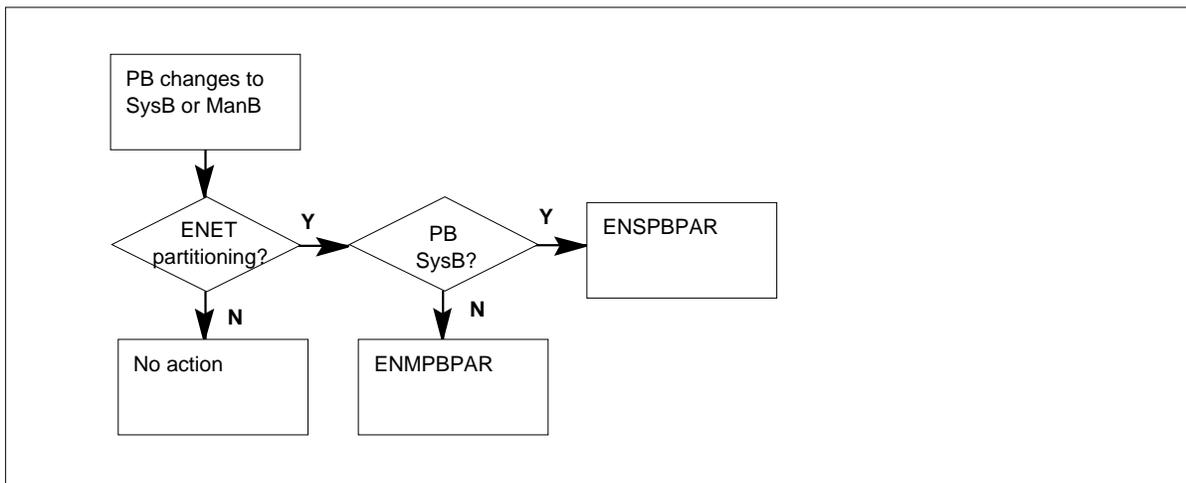
OM group ENETMAT (continued)

OM group ENETMAT registers: PB faults



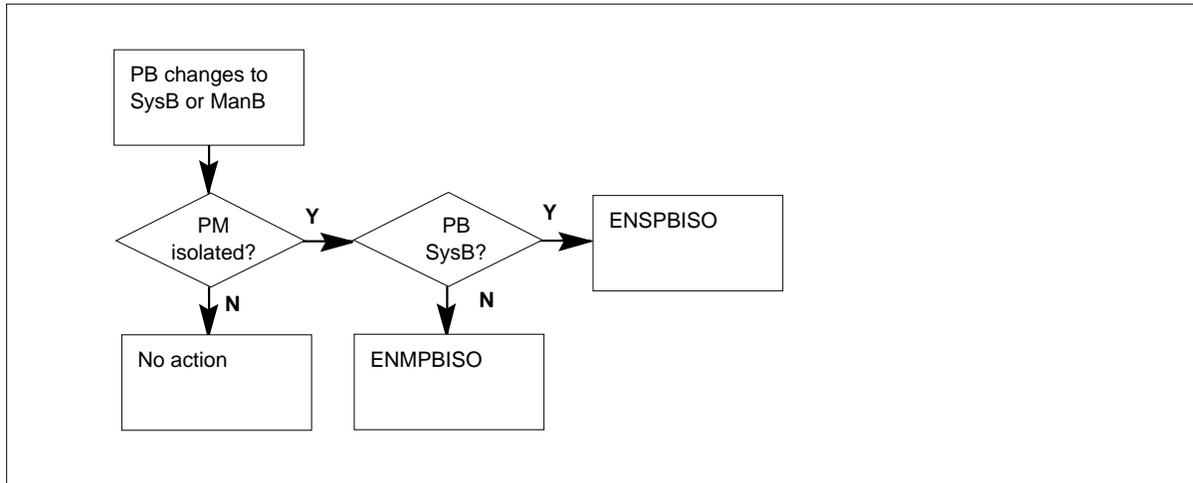
OM group ENETMAT registers: XPT card ENET partitioning



OM group ENETMAT (continued)**OM group ENETMAT registers: XPT card PM isolated****OM group ENETMAT registers: PB ENET partitioning**

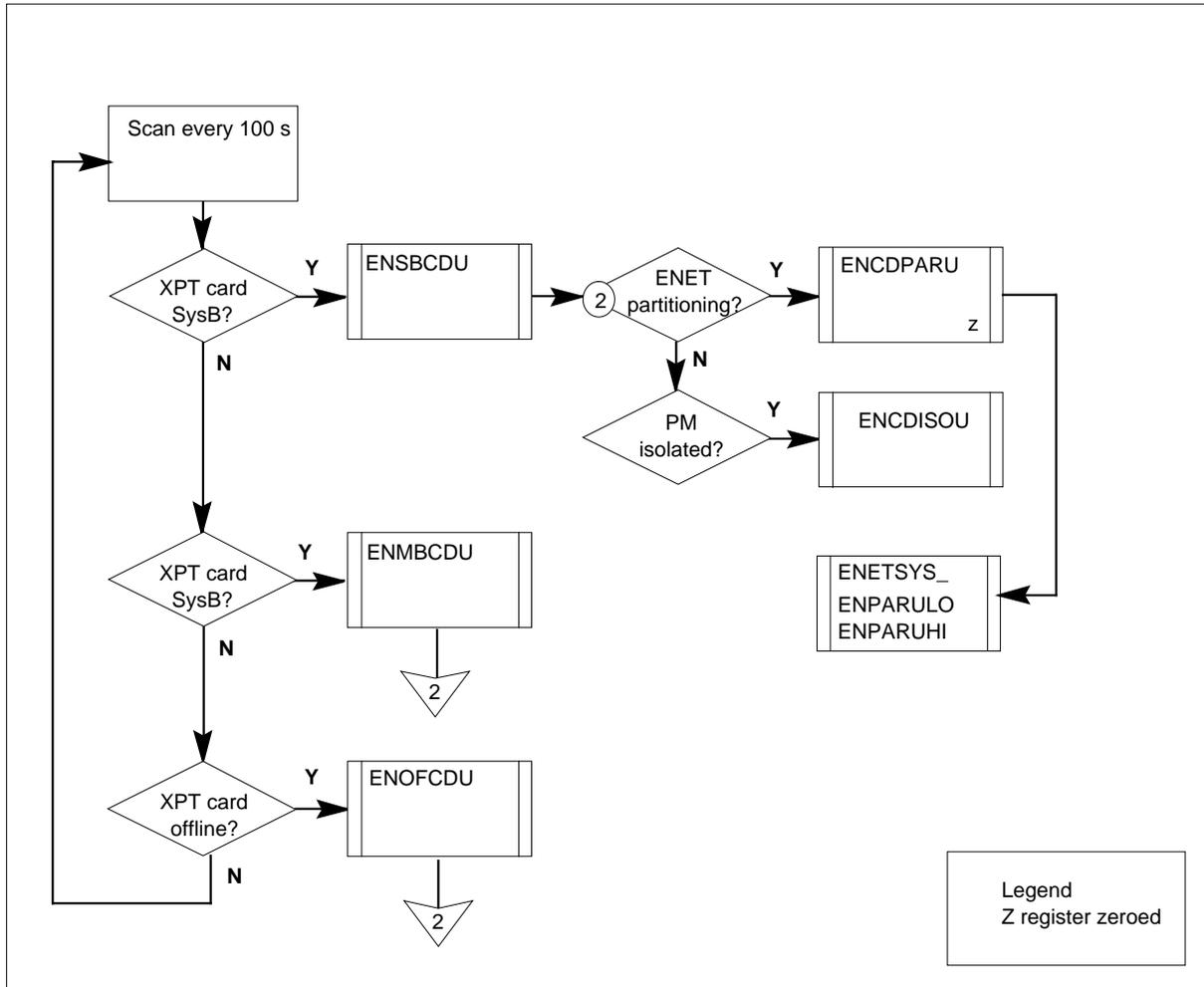
OM group ENETMAT (continued)

OM group ENETMAT registers: PB PM isolated



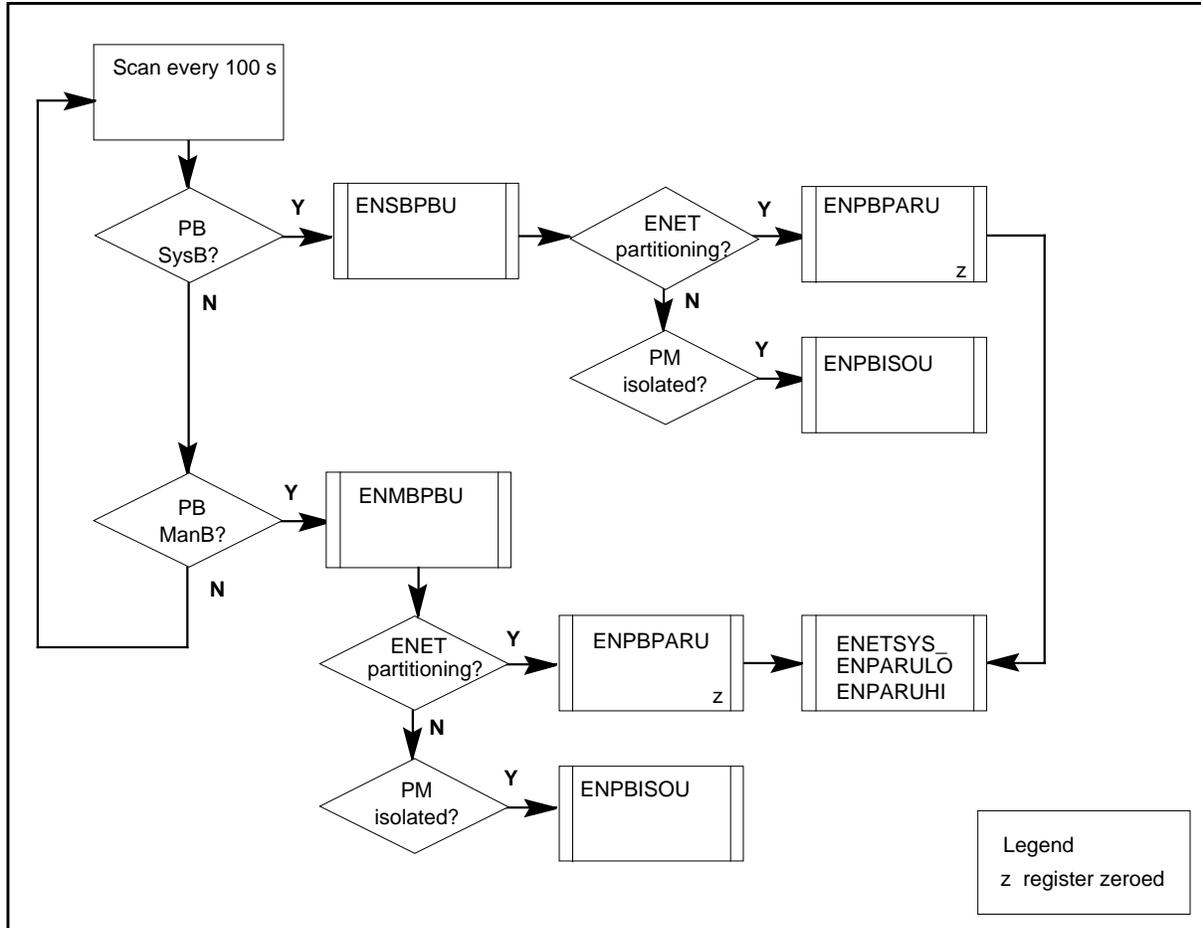
OM group ENETMAT (continued)

OM group ENETMAT registers: XPT card usage registers



OM group ENETMAT (continued)

OM group ENETMAT registers: PB usage registers



Register ENCDERR

XPT card errors (ENCDERR)

Register ENCDERR counts errors that the system detects in the operation of the in-service XPT cards of the network.

Register ENCDERR release history

Register ENCDERR was introduced in BCS31.

Associated registers

There are no associated registers.

Associated logs

The system generated ENET208 when the ENET card is set to in-service trouble.

OM group ENETMAT (continued)

Register ENCDFLT

XPT card faults (ENCDFLT)

Register ENCDFLT counts the number of times the system identifies a hard fault in network XPT cards. The system identifies hard faults as a result of self tests. A detected error triggers self tests. The XPT card is set to a system busy status. This status remains until a manual action occurs or until the system initiates a successful recovery.

Register ENCDFLT release history

Register ENCDFLT was introduced in BCS31.

Associated registers

There are no associated registers.

Associated logs

The system generates the ENET203 when an ENET card changes state from in service (OK) to system busy.

Register ENCDISOU

XPT card isolation usage (ENCDISOU)

Register ENCDISOU is a usage register. The system scans the ENET XPT cards every 100 s. Register ENCDISOU records if the system isolates a PM because of out-of-service XPT cards.

An isolated PM does not access the network. Isolation occurs if the last ENET XPT card that connects a PM to the rest of the network goes out of service. If the network goes out of service, the PM becomes central side (C-side) busy.

Register ENCDISOU increases by the number of C-side busy PMs connected to the network. Register ENCDISOU increases if the XPT card and the mate XPT card on the opposite plane are out of service.

Register ENCDISOU release history

Register ENCDISOU was introduced in BCS31.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

OM group ENETMAT (continued)

Register ENCDPARU

XPT card partitioning usage (ENCDPARU)

Register ENCDPARU is a usage register. The system scans the ENET XPT cards every 100 s. Register ENCDPARU records if a minimum of one out-of-service XPT card is present on plane 0. Register ENCDPARU also records if a minimum one out-of-service ENET component is present on plane 1.

This out-of-service XPT card and ENET component can partition the network and result in blocked calls. When the system partitions the network, register ENCDPARU increases by the total number of paths that are not accessible. These paths are from the P-side links of the out-of-service link XTP card to other P-side links in the network.

Register ENCDPARU release history

The ENCDPARU was introduced in BCS31.

BCS34

Register ENCDPARU is set to zero. Registers ENETSYS_ENPARUHI and ENETSYS_ENPARULO replace ENCDPARU.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Register ENMBCDU

XPT card manual busy usage (ENMBCDU)

Register ENMBCDU is a usage register. The system scans the ENET XPT cards every 100 s. Register ENMBCDU records if an XPT card is manual busy.

Register ENMBCDU release history

The ENMBCDU was introduced in BCS31.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

OM group ENETMAT (continued)

Register ENMBPBU

Link PB manual busy usage

Register ENMBPBU is a usage register. The system scans the ENET link PBs every 100 s. Register ENMBPBU records if a PB is manual busy.

Register ENMBPBU release history

Register ENMBPBU was introduced in BCS31.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Register ENMCDISO

XPT card manual busy isolation (ENMCDISO)

Register ENMCDISO counts in-service ENET XPT cards that become manual busy. The manual busy state causes the isolation of a minimum of one PM.

An isolated PM cannot access the network. Isolation occurs if the last ENET XPT card that connects a PM to the rest of the network goes out of service. The PM becomes C-side busy.

Register ENMCDISO release history

Register ENMCDISO was introduced in BCS31.

Associated registers

There are no associated registers.

Associated logs

The system generates the ENET201 when an ENET card changes state from in service (OK) to manual busy.

Register ENMCDPAR

The XPT card manual busy partitioning (ENMCDPAR)

Register ENMCDPAR counts in-service ENET XPT cards that become manual busy. These cards become manual busy while other ENET components on the opposite plane are out of service. The count can partition the network. A partitioned network results in blocked calls. This condition

OM group ENETMAT (continued)

must be present for a minimum of 100 s before the register increases. This condition must be present as a result of the scanning interval.

Register ENMCDPAR release history

Register ENMCDPAR was introduced in BCS31.

Associated registers

There are no associated registers.

Associated logs

The system generates the ENET201 when an ENET card changes state from in service (OK) to manual busy.

Register ENMPBISO

Link PB manual busy isolation (ENMPBISO)

Register ENMPBISO counts in-service ENET link PBs that become manual busy. The manual busy state causes the isolation of a minimum of one PM.

An isolated PM cannot access the network. An ENET link PB card connects the PM to the rest of the network. If the last ENET link PB card goes out of service, PM isolation occurs. The PM becomes C-side busy.

Register ENMPBISO release history

Register ENMPBISO was introduced in BCS31.

Associated registers

There are no associated registers.

Associated logs

The system generates the ENET201 when an ENET card changes state from in service (OK) to manual busy.

Register ENMPBPAR

Link PB manual busy partitioning (ENMPBPAR)

Register ENMPBPAR counts in-service ENET link PBs that become manual busy. These PBs become manual busy while other ENET components on the opposite plane are out of service. The manual busy state causes the blockage of calls from one PM to other PMs. As a result of the scanning interval, this condition must be present for a minimum of 100 s before the register increases.

OM group ENETMAT (continued)

Register ENMPBPAP release history

Register ENMPBPAP was introduced in BCS31.

Associated registers

There are no associated registers.

Associated logs

The system generates the ENET201 when an ENET card changes state from in service (OK) to manual busy.

Register ENOFCDU

XPT card offline usage (ENOFCDU)

Register ENOFCDU is a usage register. Every 100 s the system scans the ENET XPT cards every 100 s. Register ENOFCDU records if a card is offline.

Register ENOFCDU release history

Register ENOFCDU was introduced in BCS31.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Register ENPBERR

Link PB errors (ENPBERR)

Register ENPBERR counts all errors that the system detects in the operation of the in-service link PBs of the network.

Register ENPBERR release history

Register ENPBERR was introduced in BCS31.

Associated registers

There are no associated registers.

Associated logs

The system generates the ENET208 when an ENET card becomes in-service busy.

Register ENPBFLT

Link PB faults (ENPBFLT)

OM group ENETMAT (continued)

Register ENPBFLT counts the number of times the system identifies a hard fault in the network link PB. Detected errors trigger self tests that result in hard faults. The link PB is set to system busy until a manual action occurs or until the system initiates a successful recovery.

Register ENPBFLT release history

The ENPBFLT was introduced in BCS31.

Associated registers

There are no associated registers.

Associated logs

The system generates the ENET203 when an ENET card changes state from in service (OK) to system busy.

Register ENPBISOU

Link PB isolation usage (ENPBISOU)

The ENPBISOU is a usage register. The system scans the link PBs every 100 s. Register ENPBISOU records if a PM isolates as a result of out-of-service PBs.

An isolated PM cannot access the network. Isolation occurs if the last ENET link PB that connects a PM to the rest of the network goes out of service. The PM becomes C-side busy.

Register ENPBISOU increases if a link PB and the mate link PB on the opposite plane are out of service. Register ENPBISOU increases by the total number of C-side busy PMs that the two link PBs connect to the network.

Register ENPBISOU release history

Register ENPBISOU was introduced in BCS31.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Register ENBPARU

Link PB partitioning usage (ENBPARU)

OM group ENETMAT (continued)

Register ENPBPURU is a usage register. A scan occurs every 100 s. Register ENPBPURU records if a minimum of one out-of-service link PB is present on plane 0. Register ENPBPURU also records if a minimum of one out-of-service ENET component is present on plane 1.

The out-of-service link PB and ENET component can partition the network and result in blocked calls. When the system partitions the network, register ENPBPURU increases. Register ENPBPURU increases by the total number of paths that are not accessible. These paths are from the P-side links of the out-of-service link PB to other P-side links in the network.

Register ENPBPURU release history

Register ENPBPURU was introduced in BCS31.

BCS34

Register ENPBPURU is set to zero. The system replaces the ENPBPURU with registers ENETSYS_ENPARUHI and ENETSYS_ENPARULO.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Register ENSBCDU

Crosspoint card system busy usage (ENSBCDU)

Register ENSBCDU is a usage register. The scan rate is 100 s. Register ENSBCDU records if an ENET XPT card is system busy.

Register ENSBCDU release history

Register ENSBCDU was introduced in BCS31.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Register ENSBPBU

Link paddle board (PB) system busy usage (ENSBPBU)

OM group ENETMAT (continued)

Register ENSBPBU is a usage register. The scan rate is 100 s. Register ENSBPBU records if an ENET link PB is system busy.

Register ENSBPBU release history

Register ENSBPBU was introduced in BCS31.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Register ENSCDISO

Crosspoint (XPT) card system busy isolation

Register ENSCDISO counts in-service ENET XPT cards that become system busy. The system busy state causes the isolation of a minimum of one PM.

An isolated PM cannot access the network. Isolation occurs if the last ENET XPT card that connects a PM to the rest of the network goes out of service. The PM becomes C-side busy.

Register ENSCDISO release history

Register ENSCDISO was introduced in BCS31.

Associated registers

There are no associated registers.

Associated logs

The system generates the ENET203 when an ENET card changes state from in service (OK) to system busy.

Register ENSCDPAR

Crosspoint (XPT) card system busy partitioning (ENSCDPAR)

Register ENSCDPAR counts in-service ENET XPT cards that become system busy. These cards become system busy when other ENET components on the opposite plane are out of service. This condition can partition the network. A partitioned network results in blocked calls. A 100 s interval must occur between these events for the register to increase.

Register ENSCDPAR release history

Register ENSCDPAR was introduced in BCS31.

OM group ENETMAT (continued)

Associated registers

There are no associated registers.

Associated logs

The system generates the ENET203 when an ENET card changes state from in service (OK) to system busy.

Register ENSPBISO

Link paddle board (PB) system busy isolation (ENSPBISO)

Register ENSPBISO counts in-service ENET link PBs that become system busy. The system busy state causes the isolation a minimum of one PM.

An isolated PM cannot access the network. Isolation occurs if the last ENET link PB that connects a PM to the rest of the network goes out of service. The PM becomes C-side busy.

Register ENSPBISO release history

Register ENSPBISO was introduced in BCS31.

Associated registers

There are no associated registers.

Associated logs

The system generates the ENET203 when an ENET card changes state from in service (OK) to system busy.

Register ENSPBPAP

Link paddle board (PB) system busy partitioning (ENSPBPAP)

The ENSPBPAP counts in-service ENET link PBs that become system busy. The PBs become system busy when other ENET components on the opposite plane are out of service. The system busy state causes the blockage of calls from one PM to the other PMs. An interval of 100 s must occur between these events for the register to increase.

Register ENSPBPAP release history

Register ENPBPAP was introduced in BCS31.

Associated registers

There are no associated registers.

OM group ENETMAT (end)

Associated logs

The system generates the ENET203 when an ENET card changes state from in service (OK) to system busy.

OM group ENETOCC

OM description

ENET occupancy (ENETOCC)

The OM group ENETOCC provides information about the central processing unit (CPU) occupancy of in-service enhanced network (ENET). The OM group ENETOCC provides information on each ENET in a DMS-100 family switch. Each ENET CPU sends occupancy information to the computing module (CM) every 60 s. The CM copies this information in to the OM registers.

The ENETOCC contains six registers that record the use of the ENET CPU by:

- call processing-related processes
- scheduler-related processes
- system-related processes
- maintenance-related processes
- background-related processes
- idler class processes

Release history

The OM group ENETOCC was introduced in BCS31.

Registers

The OM group ENETOCC registers appear on the MAP terminal as follows:

| | | | |
|---------|---------|--------|---------|
| ENCPOCC | ENSCHED | ENFORE | ENMAINT |
| ENBKG | ENIDLE | | |

Group structure

The OM group ENETOCC provides one tuple for each ENET card in the office.

Key field:

There are no Key fields.

Info field:

There are no Info field.

Associated OM groups

The ENETSYS monitors the performance of the ENET system cards.

OM group ENETOCC (continued)

The ENETMAT monitors the performance of the ENET matrix cards.

The ENETPLNK monitors the performance of the ENET peripheral side (P-side) links.

Associated functional groups

The following functional groups associate with the OM group ENETOCC:

- SuperNode offices that have ENET

Associated functionality codes

The associated functionality codes for the OM group ENETOCC appear in the following table.

| Functionality | Code |
|------------------------|----------|
| Enhanced Network—Basic | NTXE01AA |

Register ENBKG

Background occupancy (ENBKG)

Register ENBKG records if the ENET CPU holds background-related processes. Examples of background-related processes are routine maintenance logs, service orders, OM accumulation and audits.

At the beginning of the transfer period, ENBKG is set to zero. The occupancy value for the ENET CPU background transfers from the ENET node to the CM node every 60 s. The OM system samples the background occupancy value stored on the CM every 100 s. The 100 s is the slow sample period. The OM system accumulates the samples over the transfer period.

To obtain the percentage of ENET CPU occupancy attributed to background-related processes, perform the following calculation. Divide the ENBKG register value by the number of slow samples from the transfer period.

If a sample dump of OM group ENETOCC appears as follows:

OM group ENETOCC (continued)

```

CLASS:ACTIVE START:1996/04/24 17:30:00WED; STOP:1996/04/24 17:33:01WED;
SLOWSAMPLES:      2 ; FASTSAMPLES:      18 ;

INFO (ENETOCC_PLANE_SHELF)

      ENCPOCC   ENSCHED   ENFORE   ENMAINT   ENBKG   ENIDLE
0          0         0         0         0         0
      2          20        12         58         2        106

```

The percentage of ENET CPU (on plane 0 shelf 0) occupancy attributed to background-related processes for the transfer period is $(2/2) = 1\%$

Register ENBKG release history

Register ENBKG was introduced in BCS31.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Register ENCPOCC

Call processing occupancy (ENCPOCC)

Register ENCPOCC records if the ENET CPU holds call processing-related processes.

At the beginning of the transfer period, register ENCPOCC is set to zero. The CPU call processing occupancy value for the ENET transfers from the ENET node to the CM node every 60 seconds. The OM system samples the call processing occupancy value stored on the CM every 100 s. One hundred seconds is the slow sample period. The OM system accumulates the samples over the transfer period.

To obtain the percentage of ENET CPU occupancy attributed to call processing-related processes, perform the following calculation. Divide the ENCPOCC register value by the number of slow samples from the transfer period.

If a sample dump of OM group ENETOCC appears as follows:

OM group ENETOCC (continued)

```

CLASS:ACTIVE START:1996/04/24 17:30:00WED; STOP:1996/04/24 17:33:01WED;
SLOWSAMPLES:      2 ; FASTSAMPLES:      18 ;

INFO (ENETOCC_PLANE_SHELF)

      ENCPOCC   ENSCHED   ENFORE   ENMAINT   ENBKG   ENIDLE
0
      2         20       12       58       2       106

```

The percentage of ENET CPU (on plane 0 shelf 0) occupancy attributed to call processing-related processes for the transfer period is $(2/2) = 1\%$

Register ENCPOCC release history

Register ENCPOCC was introduced in BCS31.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Register ENFORE

System occupancy (ENFORE)

Register ENFORE records system-related processes occupy the ENET CPU. Examples of system-related processes are sanity checking, or system-critical work that requires immediate response.

At the beginning of the transfer period, register ENFORE is set to zero. The system occupancy for the ENET CPU transfers from the ENET node to the CM node every 60 seconds. The OM system samples the system occupancy value stored on the CM every 100 seconds. The slow sample period is 100 s. The OM system accumulates the samples over the transfer period.

To obtain the percentage of ENET CPU occupancy attributed to system-related processes perform the following calculation. Divide the ENFORE register value by the number of slow samples from the transfer period.

If a sample dump of OM group ENETOCC appears as follows:

OM group ENETOCC (continued)

```

CLASS:ACTIVE START:1996/04/24 17:30:00WED; STOP:1996/04/24 17:33:01WED;
SLOWSAMPLES:      2 ; FASTSAMPLES:      18 ;

INFO (ENETOCC_PLANE_SHELF)

      ENCOCC   ENSCHED   ENFORE   ENMAINT   ENBKG   ENIDLE
0
      2         20        12        58        2       106

```

The percentage of ENET CPU (on plane 0 shelf 0) occupancy attributed to system-related processes for the transfer period is $(12/2) = 6\%$

Register ENFORE release history

Register ENFORE was introduced in BCS31.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Register ENIDLE

Idler occupancy (ENIDLE)

Register ENIDLE records if the ENET CPU performs idler class processes. These processes run when other processes do not run.

At the beginning of the transfer period, the system sets the ENIDLE to zero. The system transfers the ENET CPU idler occupancy value from the ENET node to the CM node every 60 s. The OM system samples idler occupancy value stored on the CM every 100 s. The slow sample period is 100 s. The OM system accumulates the samples over the transfer period.

To obtain the percentage of ENET CPU occupancy attributed to idler-related processes, perform the following calculation. Divide the ENIDLE register value by the number of slow samples from the transfer period.

If a sample dump of OM group ENETOCC appears as follows:

OM group ENETOCC (continued)

```

CLASS:ACTIVE START:1996/04/24 17:30:00WED; STOP:1996/04/24 17:33:01WED;
SLOWSAMPLES:      2 ; FASTSAMPLES:      18 ;

INFO  (ENETOCC_PLANE_SHELF)

      ENCPOCC   ENSCHED   ENFORE   ENMAINT   ENBKG   ENIDLE
0           2           0           0           58       2       106

```

The percentage of ENET CPU occupancy related to idler-related processes for the transfer period is $(106/2) = 53\%$. The ENET CPU for this example is on plane 0, shelf 0.

Register ENIDLE release history

Register ENIDLE was introduced in BCS31.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Register ENMAINT

Maintenance occupancy (ENMAINT)

Register ENMAINT records if the ENET CPU performs maintenance-related processes.

At the beginning of the transfer period, the system sets the ENMAINT to zero. The system transfers ENET CPU maintenance occupancy value from the ENET node to the CM node every 60 s. The OM system samples maintenance occupancy value stored on the CM every 100 s. The slow sample period is 100 s. The OM system accumulates samples over the transfer period.

To obtain the percentage of ENET CPU occupancy attributed to maintenance-related processes, perform the following calculation. Divide the ENMAINT register value by the number of slow samples from the transfer period.

If a sample dump of OM group ENETOCC appears as follows:

OM group ENETOCC (continued)

```

CLASS:ACTIVE START:1996/04/24 17:30:00WED; STOP:1996/04/24 17:33:01WED;
SLOWSAMPLES:      2 ; FASTSAMPLES:      18 ;

INFO (ENETOCC_PLANE_SHELF)

      ENCPOCC   ENSCHED   ENFORE   ENMAINT   ENBKG   ENIDLE
0           0         0
      2         20        12         58        2        106

```

The percentage of ENET CPU occupancy related to maintenance-related processes for the transfer period is $(58/2) = 29\%$. The ENET CPU for this example is on plane 0, shelf 0.

Register ENMAINT release history

Register ENMAINT was introduced in BCS31.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Register ENSCHED

Scheduler occupancy (ENSCHED)

Register ENSCHED records if the ENET CPU performs scheduler-related processes.

At the beginning of the transfer period, the system sets ENSCHED to zero. The system transfers ENET CPU scheduler occupancy value from the ENET node to the CM node every 60 s. The OM system samples scheduler occupancy value stored on the CM every 100 s and accumulates the samples over the transfer period.

To obtain the percentage of ENET CPU occupancy related to scheduler-related processes, perform the following calculation. Divide the ENSCHED register value by the number of slow samples from the transfer period.

If a sample dump of OM group ENETOCC appears as follows:

OM group ENETOCC (end)

```
CLASS:ACTIVE START:1996/04/24 17:30:00WED; STOP:1996/04/24 17:33:01WED;
SLOWSAMPLES:      2 ; FASTSAMPLES:      18 ;
INFO (ENETOCC_PLANE_SHELF)
      ENCPOCC   ENSCHED   ENFORE   ENMAINT   ENBKG   ENIDLE
0
      2         20       12        58        2       106
```

The percentage of ENET CPU occupancy related to scheduler-related processes for the transfer period is $(20/2) = 10\%$. The ENET CPU for this example is on plane 0, shelf 0.

Register ENSCHED release history

Register ENSCHED was introduced in BCS31.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

OM group ENETPLNK

OM description

Enhanced network (ENET) peripheral side (P-side) links (ENETPLINK)

All SuperNode offices with ENET have OM group ENETPLNK.

The OM group ENETPLNK monitors the performance of ENET P-side links. The OM group ENETPLNK contains seven peg registers that count the following events:

- errors on speech connections through the network
- errors on in-service links between the network and peripheral modules (PM)
- faults on P-side links
- ENET partitioning that occurs because an ENET P-side link is system busy
- ENET partitioning that occurs because an ENET P-side link is manual busy
- PMs that the system isolates because an ENET P-side link is system busy
- PMs that the system isolates because an ENET P-side link is manual busy

The OM group ENETPLNK also contains use registers that record the following events:

- A P-side link is system busy.
- A P-side link is manual busy.
- ENET partitioning occurs because an ENET P-side link is out of service.
- the system isolates a PM because an ENET P-side link is out of service.

Release history

The OM group ENETPLNK was introduced in BCS31.

BCS34

The system sets register ENLKPARU to zero.

Registers

The OM group ENETPLNK registers appear on the MAP terminal as follows:

OM group ENETPLNK (continued)

| | | | |
|----------|----------|----------|----------|
| ENSPCHER | ENLKERR | ENLKFLT | ENSBLKU |
| ENMBLKU | ENLKPARU | ENSLKPAR | ENMLKPAR |
| ENLKISOU | ENSLKISO | ENMLKISO | |

Group structure

The OM group ENETPLNK provides one tuple for each office.

Key field:

There is no Key field

Info field:

There is no Info field.

Associated OM groups

The OM groups ENETSYS monitors the performance of the ENET system cards.

The OM groups ENETMAT monitors the performance of the ENET matrix cards.

The OM groups ENETOCC provides information on the central processing unit occupancy of each in-service ENET. The OM group ENETOCC provides information on each ENET a DMS-100 Family switch.

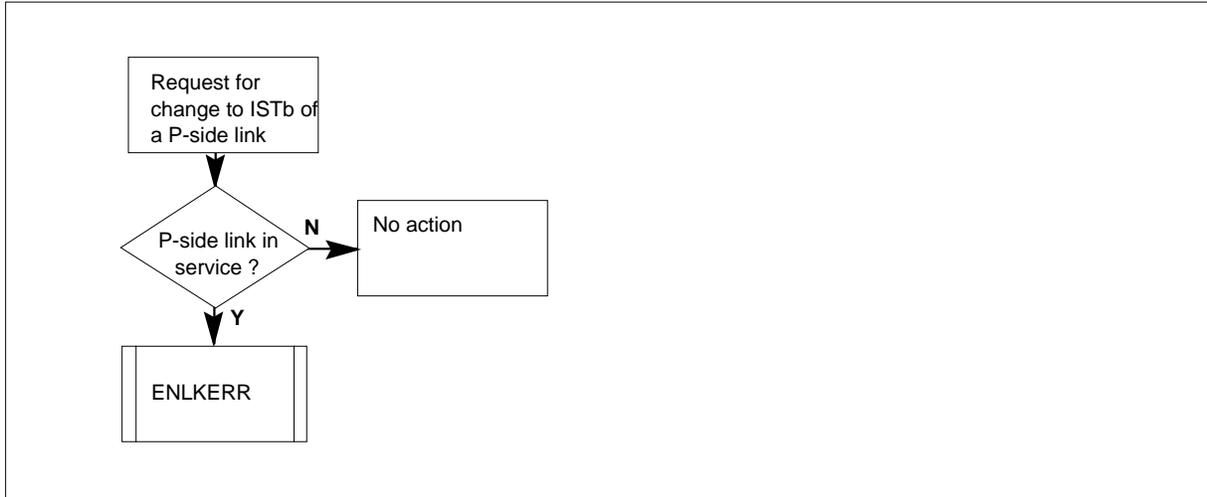
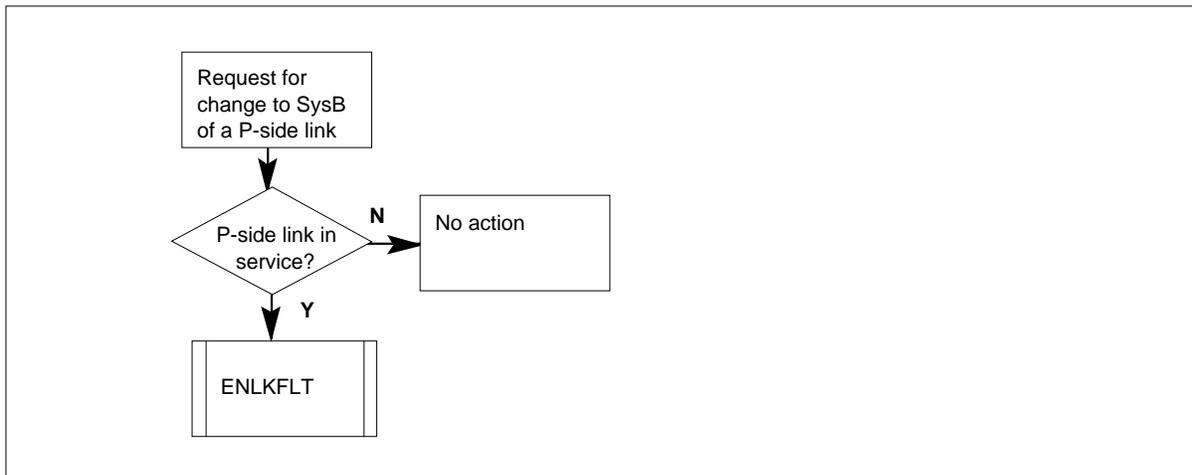
Associated functional groups

The functional group SuperNode offices equipped with ENET associates with OM group ENETPLNK.

Associated functionality codes

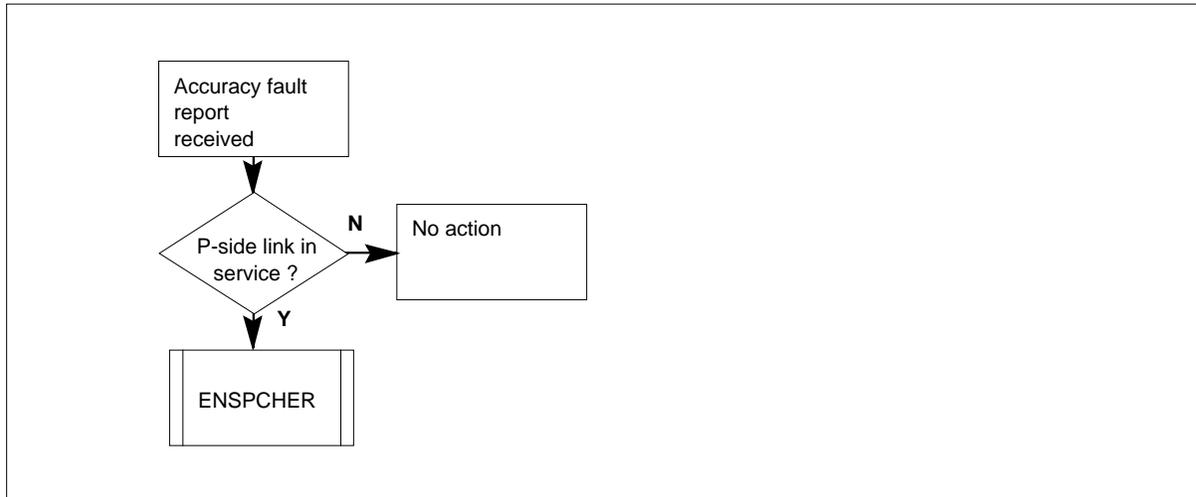
The associated functionality codes for the OM group ENETPLNK appear in the following table.

| Functionality | Code |
|---------------|----------|
| ENET - Basic | NTXE01AA |

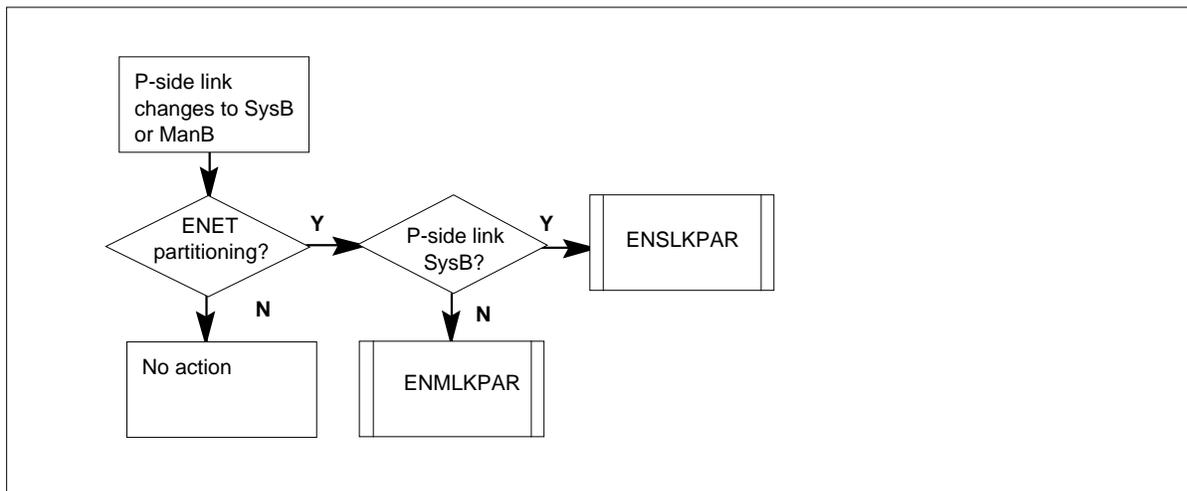
OM group ENETPLNK (continued)**OM group ENETPLNK registers: P-side link errors****OM group ENETPLNK registers: P-side link faults**

OM group ENETPLNK (continued)

OM group ENETPLNK registers: speech connection errors

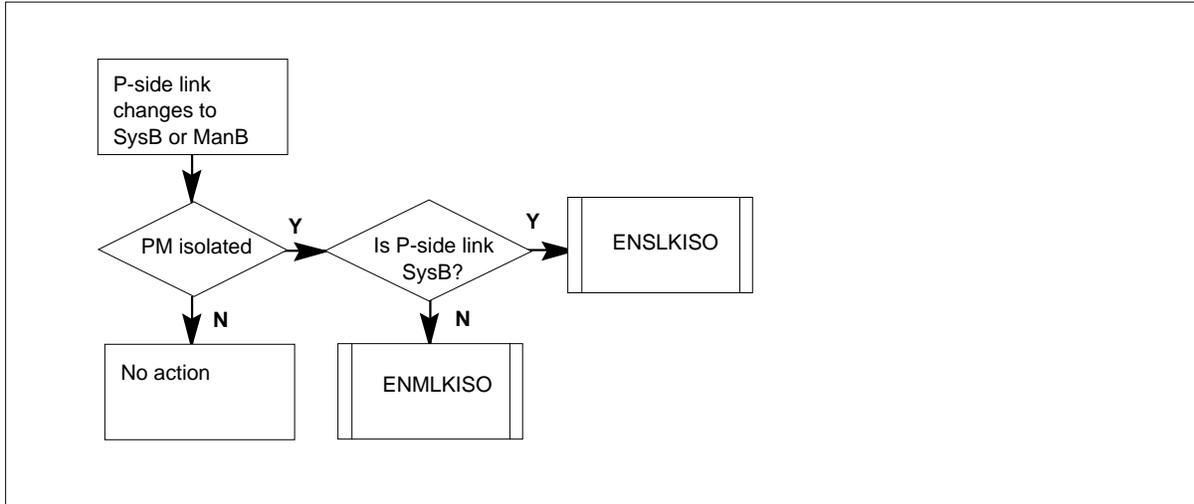


OM group ENETPLNK registers: P-side link partitioning



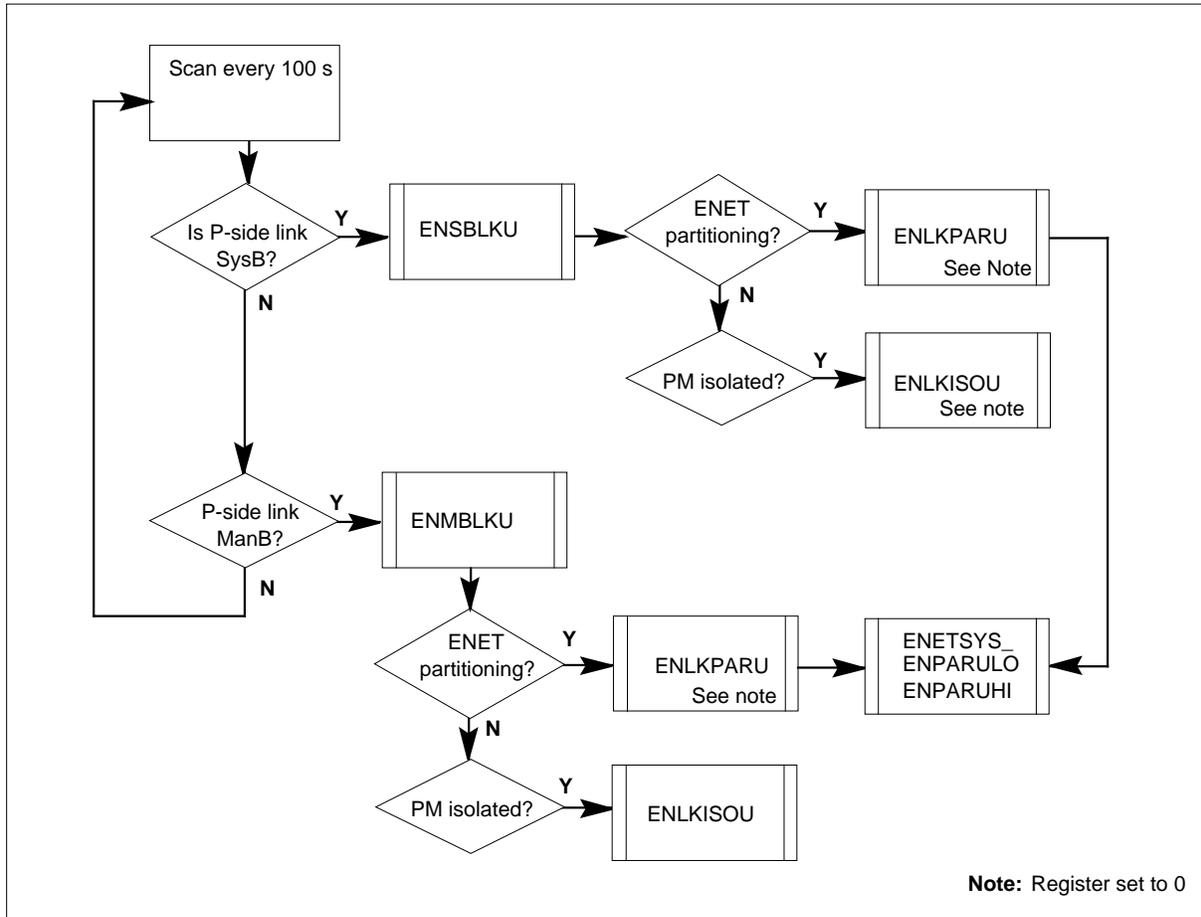
OM group ENETPLNK (continued)

OM group ENETPLNK registers: PM isolated



OM group ENETPLNK (continued)

OM group ENETPLNK registers: P-side link use registers



Register ENLKERR

P-side link errors (ENLKERR)

Register ENLKERR counts all errors that the system detect on in-service links between the network and PMs.

Register ENLKERR release history

Register ENLKERR was introduced in BCS31.

Associated registers

There are no associated registers.

Associated logs

The system generates ENET308 when a P-side link is set to in-service trouble.

OM group ENETPLNK (continued)

Register ENLKFLT

P-side link faults (ENLKFLT)

Register ENLKFLT counts the number of times the system cannot recover a P-side link between the ENET and a PM. The recovery attempt occurs following detection of an error. The link is system busy until manual action or a successful system-initiated recovery attempt.

Register ENLKFLT release history

Register ENLKFLT was introduced in BCS31.

Associated registers

There are no associated registers.

Associated logs

The system generates ENET303 when a P-side link changes state from in service to system busy.

Register ENLKISOU

P-side link isolation use (ENLKISOU)

Register ENLKISOU is a use register. The system scans the ENET P-side links every 100 s. Register ENLKISOU records if the system isolated a PM because of an out-of-service link.

An isolated PM does not have access to the network. Isolation occurs when the last ENET P-side link that connects a PM to the rest of the network goes out of service. The PM becomes central side (C-side) busy.

A P-side link and the mate P-side link on the opposite plane are out of service. The ENLKISOU increases by the number of C-side busy PMs that these P-side links connect to the network. This condition must persist for 100 s before the register increases.

Register ENLKISOU release history

Register ENLKISOU was introduced in BCS31.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

OM group ENETPLNK (continued)

Register ENLKPARU

P-side link partitioning usage (ENLKPARU)

Register ENLKPARU is a usage register. The system scans the ENET P-side links every 100 s. Register ENLKPARU records when: and . This condition must persist for 100 s for the register to increase.

- a minimum of one out-of-service link is present on plane 0
- a minimum of one out-of-service ENET components is present on plane 1

A 100 s interval must occur between these events for register ENLKPARU to increase.

This condition can partition the network. When partitioning occurs, ENLKPARU increases by number of paths the system cannot access from out-of-service P-side links.

Register ENLKPARU release history

Register ENLKPARU was introduced in BCS31.

BCS34

Register ENLKPARU is set to zero. Registers ENETSYS_ENPARUHI and ENETSYS_ENPARULO replace the ENLKPARU .

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Register ENMBLKU

P-side link system busy usage (ENMBLKU)

Register ENSBLKU is a usage register. The system scans the ENET P-side links every 100 s. Register ENSBLKU records if a link is a system-busy link.

Register ENMBLKU release history

Register ENMBLKU was introduced in BCS31.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

OM group ENETPLNK (continued)

Register ENMLKISO

P-side link manual busy isolation (ENMLKISO)

Register ENMLKISO counts in-service ENET P-side links that become manual busy and cause isolation of a minimum of one PM.

An isolated Pm does not access the network. Isolation occurs when the last ENET P-side link that connects the PM to the rest of the network goes out of service. The PM becomes C-side busy.

Register ENMLKISO release history

Register ENMLKISO is a usage register.

Associated registers

There are no associated registers.

Associated logs

The system generates ENET301 when a P-side link changes state from in service to manual busy.

Register ENMLKPAR

P-side link manual busy partitioning (ENMLKPAR)

Register ENMLKPAR when in-service ENET P-side links become ManB while links on the opposite plane are out of service. This condition blocks calls between PMs. This condition must continue for 100 s before register ENMLKPAR increases.

Register ENMLKPAR release history

Register ENMLKPAR was introduced in BCS31

Associated registers

There are no associated registers.

Associated logs

The system generates ENET301 when a P-side link changes state from in service to manual busy.

Register ENSBLKU

P-side link system busy use (ENSBLKU)

Register ENSBLKU is a usage register. The system scans the ENET P-side links every 100 s. Register ENSBLKU records if a link is system busy.

OM group ENETPLNK (continued)

Register ENSBLKU release history

Register ENSBLKU was introduced in BCS31

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Register ENSLKISO

P-side link system busy isolation (ENSLKISO)

Register ENSLKISO counts in-service ENET P-side links that become system busy and cause isolation of a minimum of one PM.

An isolated PM does not have access to the network. Isolation occurs if the last ENET P-side link that connects a PM to the network goes out of service. The PM becomes C-side busy.

Register ENSLKISO release history

Register ENSLKISO was introduced in BCS31

Associated registers

There are no associated registers.

Associated logs

The system generates ENET301 when a P-side link changes state from in service to system busy.

Register ENSLKPAR

P-side link system busy partitioning (ENSLKPAR)

Register ENSLKPAR counts when in-service ENET P-side links become SysB. The links become SysB while P-side links on the opposite plane are out of service. This condition blocks calls between PMs. This condition must continue for 100 s before the register increases because of the scanning interval.

Register ENSLKPAR release history

Register ENSLKPAR was introduced in BCS31.

Associated registers

There are no associated registers.

OM group ENETPLNK (end)

Associated logs

The system generates the ENET303 when a P-side link changes state from in service to system busy.

Register ENSPCHER

P-side links speech errors (ENSPCHER)

Register ENSPCHER counts all errors detected on speech connections through the network.

The value in register ENSPCHER equals the number of integrity failure reports received from PM controllers. The following failures can cause an integrity failure:

- a failure of the PM at the other end of the connection
- a failure on a link between a PM and the network

Register ENSPCHER release history

Register ENSPCHER was introduced in BCS31.

Associated registers

There are no associated registers.

Associated logs

The system generates ENCP100 when the PM reports an integrity fault and does not terminate the connection. .

The system generates ENCP101 when a PM reports an accuracy mismatch for a terminated connection. The termination occurs when the fault handler begins to analyse the report.

The system generates ENCP102 when the PM reports an integrity failure and does not terminate the connection.

OM group ENETSYS

OM description

Enhanced network system card (ENETSYS)

All SuperNode offices with ENET have OM group ENETSYS

The OM group ENETSYS monitors the performance of the following enhanced network (ENET) system cards:

- NT9X13 - Processor card
- NT9X26 - Remote terminal interface paddle board
- NT9X36 - Network clock and message controller card
- NT9X40 - Quad DS-512 fiber interface paddle board
- NT9X30 - +5 V power converter
- NT9X31 - -5 V power converter

The ENETSYS contains 12 registers that count:

- errors in ENET system cards
- faults in ENET system cards
- calls that the system denies because system cards are out of service (OOS)
- ENET central processing unit (CPU) traps
- ENET CPU software errors (SWERR)
- ENET CPU warm restarts
- ENET CPU cold restarts
- ENET CPU reload-restarts
- ENET partitioning that occurs because an ENET system card is system busy
- ENET partitioning that occurs because an ENET system card is manual busy
- peripheral modules (PM) isolated because an ENET system card is system busy
- PMs isolated because an ENET system card is manual busy

The OM group ENETSYS also contains four use registers that record when:

- a system card is system busy
- a system card is manual busy

OM group ENETSYS (continued)

- ENET partitioning occurs because an ENET system card is OOS
- a PM isolated because an ENET system card is OOS

Release history

The OM group ENETSYS was introduced in BCS31.

BCS34

The system sets ENPARU to zero. Registers ENPARUHI and ENPARULO replace the ENPARU.

Registers

The OM group ENETSYS registers appear on the MAP terminal as follows:

| | | | |
|----------|----------|----------|---------|
| ENERR | ENFLT | ENSBU | ENMBU |
| ENCALDND | ENTRAPS | ENSWERRS | ENWARM |
| ENCOLD | ENRELOAD | ENPARU | ENSPARP |
| ENMPARP | ENISOU | ENSISOP | ENMISOP |
| ENPARUHI | ENPARULO | | |

Group structure

The OM group ENETSYS provides one tuple per office.

Key field:

There is no Key field

Info field:

There is no Info field

Associated OM groups

The OM group ENET peripheral side (P-side) MAT monitors the performance of the ENET matrix cards.

The OM group ENETPLNK monitors the performance of the ENET P-side links.

The OM group ENETOCC provides information about the CPU occupancy of each in-service ENET in a DMS-100 Family switch.

Associated functional groups

The functional group SuperNode offices with ENET associates with OM group ENETSYS.

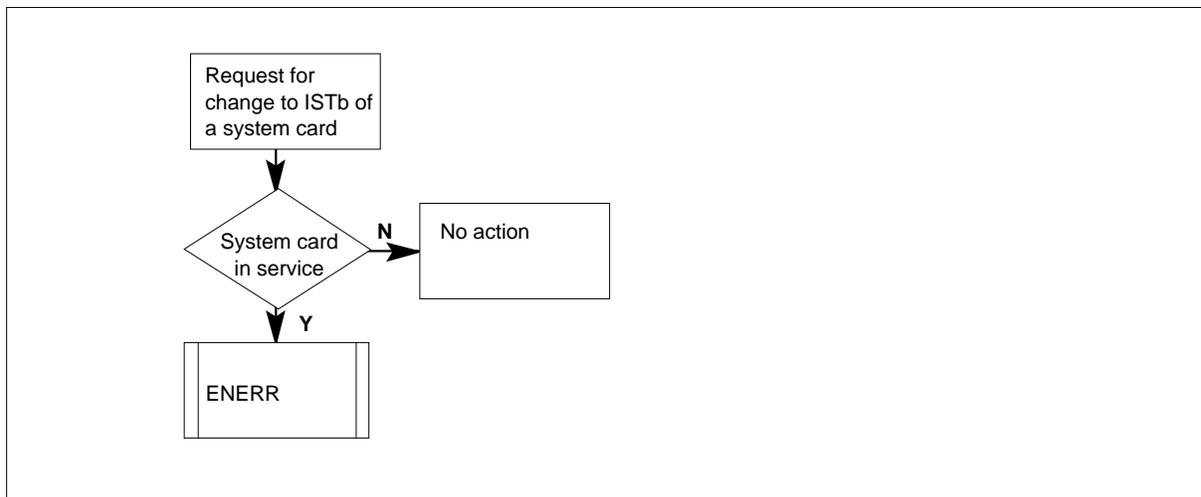
OM group ENETSYS (continued)

Associated functionality codes

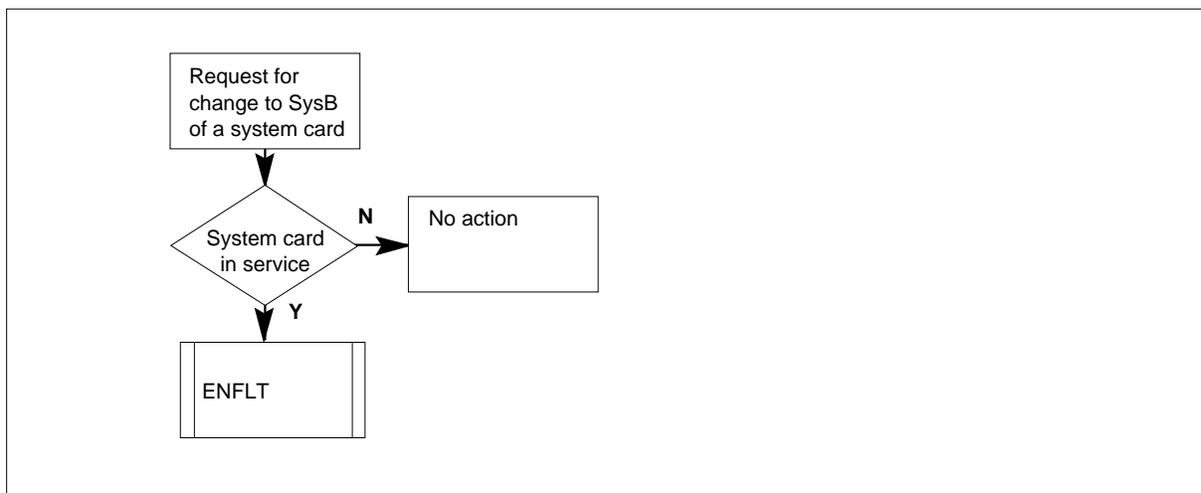
The associated functionality codes for OM group ENETSYS appear in the following table.

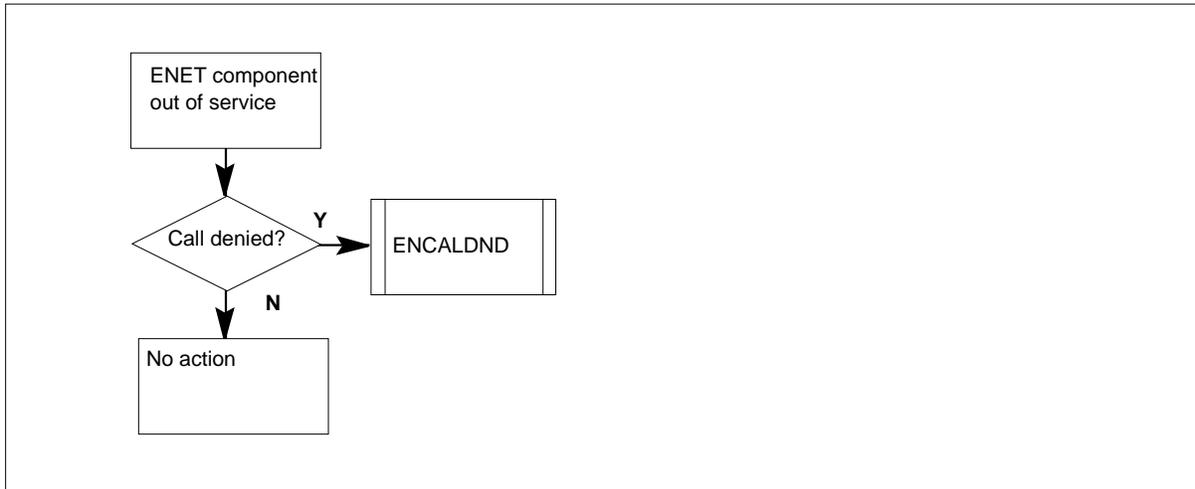
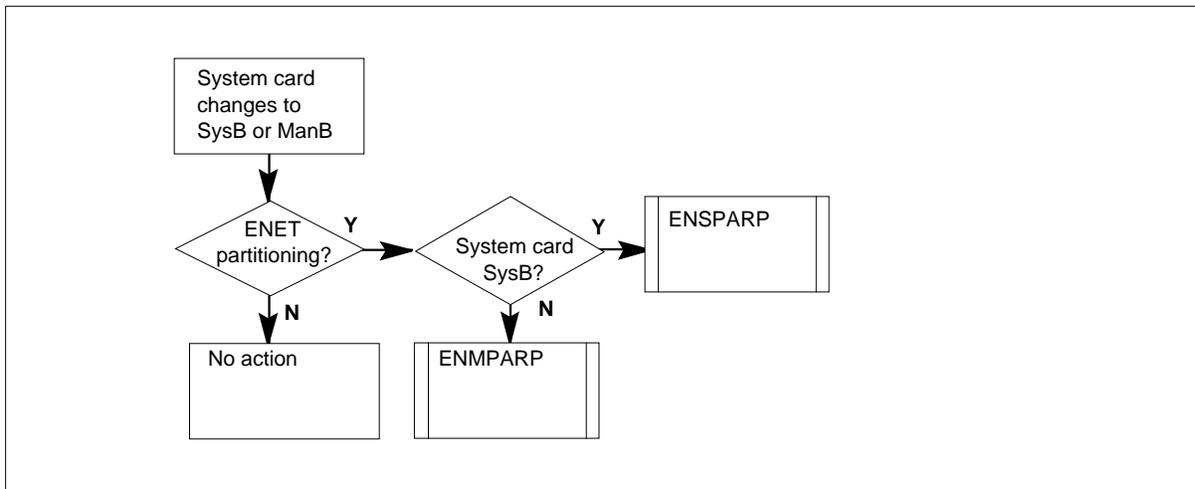
| Functionality | Code |
|---------------|----------|
| ENET - Basic | NTXE01AA |

OM group ENETSYS registers: system card errors



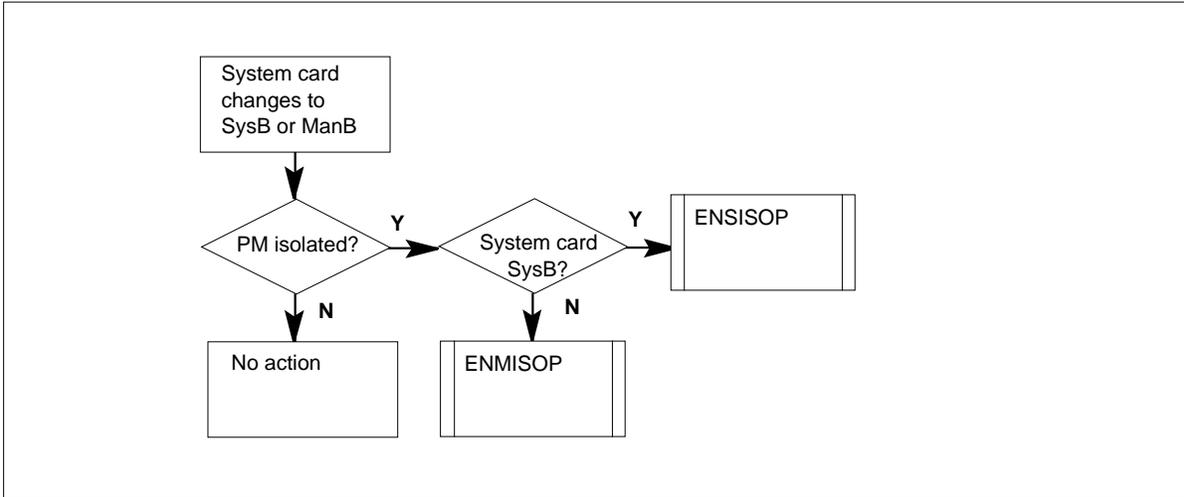
OM group ENETSYS registers: system card faults



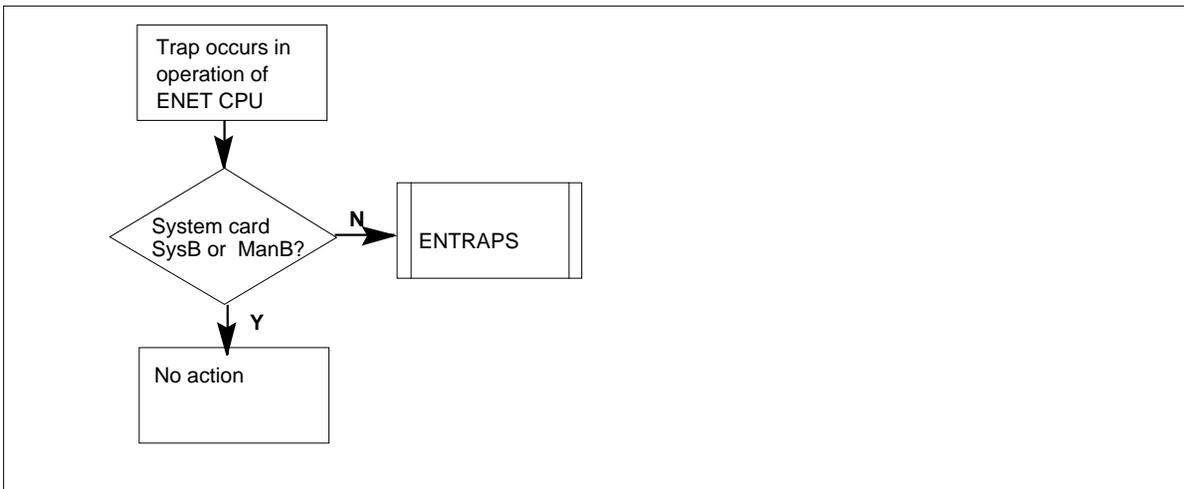
OM group ENETSYS (continued)**OM group ENETSYS registers: calls denied****OM group ENETSYS registers: ENET partitioning**

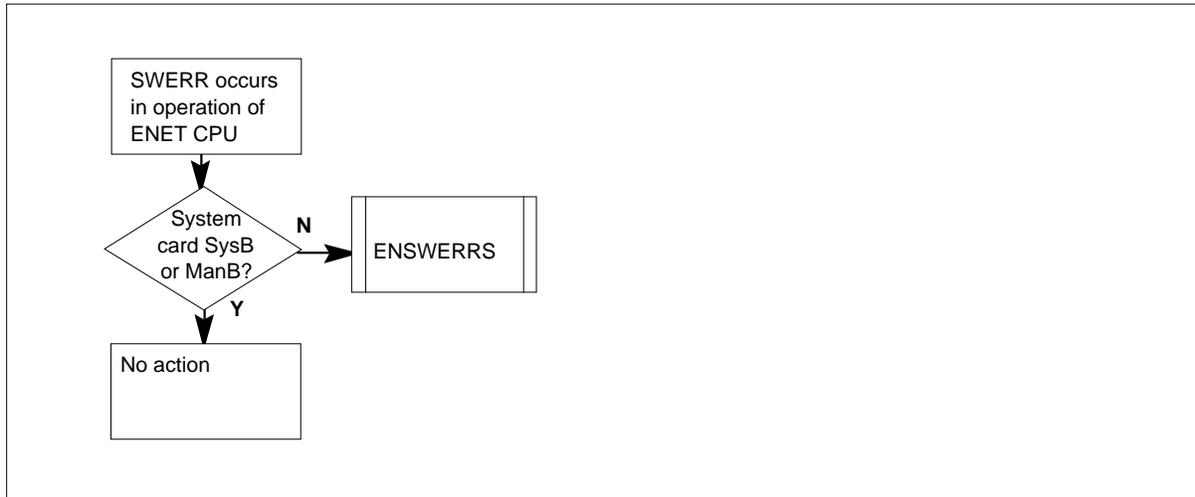
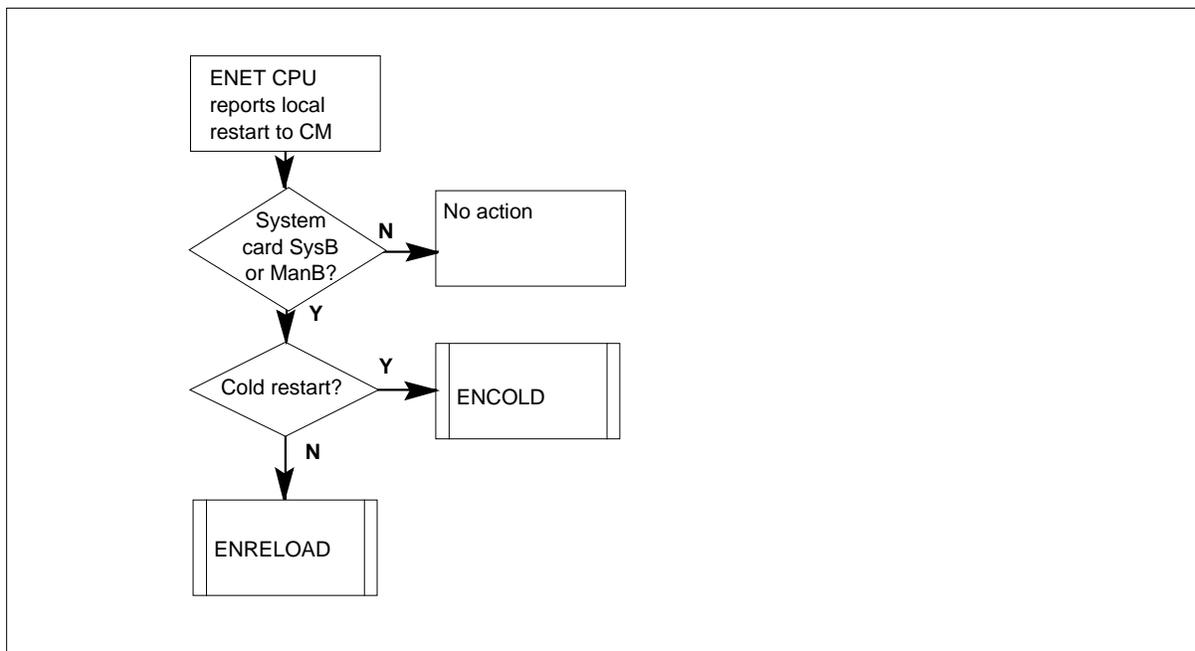
OM group ENETSYS (continued)

OM group ENETSYS registers: PM isolation



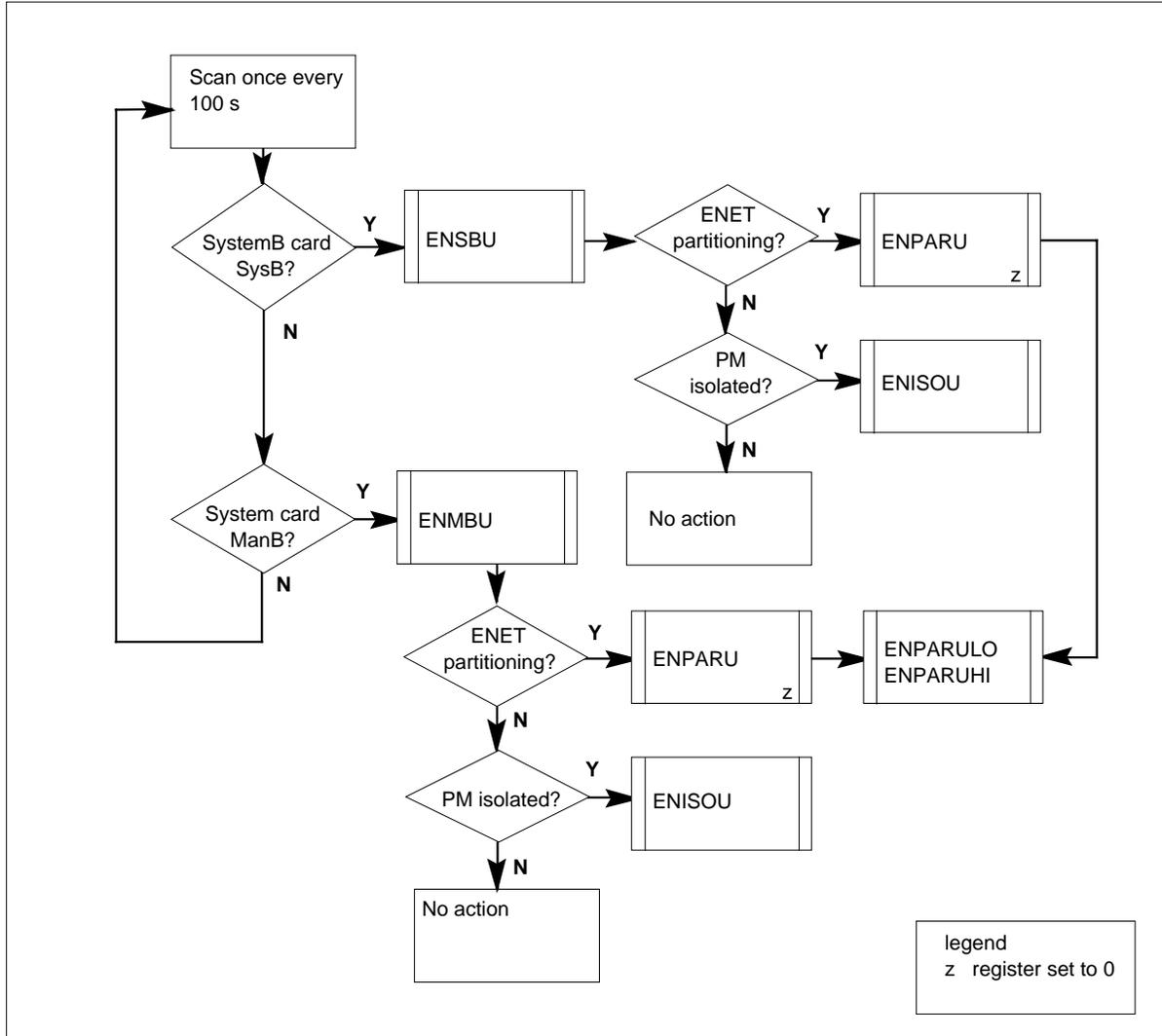
OM group ENETSYS registers: trap in operation of ENET CPU



OM group ENETSYS (continued)**OM group ENETSYS registers: SWERR in operation of ENET CPU****OM group ENETSYS registers: ENETSYS restarts**

OM group ENETSYS (continued)

OM group ENETSYS registers: busy use registers



Register ENCALDND

Calls denied (ENCALDND)

REGISTER ENCALDND counts calls that the system denies because ENET components in both planes are OOS. An OOS component is a component that is system busy, manual busy, central side (C-side) busy, or off line.

Register ENCALDND release history

Register ENCALDND was introduced in BCS31.

OM group ENETSYS (continued)

Associated registers

There are no associated registers.

Associated logs

The system generates ENCP136 when an attempt to establish an ENET connection. The system generates the log when the hardware needed for connection is OOS in both planes.

Register ENCOLD

Cold restarts (ENCOLD)

Register ENCOLD counts cold restarts that occur in the operation of the ENET CPU.

Register ENCOLD release history

Register ENCOLD was introduced in BCS31.

Associated registers

There are no associated registers.

Associated logs

The system generates ENET103 when an ENET node changes state from in service to system busy.

Register ENERR

System card errors (ENERR)

Register ENERR counts errors that the system detects in the operation of the ENET system cards. This count includes errors that the system detects:

- through problem reports from the ENET local processor
- as a result of routine or initializing audits
- through the failure of an ENET shelf to respond to the computing module

Register ENERR release history

Register ENERR was introduced in BCS31.

Associated registers

There are no associated registers.

Associated logs

The system generates ENET108 when the system sets an ENET node to in-service trouble.

OM group ENETSYS (continued)

Register ENFLT

System card faults (ENFLT)

Register ENFLT counts the number of times an ENET system card cannot recover from an error. The ENET is system busy until manual action or a successful system recovery.

Register ENFLT release history

Register ENFLT was introduced in BCS31.

Associated registers

There are no associated registers.

Associated logs

The system generates ENET103 when an ENET node changes state from in service to system busy.

Register ENISOU

System card isolation usage (ENISOU)

Register ENISOU is a usage register. Register ENISOU records peripheral modules (PM) because of OSS ENET system cards every 100 s.

An isolated PM does not have access to the network. Isolation occurs if the last ENET system card that connects a PM to the rest of the network becomes OOS. The PM becomes central-side busy.

If a system card and its mate on the opposite plane are OOS, register ENISOU increases. Register ENISOU increases by the number of C-side busy PMs that the system cards connect to the network.

Register ENISOU release history

Register ENISOU was introduced in BCS31.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Register ENMBU

System card manual busy usage (ENMBU)

OM group ENETSYS (continued)

The ENMBU is a usage register. Register ENMBU records ENET system cards that are manual busy every 100 s.

Register ENMBU release history

Register ENMBU was introduced in BCS31.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Register ENMISOP

Manual busy isolation with system cards (ENMISOP)

Register ENMISOP counts in-service ENET system cards that become manual busy and cause isolation of a minimum of one PM.

An isolated PM does not have access to the network. Isolation occurs if the last ENET system card that connects a PM to the network goes out of service. The PM becomes central-side busy.

Register ENMISOP release history

Register ENMISOP was introduced in BCS31.

Associated registers

There are no associated registers.

Associated logs

The system generates ENET101 when an ENET node changes state from in service to manual busy.

Register ENMPARP

System card manual busy partitioning (ENMPARP)

Register ENMPARP counts in-service ENET system cards that become manual busy when a system card on opposite plane is OOS. This condition can partition the network and block calls. A 100 s interval must occur between these events for this register ENMPARP to increase.

Register ENMPARP release history

The ENMPARP was introduced in BCS31.

OM group ENETSYS (continued)

Associated registers

There are no associated registers.

Associated logs

The ENET101 generates when an ENET node changes state from in service to manual busy.

Register ENPARU

Partitioning use with system cards (ENPARU)

Register ENPARU is a usage register. Register ENPARU records when: if an OOS ENET system card exists on plane zero. ENPARU also records if an OOS ENET component exists on plane 1. A 100-s interval must occur between these events for this register to increase.

- a minimum of one out-of-service link is present on plane 0
- a minimum of one out-of-service ENET component is present on plane 1

A 100 s interval must occur between these events for register ENPARU to increase.

This condition can partition the network. When partitioning occurs, register ENPARU increases by the number of paths the system cannot access. These parts are from the P-side links off the OOS ENET system card to other P-side links.

Register ENPARU release history

Register ENPARU was introduced in BCS31.

BCS34

The system sets register ENPARU to zero. Registers ENPARUHI and ENPARULO replace register ENPARU.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Register ENPARUHI

ENET partitioning usage register high (ENPARUHI)

Register ENPARUHI is a usage register that works with register ENPARULO. These registers show how many paths are not available for call processing.

OM group ENETSYS (continued)

The paths are not available because of out-of-service hardware components in either plane.

A scan rate occurs every 100 s. Register ENPARUHI increases when the ENPARULO exceeds 65535.

Total partitioning = (ENPARUHI x 65535) + ENPARULO

Register ENPARUHI and register ENPARULO replace the usage registers ENPARU, ENETMAT_ENCDPARU, ENETMAT_ENPBPAPU, and ENETPLNK_ENLKPARU. The old registers were plane-dependent and did not give a clear view of the whole network.

Register ENPARUHI release history

Register ENPARUHI was introduced in BCS34.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

Register ENPARULO

Register ENPARULO

ENET partitioning use register low (ENPARULO)

Register ENPARULO is a usage register that works together with register ENPARUHI. These registers reflect the number of paths not available for call processing. The paths are not available because of out-of-service hardware components in either plane.

A scan rate occurs every 100 s. After ENPARULO exceeds 65535, it is reset and ENPARUHI increases by one.

Total partitioning = (ENPARUHI x 65535) + ENPARULO

Register ENPARULO and register ENPARUHI replace the usage registers ENPARU, ENETMAT_ENCDPARU, ENETMAT_ENPBPAPU, and ENETPLNK_ENLKPARU. The old registers were plane-dependent and did not give a clear view of the whole network.

OM group ENETSYS (continued)

Register ENPARULO release history

Register ENPARULO was introduced in BCS34.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

Register ENPARUHI

Register ENRELOAD

Reload restarts (ENRELOAD)

Register ENRELOAD counts reload restarts that occur in the operation of the ENET CPU.

Register ENRELOAD release history

Register ENRELOAD was introduced in BCS31.

Associated registers

There are no associated registers.

Associated logs

The system generates ENET103 when an ENET node changes state from in service to system busy.

Register ENSBU

System card system busy usage (ENSBU)

Register ENSBU is a usage register. Register ENSBU records when an ENET system card is system busy every 100 s.

Register ENSBU release history

Register ENSBU was introduced in BCS31.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

OM group ENETSYS (continued)

Register ENSISOP

System busy isolation (ENISISOP)

Register ENSISOP counts in-service ENET system cards that become system busy and cause isolation of a PM.

An isolated PM does not have access to the network. Isolation occurs if the last ENET system card connecting a PM to the network becomes OOS. The PM becomes central-side busy.

Register ENSISOP release history

Register ENSISOP was introduced in BCS31.

Associated registers

There are no associated registers.

Associated logs

The system generates ENET103 when an ENET node changes state from in service to system busy.

Register ENSPARP

System busy partitioning (ENSPARP)

Register ENSPARP counts when an in-service ENET system card becomes system busy while an ENET component on opposite plane is OOS. A 100 s interval must occur between these events for the register to increase. This condition can partition the network and block calls.

Register ENSPARP release history

Register ENSPARP was introduced in BCS31.

Associated registers

There are no associated registers.

Associated logs

The system generates ENET103 when an ENET node changes state from in service to system busy.

Register ENSWERRS

Enhanced network (ENET) software error (SWERRS) (ENSWERRS)

Register ENSWERRS counts SWERRS that occur in the operation of the ENET system card.

OM group ENETSYS (end)

Register ENSWERRS release history

Register ENSWERRS was introduced in BCS31.

Associated registers

There are no associated registers.

Associated logs

The system generates SWERSS when:

- a software condition affects normal operation of the DMS or DMS PMs
- the LOGUTIL utility of a MAP display requests a log trace

Register ENTRAPS

Enhanced network (ENET) traps (ENTRAPS)

Register ENTRAPS counts traps that occur in the operation of the ENET system cards.

Register ENTRAPS release history

Register ENTRAPS was introduced in BCS31.

Associated registers

There are no associated registers.

Associated logs

The system generates TRAP when a software or hardware error condition causes an interruption of normal DMS operation.

Register ENWARM

Warm restarts (ENWARM)

Register ENWARM is not active.

Register ENWARM release history

Register ENWARM was introduced in BCS31.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

OM group ENG640M1

OM description

Engineering 640 Measurements 1 (ENG640M1)

The OM group ENG640M1 provides information about line use, counts originations, and counts terminations on selected subscriber lines or line groups.

Table ENG640I1 specifies the monitored lines. The table contains a maximum of 640 entries. You add the subscriber line usage (SLU) option to a line through SERVORD. The SLUADD command adds the line to table ENG640I1. Following the SLU_INSTALL command, the system copies the contents of table ENG640I1 into group ENG640M1.

Table ENG640I1 can accept new entries while group ENG640M1 monitors the lines that the table specified. The new entries do not affect the group before the SLU_INSTALL command.

Release history

The OM group ENG640M1 was introduced before BCS20.

NA006

The OM register BUSY0 was introduced.

CSP04

Registers TBU, ORIG, and TERM were changed to TBU0, ORIG0, and TERM0 in CSP04 to eliminate double use of OM register names.

BCS33

Register TBU changed in BCS33 to allow conversion from CCS to deci-erlangs.

BCS31

Current registers on the SL-100 in BCS31 for intelligent peripheral equipment.

Registers

The OM group ENG640M1 registers appear on the MAP terminal as follows:

TBU0

ORIG0

TERM0

BUSY0

OM group ENG640M1 (continued)

Group structure

The OM group ENG640M1 provides one tuple for each line specified in table ENG640I1.

Key field:

There is no Key field

Info field:

SLU_OM_INFO

Number of tuples:

1 to 640, according to the number of lines under study

To activate the SLU feature set parameter OPTIONAL_SLU_FEATURE in table OFCOPT to Y (yes). The SLU feature works in tables LENFEAT, IBNFEAT, and KSETFEAT.

Associated OM groups

The OM groups TRA125M1, TRA125M2, and TRA250M1 provide information about line use, and count originations and terminations on selected subscriber lines.

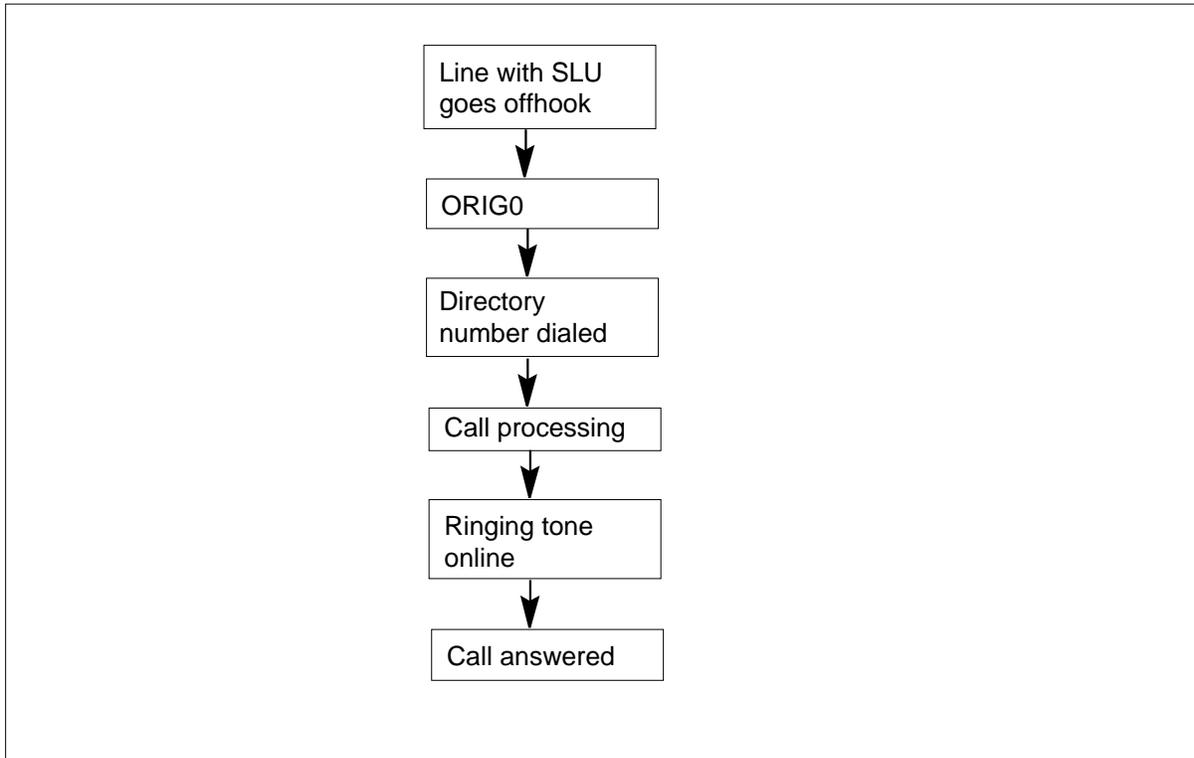
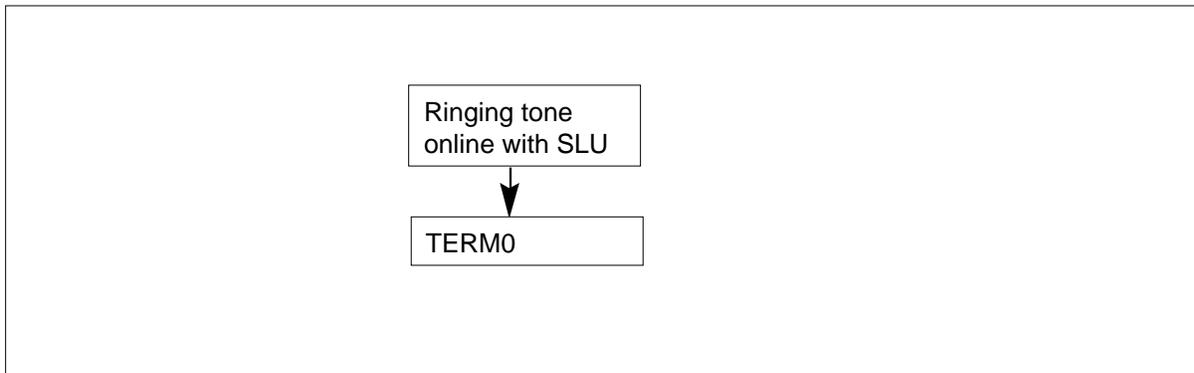
Associated functional groups

The Meridian SL-100 PBX functional group associates with OM group ENG640M1.

Associated functionality codes

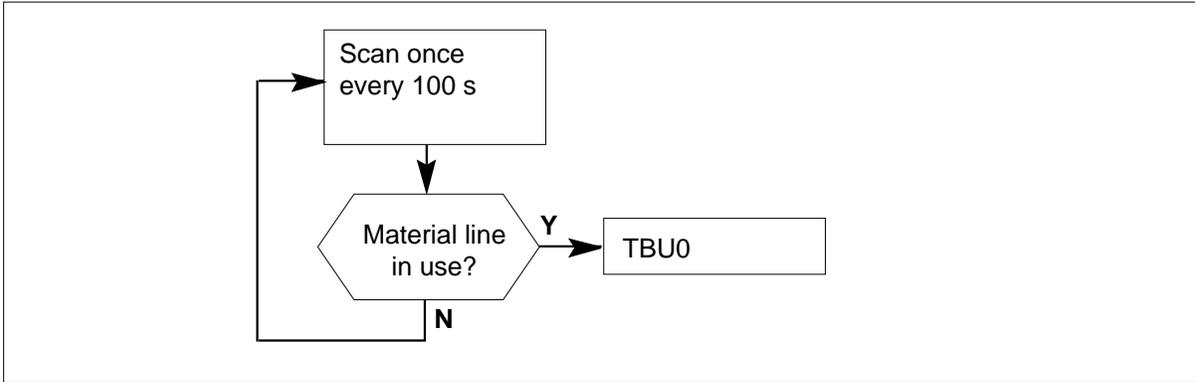
The associated functionality codes for the OM group ENG640M1 appear in the following table.

| Functionality | Code |
|--|----------|
| Extended Peripheral Equipment | NTXN25AA |
| Subscriber Line Measurements | NTX082AA |
| IBN Proprietary Business Set. This functionality allows assignment of SLU to any business set directory number appearance. The SLU is not available on business set multiple appearance directory number (MADN) secondary directory appearances. | NTX106AA |

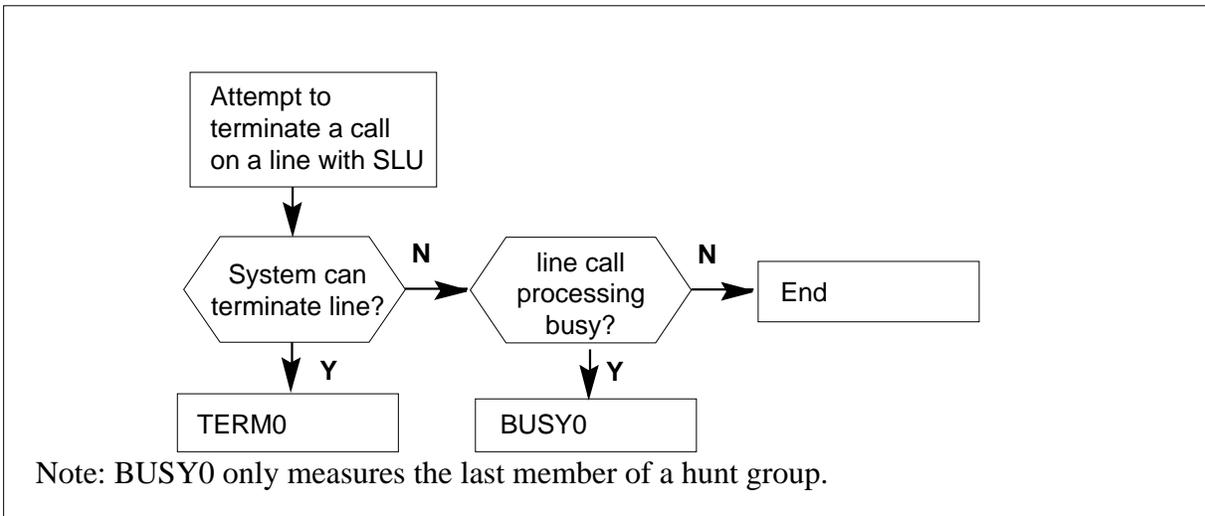
OM group ENG640M1 (continued)**OM group ENG640M1 registers: originating calls****OM group ENG640M1 registers: terminating calls**

OM group ENG640M1 (continued)

OM group ENG640M1 registers: use registers



OM group ENG640M1 call processing busy registers



Register TBU0

Traffic busy use (TBU0)

Register TBU0 is a usage register. Parameter ENG640M1_SCAN_RATE in table OFCVAR specifies the scan rate. TBU0 records when a line processes calls.

The default value of parameter ENG640M1_SCAN_RATE is 100 s.

Register TBU0 release history

Register TBU was introduced before BCS20.

OM group ENG640M1 (continued)

CSP04

Register TBU changed to TBU0 in CSP04 to eliminate double use of OM register names.

BCS33

When you set office parameter OMINERLANGS to Y, you convert the usage count from CCS to deci-erlangs before the count appears. Use the OMSHOW command on the ACTIVE class to display the usage count. The value held in the active registers remains in CCS.

BCS31

Register TBU increases on the SL-100 for intelligent peripheral equipment in BCS31.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs

Extension registers

There are no extension registers.

Register ORIG0

Originations (ORIGO)

Register ORIG0 increases when a subscriber with subscriber line usage (SLU) option attempts to originate a call and dial tone connects.

If the switch can identify which party of two- and four-party lines tries to call, the register increases one time. If the switch cannot identify the party, the register counts each directory number on the line.

Register ORIG0 release history

Register ORIG0 was introduced before BCS20.

CSP04

Register ORIG changed to ORIG0 in CSP04 to eliminate double use of OM register names.

BCS31

Register ORIG0 increased on the SL-100 for intelligent peripheral equipment in BCS31.

OM group ENG640M1 (continued)

Associated registers

There are no registers.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register TERM0

Terminations (TERM0)

Register TERM0 increases when a call terminates to a line with subscriber line usage (SLU) option and a ringing tone begins.

Register TERM0 does not count calls in the same hunt group or the same equivalent group.

Register TERM0 release history

TERM was introduced before BCS20.

CSP04

Register TERM changed to TERM0 in CSP04 to eliminate double use of OM register names.

BCS31

Register TERM increases on the SL-100 for intelligent peripheral equipment in BCS31.

Associated registers

For a hunt group with the SLU option associated with all the lines:
HUNT_HUNTATT - HUNT_HUNTOVFL = TERM0

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register BUSY0

Call Processing Busy - termination attempt failed

OM group ENG640M1 (end)

Register BUSY0 measures the number of calls that the system cannot terminate to a line because the line is CPB. For lines that are part of a hunt group, register BUSY0 measures only the last member of the hunt group.

Register BUSY0 release history

NA006

Register BUSY0 was introduced in NA006.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

OM group ESP

OM description

Essential service protection (ESP)

The OM groups ESP counts calls on essential service lines and failures to process essential line calls because of resource shortages.

ESP guarantees preferred service to essential lines. The system treats originations from essential lines before all other calls. Calls on essential lines require call condense blocks (CCB in table OFCENG). If CCBs are not available, the call will use the CCB for an origination that is not essential. If all CCBs are in use for essential originations, the call receives delayed service.

Release history

The OM group ESP was introduced before BCS20.

BCS29

Registers ESPDELAY, ESPORIG, ESPOVRD, ESPPMBLK, ESPPMCCO, ESPPMORG, and ESPPMSTL were introduced in BCS29 to count network-switched ISDN calls.

BCS27

Registers ESPPMBLK, ESPPMCCO, ESPPMORG, and ESPPMSTL were introduced in BCS27 for essential line originations in extended peripheral modules.

Registers

The OM group ESP registers appear on the MAP terminal as follows:

| | | | |
|----------|----------|----------|----------|
| ESPORIG | ESPOVRD | ESPDELAY | ESPPMORG |
| ESPPMSTL | ESPPMBLK | ESPPMCCO | |

Group structure

The OM group ESP provides one tuple for each office.

Key field:

There is no Key field

Info field:

There is no Info field

Associated OM groups

The OM group CP provides information on CCB activity.

OM group ESP (continued)

Associated functional groups

The Essential Service Protection functional group associates with OM group ESP.

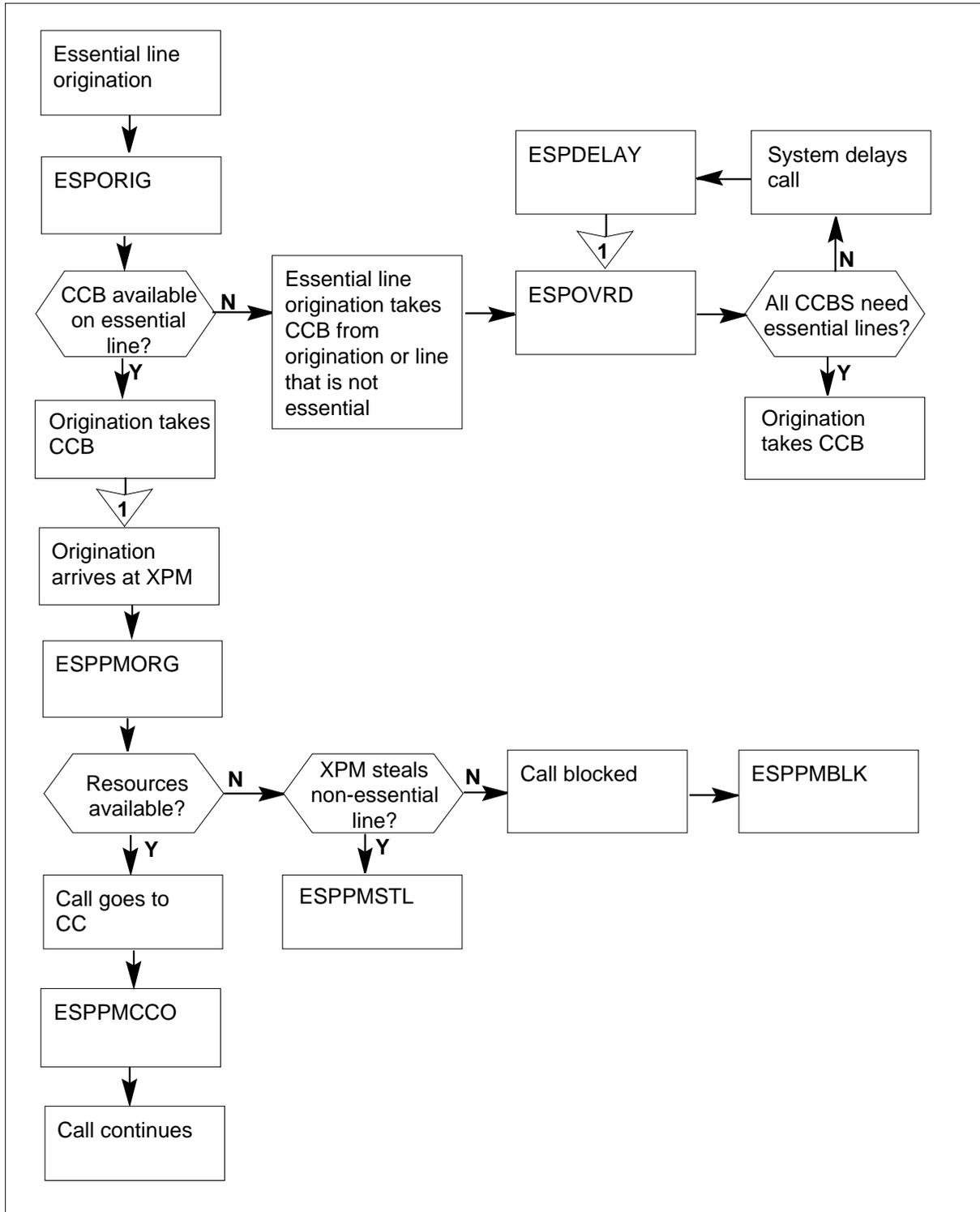
Associated functionality codes

The associated functionality codes for OM group ESP appear in the following table.

| Functionality | Code |
|----------------------|-------------|
| Local Features II | NTX902AA |

OM group ESP (continued)

OM group ESP registers



OM group ESP (continued)

Register ESPDELAY

Essential service protection delay (ESPDELAY)

Register ESPDELAY increases when an essential line receives delayed origination because CCBs are not available. All CCBs are in use on essential line originations.

This register indicates not enough CCBs in table OFCENG.

Register ESPDELAY release history

Register ESPDELAY was introduced before BCS20.

BCS29

Register ESPDELAY was introduced in BCS29 to increase by network-switched ISDN calls.

Associated registers

Register CP_CCBOVFL counts messages that the system loses because CCBs are not available.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register ESPORIG

Essential service protection originations (ESPIORG)

Register ESPORIG counts originations from essential lines.

Register ESPORIG release history

Register ESPORIG was introduced before BCS20.

BCS29

Register ESPORIG was introduced to increase by network-switched ISDN calls.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

OM group ESP (continued)

Extension registers

There are no extension registers.

Register ESPOVRD

Essential service protection override (ESPOVRD)

Register ESPOVRD increases when an essential line origination takes the CCB of an origination that is not essential.

Register ESPOVRD release history

Register ESPOVRD was introduced before BCS20.

BCS29

Register ESPOVRD was introduced in BCS29 to increase network-switched ISDN calls.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register ESPPMBLK

Essential service protection peripheral module blocked calls (ESPPMBLK)

Register ESPPMBLK increases when an extended peripheral module (XPM) cannot give priority service to an essential line origination. This condition occurs because resources are not available.

Register ESPPMBLK release history

Register ESPPMBLK was introduced in BCS27.

BCS29

Register ESPPMBLK was introduced in BCS29 to increase by network-switched ISDN calls.

Associated registers

Register ESPPMBLK counts calls that ESPPMORG also counts.

OM group ESP (continued)

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register ESPPMCCO

Essential services protection calls forwarded from peripheral module to central controller (ESPPMCCO)

Register ESPPMCCO counts essential line originations that the system forwards from an extended peripheral module (XPM) to the central controller (CC).

Register ESPPMCCO release history

Register ESPPMCCO was introduced in BCS27.

BCS29

Register ESPPMCCO was introduced in BCS29 to increase by network-switched ISDN calls.

Associated registers

Register ESPPMCCO counts the same calls that register ESPPMORG counts.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register ESPPMORG

Essential service protection peripheral module originations (ESPPMORG)

Register ESPPMORG counts originations for an essential line that arrive at an extended peripheral module (XPM). The XPM attempts to give the line priority service.

Register ESPPMORG release history

Register ESPPMORG was introduced in BCS27.

BCS29

Register ESPPMORG was introduced in BCS29 to increase by network-switched ISDN calls.

OM group ESP (end)

Associated registers

Register ESPPMSTL or ESPPMBLK or ESPPMCCO increases according to resources available for a call that ESPPMORG counts.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register ESPPMSTL

Essential service protection peripheral module steal

Register ESPPMSTL increases when an extended peripheral module (XPM) seizes a line that is not essential for an essential origination.

Register ESPPMSTL release history

Register ESPPMSTL was introduced in BCS27.

BCS29

Register ESPPMSTL was introduced in BCS29 to increase by network-switched ISDN calls.

Associated registers

Register ESPPMSTL counts calls the same calls that register ESPPMORG counts.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

OM group ESUP

OM description

Digital echo suppressor (ESUP)

The OM group ESUP provides information on digital echo suppressor (DES) circuits. Each DES card contains eight circuits that provide echo suppression for eight separate channels. The DES circuits monitor the levels of digital speech signals on the transmit and receive paths between connected trunk circuits. DES circuits automatically apply attenuation when necessary, to reduce echo effects on long-distance trunk circuits.

Two peg registers count requests for a DES. Three usage registers record when DES circuits are in maintenance states.

The OM group ESUP data helps to assess the performance of DES cards, and to make sure that the configuration meets traffic requirements.

Release history

The OM group ESUP was introduced before BCS20.

Registers

The OM group ESUP registers appear on the MAP terminal as follows:

DESSZRS DESOVFL DESTRU DESSBU DESMBU

Group structure

The OM group ESUP provides one tuple for each key.

Key field:

CP_SELECTOR is the external identifier ESUP.

Info field:

DES_OM_INFO is the number of DES circuits that the software defines.

Associated OM groups

There are no associated OM groups.

Associated functional groups

The following functional groups associate with OM group ESUP:

- DMS-100 Local
- DMS-100/200 Local/Toll

OM group ESUP (continued)

- DMS-200 Toll
- DMS-250 Toll/Tandem
- DMS-300 Gateway
- DMS International
- DMS-MTX

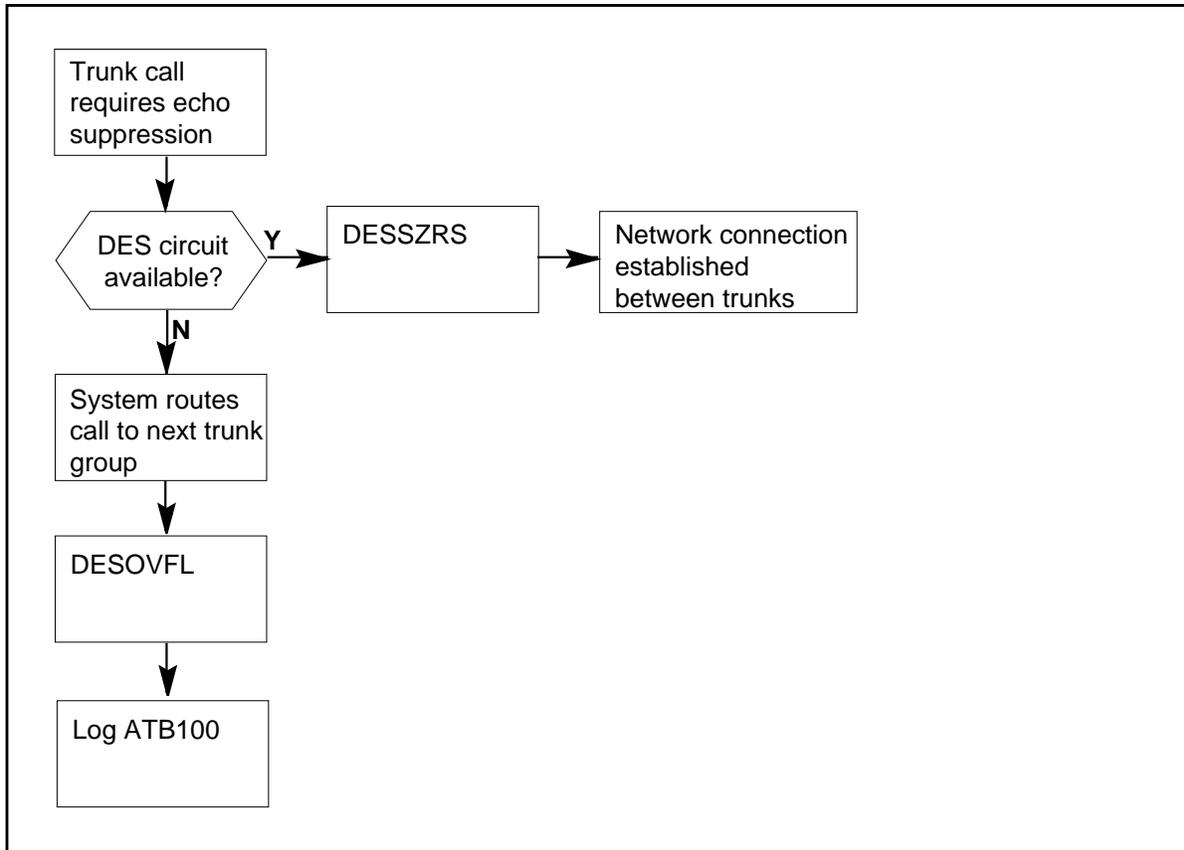
Associated functionality codes

The associated functionality codes for the OM group ESUP appear in the following table.

| Functionality | Code |
|-----------------|----------|
| Echo Suppressor | NTX063AA |

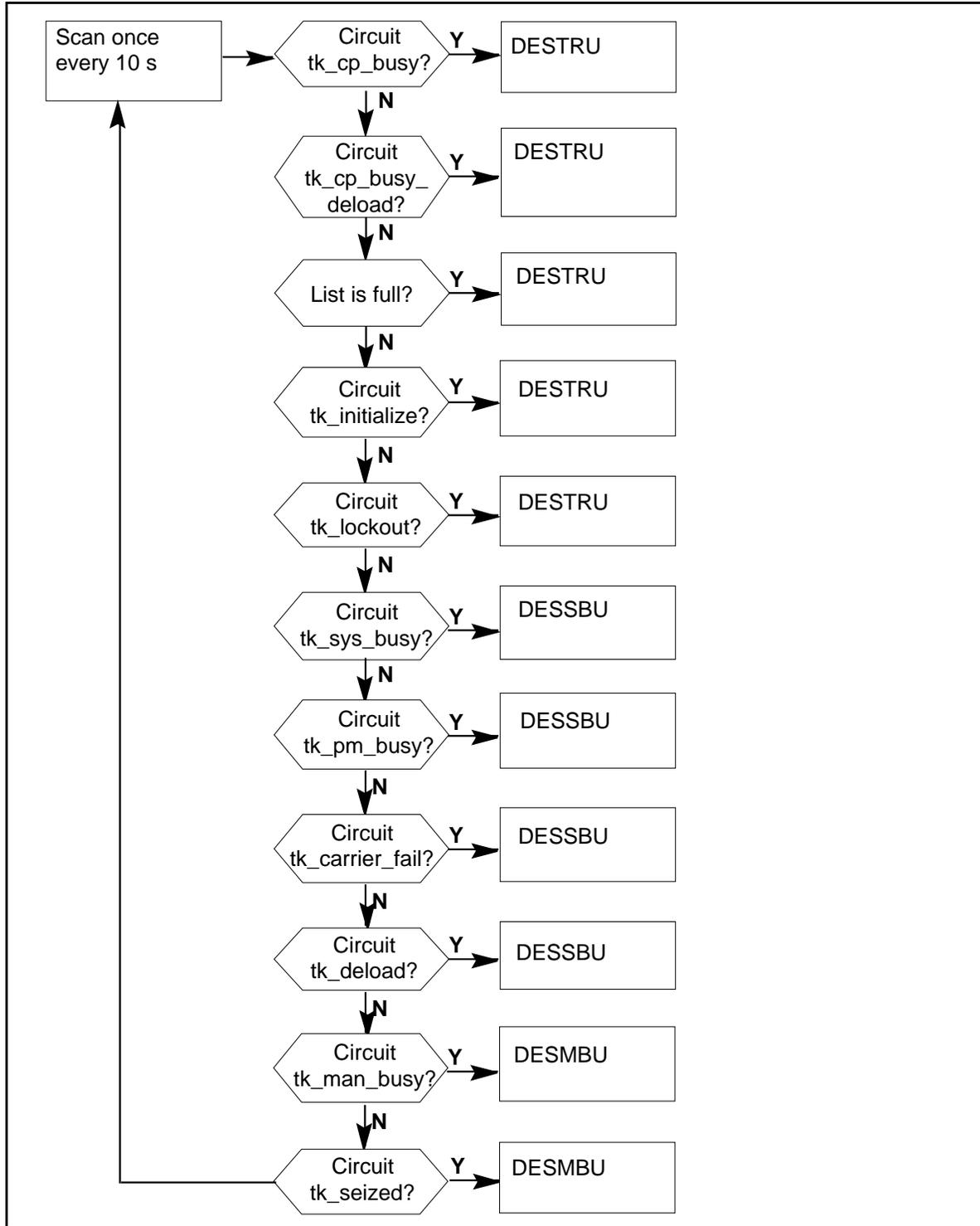
OM group ESUP (continued)

OM group ESUP registers



OM group ESUP (continued)

OM group ESUP use registers



OM group ESUP (continued)

Register DESMBU

Digital echo suppressor manual busy use (DESMBU)

Register DESMBU is a usage register. The scan rate is 10 s. Register DESMBU records when digital echo suppressor circuits are manual busy or seized.

Register DESMBU release history

Register DESMBU was introduced before BCS20.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register DESOVFL

Digital echo suppressor overflow (DESOVFL)

Register DESOVFL increases when a request for a digital echo suppressor (DES) fails because idle circuits are not available.

When a request for a DES fails, the system routes the call to the next trunk group in the routing list. The system searches for a route that does not require a DES.

Register DESOVFL release history

Register DESOVFL was introduced before BCS20.

Associated registers

There are no associated registers.

Associated logs

The system generates ATB100 if trunks are not available to route incoming calls. The system routes the calls to a specific numbering plan area or switching office.

Extension registers

There are no extension registers.

OM group ESUP (continued)

Register DESSBU

Digital echo suppressor system busy use (DESSBU)

Register DESSBU is a usage register. The scan rate is 10 s. The DESSBU records when digital echo suppressor circuits are in the following states:

- system busy
- peripheral module busy
- carrier fail
- deloaded

Register DESSBU release history

Register DESSBU was introduced before BCS20.

Associated registers

There are no associated registers.

Associated logs

The system generates PM105 when a peripheral module becomes manual busy.

The system generates PM109 when when a T1 carrier becomes system busy.

The system generates PM182 when the P-side link of a peripheral module becomes manual busy.

The system generates TRK106 when a diagnostic on trunk equipment fails.

The system generates TRK109 when a diagnostic performed on a DS-1 facility fails.

Extension registers

There are no extension registers.

Register DESSZRS

Digital echo suppressor seizure (DESSZRS)

Register DESSZRS increases when a request for a digital echo suppressor (DES) is successful and a DES circuit handles a call.

Register DESSZRS increases before the network connects the DES circuit and the trunks.

OM group ESUP (end)

Register DESSZRS release history

Register DESSZRS was introduced before BCS20.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register DESTRU

Digital echo suppressor trunk use (DESTRU)

Register DESTRU is a usage register. The scan rate is 10 s. Register DESTRU records when digital echo suppressor circuits are in the following states:

- call processing busy
- call processing busy deload
- initialize
- lockout

Register DESSZRS release history

Register DESSZRS was introduced before BCS20.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

OM group EXNDINV

OM description

External node inventory (EXNDINV)

The OM group EXNDINV provides information about the availability and performance of external nodes. The OM group EXNDINV also provides information about maintenance level activity on nodes entered in table EXNDINV. This OM group adds the external node type OSNM to the range of correct keys. The system transmits messages between the Digital Multiplex System (DMS) switch application and a remote service peripheral module (SPM). The advanced services protocol (ASP) allows this transmission. This OM group counts messages and failures to deliver messages because of problems with the remote node, hardware, or the ASP. Two usage registers record how long the external node is system busy or manual busy.

Release history

The OM group EXNDINV was introduced in BCS35.

NA006

External node type OSNM was introduced in NA006 as a correct EXNDINV key.

Registers

The OM group EXNDINV registers appear on the MAP terminal as follows:

OM group EXNDINV (continued)

```

OMSHOW EXNDINV ACTIVE

EXNDINV

CLASS:    ACTIVE
START:1995/06/14 00:30:00 WED; STOP: 1995/06/14 00:44:51 WED
SLOWSAMPLES:      9 ; FASTSAMPLES:      89 ;

      KEY (TENNAME_TYPE)
      INFO (EXNDINV_OMINFO)

          SYSBUSE      MANBUSE      INSSYSB      INSMANB
          LK1FAIL      RTSFAIL      TSTFAIL      PROTVIOL
          DLMTX        DLMRX        DLMSW        DLMER

0 BRTPHname
  OSNM 0
          0              0              0              0
              0              0              0
              0              0

```

Note: Operator Services System Advanced Intelligent Network (OSSAIN) does not support the following registers: DLMER, DLMRX, DLMSW, DLMTX, LK1FAIL, and PROTVIOL.

Group structure

The OM group EXNDINV provides 32 tuples for each office.

Key field:

TENNAME_TYPE (12 character string)

(This key is the ENPMTYPE field of table EXDINV).

Info field:

EXNDINV_OMINFO (TENPM_TYPE [external nodename],
TENNODENO [external node number])

Associated OM groups

The OM group OASNPOOL

OM group EXNDINV (continued)

Associated functional groups

The following functional groups associate with OM group EXNDINV:

- Intelligent Services Node (ISN)
- LAN-supported external nodes
- Nodes entered in table EXNDINV

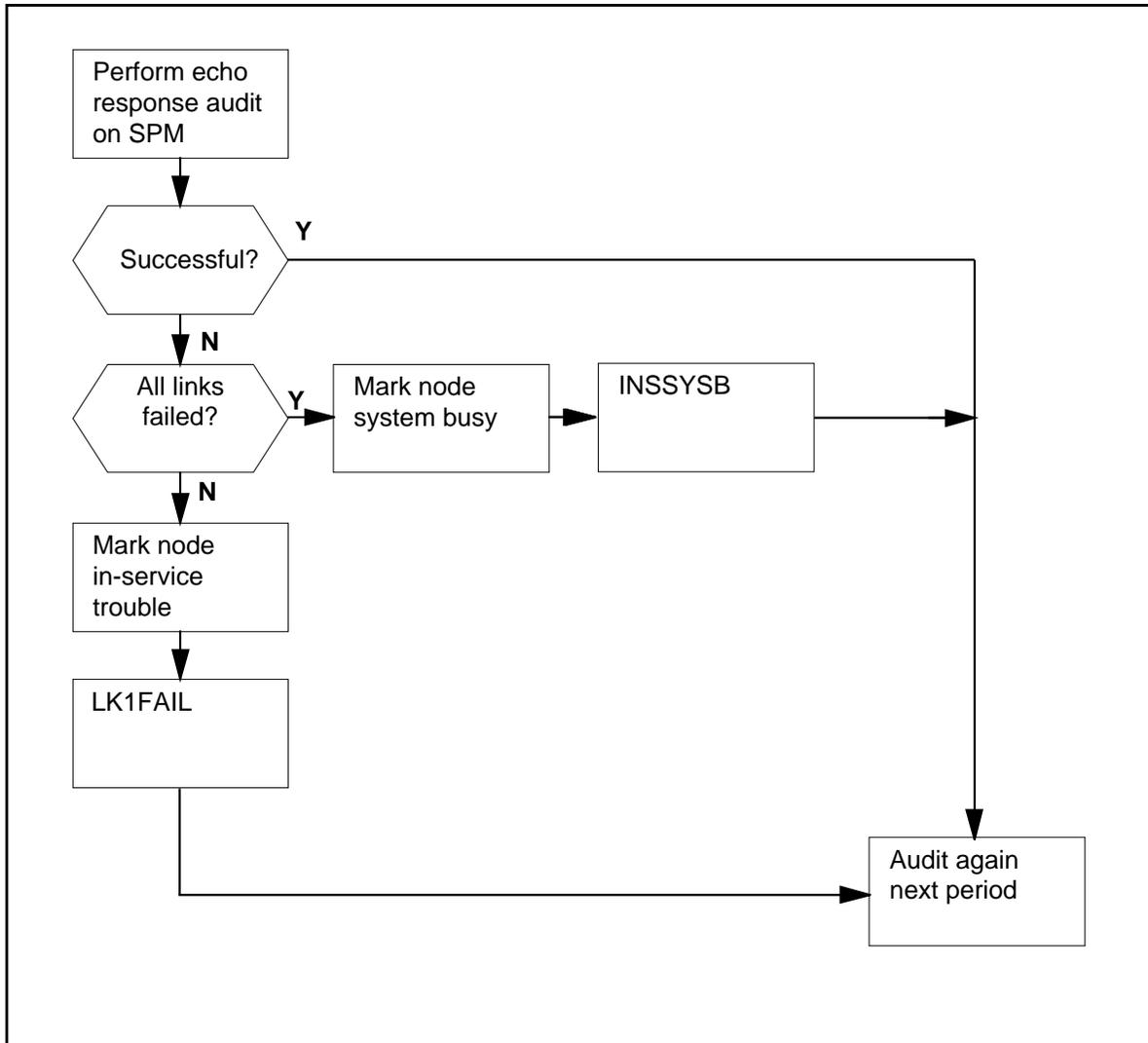
NA006

Functional group ENSV Enhanced Services (ENSV0001) introduced external node type OSNM in NA006. External node type OSNM was introduced as a correct value in the range of correct keys of OM group EXNDINV. The introduction occurs through the Operator Services AIN (ENSV0014) functionality.

Associated functionality codes

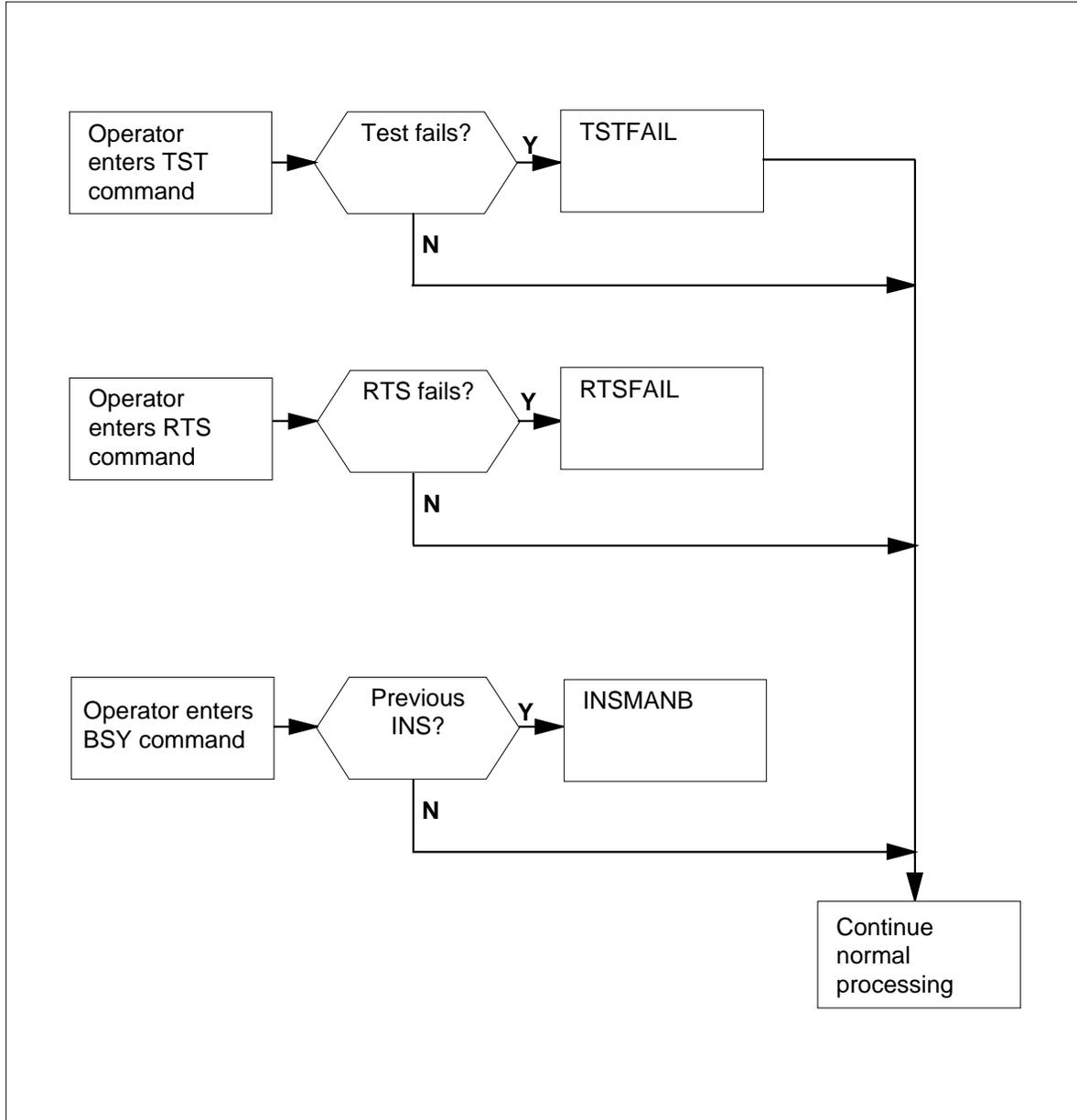
The associated functionality codes for OM group EXNDINV appear in the following table.

| Functionality | Code |
|-----------------------|------------------|
| ISN Basic | NTXR87AA |
| Operator Services AIN | ENSV0014 (NA006) |

OM group EXNDINV (continued)**OM group EXNDINV registers: SPM maintenance**

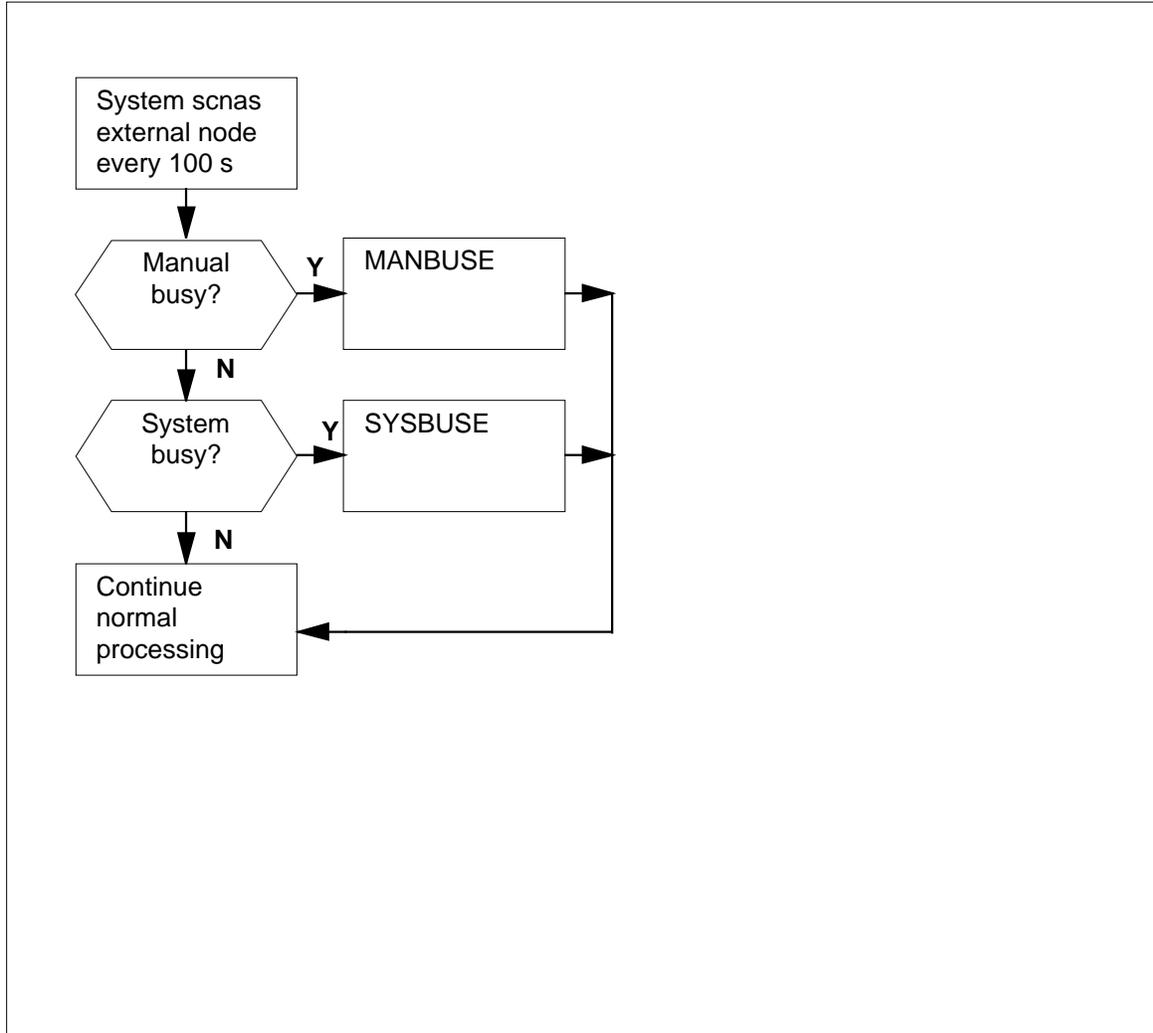
OM group EXNDINV (continued)

OM group EXNDINV registers: SPM maintenance (continued)



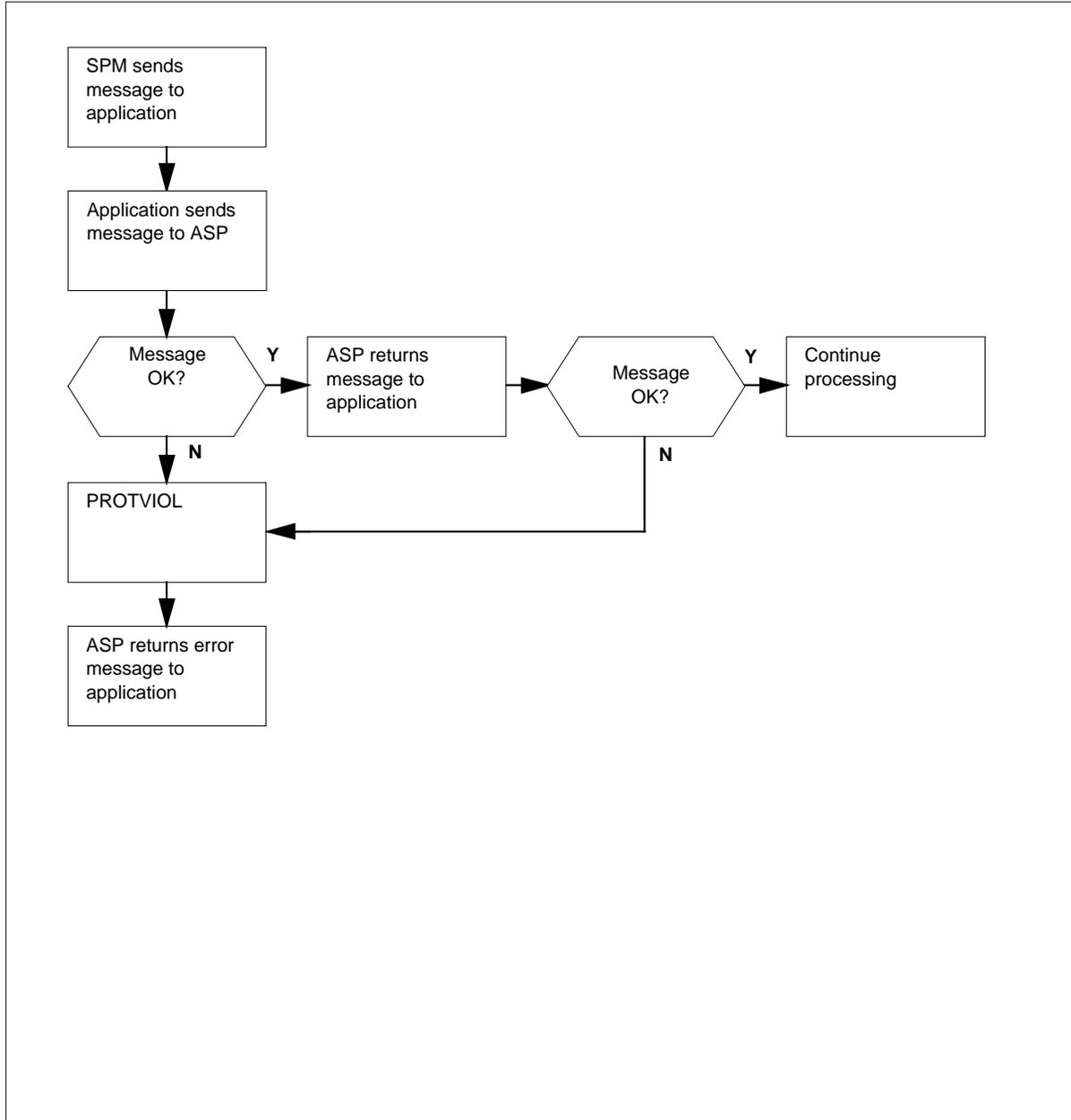
OM group EXNDINV (continued)

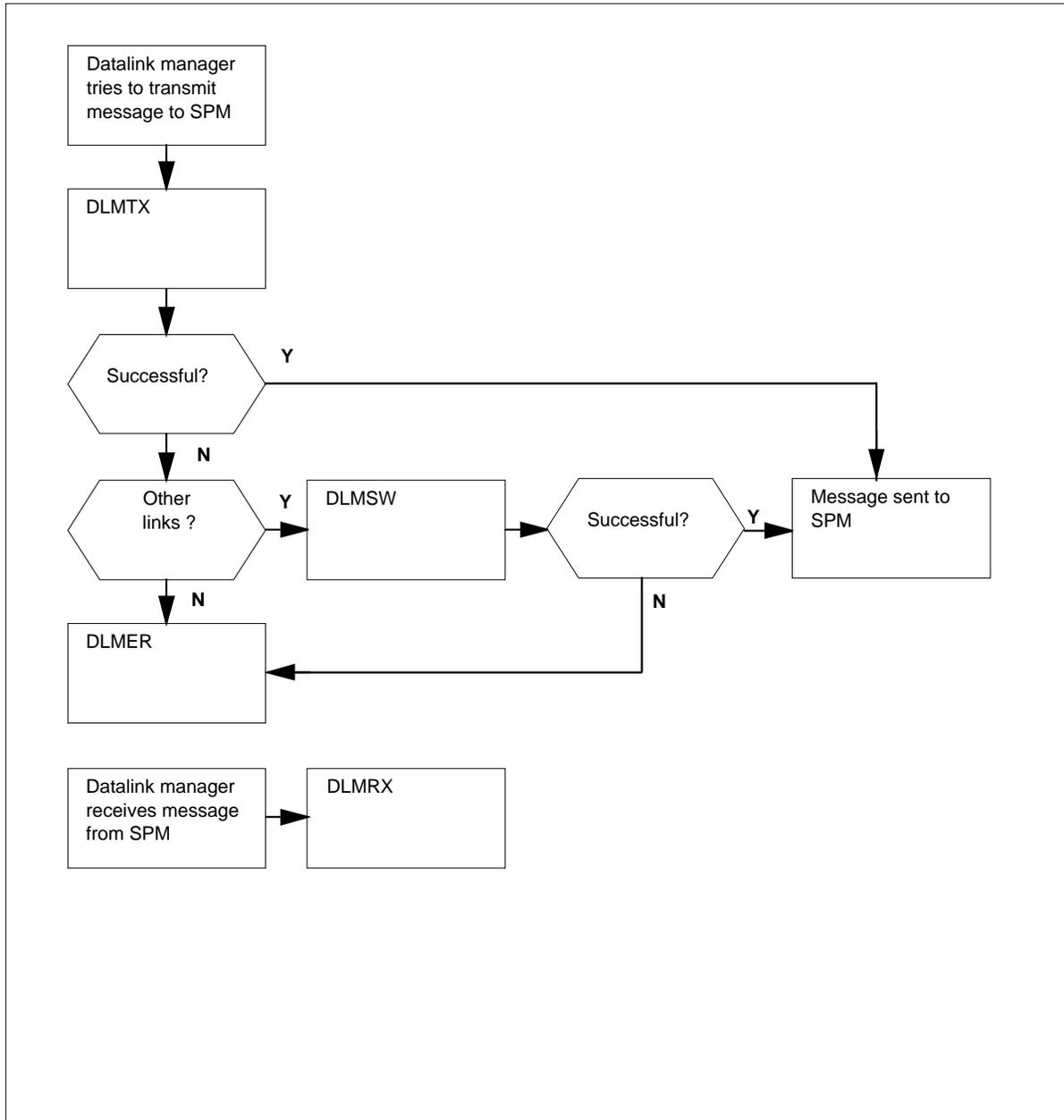
OM group EXNDINV registers: use registers



OM group EXNDINV (continued)

OM group EXNDINV registers: protocol violation



OM group EXNDINV (continued)**OM group EXNDINV registers: datalink manager****Register DLMER**

Datalink manager errors (DLMER)

OM group EXNDINV (continued)

Register DLMER counts failed attempts to send a message to the SPM. This count includes output messages the datalink manager cannot deliver to the SPM because of remote, protocol, or hardware problems.

Note: The OSSAIN does not support this register.

Register DLMER release history

Register DLMER was introduced in BCS35.

Associated registers

Register DLMTX counts the number of times the datalink manager attempts to transmit a message to the SPM.

$DLMER \leq DLMTX$

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register DLMRX

Datalink manager received (DLMRX)

Register DLMRX counts the number of times the datalink manager receives an input message from the SPM. This event occurs when a call goes to a remote external node.

Note: The OSSAIN does not support this register.

Register DLMRX release history

Register DLMRX was introduced in BCS35.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

OM group EXNDINV (continued)

Register DLMSW

Datalink manager switched (DLMSW)

Register DLMSW counts each time the SPM must send a message across an alternate link. When the system tries multiple links, this register increases only once for each message sent.

The SPM must send a message across an alternate link when:

- a hardware failure occurs.
- an Ethernet interface unit (EIU) normally used for this data transmission is busy. The EIU becomes busy when several calls are in progress and the system must route some output messages over different links.

Note: The OSSAIN does not support this register.

Register DLMSW release history

Register DLMSW was introduced in BCS35.

Associated registers

Register DLMTX counts each time the datalink manager attempts to send a message to the SPM.

$DLMSW < = DLMTX$

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register DLMTX

Datalink manager transmit (DLMTX)

Register DLMTX counts each time the datalink manager tries to send an output message to an SPM. A call to a remote external node increases this register.

Note: The OSSAIN does not support this register.

Register DLMTX release history

Register DLMTX was introduced in BCS35.

OM group EXNDINV (continued)

Associated registers

Register DLMSW counts each time the SPM must send a message across an alternate link. Register DLMER increases each time a link to the SPM is not successful.

$DLMTX \geq DLMSW$

$DLMTX \geq DLMER$

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register INSMANB

In service to manual busy (INSMANB)

Register INSMANB counts each time an external node changes state from the in-service to manual-busy. This event occurs when you issue the BSY command at the MAP terminal.

Register INSMANB release history

Register INSMANB was introduced in BCS35.

Associated registers

Register MANBUSE records the amount of time an external node is in the manual-busy state.

If $MANBUSE > 0$, $INSMANB > 0$.

Associated logs

The system generates PM105 each time INSMANB increases.

Extension registers

There are no extension registers.

Register INSSYSB

In service to system busy (INSSYSB)

Register INSSYSB counts each time an external node changes state from in-service to system-busy.

OM group EXNDINV (continued)

Register INSSYSB release history

Register INSSYSB was introduced in BCS35.

Associated registers

Register SYSBUSE records the amount of time an external node is system-busy.

If SYSBUSE > 0, then INSSYSB > 0.

Associated logs

The system generates PM102 when register INSSYSB increases.

Extension registers

There are no extension registers.

Register LK1FAIL

Link one fail (LK1FAIL)

Register LK1FAIL counts each time an external node fails the internet control message protocol (ICMP) echo message test on one of the two links.

Note: The OSSAIN does not support this register.

Register LKIFAIL release history

Register LKIFAIL was introduced in BCS35.

Associated registers

There are no associated registers.

Associated logs

The system generates PM128 when one of the links connected to the associated node fails the ICMP echo message test.

Extension registers

There are no extension registers.

Register MANBUSE

Manual busy usage (MANBUSE)

Register MANBUSE records the amount of time an external node is manual-busy every 100 s.

OM group EXNDINV (continued)

Register MANBUSE release history

Register MANBUSE was introduced in BCS35.

Associated registers

Register INSMANB counts each time an external node changes state from in-service to manual-busy.

If INSMANB > 0, MANBUSE must be > 0. An exception occurs when the device becomes manual busy less than 100 s before the transfer from holding register to active register.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register PROTVIOL

Protocol violation (PROTVIOL)

Register PROTVIOL counts each time advanced services protocol (ASP) or an application that uses ASP detects a high-level protocol violation.

Note: The OSSAIN does not support this register.

Register PROTVIOL release history

Register PROTVIOL was introduced in BCS35.

Associated registers

There are no associated registers.

Associated logs

The system generates ASP100 when an application that uses the ASP detects a protocol violation.

The system generates ASP101 when the ASP detects a protocol violation.

Extension registers

There are no extension registers.

Register RTSFAIL

Return-to-service failure (RTSFAIL)

OM group EXNDINV (continued)

Register RTSFAIL counts each time an external node fails to return to service after a manual request or switch maintenance actions.

Register RTSFAIL release history

Register RTSFAIL was introduced in BCS35.

Associated registers

There are no associated registers.

Associated logs

The system generates PM181 if an external node fails to return to service when requested from the MAP terminal.

For OSSAIN, the system generates PM100 if an external node fails to return to service. The system generates PM 100 after a return to service request at the MAP terminal.

Extension registers

There are no extension registers.

Register SYSBUSE

System busy usage (SYSBUSE)

Register SYSBUSE records the amount of time an external node is system-busy every 100 s.

Register SYSBUSE release history

Register SYSBUSE was introduced in BCS35.

Associated registers

Register INSSYSB counts each time an external node changes state from in-service to system-busy.

If INSSYSB is > 0 , SYSBUSE must be > 0 . An exception occurs if the device becomes system busy less than 100 s before transfer from holding register to active register.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

OM group EXNDINV (end)

Register TSTFAIL

Test failures (TSTFAIL)

Register TSTFAIL counts each time the system does not receive the audit echo response from the SPM. Register TSTFAIL counts these reception failures when you issue the TST command at the MAP.

Register TSTFAIL release history

Register TSTFAIL was introduced in BCS35.

Associated registers

There are no associated registers.

Associated logs

The system generates PM181 when a test command fails.

Extension registers

There are no extension registers.

OM group EXT

OM description

Extension Block OM (EXT)

The OM group EXT monitors the use of extension blocks. Extension blocks are auxiliary software resources allocated to calls for purposes like:

- special billing records
- data extensions for operator services
- custom calling features

The primary purpose of an extension block is to provide additional storage for data associated with a call.

The OM group EXT has five registers: EXTHI, EXTHI2, EXTOVFL, EXTSEIZ, and EXTSEIZ2.

Register EXTHI records the maximum number of extension blocks in use at the same time during an OM transfer period. Register EXTHI2 is an extension register.

Register EXTOVFL increases when an extension block is not available. If the count is not zero, you must review the supply of extension blocks. You can increase the number of extension blocks in table OFCENG.

Register EXTSEIZ monitors the number of requests for a given type of extension block. Register EXTSEIZ2 is an extension register.

The OM group EXT data indicates the most used extension blocks and availability of given types of extension blocks.

The USNBD feature uses the 126 FBSEXT entry to monitor the use of extension blocks.

Release history

The OM group EXT was introduced before BCS20.

MMP12

Added INDA_EXT_FC for key field.

NA011

Monitoring of extension blocks by the USNBD feature now included.

OM group EXT (continued)

Replaced office parameter name NBEXTBLK with NO_OF_SDS_EXT_BLKs in index 135.

EUR010

Added value 203 XLAS_EXT_BLK for key field.

EUR009

Two key fields added: 512 DMS250_FEATURE_EXT_FMT_CD and 560 OVERFLOW_CCB_EXT_FC.

TL010

Key field 198 DITM_AGENT_EXT_BLOCKS added, indicating the number of Data Interface and Topology Mapping agent extension blocks provisioned (AF7401).

EUR008

Key field 180 X_LARGE_FEATURE_DATA added, indicating the number of X_LARGE_FEATURE_DATA blocks provisioned.

NA009

Key field BASCPS_HUGE_EXT_BLK is introduced (AU2648).

HUGE_HIS_DATA_BLK_EXT_FCEXT_FORMAT_CODE added to the EXTINFO information field (AU2626).

Added key field entry NS_EXT_FC.

MSL07

Removed index value 102 VCDR_RECORDING_UNIT for key field EXT_FORMAT_CODE

EUR006

Introduced index value 148 EMERG_EXT for key field EXT_FORMAT_CODE.

TOPS07

Key field entries OSACRU and TOPS_GEN_TCAP_EXT_BLK were introduced.

NA007

Key field entry 172 AIN_ORIG_INFO was introduced.

OM group EXT (continued)

NA006

Key field entry 135 MSGING_EXT_BLK replaced key field entry 135 SDS_EXT_BLK in NA006.

Functional group Alternate Billing Services (ABS00001) introduced 143 Originating Line Number Screening transaction capabilities application part extension block (OLNS_TCAP_EXT_BLK). Functional group OLNS_TCAP_EXT_BLK was introduced as an entry of the key field EXT_FORMAT_CODE, through the TOPS OLNS Interface (ABS00012) functionality. Functional group 143 OLNS_TCAP_EXT_BLK provides blocks of storage for OLNS information.

Functional group Enhanced Services (ENSV0001) introduced 139 Operator Services System Advanced Intelligent Network (OSSAIN) recording units (RU) (OSSAINRU). Functional group OSSAINRU was introduced as an entry of the key field EXT_FORMAT_CODE, through Operator Services Advanced Intelligent Network (ENSV0014) functionality.

TOPS05

Key field entry 147 CRS_SUBRU_POOL5 was introduced.

NA005

Key field entry AIN_TN_EXT_FMT_CODE was introduced.

NA004

Key field entries EA_MF_SS7_EXT_BLOCK, 135 SDS_EXT_BLK, and RTRS_TCAP_EXT_BLK were introduced.

BCS36

Key field entries CNAMD_TCAP_EXT_BLK, FBS_EXT_FMT_CODE, REDIR_EXT_BLKs, and DATA_CALL_TESTER_EXT were introduced.

BCS35

Key field entries DSD_EXT_BLKs, TC_AP_COMPONENT_EXT_BLK, GSM_MESSAGE_BLOCKS, and CRS_PRU_POOL3 were introduced in BCS35. These key fields replaced SMDR_RECORDING_UNIT, which did not appear in BCS36.

BCS34

Key field entries DINA_EXT_BLOCK, WIDEBAND_EXT_BLOCK, SBS_EXT_BLOCK, and CAMA_CALLED_EXT_BLK_ST were introduced.

OM group EXT (continued)

The E911 feature data blocks (FDB) replaced E911 extension blocks. Office parameter E911_NUMBER_OF_EXT_BLOC Kb was replaced by two office parameters: NO_OF_CRITICAL_FTR_DATA_BLKs and E911_NUMBER_OF_FDBS.

BCS33

Key field entries REGULAR_HISTORY_DATA, LARGE_HISTORY_DATA, EXTRA_LARGE_HISTORY_DATA, CRS_SUBRU_POOL2, CRS_PRU_POOL1, CDR300_EXTND_EXT_FC, and NSS_RDD_TCAP_EXT_BLK were introduced.

Key field entry HIS_DATA_BLOCK_EXT_FC was removed.

BCS32

Key field entries CRS_SUBRU_POOL1, CRS_SUBRU_POOL2, CRS_SUBRU_POOL3, CRS_SUBRU_POOL4, CRS_PRU_POOL1, CRS_PRU_POOL2, MCI_POPS_REC_UNIT, SMALL_EE_EXT_BLK, MEDIUM_EE_EXT_BLK, LARGE_EE_EXT_BLK, and VCDR_RECORD_UNIT were introduced.

Key field entries BC_RECORDING_UNIT, BC_LAMA_REC_UNIT, MDR_EXT_BLOCK, and REAL_EXTENSION BLOCK were removed.

BCS31

Key field entries OVERFLOW_CCB_EXT_FC, MTX_EXT_BLOCK, and RC_EXT_FMT_CODE DMS250_EOPS_EXT_FC were introduced.

Key field entry DMS250_EOPS_VAL_EXT_FMT_CD was renamed.

Registers EXTSEIZ2 and EXTHI2 were introduced.

BCS30

Key field TC_AP_MEDIUM_EXT_BLK was introduced.

BCS29

Key field entries REAL_EXTENSION_BLOCK, MDR_EXT_BLOCK, SMPDB_FC, and INTL_CCMTR_EXT_BLOCK were introduced.

BCS28

Key field entries E911_FMT_CODE, ACD_OVFLINQ_EXTENSION, INTL250_RECORDING_UNIT, and ZERO_PLUS_EXT_FC were introduced.

OM group EXT (continued)

BCS27

Key field entries EOPS_RECORDING_UNIT, ECCBX_EXT_FC, TPBX_CCB_EXTENSION, and MTX_EXTENSION_BLOCKS were introduced.

BCS26

Key field entries DMS250_MCI_EOPS_EXT_FC, PVN_TERM_EXT_BLK, DMS250_BBF_EXT_BLK, FCSCS_EXT_BLK_FC, ICT_FORMAT_CODE, and SCRATCHPAD_250_EXT_FMT_CD were introduced.

BCS25

Key field entries CDRMTX_EXT_FMT_CD and AUX_EXTENSION_BLOCK were introduced. Register EXTUSAGE was removed.

BCS24

Key field entries ITOPSRU and DMS-250_FEATURE_EXT_FMT_CD were introduced. Register EXTUSAGE was set to zero.

BCS23

Register EXTHI and key field entries ICAMA_RECORDING_UNIT, POTS_CFZ_EXTENSION, and RTEB_EXTENSION were introduced.

BCS22

Key field entry FTR_XLA_BLOCK_EXT_FC was introduced.

BCS21

Key field entry ISUP_MSG_EXT_FC was introduced.

BCS20

Key field entries CFD_EXTENSION, CDIV_EXTENSION, NTL_RECORDING_UNIT, and DCR_EXTENSION were introduced.

Registers

The OM group EXT registers appear on the MAP terminal as follows:

OM group EXT (continued)

```

OMSHOW EXT ACTIVE
EXT
CLASS:    ACTIVE
START:1996/11/16 14:30:00 WED; STOP: 1996/11/16 14:53:13 WED;
SLOWSAMPLES: 14; FASTSAMPLES: 143;
KEY (EXT_FORMAT_CODE)
INFO (EXTINFO)
           EXTSEIZ EXTTOVFL EXTHI EXTSEIZ2 EXTHI2

139 OSSAINRU
           0
           0      0      0      0
           0
143 OLNS_TCAP_EXT_BLK
           0
           0      0      0      0
           0
182 HUGE_HIS_DATA_BLOCK
           50
           0      0      0      0
           0
...## BASCPS_HUGE_EXT_BLK
           16
           0      0      0      0
           0
    
```

Group structure

The OM group EXT provides one tuple for each EXT_FORMAT_CODE.

Key field:

EXT_FORMAT_CODE

The EXT_FORMAT_CODE entries appear in the following table.

Info field:

EXTINFO indicates the number of available blocks.

OM group EXT (continued)**EXT_FORMAT_CODE** entries (Sheet 1 of 7)

| Index | EXT_FORMAT_CODE | Office parameter name |
|--------------|------------------------|------------------------------|
| 1 | AOSS_RU | AOSS_NUM_RECORDING_UNITS |
| 2 | REGN_CP_SEMA_EXT | |
| 3 | PERM | NUMPERMEXT |
| 4 | CCIS_INWATS_BLOCK | NUM_OF_CCIS_INWATS_BLOCKS |
| 5 | NT_RECORDING_UNIT | NUM_OF_NT_RECORDING_UNITS |
| 6 | TOPSRU | TOPS_NUM_RU |
| 7 | FEATURE_EXT_FC | NO_OF_TWC_EXT_BLOCKS |
| 8 | MTX_HANDOFF_BLOCK | HANDOFF_BLOCK_COUNT |
| 9 | CFW_EXTENSION | CFW_EXT_BLOCKS |
| 10 | CSDDSPERM | NUMCSDDSPERMEXT |
| 11 | ROTL_PRIMING_BLOCK | ROTL_TIME_IN_20MIN |
| 12 | CUSTOM_CALLING_DATA | NO_OF_SC_EXT_BLKS |
| 13 | CAMATOPS_RU | TOPS_NUM_CAMA_RU |
| 14 | IBNCQEXT | NUMIBNCQEXTBLK |
| 15 | IBN_INTL_XLA_EXT_BLOCK | NUM_IBN_IXLA_EXT_BLOCKS |
| 16 | SMDR_RECORDING_UNIT | NO_OF_SMDR_REC_UNITS |
| 17 | ALTADDR_EXT_FC | Fixed at 64 |
| 18 | ASO_RECORD_UNIT | Fixed at 128 |
| 19 | CFD_EXTENSION | CFD_EXT_BLOCKS |
| 20 | AVDSA_RECORD_UNIT | DSA_RU_CNT |
| 21 | AVCDRU_RECORD_UNIT | AVCDR_RU_COUNT |
| 22 | FEATURE_CONTROL_DATA | NO_OF_FTR_CONTROL_BLKS |
| 23 | MCDR_RECORD_UNIT | NO_OF MCDR_REC_UNITS |

OM group EXT (continued)**EXT_FORMAT_CODE** entries (Sheet 2 of 7)

| Index | EXT_FORMAT_CODE | Office parameter name |
|--------------|-----------------------------|-----------------------------------|
| 24 | WIDEBAND_EXT_BLOCK | WIDEBAND_EXT_BLOCK |
| 25 | SDPATC_EXTENSION | NUMSDPATCEXTBLK |
| 26 | MCI_POPS_REC_UNIT | NO_OF_POPS_REC_UNITS |
| 27 | LCO_EXTENSION_BLOCK | NO_LOCAL_COIN_EXT_BLKs |
| 28 | CDR300_EXTND_RECORDING_UNIT | CDR300_EXTND_RECORDING_UNIT |
| 29 | NSG_RECORDING_UNIT | NO_OF_CDR_REC_UNITS |
| 30 | CDR300_RECORDING_UNIT | NUMBER_OF_CDR_UNITS |
| 31 | OESD_RECORD_UNIT | Reserved for OESD office |
| 32 | NCS_EXTENSION_BLK | NUM_NCS_EXT_BLK |
| 33 | LTD_EXT_DATA | Fixed at 20 |
| 34 | KEY_SHORT_HUNT_EXT | KSHUNT_EXT_BLOCKS |
| 35 | NSC_EXT_BLK | NUM_OF_NSC_EXT_BLK |
| 36 | AV_CRS_EXT_BLK | Fixed at 50 |
| 37 | CDIV_EXTENSION | CDIV_EXT_BLOCKS |
| 38 | INTL_RECORDING_UNIT | NUM_INTL_RECORDING_UNITS |
| 39 | OOCRU | OOC_NUM_RU |
| 40 | DCR_EXTENSION | NUM_DCR_EXT_BLKs |
| 41 | E800_TCAP_EXT_BLK | NO_OF_TRANSACTION_IDS |
| 42 | ISUP_EXTENSION_BLOCK | NUM_ISUP_EXT_BLKs |
| 43 | SCRPAD_EXTEN_BLK | NUMBER_ECCB_SCRATCHPAD_AREAS |
| 44 | MCCS_EXTEN_BLK | NUMBER_ECCB_NCCS_AREAS_EXT_FMT_CD |
| 45 | MTR_EXT_BLOCK | NUM_CCMTR_EXT_BLOCKS |
| 46 | RDB_EXT_BLK | |
| 47 | FEATURE_XLA_DATA | NO_OF_FTR_XLA_BLKs |

OM group EXT (continued)**EXT_FORMAT_CODE** entries (Sheet 3 of 7)

| Index | EXT_FORMAT_CODE | Office parameter name |
|--------------|------------------------|----------------------------------|
| 48 | ICAMA_RECORDING_UNIT | NUM_ICAMA_RECORDING_UNITS |
| 49 | POTS_CFZ_EXTENSION | CFZ_EXT_BLOCKS |
| 50 | ACCS_TCAP_EXT_BLK | |
| 51 | RU250_RECORDING_UNIT | NO_OF_DMS_250_REC_UNITS |
| 52 | RTEB_EXTENSION | NUM_OF_RTEB_EXTBLKS |
| 53 | SO_RECORD_UNIT | KSAMA_NO_OF_RU_FOR_SO |
| 54 | ITOPSRU | TOPS_NUM_RU |
| 55 | HISTORY_CONTROL_DATA | NO_OF_HIS_CONTROL_BLKSO |
| 56 | GOSRU | |
| 57 | PVN_EXT_BLK | NO_OF_PVN_EXTBLK |
| 58 | DPNSS_EXT_BLOCK | NUMBER_OF_DPNSS_EXTENSION_BLOCKS |
| 59 | MTX_RECORDING_UNIT | |
| 60 | AUX EXTENSION BLK | NUMBER_AUX_EXTENSION_BLOCKS |
| 61 | TC_AP_SMALL_EXT_BLK | NO_OF_SMALL_EXT_BLKs |
| 62 | TC_AP_LARGE_EXT_BLK | NO_OF_LARGE_EXT_BLKs |
| 63 | TC_AP_XLARGE_EXT_BLK | NO_OF_XLARGE_EXT_BLKs |
| 64 | PVN_TCAP_EXT_BLK | NO_OF_PVN_EXTBLK |
| 65 | ICT_EXT_BLOCK | NUM_ICT_EXT_BLKs |
| 66 | EOPS_RECORDING_UNIT | NO_OF_EOPS_REC_UNITS |
| 67 | TC_AP_MEDIUM_EXT_BLK | NO_OF_MEDIUM_EXT_BLKs |
| 68 | PVN_TERM_EXT_BLK | NO_OF_PVN_TERM_EXTBLK |
| 69 | DMS250_BBF_EXT_BLK | NO_OF_DMS250_BBF_EXT_BLK |
| 70 | TPBX_EXTENSION | NUM_TPBX_EXT_BLKs |
| 71 | SCS_EXT_BLK_FC | NUM_OF_SCS_EXTBLKS |

OM group EXT (continued)**EXT_FORMAT_CODE** entries (Sheet 4 of 7)

| Index | EXT_FORMAT_CODE | Office parameter name |
|--------------|----------------------------|------------------------------|
| 72 | MTX_DATA_BLOCK | NUM_OF_MTX_DATA_BLOCKS |
| 73 | EOPS_EXT_BLK | TOPS_NUM_RU |
| 74 | MCI_EOPS_REC_UNIT | NO_OF_EOPS_REC_UNITS |
| 75 | E911_FEATURE_DATA_BLOCK | E911_NUMBER_OF_FDBS |
| 76 | TRAVER_EXT_BLK | |
| 77 | ACD_OVFLINQ_EXTENSION | ACD_OVERFLOW_BLOCKS |
| 78 | INTL250_RECORDING_UNIT | NO_OF_INTL_250_REC_UNIT |
| 79 | INWATS OSO/TSO EXT BLK | NO_OF_INWATS_EXT_BLOCKS |
| 80 | ZERO_PLUS_EXT_FC | ZERO_PLUS_EXT_BLK |
| 81 | SMALL_FEATURE_DATA | NO_OF_SMALL_FTR_DATA_BLKs |
| 82 | MEDIUM_FEATURE_DATA | NO_OF_MEDIUM_FTR_DATA_BLKs |
| 83 | LARGE_FEATURE_DATA | NO_OF_LARGE_FTR_DATA_BLKs |
| 84 | NSS_RDD_TCAP_EXT_BLK | |
| 85 | XLA_EXT | MARKET_OF_OFFICE |
| 86 | CRITICAL_FEATURE_DATA | NO_OF_CRITICAL_FTR_DATA_BLKs |
| 87 | NETAS_EXT_UNIT | |
| 88 | NETS_EXT_FMT_CODE | |
| 89 | NSS_TCN_TCAP_EXT_BLK | NUM_RC_EXT_BLKs |
| 90 | MXT_EXTEN_BLK | NCCBS |
| 91 | RC_EXT_BLK | NUM_RC_EXT_BLKs |
| 92 | DMS250_OCCB_EXT | |
| 93 | ACCSRU | ACCS_NUM_RU |
| 94 | CDR300_ISDN_RECORDING_UNIT | |
| 96 | CRS_SUBRU_POOL1 | CRS_SUBRU_POOL1_SIZE |

OM group EXT (continued)**EXT_FORMAT_CODE** entries (Sheet 5 of 7)

| Index | EXT_FORMAT_CODE | Office parameter name |
|--------------|-------------------------------|-------------------------------|
| 97 | CRS_SUBRU_POOL2 | CRS_SUBRU_POOL2_SIZE |
| 98 | CRS_SUBRU_POOL3 | CRS_SUBRU_POOL3_SIZE |
| 99 | CRS_SUBRU_POOL4 | CRS_SUBRU_POOL4_SIZE |
| 100 | CRS_PRU_POOL1 | CRS_PRU_POOL1_SIZE |
| 101 | CRS_PRU_POOL2 | CRS_PRU_POOL2_SIZE |
| 102 | VCDR_RECORDING_UNIT | NO_OF_VCDR_REC_UNITS |
| 104 | DMS250_DINA_EXT | |
| 105 | GSM_MAP_HLR_EXT_BLK | NUM_OF_GSM_MSG_BLOCKS |
| 106 | SMALL_EE_EXT_BLK | NUM_SMALL_EE_EXT_BLKs |
| 107 | MEDIUM_EE_EXT_BLK | NUM_MEDIUM_EE_EXT_BLKs |
| 108 | LARGE_EE_EXT_BLK | NUM_LARGE_EE_EXT_BLKs |
| 109 | REGULAR_HISTORY_DATA | NO_OF_HIS_DATA_BLKs (Field 1) |
| 110 | LARGE_HISTORY_DATA | NO_OF_HIS_DATA_BLKs (Field 2) |
| 111 | EXTRA_LARGE_HISTORY_DATA | NO_OF_HIS_DATA_BLKs (Field 3) |
| 112 | TOPSOC | |
| 113 | CAMA_CALLED_EXT_BLK_STRUCTURE | |
| 114 | SBS_EXTENSION_BLK | |
| 115 | CRS_PRU_POOL3 | CRS_CRU_POOL3_SIZE |
| 118 | AIN_FTR_BLK | |
| 119 | TC_AP_COMPONENT_EXT_BLK | |
| 120 | DCTS_EXT_BLK_STRUCTURE | |
| 121 | DSD_EXT_BLKs | NUM_DSD_EXT_BLOCKS |
| 123 | CNAMD_TCAP_EXT_BLK | |
| 124 | DATA_CALL_TESTER_EXT | |

OM group EXT (continued)**EXT_FORMAT_CODE** entries (Sheet 6 of 7)

| Index | EXT_FORMAT_CODE | Office parameter name |
|--------------|---|---------------------------------|
| 125 | AIN_PROCESSING_BLK | |
| 126 | FBS_EXT_FMT_CODE | |
| 127 | GSM_MAP_SCCP_EXTENSION_BLOCKS | |
| 128 | HANDOVER_PARAMETER_EXTENSION_BLOCKS | |
| 129 | GSM_INTERCALL_MSG_BUFFER | |
| 131 | REDIR_EXT_BLKs | REDIR_NUM_EXT_BLOCKS |
| 134 | AIN_TN_EXT_FMT_CODE | AIN_NUM_TERM_NOTIF_EXT_BLKs |
| 135 | MSGING_EXT_BLK | NO_OF_SDS_EXT_BLKs |
| 138 | EA_MF_SS7_EXT_BLOCK | EA_MF_SS7_EXT_BLOCK_COUNT |
| 139 | OSSAINRU | OSSAIN_NUM_RU |
| 143 | OLNS_TCAP_EXT_BLK | |
| 147 | CRS_SUBRU_POOL5 | CRS_SUBRU_POOL5_SIZE |
| 148 | EMERG_EXT | ALLOC_EMERGENCY_EXT_BLK |
| 161 | OSACRU | |
| 172 | AIN_ORIG_INFO | NO_OF_ORIG_INFO_EXT_BLKs |
| 174 | TOPS_GEN_TCAP_EXT_BLK | |
| 180 | X_LARGE_FEATURE_DATA | NO_OF_X_LARGE_FTR_DATA_BLOCKS |
| 182 | HUGE_HIS_DATA_BLK_EXT_FCEXT_FORMAT_CODE | |
| 184 | NS_EXT_FC | |
| 198 | DITM_AGENT_EXT_BLOCKS | NUMBER_OF_DITM_EXTENSION_BLOCKS |
| 203 | XLAS_EXT_BLK | NUM_XLAS_EXT_BLKs |
| ??? | INDA_EXT_FC | INDA_EXT_BLOCK |

OM group EXT (continued)**EXT_FORMAT_CODE entries (Sheet 7 of 7)**

| Index | EXT_FORMAT_CODE | Office parameter name |
|-------|----------------------------|----------------------------|
| 512 | DMS_250_FEATURE_EXT_FMT_CD | NUMBER_OF_MCCS_EXT_BLOCKS |
| 560 | OVERFLOW_CCB_EXT_FC | NUMBER_OF_MNCOS_EXT_BLOCKS |

Associated OM groups

The following overflow registers in other OM groups count call failures caused by extension blocks that are not available:

- ACDGRP
- CALLFWD
- CALLWAIT
- KSHUNT
- IBNGRP
- MWTCAR
- OHQCBQCG
- OHQCBQRT
- PRKOM
- UCDGRP

The OM group CP provides information on the use of call processing software resources. These resources include call condense blocks, call processes, CP letters, multi-blocks, wake-up blocks, and long buffers.

The OM group CP2 provides information on the use of extended call control blocks.

The OM group FTRQ provides information on the use of feature queuing software resources.

Associated functional groups

All DMS office types associate with OM group EXT.

The following functional groups associate with OM group EXT:

- ABS00001
- ENSV0001
- RES00002

OM group EXT (continued)

- RES00005
- OSEA0001
- DSP0001
- SVBI0001

Associated functionality codes

The associated functionality codes for OM group EXT appear in the following table.

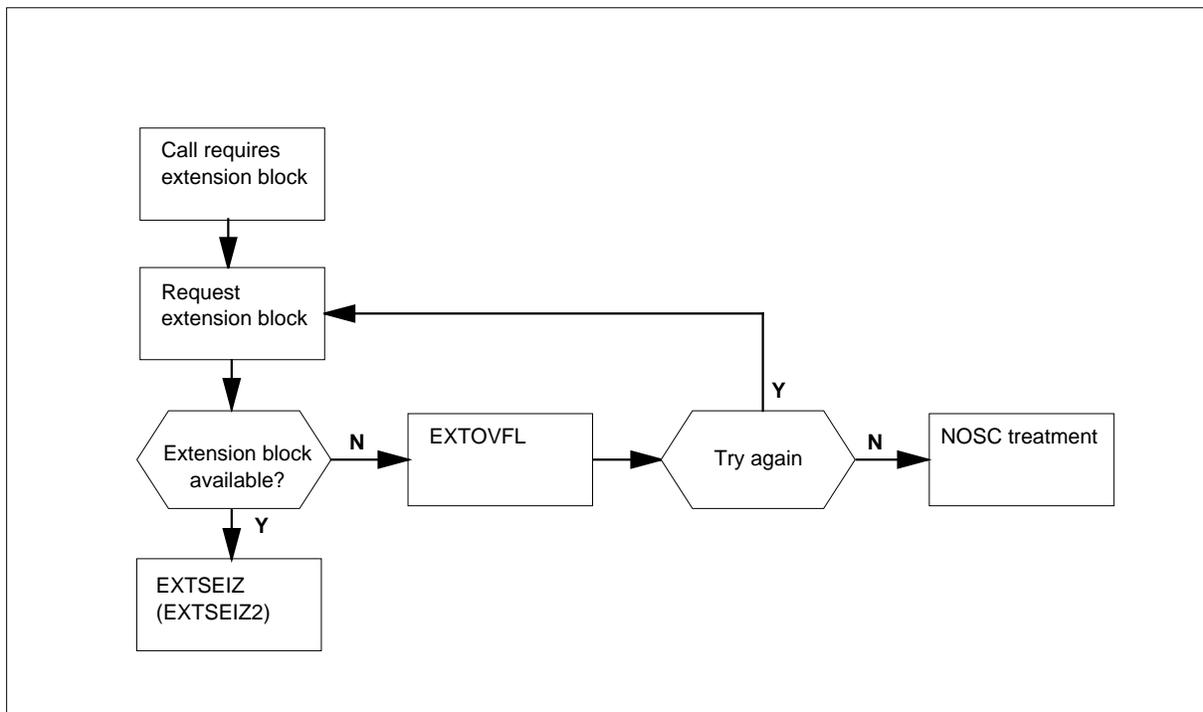
(Sheet 1 of 2)

| Functionality | Code |
|---|----------|
| CLASS-Call Setup (upgraded by NTXA00AB) | NTXA00AA |
| DMS-250 EOPS | NTXG12AA |
| DMS-250 EOPS (Type III) | NTXG12CA |
| MTX Universal Network Messaging | NTXG83AA |
| MTX North America Dialing Plan | NTXG84AA |
| MTX Universal Dialing Plan | NTXG85AA |
| Facility Broadcast Services | NTXR77AA |
| Data Call Tester | NTXS17AA |
| Common Basic | NTX001AA |
| DMS-250 Call Processing (Type II) | NTX222BA |
| DMS-250 Call Processing (Type III) | NTX222CA |
| TR448 ISDN Digit Analysis Compliance - End Office | NTX767AA |
| TR448 ISDN Digit Analysis Compliance - Toll | NTX768AA |
| TOPS OLNS Interface | ABS00012 |
| Operator Services Advanced Intelligent Network | ENSV0014 |
| Access to Messaging | RES00077 |

OM group EXT (continued)

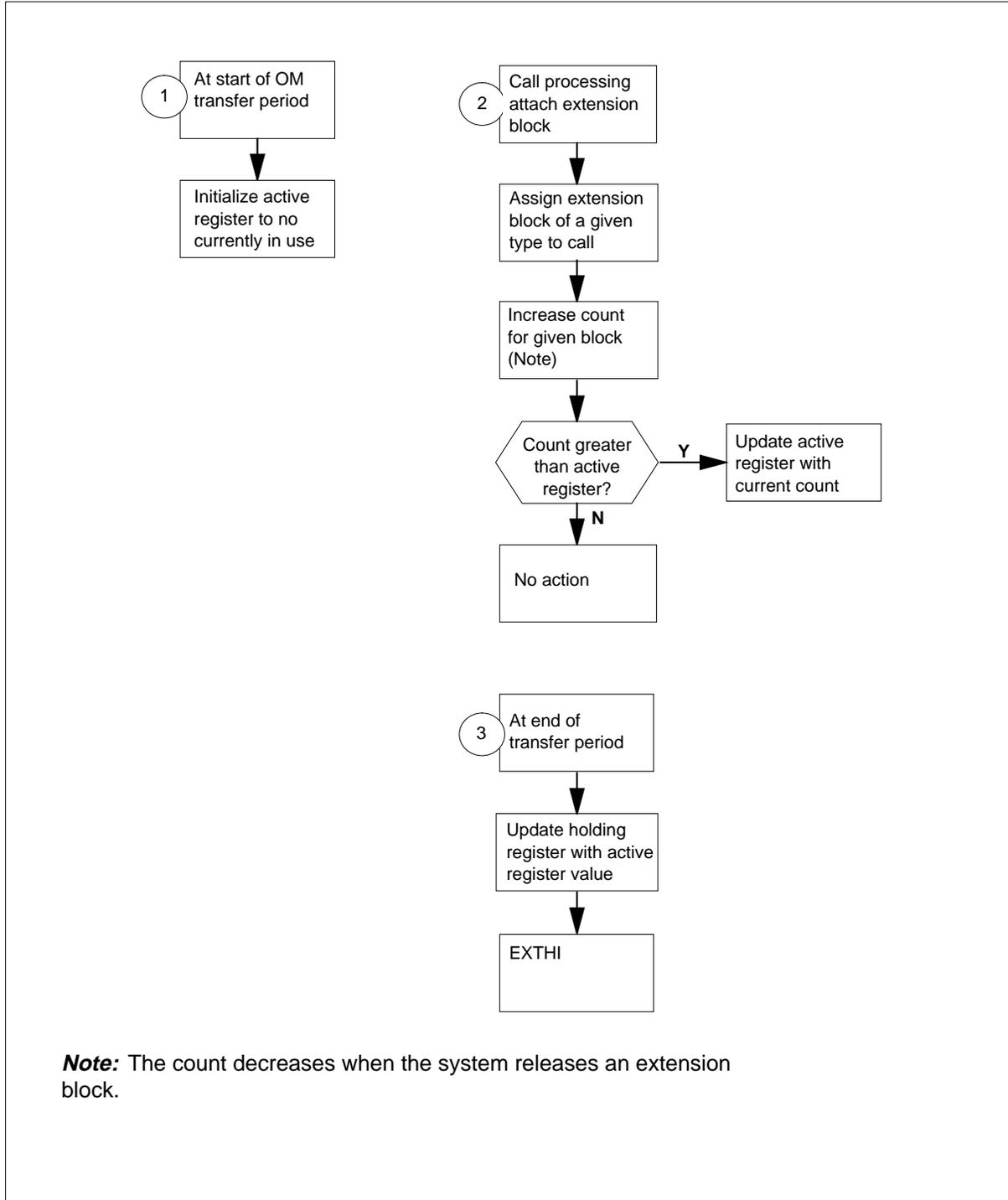
(Sheet 2 of 2)

| Functionality | Code |
|---|----------|
| Enhanced Busy Call Return | RES00076 |
| TOPS LNP | OSEA0008 |
| OSSAIN Enhancements | ENSV0020 |
| CS1R Real Time Enhancements | DSSP0001 |
| DMS Calling Card Service | SVBI0002 |
| Re-origination for DMS Calling Card Service | SVBI0002 |

OM group EXT registers: registers

OM group EXT (continued)

OM group EXT registers: high water mark



OM group EXT (continued)

Register EXTHI

Extension block high water (EXTHI)

Register EXTHI records the maximum number of extension blocks in use at the same time during an OM transfer period. The OM transfer period can be 15 min or 30 min. To predict peak use accurately, gather high water marks for the busiest hours of the busiest days of the year. Follow either the High Day Busy Hour or the Extreme Value Engineering material. Calculate and adjust the supply of extension blocks. Calls during the busiest times should take no more than 80% of extension blocks.

At the start of a transfer period, the active register records the number of extension blocks in use. This number changes during the transfer period when the number of blocks in use exceeds the error recorded value.

At the end of the transfer period (15 or 30 min), the active register value moves to the holding register (EXTHI). The value stays in EXTHI until the end of the next transfer period, when the software writes over the value.

To predict true peak use, take the maximum value of all high water marks from transfer periods on the busiest days of the year. Add an additional amount to make sure that peak use of software resource is a maximum of 80%. Enter the calculated value in the office parameter for each given type of extension block value appears in table OFCENG.

Register EXTHI release history

Register EXTHI was introduced in BCS23. Register EXTHI2 was introduced in BCS31.

Associated registers

Register EXTHI replaces register EXTUSAGE. Register EXTUSAGE was deleted in BCS25.

Associated logs

There are no associated logs.

Extension registers

Register EXTHI2 is an extension register.

Register EXTOVFL

Extension block overflow (EXTOVFL)

OM group EXT (end)

Register EXTOVFL increases when the type of extension block requested for a call is not available. If the call cannot wait for a second attempt or second attempt fails, the call receives no-service-circuit (NOSC) treatment.

If the count in this register is not zero, you must review the supply of extension blocks of a given type. You can increase the number of extension blocks in table OFCENG.

Register EXTOVFL release history

Register EXTOVFL was introduced before BCS20.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Register EXTSEIZ

Extension block seizures (EXTSEIZ)

Register EXTSEIZ increases when a request for a type of extension block is successful.

Register EXTSEIZ release history

Register EXTSEIZ was introduced before BCS20. Extension register EXTSEIZ2 was introduced in BCS31.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension register

Register EXTSEIZ2 is an extension register.

OM group FBTRAFF

OM description

F-bus Platform Traffic

The operational measurement (OM) group FBTRAFF monitors traffic OMs for the following F-bus platforms in a DMS office:

- link interface unit (LIU7)
- high-speed link interface unit (HLIU)
- high-speed link router (HSLR)
- Ethernet interface unit (EIU)
- X.25 link interface unit (XLIU)
- application processing unit (APU)
- voice processing unit (VPU)
- network interface unit (NIU)
- frame relay transport unit (FRIU)

OM group FBTRAFF consists of 30 registers. These registers monitor the following:

- Total number of packets sent from the ASU to the F-bus host. Data that travels from the ASU to the F-bus host travels in the transmit direction.
- Total number of packets sent from the F-bus host to the ASU. Data that travels from the F-bus host to the ASU travels in the receive direction.
- Total number of octets that travel in the transmit direction.
- Total number of octets that travel in the receive direction.
- Percentage of total F-bus bandwidth occupied by transmit throughput.
- Percentage of total F-bus bandwidth occupied by receive throughput.
- Percentage of total F-bus bandwidth occupied by the sum of transmit and receive throughput.

Each item is measured separately for F-bus 0 and F-bus 1.

Extension registers

Numbers obtained by some of these calculations can contain too many digits to fit within a single register. Calculation results are therefore split into three extension registers. For example, the result of the calculation of the total number of transmit packets on F-bus 1 is split into registers TXPK1FB1, TXPK2FB1, and TXPK3FB1.

OM group FBTRAFF (continued)

To obtain the total value expressed in the three-register set, add the following values:

- The value in register 1
- The value in register 2 x 32768
- The value in register 3 x 327682

The following mathematical formula expresses this process:

$$\text{Total value} = R1 + (R2 \times 32\,768) + (R3 \times 32\,768\,2)$$

Note: Registers that calculate percentage values do not require extension registers.

Release history

OM group FBTRAFF was introduced in TL05.

Registers

The following OM group FBTRAFF registers appear on the MAP terminal as follows:

| | | | |
|----------|----------|----------|----------|
| TXPK3FB0 | TXPK2FB0 | TXPK1FB0 | RXPK3FB0 |
| RXPK2FB0 | RXPK1FB0 | TXPK3FB1 | TXPK2FB1 |
| TXPK1FB1 | RXPK3FB1 | RXPK2FB1 | RXPK1FB1 |
| TXOC3FB0 | TXOC2FB0 | TXOC1FB0 | RXOC3FB0 |
| RXOC2FB0 | RXOC1FB0 | TXOC3FB1 | TXOC2FB1 |
| TXOC1FB1 | RXOC3FB1 | RXOC2FB1 | RXOC1FB1 |
| TXPCFB0 | RXPCFB0 | TXPCFB1 | RXPCFB1 |
| TXRPCFB0 | TXRPCFB1 | | |

Group structure

OM group FBTRAFF

Key field:

FBUS_CONTROLLERS

Info field:

HOST_INFO

OM group FBTRAFF (continued)

Associated OM groups

The following OM groups are associated with OM group FBTRAFF.

- ASUFBUS provides the number of octets and packets transmitted and received for an ASU on each F-bus port.
- NIUFBUS provides the number of octets and packets transmitted and received for a NIU on each F-bus port.

Associated functional groups

None

Associated functionality codes

The associated functionality codes for the OM group FBTRAFF appear in the following table.

| Functionality | Code |
|-------------------------|----------|
| CM Common | NTX941AA |
| Ethernet Interface Unit | NTX951AA |
| MS Common | NTXF05AA |

Register TXPK1FB0

Register transmit packets 1 F-bus 0

TXPK1FB0 is the first register of the total number of transmit packets that travel over F-bus 0. The F-bus host is the message switch (MS) for the single shelf link peripheral processor (SSLPP) and for the DMS SuperNode SE (SNSE). The F-bus host is the local message switch (LMS) for the link peripheral processor (LPP) or enhanced link peripheral processor (ELPP). The value range of this register is 0 to 32 767.

Register TXPK1FB0 release history

Register TXPK1FB0 was introduced in TL05.

Associated registers

None

Associated logs

None

OM group FBTRAFF (continued)

Extension registers

TXPK2FB0, TXPK3FB0

Register RXPk1FB0

Register received packets 1 F-bus 0

RXPk1FB0 is the first register of the total number of receive packets that travel over F-bus 0. The F-bus host is the MS for the SSLPP and for the SNSE. The F-bus host is the LMS for the LPP or ELPP. The value range of this register is 0 to 32 767.

Register RXPk1FB0 release history

Register RXPk1FB0 was introduced in TL05.

Associated registers

None

Associated logs

None

Extension registers

RXPk2FB0, RXPk3FB0

Register TXPK1FB1

Register transmit packets 1 F-bus 1

TXPK1FB1 is the first register of the total number of transmit packets that travel over F-bus 1. The F-bus host is the MS for the SSLPP and for the SNSE. The F-bus host is the LMS for the LPP or ELPP. The value range of this register is 0 to 32 767.

Register TXPK1FB1 release history

Register TXPK1FB1 was introduced in TL05.

Associated registers

None

Associated logs

None

Extension registers

TXPK2FB1, TXPK3FB1

OM group FBTRAFF (continued)

Register RXPk1FB1

Register received packets 1 F-bus 1

RXPk1FB1 is the first register of the total number of receive packets that travel over F-bus 1. The F-bus host is the MS for the SSLPP and for the SNSE. The F-bus host is the LMS for the LPP or ELPP. The value range of this register is 0 to 32 767.

Register RXPk1FB1 release history

Register RXPk1FB1 was introduced in TL05.

Associated registers

None

Associated logs

None

Extension registers

RXPk2FB1, RXPk3FB1

Register TXOC1FB0

Register transmit octets 1 F-bus 0

TXOC1FB0 is the first register of the total number of transmit octets that travel over F-bus 0. The F-bus host is the MS for the SSLPP and for the SNSE. The F-bus host is the LMS for the LPP or ELPP. The value range of this register is 0 to 32 767.

Register TXOC1FB0 release history

Register TXOC1FB0 was introduced in TL05.

Associated registers

None

Associated logs

None

Extension registers

TXOC2FB0, TXOC3FB0

Register RXOC1FB0

Register received octets 1 F-bus 0

OM group FBTRAFF (continued)

RXOC1FB0 is the first register of the total number of receive octets that travel over F-bus 0. The F-bus host is the MS for the SSLPP and for the SNSE. The F-bus host is the LMS for the LPP or ELPP. The value range of this register is 0 to 32 767.

Register RXOC1FB0 release history

Register RXOC1FB0 was introduced in TL05.

Associated registers

None

Associated logs

None

Extension registers

RXOC2FB0, RXOC3FB0

Register TXOC1FB1

Register transmit octets 1 F-bus 1

TXOC1FB1 is the first register of the total number of transmit octets that travel over F-bus 1. The F-bus host is the MS for the SSLPP and for the SNSE. The F-bus host is the LMS for the LPP or ELPP. The value range of this register is 0 to 32 767.

Register TXOC1FB1 release history

Register TXOC1FB1 was introduced in TL05.

Associated registers

None

Associated logs

None

Extension registers

TXOC2FB1, TXOC3FB1

Register RXOC1FB1

Register received octets 1 F-bus 1

RXOC1FB1 is the first register of the total number of receive octets that travel over F-bus 1. The F-bus host is the MS for the SSLPP and for the SNSE. The

OM group FBTRAFF (continued)

F-bus host is the LMS for the LPP or ELPP. The value range of this register is 0 to 32 767.

Register RXOC1FB1 release history

Register RXOC1FB1 was introduced in TL05.

Associated registers

None

Associated logs

None

Extension registers

RXOC2FB1, RXOC3FB1

Register TXPCFB0

Register percentage transmit on F-bus 0

Register TXPCFB0 monitors the percentage of total F-bus 0 bandwidth occupied by transmit traffic. The F-bus host is the MS for the SSLPP and for the SNSE. The F-bus host is the LMS for the LPP or ELPP. Total bandwidth of an ELPP is up to three times the bandwidth of an LPP. The value range of this register is 0 to 100.

Register TXPCFB0 release history

Register TXPCFB0 was introduced in TL05.

Associated registers

TXOC1FB0, TXOC2FB0, TXOC3FB0

Associated logs

None

Extension registers

None

Register RXPCFB0

Register percentage received on F-bus 0

Register RXPCFB0 monitors the percentage of total F-bus 0 bandwidth occupied by receive traffic. The F-bus host is the MS for the SSLPP and for the SNSE. The F-bus host is the LMS for the LPP or ELPP. Total bandwidth

OM group FBTRAFF (continued)

of an ELPP is up to three times the bandwidth of an LPP. The value range of this register is 0 to 100.

Register RXPCFB0 release history

Register RXPCFB0 was introduced in TL05.

Associated registers

RXOC1FB0, RXOC2FB0, RXOC3FB0

Associated logs

None

Extension registers

None

Register TXPCFB1

Register transmitted percentage on F-bus 1

Register TXPCFB1 monitors the percentage of total F-bus 1 bandwidth occupied by transmit and receive traffic. The F-bus host is the MS for the SSLPP and for the SNSE. The F-bus host is the LMS for the LPP or ELPP. Total bandwidth of an ELPP is up to three times the bandwidth of an LPP. The value range of this register is 0 to 100.

Register TXPCFB1 release history

Register TXPCFB1 was introduced in TL05.

Associated registers

TXOC1FB1, TXOC2FB1, TXOC3FB1

Associated logs

None

Extension registers

None

Register RXPCFB1

Register received percentage on F-bus 1

Register RXPCFB1 monitors the percentage of total F-bus 1 bandwidth occupied by transmit and receive traffic. The F-bus host is the MS for the SSLPP and for the SNSE. The F-bus host is the LMS for the LPP or ELPP.

OM group FBTRAFF (continued)

Total bandwidth of an ELPP is up to three times the bandwidth of an LPP. The value range of this register is 0 to 100.

Register RXPCFB1 release history

Register RXPCFB1 was introduced in TL05.

Associated registers

RXOC1FB1, RXOC2FB1, RXOC3FB1

Associated logs

None

Extension registers

None

Register TXRPCFB0

Register transmitted and received percentage of F-bus 0

Register TXRPCFB0 monitors the percentage of total F-bus 0 bandwidth occupied by transmit and receive traffic. The F-bus host is the MS for the SSLPP and for the SNSE. The F-bus host is the LMS for the LPP or ELPP. Total bandwidth of an ELPP is up to three times the bandwidth of an LPP. The value range of this register is 0 to 100.

Register TXRPCFB0 release history

Register TXRPCFB0 was introduced in TL05.

Associated registers

TXOC1FB0, TXOC2FB0, TXOC3FB0, RXOC1FB0, RXOC2FB0, RXOC3FB0

Associated logs

None

Extension registers

None

Register TXRPCFB1

Register transmitted and received percentage of F-bus 1

Register TXRPCFB1 monitors the percentage of total F-bus 1 bandwidth occupied by transmit and receive traffic. The F-bus host is the MS for the SSLPP and for the SNSE. The F-bus host is the LMS for the LPP or ELPP.

OM group FBTRAFF (end)

Total bandwidth of an ELPP is up to three times the bandwidth of an LPP. The value range of this register is 0 to 100.

Register TXRPCFB1 release history

Register TXRPCFB1 was introduced in TL05.

Associated registers

TXOC1FB1, TXOC2FB1, TXOC3FB1, RXOC1FB1, RXOC2FB1, RXOC3FB1

Associated logs

None

Extension registers

None

OM group FC

OM description

Flexible Calling (FC)

The OM group FC counts the number of attempts to use Flexible Calling to transfer a conference call.

Release history

The OM group FC was introduced in NA008.

Registers

The OM group FC registers appear on the MAP terminal as follows:

```
FCXCONAT FCXCONA2 FCXCONSU FCXCONFL  
FCXC2CAT FCXC2CA2 FCXC2CSU FCXC2CFL
```

Group structure

The OM group FC provides one tuple for each calling group.

Key field:

customer group

Info field:

There is no info field.

Associated OM groups

There are no associated OM groups.

Associated working groups

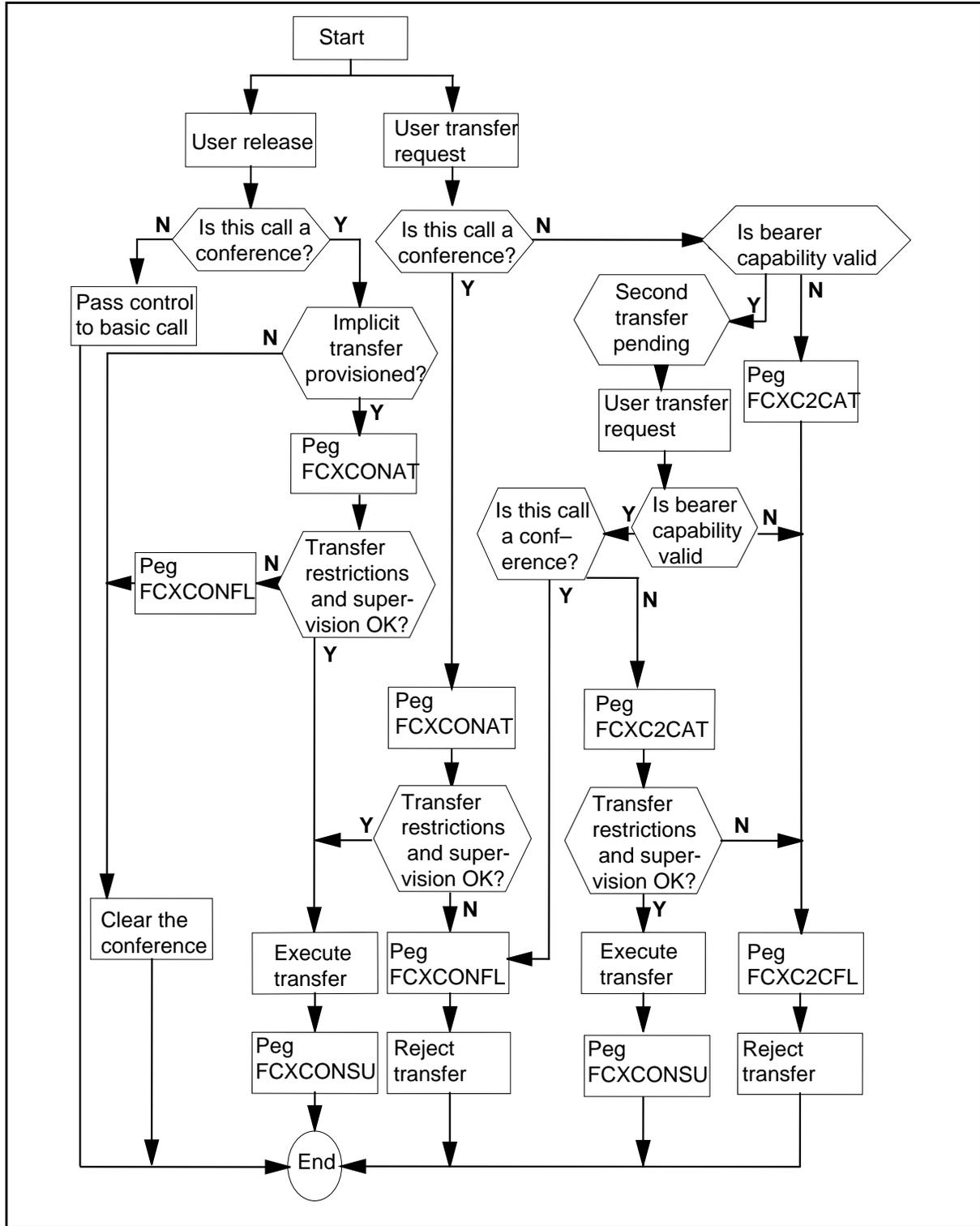
The working group NI0 NI-2/3 BRI Services Phase II (NI000051) associates with OM group FC.

Associated functionality codes

There are no associated functionality codes.

OM group FC (continued)

OM group FC registers



OM group FC (continued)

Register FCXCONAT

Register Flexible Calling Transfer Attempts involving a Conference (FCXCONAT)

Register FCXCONAT counts the number of attempts to use Flexible Calling to transfer a conference.

Register FCXCONAT release history

Register FCXCONAT was introduced in NA008.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

FCXCONA2

Register FCXCONA2

Extension register for Flexible Calling Transfer Attempts that involving a Conference (FCXCONA2)

Register FCXCONA2 counts the number of conference transfer attempts that Flexible Calling makes.

Register release history

Register FCXCONA2 was introduced in NA008.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register FCXCONSU

Register Flexible Calling Transfer Successes involving a Conference (FCXCONSU)

OM group FC (continued)

Register FCXCONSU counts the number of successful Flexible Calling transfers of two 2-party calls.

Register release history

Register FCXCONSU was introduced in NA008.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register FCXCONFL

Register Flexible Calling Transfer Failures involving a Conference (FCXCONFL)

Register FCXCONFL counts the number of times a Flexible Calling Conference transfer fails for one of the following reasons:

- different call transfer requirements between the controlling station and the transferred station
- not enough supervision on the trunks
- reference a call type that is not permitted

Register release history

Register FCXCONFL was introduced in NA008.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register FCXC2CAT

Register Flexible Calling Call to Call Transfer Attempts (FCXC2CAT)

OM group FC (continued)

Register FCXC2CAT counts the number of attempts to use Flexible Calling to transfer two 2-party calls.

Register release history

Register FCXC2CA2 was introduced in NA008.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

FCXC2CA2

Register FCXC2CA2

Extension register for Flexible Calling Call to Call Transfer Attempts (FCXC2CA2)

Register FCXC2CA2 counts the number of attempts to use Flexible Calling to transfer two 2-party calls.

Register release history

Register FCXC2CA2 was introduced in NA008.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register FCXC2CSU

Register Flexible Calling Call to Call Transfer Successes (FCXC2CSU)

Register FCXC2CSU counts the number of successful Flexible Calling transfers of two 2-party calls.

Register release history

Register FCXC2CSU was introduced in NA008.

OM group FC (end)

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register FCXC2CFL

Register Flexible Calling Call to Call Transfer Failures (FCXC2CFL)

Register FCXC2CFL counts the number of times a Flexible Calling transfer of two 2-party calls fails. A Flexible Calling transfer of two 2-party calls fails for one of the following reasons:

- different call transfer requirements between the controlling station and the transferred station
- not enough supervision on the trunks
- reference to call type that is not permitted

Register release history

Register FCXC2CFL was introduced in NA008.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

OM group FCNF

OM description

FBS Conference

This OM group is a separate requirement functionality that does not apply to this PCL release.

Release history

The OM group FCNF was introduced in NA005 and modified in NA012 and NA014.

OM group FCS

OM Descriptions

Flexible charging system (FCS)

The OM group FCS provides counts for automatic call distribution (ACD) calls that fail to terminate to ACD agents. This group counts calls the system denies termination. These calls are FCS calls to non-FCS agents. This group also counts calls that the system does not accept. These calls are non-FCS calls to FCS agents.

The FCS is a customer option entered in table ACDGRP. Customer option FCS allows flexible charges for supplementary service features for the Japanese Public Network (JPN) ISDN user part (ISUP).

Register ACDANSR in operational measurements (OM) group ACDGRP counts FCS calls that FCS agents answer.

Release history

The OM group FCS was introduced in BCS35.

Registers

The OM group FCS registers appear on the MAP terminal as follows:

FCSDNTR FCSCNAC

Group structure

The OM group FCS provides one tuple for each ACD group.

Key field:

There is no key field.

Info field:

There is no info field.

Associated OM groups

ACDGRP

Associated working groups

There are no associated working groups.

OM group FCS (continued)

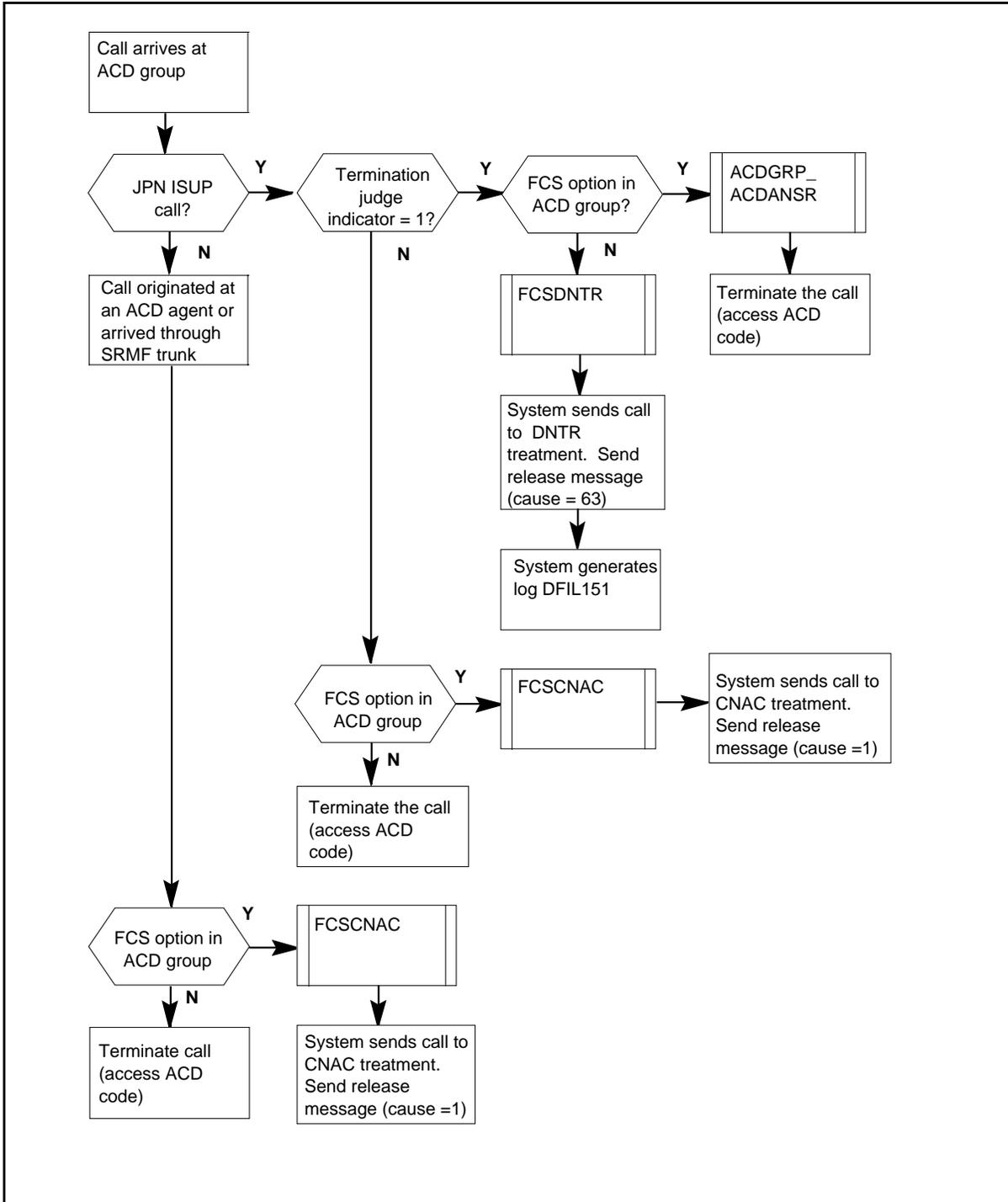
Associated functionality codes

The associated functionality codes for OM group FCS appear in the following table.

| Functionality | Code |
|---|-------------|
| JPN Flexible Charge System Call Termination | NTXV24AA |

OM group FCS (continued)

OM group FCS registers



OM group FCS (continued)

Register FCSCNAC

FCS call not accepted (FCSCNAC)

Register FCSCNAC increases when a non-FCS call attempts to terminate to an ACD group that has the FCS option present.

A call is non-FCS if one of the following conditions occurs:

- value of terminating judge indicator bit in network indicator field of the initial address message (IAM) is 0 or not present
- the call arrives through a non-JPN ISUP trunk or line

FCSCNAC release history

Register FCSCNAC was introduced in BCS35.

Associated registers

Register ACDGRP_ACDOFFR counts the number of calls that the system offers to an ACD group.

ACDGRP_ACDOFFR FCSCNAC

Other registers in OM group ACDGRP can increase when FCSCNAC increases, according to how this call terminates. The system can send the call to Night Service, overflow the call to another ACD group, or abandon the call.

Associated logs

There are no associated logs.

Register FCSDNTR

FCS denied termination (FCSDNTR)

Register FCSDNTR increases each time an FCS call attempts to terminate to a non-FCS agent. This increase means that the value of the terminating judge indicator bit in the network indicator field of the initial address message (IAM) is 1. This increase also means that the ACD group does not have the FCS option entered.

FCSDNTR release history

Register FCSDNTR was introduced in BCS35.

Associated registers

Register ACDGRP_ACDOFFR counts the number of calls that the system offers to an ACD group.

OM group FCS (end)

ACDGRP_ACDOFFR FCSDNTR

Other registers in OM group ACDGRP can increase when FCSDNTR increases, according to how this call terminates. The system can send the call to Night Service, overflow the call to another ACD group, or abandon the call.

Associated logs

The system generates DFIL151 when an FCS call arrives at an ACD group that does not have the FCS option assigned.

OM group FPDABM

OM description

File processor dual-access buffer memory counts (FPDABM)

The OM group FPDABM counts the number of times that the dual-access buffer memory (DABM) changes state. The OM group FPDABM counts changes of state to in-service trouble (ISTB) or system busy (SYSB). These states indicate the occurrence of errors related to the DABM and if the errors are part of normal maintenance activities.

Release history

The OM group FPDABM was introduced in BCS33.

Registers

The OM group FPDABM registers appear on the MAP terminal as follows:

FPDABMIT FPDABMSB FPDABMRX

Group structure

The OM group FPDABM provides four tuples for each FP to a maximum of 100 FPs.

Key field:

FPD_SYMB_NUM

Info field:

FPDABM_OM_INFO_T

Associated OM groups

There are no associated OM groups.

Associated working groups

The working group Series Three Peripheral-File Processor associates with OM -group FPDABM.

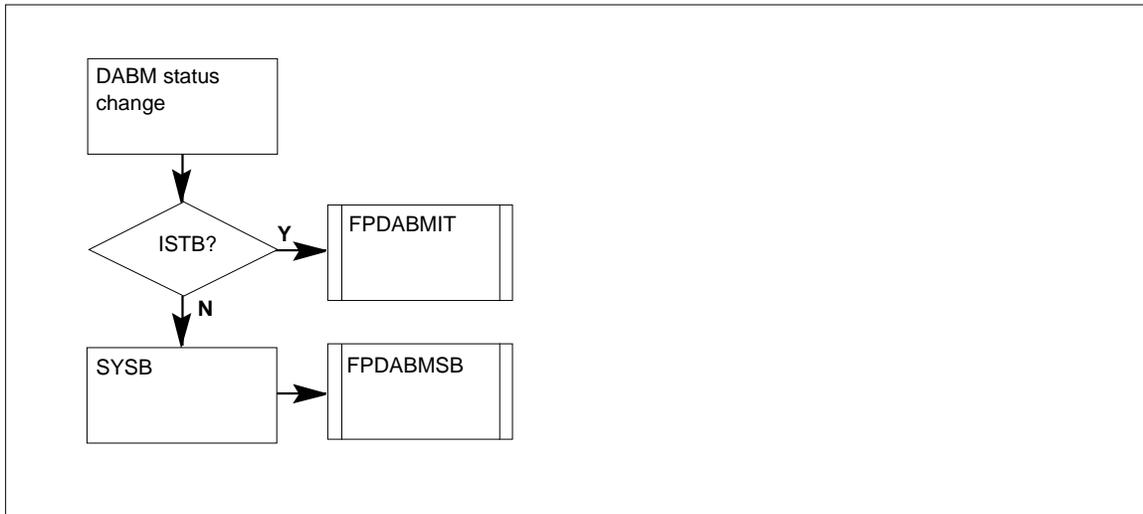
OM group FPDABM (continued)

Associated functionality codes

The associated functionality codes for OM group FPDABM appear in the following table.

| Functionality | Code |
|---------------------|----------|
| File Processor (FP) | NTXF04AA |

OM group FPDABM registers



Register FPDABMIT

FP DABM in-service trouble count (FPDABMIT)

Register counts the number of times the DABM changes state to an ISTB.

Register FPDABMIT release history

Register FPDABMIT was introduced in BCS33.

Associated registers

There are no associated registers.

Associated logs

The system generates FP552 for each change in the operational status of the FP DABM.

Register FPDABMRX

FP DABM system busy, caused by a routine exercise (REX) test (FPDABMRX)

Register FPDABMRX counts the number of times the DABM changes state to SYSB as a result of an REX test.

This register is not active.

Register FPDABMRX release history

Register FPDABMRX was introduced in BCS33.

Associated registers

There are no associated registers.

Associated logs

The system generates FP552 for each change in the operational state of the FP DABM.

Register FPDABMSB

FP DABM system busy count (FPDABMSB)

Register FPDABMSB counts the number of times the DABM changes state to SYSB.

Register FPDABMSB release history

Register FPDABMSB was introduced in BCS33.

Associated registers

FPDABMRX

Associated logs

The system generates FP552 for each change in the operational state of the FP DABM.

OM group FPDEVICE

OM description

File processor storage device counts (FPDEVICE)

The OM group FPDEVICE counts the number of times each file processor (FP) storage device enters the following states:

- in-service trouble (ISTB)
- manual busy (ManB)
- not available (NA)
- resource busy (RBSY)
- system busy (SYSB)

The OM group FPDEVICE counts the number of times that use indicators specify the device activity.

Release history

The OM group FPDEVICE was introduced in BCS33.

Registers

The OM group FPDEVICE registers appear on the MAP terminal as follows:

| | | | |
|-----------|----------|---------|----------|
| FPDIP0EU | FPDIP1EU | FPDEVMB | FPDEVMBU |
| FPDEVRB | FPDEVRSU | FPDEVNA | FPDEVNAU |
| FPDEVIT | FPDEVITU | FPDEVSB | FPDEVSBU |
| FPDEVBW | FPDEVBR | FPDEVQR | FPDEVRA |
| FPDEVRRAR | FPDEVNU | | |

Group structure

The OM group FPDEVICE provides 12 tuples for each FP to a maximum of 100 FPs.

Key field:

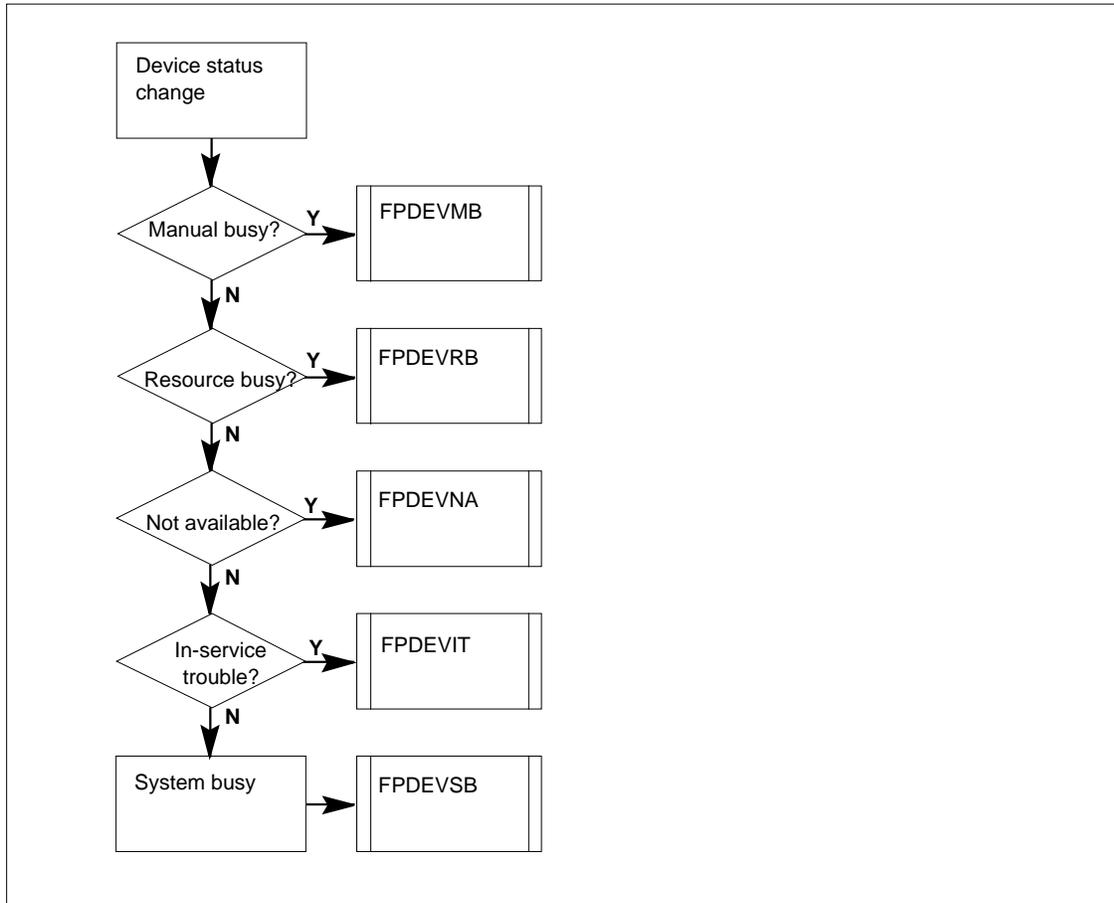
FPD_SYMB_NUM

Info field:

FPDEVICE_OM_INFO_T

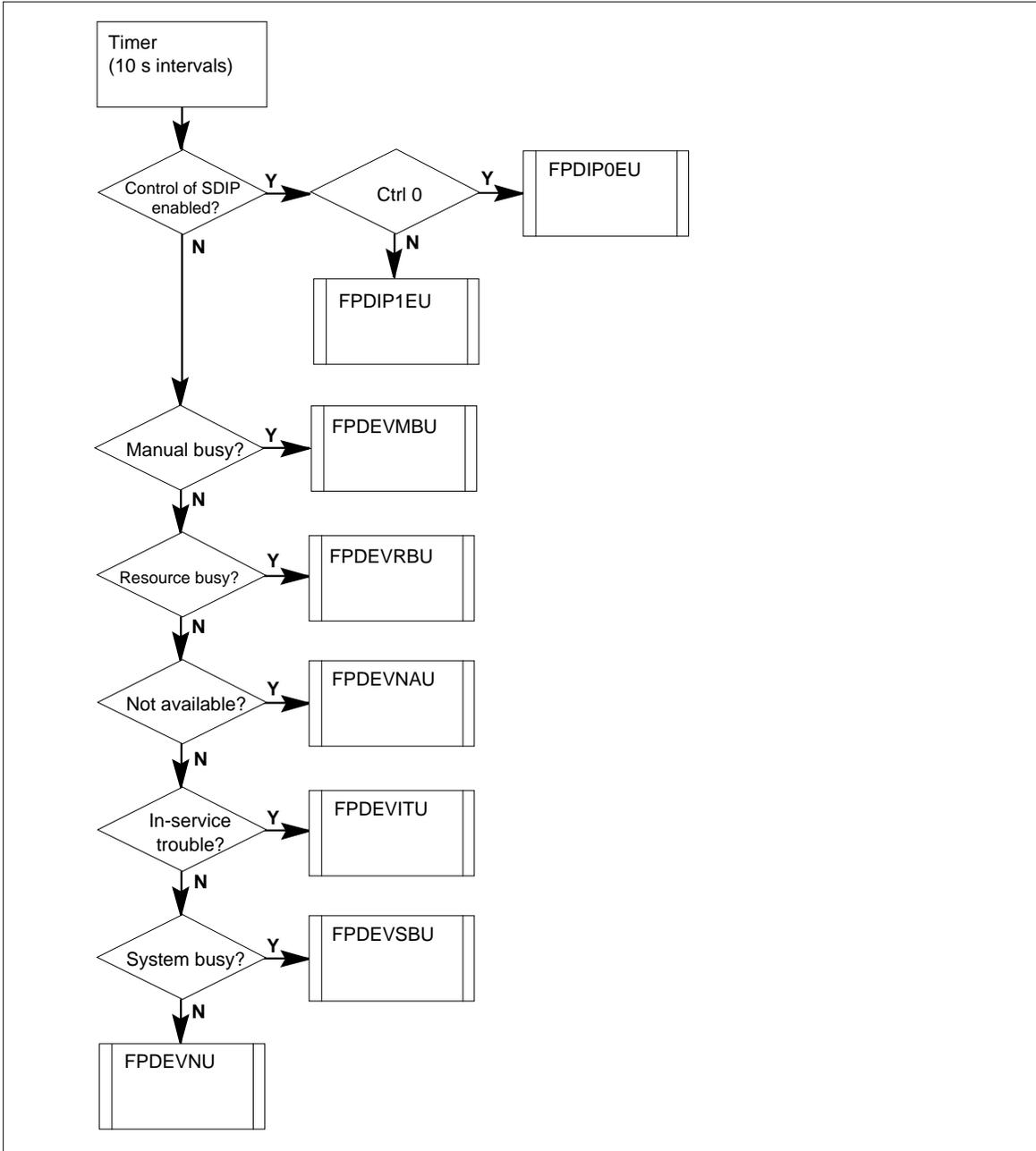
OM group FPDEVICE (continued)

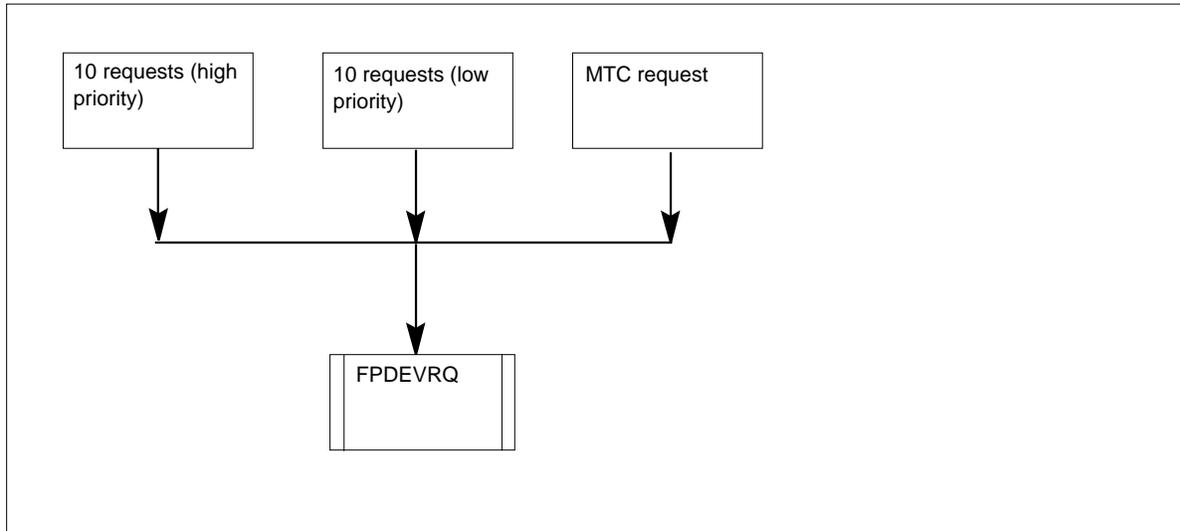
OM group FPDEVICE registers



OM group FPDEVICE (continued)

OM group FPDEVICE usage registers



OM group FPDEVICE (continued)**OM group FPDEVICE FPDEVRQ register****Associated OM groups**

There are no associated OM groups.

Associated working groups

The working group Series Three Peripheral-File Processor associates with OM group FPDEVICE.

Associated functionality codes

The associated functionality codes for OM group FPDEVICE appear in the following table.

| Functionality | Code |
|----------------|----------|
| File Processor | NTXF04AA |

Register FPDEVBR

FP storage device blocks read count (FPDEVBR)

Register FPDEVBR counts the number of blocks that the system reads from the given storage device.

This register is not active.

OM group FPDEVICE (continued)

Register FPDEVBR release history

Register FPDEVBR was introduced in BCS33.

Associated registers

FPDEVNU

Associated logs

There are no associated logs.

Register FPDEVBW

FP storage device blocks written count (FPDEVBW)

Register FPDEVBW counts the number of blocks that the system writes to the given storage device. This count takes into account the time interval during which the count accumulates to determine block write traffic.

This register is not active.

Register FPDEVBW release history

Register FPDEVBW was introduced in BCS33.

Associated registers

FPDEVNU

Associated logs

There are no associated logs.

Register FPDEVIT

FP storage device ISTB state count (FPDEVIT)

Register FPDEVIT increases each time the given storage device changes state to ISTB.

Register FPDEVIT release history

Register FPDEVIT was introduced in BCS33.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

OM group FPDEVICE (continued)

Register FPDEVITU

FP storage device ISTB state usage (FPDEVITU)

Register FPDEVITU increases every 10 s when the given storage device is in the ISTB state.

Register FPDEVITU release history

Register FPDEVITU was introduced in BCS33.

Associated registers

FPDEVNU

Associated logs

There are no associated logs.

Register FPDEVMB

FP storage device ManB state count (FPDEVMB)

Register FPDEVMB increases each time the given storage device changes state to ManB.

Register FPDEVMB release history

Register FPDEVMB was introduced in BCS33.

Associated registers

There are no associated registers.

Associated logs

The system generates FP503 each time the operational state changes for the storage device.

Register FPDEVMBU

FP storage device ManB state usage (FPDEVMBU)

Register FPDEVMBU increases every 10 s when the given storage device is in the ManB state.

FPDEVMBU release history

Register FPDEVMBU was introduced in BCS33.

Associated registers

FPDEVNU

OM group FPDEVICE (continued)

Associated logs

There are no associated logs.

Register FPDEVNA

FP storage device NA state count (FPDEVNA)

Register FPDEVNA increases each time the given storage device changes state to NA.

Register FPDEVNA release history

Register FPDEVNA was introduced in BCS33.

Associated registers

There are no associated registers.

Associated logs

The system generates FP503 each time operational state changes for the storage device.

Register FPDEVNAU

FP storage device NA state usage (FPDEVNAU)

Register FPDEVNAU increases every 10 s when the given storage device is in the NA state.

Register FPDEVNAU release history

Register FPDEVNAU was introduced in BCS33.

Associated registers

FPDEVNU

Associated logs

There are no associated logs.

Register FPDEVNU

FP storage device number of usage intervals in the last transfer period (FPDEVNU)

Register FPDEVNU increases every 10 when the usage scan process checks usage conditions for registers in OM group FPDEVICE.

Register FPDEVNU release history

Register FPDEVNU was introduced in BCS33.

OM group FPDEVICE (continued)

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Register FPDEVRA

FP storage device unrecoverable block assignment count (FPDEVRA)

Register FPDEVRA counts the number of unrecoverable block reassignments.

This register is not active.

Register FPDEVRA release history

Register FPDEVRA was introduced in BCS33.

Associated registers

FPDEVNU

Associated logs

There are no associated logs.

Register FPDEVRAR

FP storage device recoverable block assignment count (FPDEVRAR)

Register FPDEVRAR counts the number of recoverable block reassignments.

This register is not active.

Register FPDEVRAR release history

Register FPDEVRAR was introduced in BCS33.

Associated registers

FPDEVNU

Associated logs

There are no associated logs.

Register FPDEVRB

FP storage device RBSY state count (FPDEVRB)

Register FPDEVRB increases each time the given storage device changes state to RBSY.

OM group FPDEVICE (continued)

Register FPDEVRB release history

Register FPDEVRB was introduced in BCS33.

Associated registers

There are no associated registers.

Associated logs

The system generates FP503 each time the operational state for the storage device changes.

Register FPDEVRBU

FP storage device RBSY state usage (FPDEVRBU)

Register FPDEVRBU increases every 10 s when the given storage device is in the RBSY state.

Register FPDEVRBU release history

Register FPDEVRBU was introduced in BCS33.

Associated registers

FPDEVNU

Associated logs

There are no associated logs.

Register FPDEVRQ

FP storage device requests count (FPDEVRQ)

Register FPDEVRQ counts the number of requests to the given storage device.

Register FPDEVRQ release history

Register FPDEVRQ was introduced in BCS33.

Associated registers

FPDEVNU

Associated logs

There are no associated logs.

Register FPDEVSB

FP storage device SYSB state count (FPDEVSB)

OM group FPDEVICE (continued)

Register FPDEVSB increases each time the given storage device changes state to SYSB.

Register FPDEVSB release history

Register FPDEVSB was introduced in BCS33.

Associated registers

There are no associated registers.

Associated logs

The system generates FP503 each time the operational state for the storage device changes.

Register FPDEVSBU

FP storage device SYSB state usage (FPDEVSBU)

Register FPDEVSBU increases every 10 s when the given storage device is in the SYSB state.

Register FPDEVSBU release history

Register FPDEVSBU was introduced in BCS33.

Associated registers

FPDEVNU

Associated logs

There are no associated logs.

Register FPDIP0EU

FP device interface paddleboard for controller 0, enabled usage (FPDIP0EU)

Register FPDIP0EU increases every 10 s when the given SCSI device interface paddleboard (SDIP) on controller 0 is enabled.

Register FPDIP0EU release history

Register FPDIP0EU was introduced in BCS33.

Associated registers

FPDEVNU

Associated logs

There are no associated logs.

OM group FPDEVICE (end)

Register FPDIP1EU

FP device interface paddleboard for controller 1, enabled usage (FPDIP1EU)

The FPDIP1EU increases every 10 s when the given SCSI device interface paddleboard (SDIP) on controller 1 is enabled.

Register FPDIP1EU release history

The BCS33 introduced FPDIP1EU.

Associated registers

FPDEVNU

Associated logs

There are no associated logs.

OM group FPSCSI

OM description

FP SCSI bus counts (FPSCSI)

The OM group FPSCSI counts the number of times the SCSI changes state. This OM group also provides an indication of bus activity.

Release history

The OM group FPSCSI was introduced in BCS33.

Registers

The OM group FPSCSI registers appear on the MAP terminal as follows:

| | | | |
|----------|----------|----------|----------|
| FPSCSIMB | FPSCSIRB | FPSCSIIT | FPSCSISB |
| FPSCSIRX | FPSCSIEU | FPSIPPIO | FPSIPPMO |
| FPSIPPDO | FPSCSISW | FPSCSIRS | FPSCSIIU |
| FPSCSINU | | | |

Group structure

The OM group FPSCSI provides four tuples for each FP to a maximum of 100 FPs.

Key field:

FPD_SYMB_NUM

Info field:

FPSCSI_OM_INFO_T

Associated OM groups

There are no associated OM groups.

Associated working groups

The working group Series Three Peripheral-File Processor associates with OM group FPSCSI.

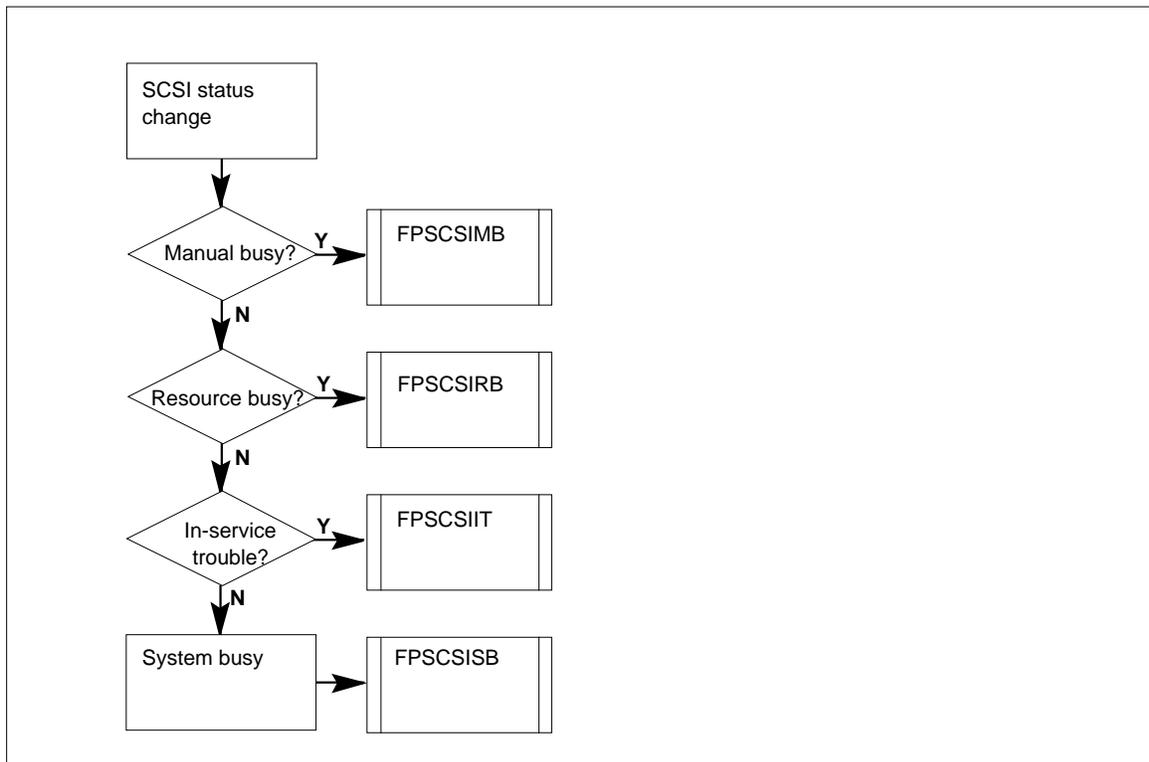
OM group FPSCSI (continued)

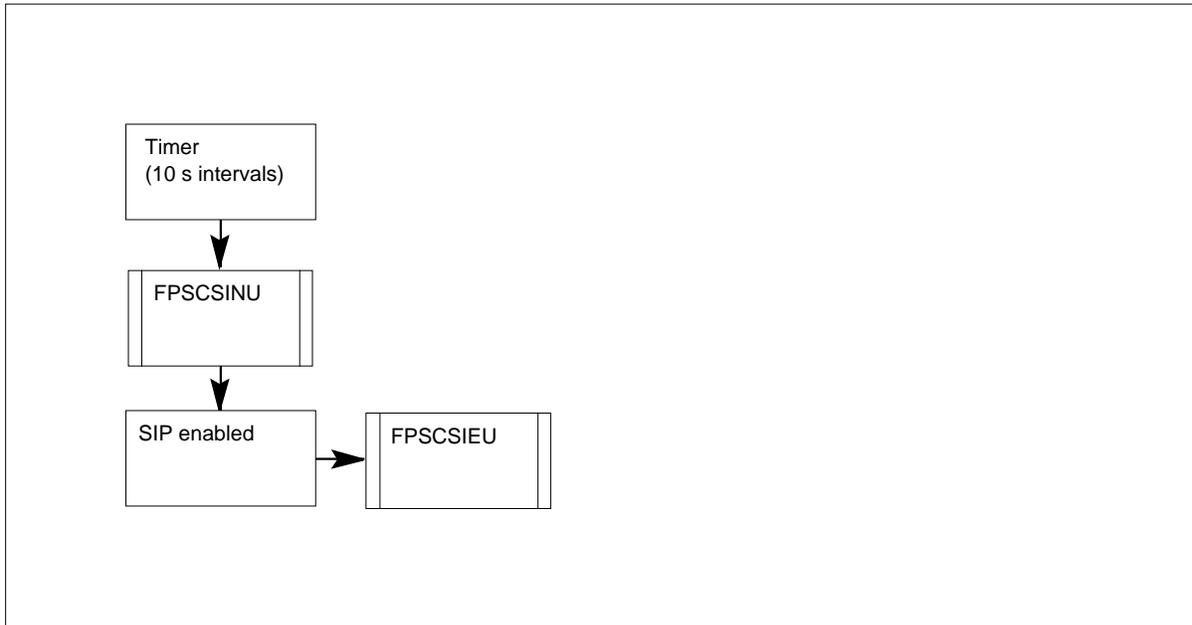
Associated functionality codes

The associated functionality codes for OM group FPSCSI appear in the following table.

| Functionality | Code |
|---------------------|----------|
| File Processor (FP) | NTXF04AA |

OM group FPSCSI registers



OM group FPSCSI (continued)**OM group FPSCSI usage registers****Register FPSCSIEU**

FP SCSI bus enabled usage (FPSCSIEU)

Register FPSCSIEU increases every 10 s when the SCSI bus is enabled.

Register FPSCSIEU release history

Register FPSCSIEU was introduced in BCS33.

Associated registers

FPSCSINU

Associated logs

The system generates FP504 when the operational state of the SCSI bus changes.

Register FPSCSIIT

FP SCSI bus ISTB count (FPSCSIIT)

Register FPSCSIIT increases when the SCSI bus changes state to in-service trouble (ISTB).

Register FPSCSIIT release history

Register FPSCSIIT was introduced in BCS33.

OM group FPSCSI (continued)

Associated registers

There are no associated registers.

Associated logs

The system generates FP504 when the operational state of the SCSI bus changes.

Register FPSCSIU

FP SCSI bus device usage (FPSCSIU)

Register FPSCSIU increases every 10 s when a storage device uses the SCSI.

This register is not active.

FPSCSIU release history

Register FPSCSIU was introduced in BCS33.

Associated registers

FPSCSINU

Associated logs

There are no associated logs.

Register FPSCSIMB

FP SCSI bus ManB count (FPSCSIMB)

Register FPSCSIMB increases when the SCSI bus changes state to manual busy (ManB).

Register FPSCSIMB release history

Register FPSCSIMB was introduced in BCS33.

Associated registers

There are no associated registers.

Associated logs

The system generates FP504 when the operational state of the SCSI bus changes.

Register FPSCSINU

FP SCSI bus number of usage intervals in the last transfer period (FPSCSINU)

OM group FPSCSI (continued)

Register FPSCSINU increases every 10 s when the usage scan process checks usage conditions for registers in OM group FPSCSI.

Register FPSCSINU release history

Register FPSCSINU was introduced in BCS33.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Register FPSCSIRB

FP SCSI bus RBSY count (FPSCSIRB)

Register FPSCSIRB increases when the SCSI bus changes state to resource busy (RBSY).

Register FPSCSIRB release history

Register FPSCSIRB was introduced in BCS33.

Associated registers

There are no associated registers.

Associated logs

The system generates FP504 when the operational state of the SCSI bus changes.

Register FPSCSIRS

FP SCSI bus SWEN caused by a REx test (FPSCSIRS)

Register FPSCSIRS counts the number of times the SCSI bus changes state to switch enable (SWEN). The SCSI bus changes state to SWEN to switch from one bus to the other because of a routine exercise (REx) test.

This register is not active.

Register FPSCSIRS release history

Register FPSCSIRS was introduced in BCS33.

Associated registers

There are no associated registers.

OM group FPSCSI (continued)

Associated logs

The system generates FP504 when the operational state of the SCSI bus changes.

Register FPSCSIRX

FP SCSI bus SYSB caused by an REx (FPSCSIRX)

Register FPSCSIRX increases when the SCSI bus changes state to SYSB as a result of a REx test.

This register is not active.

Register FPSCSIRX release history

Register FPSCSIRX was introduced in BCS33.

Associated registers

There are no associated registers.

Associated logs

The system generates FP504 when the operational state of the SCSI bus changes.

Register FPSCSISB

FP SCSI bus SYSB count (FPSCSISB)

Register FPSCSISB increases when the SCSI bus changes state to the system busy (SYSB).

Register FPSCSISB release history

Register FPSCSISB was introduced in BCS33.

Associated registers

FPSCSIRX

Associated logs

The system generates FP504 when the operational state of the SCSI bus changes.

Register FPSCSISW

FP SCSI bus SWEN count (FPSCSISW)

OM group FPSCSI (continued)

Register FPSCSISW counts the number of times the SCSI bus changes state to switch enable (SWEN). The SCSI bus changes state to SWEN to switch from one bus to the other.

This register is not active.

Register FPSCSISW release history

Register FPSCSISW was introduced in BCS33.

Associated registers

FPSCSIRS

Associated logs

The system generates FP504 when the operational state of the SCSI bus changes.

Register FPSIPPDO

FP SCSI paddleboard processor storage device access occupancy (FPSIPPDO)

Register FPSIPPDO counts the amount of time that the SCSI processor performs device access activity. The register counts the amount in a percentage value. This value increases to the next percentage every 10 s. The device access processor occupancy represents the amount of time the processor does not perform maintenance activity and is not idle.

This register is not active.

Register FPSIPPDO release history

Register FPSIPPDO was introduced in BCS33.

Associated registers

FPSIPPPIO, FPSIPPMO, FPSCSINU

Associated logs

The system generates FP504 when the operational state of the SCSI bus changes.

Register FPSIPPPIO

FP SCSI paddleboard processor idle occupancy (FPSIPPPIO)

OM group FPSCSI (end)

Register FPSIPPIO counts the amount of time the SCSI processor is idle. The register counts the amount of time in a percentage value. This value increases to the next percentage value every 10 s.

This register is not active.

Register FPSIPPIO release history

Register FPSIPPIO was increased in BCS33.

Associated registers

FPSIPPMO, FPSIPPDO, FPSCSINU

Associated logs

The system generates FP504 when the operational state of the SCSI bus changes.

Register FPSIPPMO

FP SCSI paddleboard processor maintenance occupancy (FPSIPPMO)

Register FPSIPPMO counts the amount of time the SCSI processor performs maintenance activity. The register counts the amount of time in a percentage value. This value increases to the next percentage value every 10 s.

This register is not active.

Register FPSIPPMO release history

Register FPSIPPMO was introduced in BCS33.

Associated registers

FPSIPPIO, FPSIPPDO, FPSCSINU

Associated logs

The system generates FP504 when the operational state of the SCSI bus changes.

OM group FRSAGENT

OM description

Frame relay service agent (FRSAGENT)

The FRSAGENT monitors the frame relay service (FRS) on each logical channel. The FRSAGENT monitors the quality of service the customer that uses a logical channel, receives.

The FRSAGENT contains registers that count the following items:

- frames received from the frame transport bus (F-bus) that are sent to the T1 carrier
- frames that are received from the T1 carrier
- cyclic redundancy check (CRC) errors
- channel disconnects
- channel originations
- aborts received in the incoming frames
- frames that are too short or too long
- frames that have an invalid data-link connection identifier (DLCI)
- frames set to backward explicit correction notification (BECN) by the agent
- frames discarded at the UNI ingress channel
- frames that exceed the committed information rate for that agent
- frames discarded with the DE bit equal to zero
- frames discarded with the DE bit equal to one
- frames set to forward exact correction notification by the agent
- time-outs by the local management interface
- number of octets received
- number of octets transmitted

Release history

BCS32

The OM group FRSAGENT was introduced in BCS32.

BCS36

Eight peg registers and two extension registers were introduced in BCS36.

OM group FRSAGENT (continued)

BCS34

Register local management interface timeouts (LMILOST) was introduced in BCS34.

Registers

The OM group FRSAGENT registers display on the MAP terminal as follows:

| | | | |
|----------|----------|---------|----------|
| FRASENT | FRASENTX | FRAREC | FRARECX |
| PTERR | CHANDISC | CHANORG | INVALEN |
| INVDLCI | ABORTS | LMILOST | OTCSENT |
| OCTSENTX | OCTREC | OCTRECX | BECNORIG |
| FECNORIG | DE0DISC | DE1DISC | CIRDISC |
| CIREXCES | | | |

Group structure

The OM group FRSAGENT provides one tuple for each FRS agent, to a maximum of 2200 tuples.

Key field:

FRSAGENT

Info field:

FRS_AGENT_INFO (contains the FRS device type, the device index, and the channel number associated with the FRS agent); frame relay interface unit (FRIU) number + channel number

Associated OM groups

The OM group, frame relay service peripheral module (FRSPM) monitors the traffic and faults on the FRS device. The OM group FRSPM contains measurements for each frame relay interface unit.

The FRT1 monitors the performance of the T1 carrier that the FRS uses.

Associated functional groups

The DataSPAN operating group associates with OM group FRSAGENT.

OM group FRSAGENT (continued)

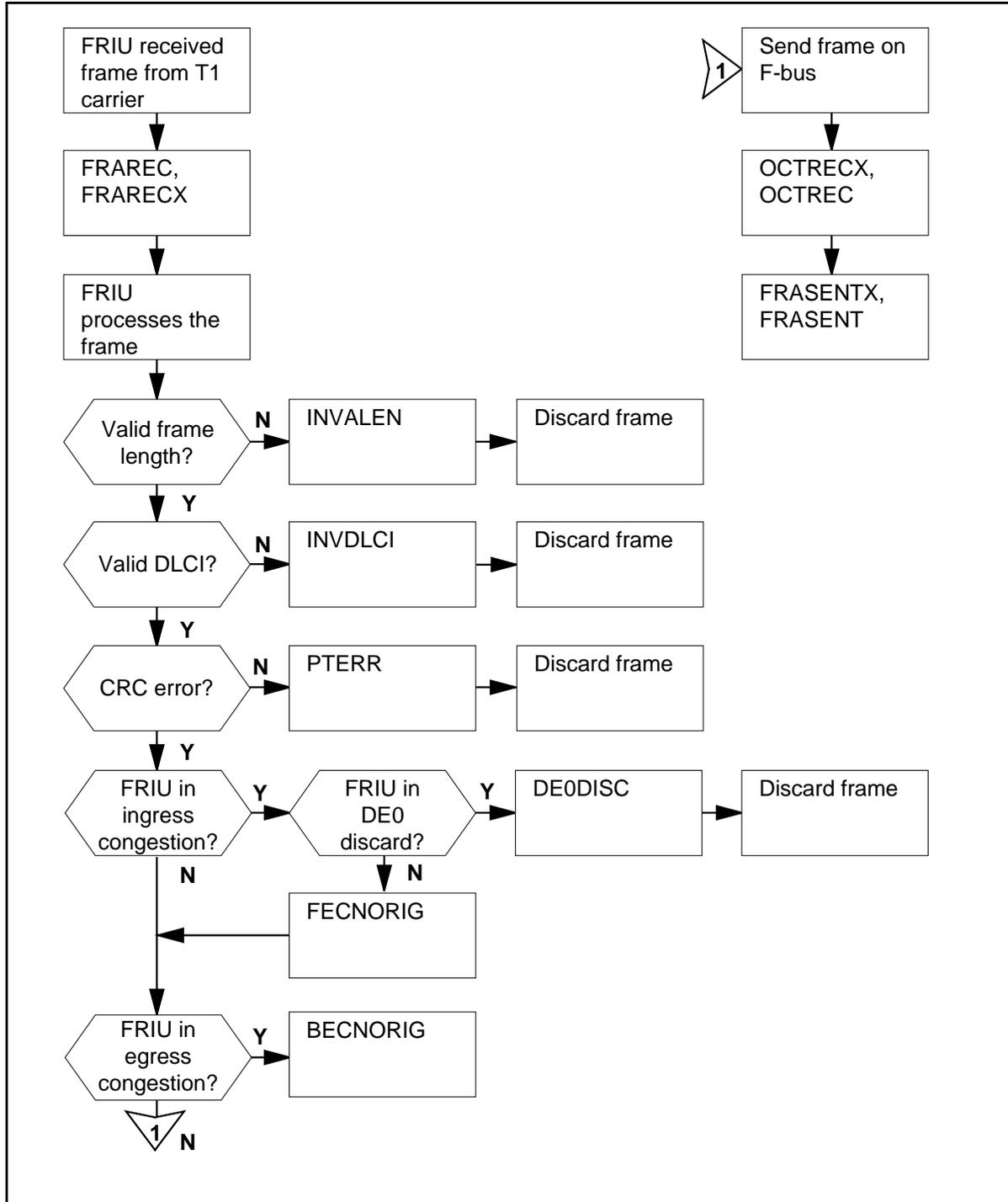
Associated functionality codes

The associated functionality codes for the OM group FRSAGENT appear in the following table.

| Functionality | Code |
|---|-------------|
| Frame Relay Basic (upgrade of NTXF25AA) | NTXF25AD |

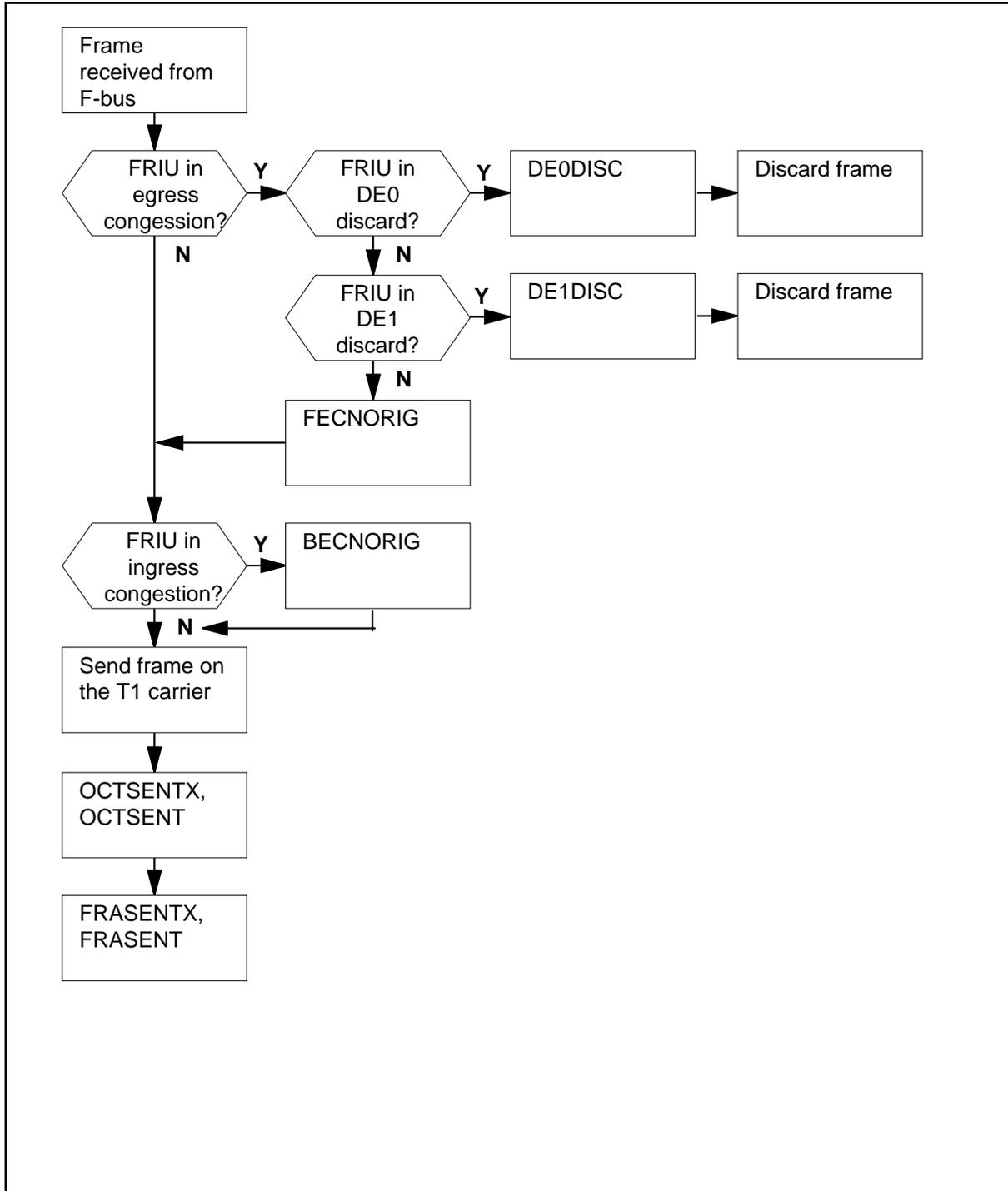
OM group FRSAGENT (continued)

OM group FRSAGENT registers



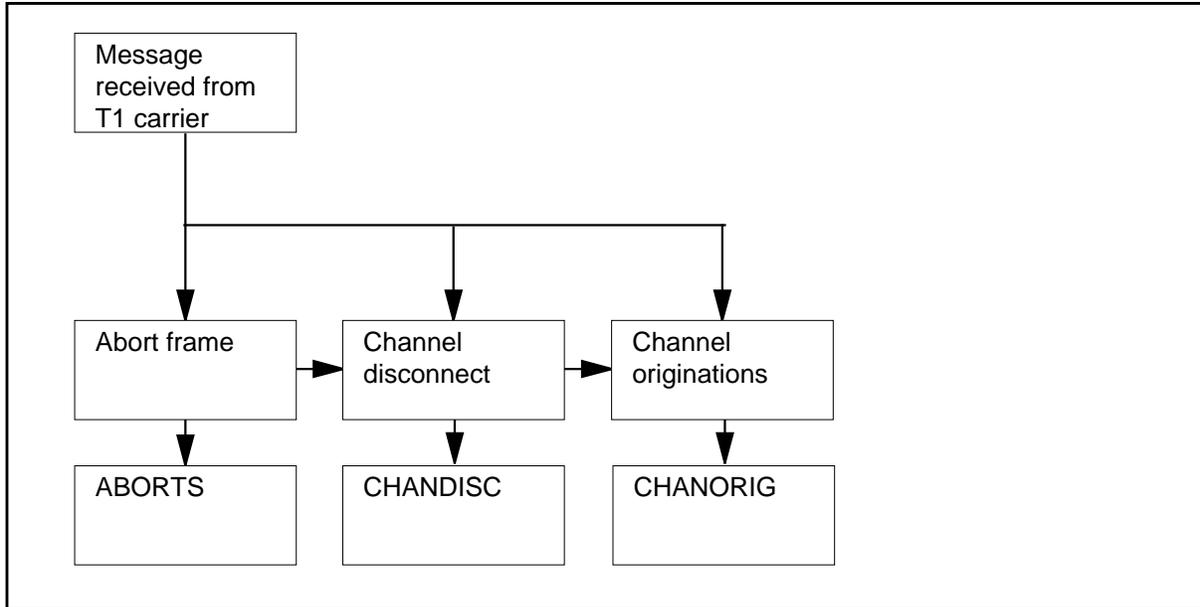
OM group FRSAGENT (continued)

OM group FRSAGENT registers



OM group FRSAGENT (continued)

OM group FRSAGENT registers



Register ABORTS

Aborts (ABORTS)

The ABORTS register counts aborts received in the incoming frame.

Register ABORTS release history

BCS33

The ABORTS register was introduced in BCS33.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

There are no extension records.

Register BECNORIG

Backward explicit correction notification (BECN) bit set on origination.

The BECN bit, set on origination (BECNORIG) counts the number of frames that were set to BECN by the agent.

OM group FRSAGENT (continued)

Register BECNORIG release history**BCS36**

The BECNORIG register was introduced in BCS36.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register CHANDISC

Channel disconnects (CHANDISC)

The CHANDISC register counts channel disconnects that the A/B bit signaling specifies.

The CHANDISC register is valid for FRS agents that run at 56 kbit/s with A/B bit signaling or digital data service.

Register CHANDISC release history**BCS32**

The CHANDISC register was introduced in BCS32.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

There are no extension records.

Register CHANORG

Channel originations (CHANORG)

The CHANORG register counts channel originations that the A/B bit signaling specifies.

The CHANORG register is valid for FRS agents that run 56 kbit/s with A/B bit signaling or 56-kbit/s digital data service.

OM group FRSAGENT (continued)

Register CHANORG release history

BCS32

The CHANORG register was introduced in BCS32.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

There are no extension records.

Register CIRDISC

Committed information rate discarded frames (CIRDISC)

The CIRDISC register counts the number of frames discarded at the UNI ingress channel because the number exceeds the total information rate. The total information rate is the committed information rate (CIR) plus the total information rate (SIR = CIR + EIR). The CIRDISC register is uploaded to the computing module (CM) with other FRSAGENT registers every 30 min.

Register CIRDISC release history

BCS36

The CIRDISC register was introduced in BCS36.

Associated registers

The committed information rate exceeded (CIREXCES) register associates with the CIRDISC register.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register CIREXCES

Committed information rate exceeded (CIREXCES)

The CIREXCES register counts the number of frames that exceed the CIR for that agent. The CIREXCES register is uploaded with other registers every 30 min.

OM group FRSAGENT (continued)

Register CIREXCES release history**BCS36**

The CIREXCES register was introduced in BCS36.

Associated registers

The CIRDISC register associates with the CIREXES register.

Associated logs

There are no associated logs.

Extension registers

There are no extension records.

Register DE0DISC

Discarded frames with DE = 0 (DE0DISC)

The DE0DISC register counts the number of discarded frames, with the discard eligible (DE) bit cleared.

Register DE0DISC release history**BCS36**

The DE0DISC register was introduced in BCS36.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

There are no extension records.

Register DE1DISC

Discarded frames with DE = 1 (DE1DISC)

The DE1DISC register counts the number of discarded frames, with the DE bit set.

Register DE1DISC release history**BCS36**

The DE1DISC register was introduced in BCS36.

OM group FRSAGENT (continued)

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

There are no extension records.

Register FECNORIG

Forward explicit correction notification (FECN) bit origination

The FECN register, bit origination (FECNORIG) counts the number of frames that were set to FECN by the agent.

Register FECNORIG release history

BCS36

The FECNORIG register was introduced in BCS36.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

There are no extension records.

Register FRAREC

Frames received (FRAREC)

The FRAREC register increments each time the FRIU receives a frame from the T1 carrier.

Register FRAREC release history

BCS32

The FRAREC register was introduced in BCS32.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

OM group FRSAGENT (continued)

Extension registers

The FRARECX register associates with the FRAREC register.

Register FRASENT

Frames sent (FRASENT)

The FRASENT register counts frames received from the F-bus that are sent to the T1 carrier.

Register FRASENT release history**BCS32**

The FRASENT register was introduced in BCS32.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

The FRASENTX register associates with the FRASENT register.

Register INVALEN

Invalid length (INVALEN)

The INVALEN register increments each time the FRS agent receives a frame with an invalid length. The minimum length of the frame depends on two items. It depends if the frame is link access procedure on the D-channel (LAPD), or link access procedure balanced (LAPB). The maximum length is 2106 bytes. If the frame exceeds 2106 bytes, it cannot be routed.

The number of frames with an invalid length can be high. When the number of frames is high it indicates that the telephone operating company is not sending valid data frames to be routed. You must report the problem to the telephone operating company.

Register INVALEN release history**BCS32**

The INVALEN register was introduced in BCS32.

Associated registers

There are no associated registers.

OM group FRSAGENT (continued)

Associated logs

There are no associated logs.

Extension registers

There are no extension records.

Register INVDLCI

Invalid data-link connection identifier (INVDLCI)

The INVDLCI register counts frames received from the T1 carrier that have an invalid data-link connection identifier (DLCI).

Register INVDLCI release history

BCS32

The INVDLCI register was introduced in BCS32.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register LMILOST

Local management interface timeouts (LMILOST)

The LMILOST register increments each time the local management interface (LMI) times out. Each time a connection is lost because the number of LMI errors exceeds a preset threshold, the LMILOST register increments.

Register LMILOST release history

BCS34

The LMILOST register was introduced in BCS34.

Associated registers

There are no associated registers.

Associated logs

The subsystem generates log report FRS121 when the LMI times out. The subsystem generates FRS121 when the connection is lost because the number of LMI errors exceeds a preset threshold.

OM group FRSAGENT (continued)

Extension registers

There are no extension registers.

Register OCTREC

Number of octets received (OCTREC)

The OCTREC register counts the number of octets that were received on the agent.

Register OCTREC release history**BCS36**

The OCTREC register was introduced in BCS36.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension register

The OCTRECX register is an extension register of the OCTREC register.

Register OCTSENT

Number of octets transmitted (OCTSENT)

The OCTSENT register counts the number of octets that were transmitted on the agent.

Register OCTSENT release history**BCS36**

The OCTSENT register was introduced in BCS36.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension register

The OCTSENTX register is an extension register of the OCTSENT register.

Register PTERR

Cyclic redundancy check (CRC) errors (PTERR)

OM group FRSAGENT (end)

The PTERR register counts CRC errors. Each CRC error detected means that one frame was as a result of damage in the frame.

Register PTERR release history

The PTERR register was introduced in BCS32.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

OM group FRSPM

OM Description

Frame relay service peripheral module (FRSPM)

The FRSPM monitors traffic and faults on the frame relay service (FRS) device. The OM group FRSPM allows operating company personnel to determine the response of the FRS device to frame switching demands. To determine the quality of service that an FRS device provides, the operating company personnel use fault numbers reported by OM registers. If the device has a high number of faults, the operating company personnel can take action.

Eight registers in the FRSPM group monitor the following:

- faults on the FRS device
- errors on the message switch link
- cyclic redundancy check (CRC) errors
- frames sent to the T1 carrier from the frame relay interface unit (FRIU)
- frames received in the FRIU from the T1 carrier
- discarded frames received in the FRIU from the T1 carrier or the frame transport bus (F-bus)

Release history

BCS32

The OM group FRSPM was introduced in BCS32.

Registers

The OM group FRSPM registers, appear on the MAP terminal as follows:

| | | | |
|---------|----------|---------|--------|
| PMFAULT | MSLKERRP | PORTERR | FRSENT |
| FRSENTX | FRREC | FRRECX | FRMERR |

Group structure

The OM group FRSPM provides one tuple for each frame relay device.

Key field:

There is no key field.

Info field:

FRS_PM_INFO is the FRS peripheral module (PM) type. The only valid FRS PM type is FRIU.

OM group FRSPM (continued)

Associated OM groups

The OM group FRSAGENT monitors the FRS on each logical channel. The FRSAGENT monitors the quality of service given to the operating company client that uses the logical channel.

The FRT1 group monitors the performance of a T1 carrier that an FRS devices uses.

Associated functional groups

The following operational groups are associated with the OM group FRSPM: DMS-100, and DataSPAN.

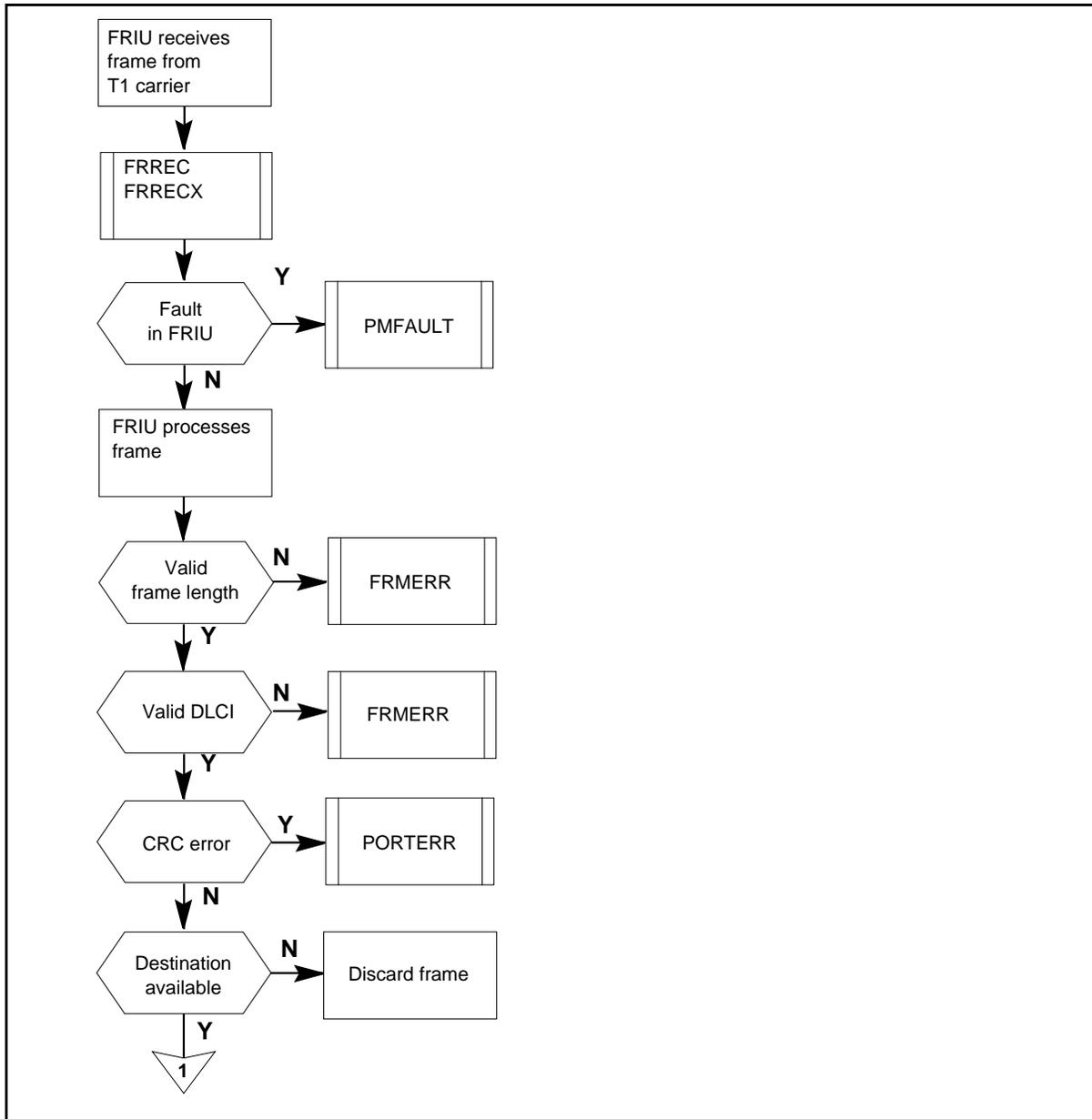
Associated functionality codes

The functionality codes associated with the OM group FRSPM are shown in the following table:

| Functionality | Code |
|----------------------|-------------|
| Frame Relay Basic | NTXF25AA |

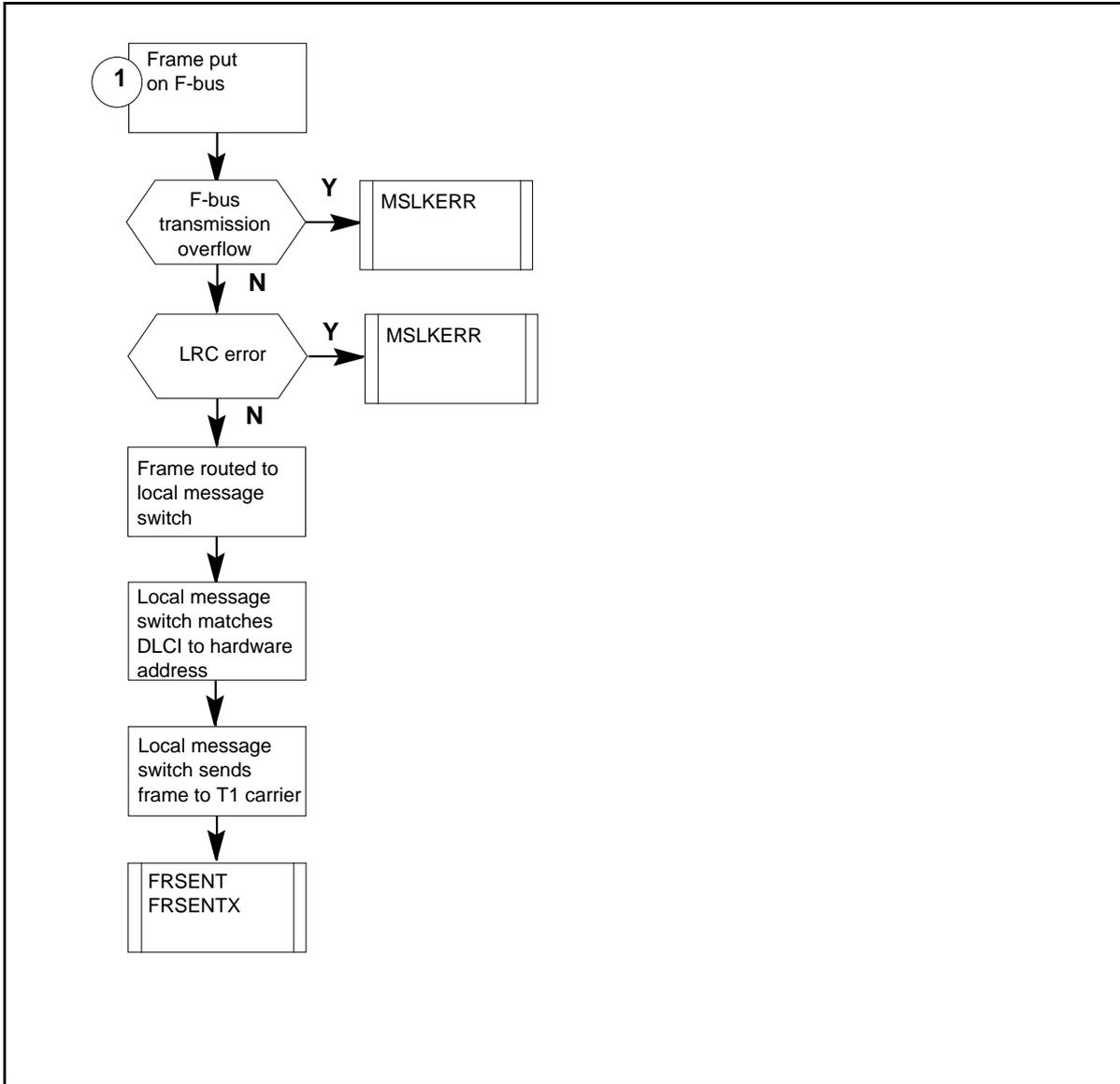
OM group FRSPM (continued)

OM group FRSPM registers



OM group FRSPM (continued)

OM group FRSPM registers



Register FRMERR

Frame errors (FRMERR)

The FRMERR register counts discarded frames received in the FRIU from the T1 carrier, for one of the following reasons:

- invalid frame length
- invalid data-link connection identifier (DLCI).

OM group FRSPM (continued)

FRMERR release history**BCS32**

The FRMERR register was introduced in BCS32.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Register FRREC

Frames received (FRREC)

The FRREC register counts frames received in the FRIU unit from the T1 carrier.

FRREC release history**BCS32**

The FRREC register was introduced in BCS32.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

The FRRECX register is an extension register of the FRREC register.

Register FRSENT

Frames sent (FRSENT)

The FRSENT register counts frames sent to the T1 carrier from the FRIU.

FRSENT release history**BCS32**

The FRSENT register was introduced in BCS32.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

OM group FRSPM (continued)

Extension register

The FRSENTX register is an extension register of the FRSENT register.

Register MSLKERRP

Message switch link errors (MSLKERRP)

The MSLKERRP register counts errors on the message switch link. Message switch link errors include longitudinal redundancy check (LRC) errors and F-bus transmission buffer overflow errors. If the value of MSLKERRP is high, it indicates that the FRS device is overloaded and frames can be lost.

MSLKERRP release history

BCS32

The MSLKERRP register was introduced in BCS32.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Register PMFAULT

Frame relay device faults (PMFAULT)

The PMFAULT register counts faults on the FRS device.

The FRS device faults include the following:

- the activity of the carrier is interrupted. The interruption causes a total loss of communication with customer devices.
- the activity of the channel is interrupted. The interruption causes a total loss of communication with the connected FRS device
- loss of signal. A signal that is not available causes a total loss of communication with the end device.
- a loss of synchronization between the clocks of the FRIU and the external device
- a user restarts while the FRS device is in service
- the FRS device becomes system busy (SysB)
- the FRIU overload occurs when the FRIU cannot provide service to the traffic load presented to it
- errors appear in the buffers that manage the FRS frames.

OM group FRSPM (end)

If the value of PMFAULT register is high, it indicates that the level of service in the device is bad.

PMFAULT release history**BCS32**

The PMFAULT register was introduced in BCS32.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Register PORTERR

Cyclic redundancy check errors (PORTERR)

The PORTERR register counts cyclic redundancy check (CRC) errors across all channels in the frame relay interface unit. CRC errors are detected from the frames that enter the FRS device from the T1 carrier. If the value of PORTERR is high, a transmission problem can occur.

PORTERR release history**BCS32**

The PORTERR register was introduced in BCS32.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

OM group FRT1

OM Description

Frame relay T1 carrier (FRT1)

The OM group FRT1 monitors the performance of a T1 carrier that the frame relay service (FRS) uses.

The OM group FRT1 contains eight registers that count the following activities:

- local carrier group alarms (LCGAs) on the T1 carrier
- remote carrier group alarms (RCGAs) on the T1 carrier
- frame loss on the T1 carrier
- the number of times the bit error rate, out-of-service limit, has been reached
- errored seconds (ES) on the T1 carrier
- severely errored seconds (SES) on the T1 carrier
- unavailable seconds on the T1 carrier
- alarm indication signals on the T1 carrier.

The OM group FRT1 contains three usage registers that record when a carrier is:

- system busy (SysB)
- manual busy (ManB)
- central-side (C-side) busy.

Release history

BCS32

The OM group FRT1 was introduced in BCS32.

BCS34

The FRT1CRC register is added.

Registers

The OM group FRT1 registers appear on the MAP terminal as follows:

OM group FRT1 (continued)

| | | | |
|----------|----------|---------|---------|
| FRT1LCGA | FRT1RCGA | FRT1LOF | FRT1SBU |
| FRT1MBU | FRT1CBU | FRT1BER | FRT1ES |
| FRT1SES | FRT1UAS | FRT1AIS | FRT1CRC |

Group structure

The OM group FRT1 provides one tuple for each T1 carrier.

Key field:

There is no key field.

Info field:

FRT1OMINF describes the T1 carrier. The FRT1OMINF field contains the frame relay interface unit (FRIU) and number.

Associated OM groups

The OM group FRSAGENT monitors the FRS on each logical channel. The FRSAGENT group monitors the quality of service that the customer that uses the logical channel receives.

The frame relay service peripheral module (FRSPM) monitors traffic and faults on the FRS device.

Associated functional groups

The following operational groups are associated with the OM group FRT1: SuperNode, and DataSPAN.

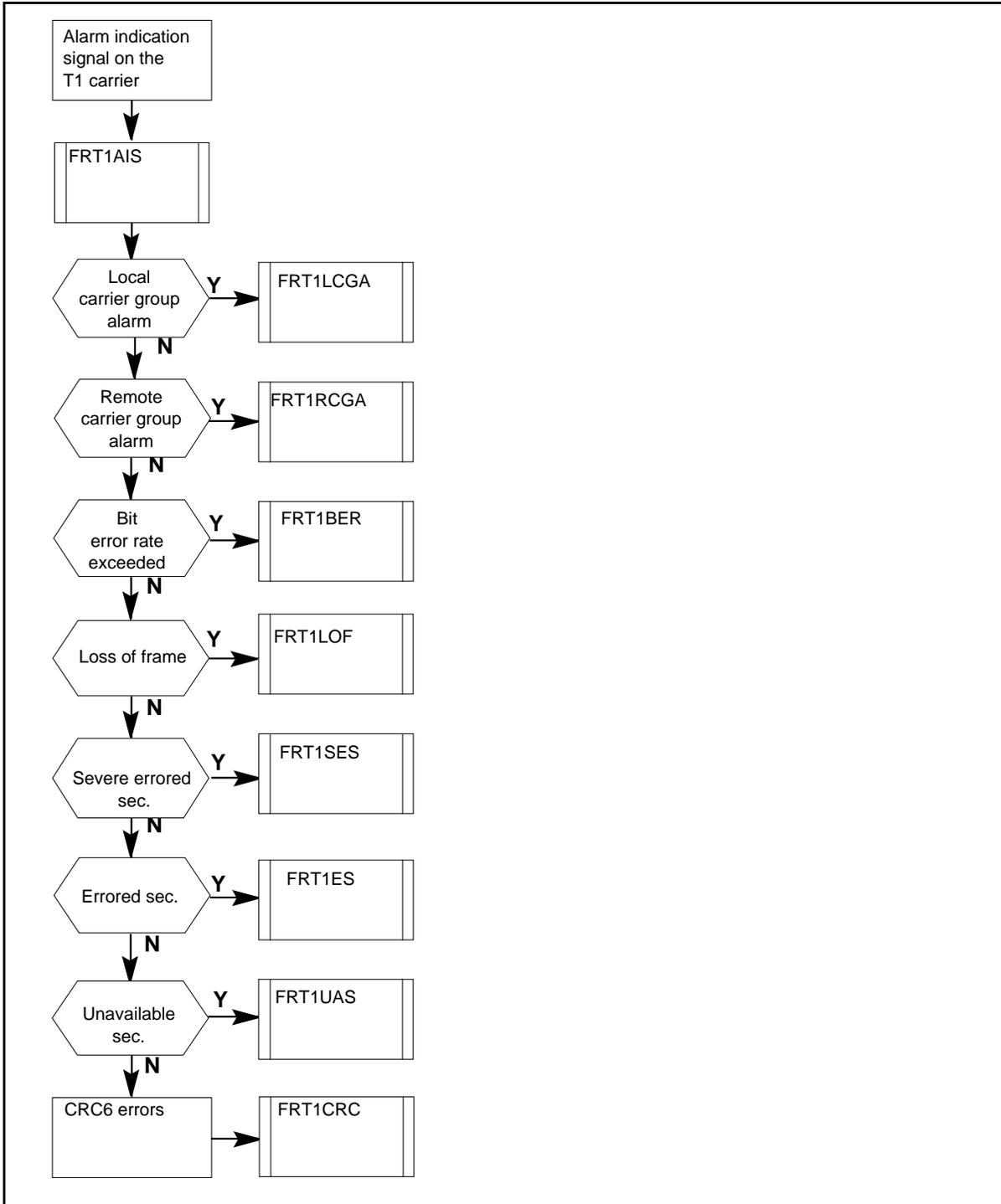
Associated functionality codes

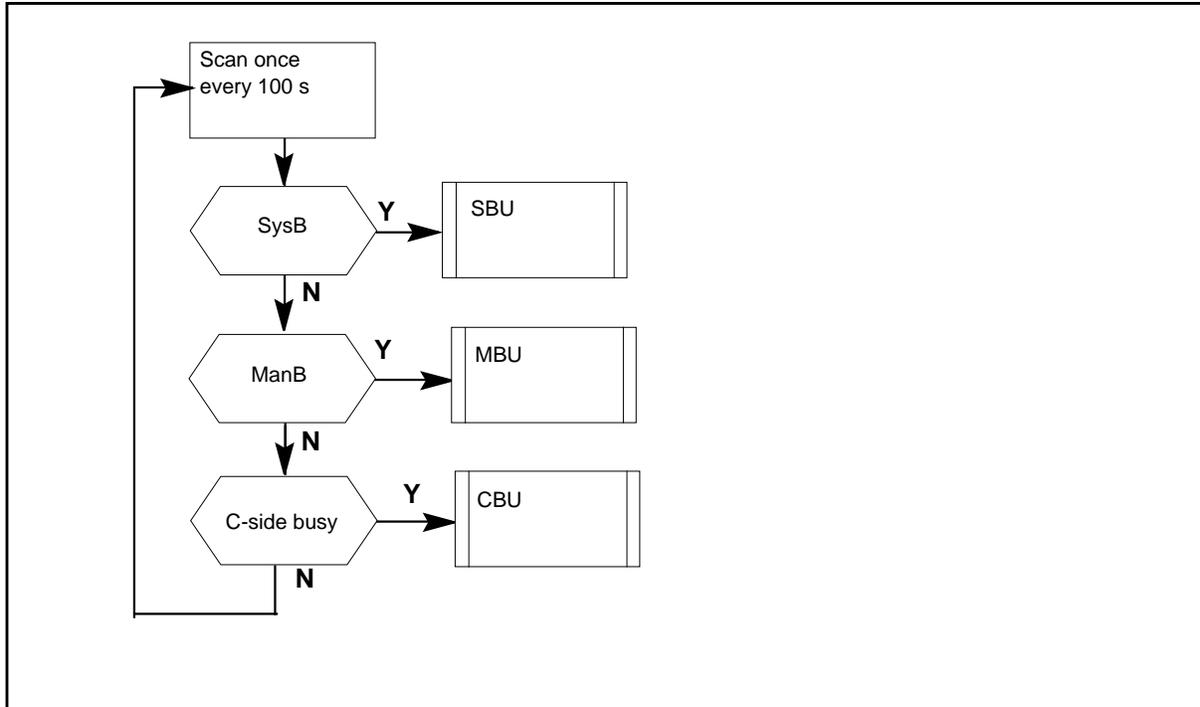
The functionality codes associated with the OM group FRT1 appear in the following table:

| Functionality | Code |
|-------------------|----------|
| Frame Relay Basic | NTXF25AA |

OM group FRT1 (continued)

OM group FRT1 registers



OM group FRT1 (continued)**OM group FRT1 usage registers****Register FRT1AIS**

Frame relay T1 alarm indication signals (FRT1AIS)

The FRT1AIS register increments when an alarm indication signal (AIS) occurs on the T1 carrier. An AIS indicates to the downstream equipment that the local peripheral is not functioning correctly.

FRT1AIS release history**BCS32**

The FRT1AIS register was introduced in BCS32.

Associated registers

There are no associated registers.

Associated logs

The system generates the PM110 log when the alarm is set or cleared.

Register FRT1BER

Frame relay T1 bit error ratio (FRT1BER)

OM group FRT1 (continued)

The FRT1BER register increments each time the bit error ratio out-of-service limit is reached on the T1 carrier. The bit error ratio out-of-service limit is defined in field BEROL in table CARRMTC.

If the value of FRT1BER is high, the carrier is operating at a low quality rate.

FRT1BER release history

BCS32

The FRT1BER register was introduced in BCS32.

Associated registers

There are no associated registers.

Associated logs

The system generates the PM110 log when maintenance or out-of-service thresholds are exceeded.

Register FRT1CBU

Frame relay T1 C-side busy usage (FRT1CBU)

The FRT1CBU register is a usage register that increments once every 100 s if the T1 carrier is C-side busy.

FRT1CBU release history

BCS32

The FRT1CBU register was introduced in BCS32.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Register FRT1CRC

Frame relay T1 cyclic redundancy check (FRT1CRC)

The FRT1CRC register counts the number of CRC errors that are received on the T1 carrier for an exact FRIU.

FRT1CRC release history

BCS34

The FRT1CRC register was introduced in BCS34.

OM group FRT1 (continued)

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Register FRT1ES

Frame relay T1 errored seconds (FRT1ES)

The FRT1ES register counts ES on the T1 carrier. ES are seconds during which at least one coding violation or one out-of-frame condition occurs. ESs are counted when the T1 carrier is available. Refer to register FRTISES, that counts SES.

The ES threshold is defined in field ES of table CARRMTC. When the carrier reaches this threshold, the carrier goes out-of-service.

FRT1ES release history**BCS32**

The FRT1ES register was introduced in BCS32.

Associated registers

There are no associated registers.

Associated logs

The system generates the PM110 log when maintenance or out-of-service thresholds are exceeded.

Register FRT1LCGA

Frame relay T1 local carrier group alarm (FRT1LCGA)

The FRT1LCGA register counts LCGA that occur on the T1 carrier. An LCGA is a severe alarm that indicates when the carrier is down and service is interrupted.

FRT1LCGA release history**BCS32**

The FRT1LCGA register was introduced in BCS32.

Associated registers

There are no associated registers.

OM group FRT1 (continued)

Associated logs

The system generates the PM110 log when an alarm is set or cleared.

Register FRT1LOF

Frame relay T1 loss of frame (FRT1LOF)

The FRT1LOF register counts the number of times a loss of frame is detected on the T1 carrier. A repeated loss of frames causes the predetermined threshold to be exceeded and raises an alarm. A loss of frame can affect service.

FRT1LOF release history

BCS32

The FRT1LOF register was introduced in BCS32.

Associated registers

There are no associated registers.

Associated logs

The system generates the PM110 log when maintenance or out-of-service thresholds are exceeded.

Register FRT1MBU

Frame relay T1 manual busy usage (FRT1MBU)

The FRT1MBU register is a usage register. Every 100 s FRT1MBU register increments if the T1 carrier is ManB.

FRT1MBU release history

BCS32

The FRT1MBU register was introduced in BCS32.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Register FRT1RCGA

Frame relay T1 remote carrier group alarm (FRT1RCGA)

OM group FRT1 (continued)

The FRT1RCGA register counts RCGA that occur on the T1 carrier. An RCGA is sent by the upstream equipment when it detects a problem on the link between the local office and the remote office.

FRT1RCGA release history**BCS32**

The FRT1RCGA register was introduced in BCS32.

Associated registers

There are no associated registers.

Associated logs

The system generates the PM110 log when an alarm is set or cleared.

Register FRT1SBU

Frame relay T1 system busy usage (FRT1SBU)

The FRT1SBU register is a usage register. Every 100 s this register increments if the T1 carrier is SysB.

FRT1SBU release history**BCS32**

The FRT1SBU register was introduced in BCS32.

Associated registers

There are no associated registers.

Associated logs

The system generates the PM109 log when a T1 carrier line is made SysB.

Register FRT1SES

Frame relay T1 severely errored seconds (FRT1SES)

The FRT1SES register counts SES on the T1 carrier. SES are the seconds during which a bit error ratio of 10³ occurs. SES are counted while the T1 carrier is available or as specified by the field SESCALC.

Use the SESCALC register to identify the calculation base used. There are two calculation bases available: STD, and BEROS. The STD is and SES calculation that is based on a bit rate error value of 10³. BEROS is an SES calculation based on the value of BEROS in table CARRMTC.

OM group FRT1 (end)

The SES threshold is defined in field SES in table CARRMTC. The carrier goes out-of-service when this threshold is reached.

FRT1SES release history

BCS32

The FRT1SES register was introduced in BCS32.

Associated registers

There are no associated registers.

Associated logs

The system generates the PM110 log when maintenance or out-of-service thresholds are exceeded.

Register FRT1UAS

Frame relay T1 unavailable seconds (FRT1UAS)

The FRT1UAS register counts unavailable seconds on the T1 carrier. Unavailable seconds start after ten consecutive SES occur, and stop when ten non-severely errored seconds occur.

FRT1UAS release history

BCS32

The FRT1UAS register was introduced in BCS32.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

OM group FTROM

OM description

Feature data block OM

AIN OMs for Telco Engineering (AU2731), introduces OM group FTROM. OM group FTROM provides information to assist in switch resource engineering. It is recommended that this OM group be used only for this purpose.

Release history

OM group FTROM is introduced in NA009.

Registers

The following OM group FTROM registers display on the MAP terminal as follows:

```

FTROM

CLASS:    ACTIVE
START:1998/01/14 13:00:00 WED; STOP: 1998/01/14 13:04:59
WED;
SLOWSAMPLES:          3 ; FASTSAMPLES:          30 ;

          KEY (FTR_NAME)
          INFO (FTR_DATA_SIZES_INFO)
          FTRHI   FTRSEIZ  FTRSEIZ2

```

Group structure

OM group FTROM

Key field:

FTR_NAME

Info field:

SMALL, MEDIUM, LARGE, X_LARGE, or CRITICAL.

Associated OM groups

OM group EXT

Associated functional groups

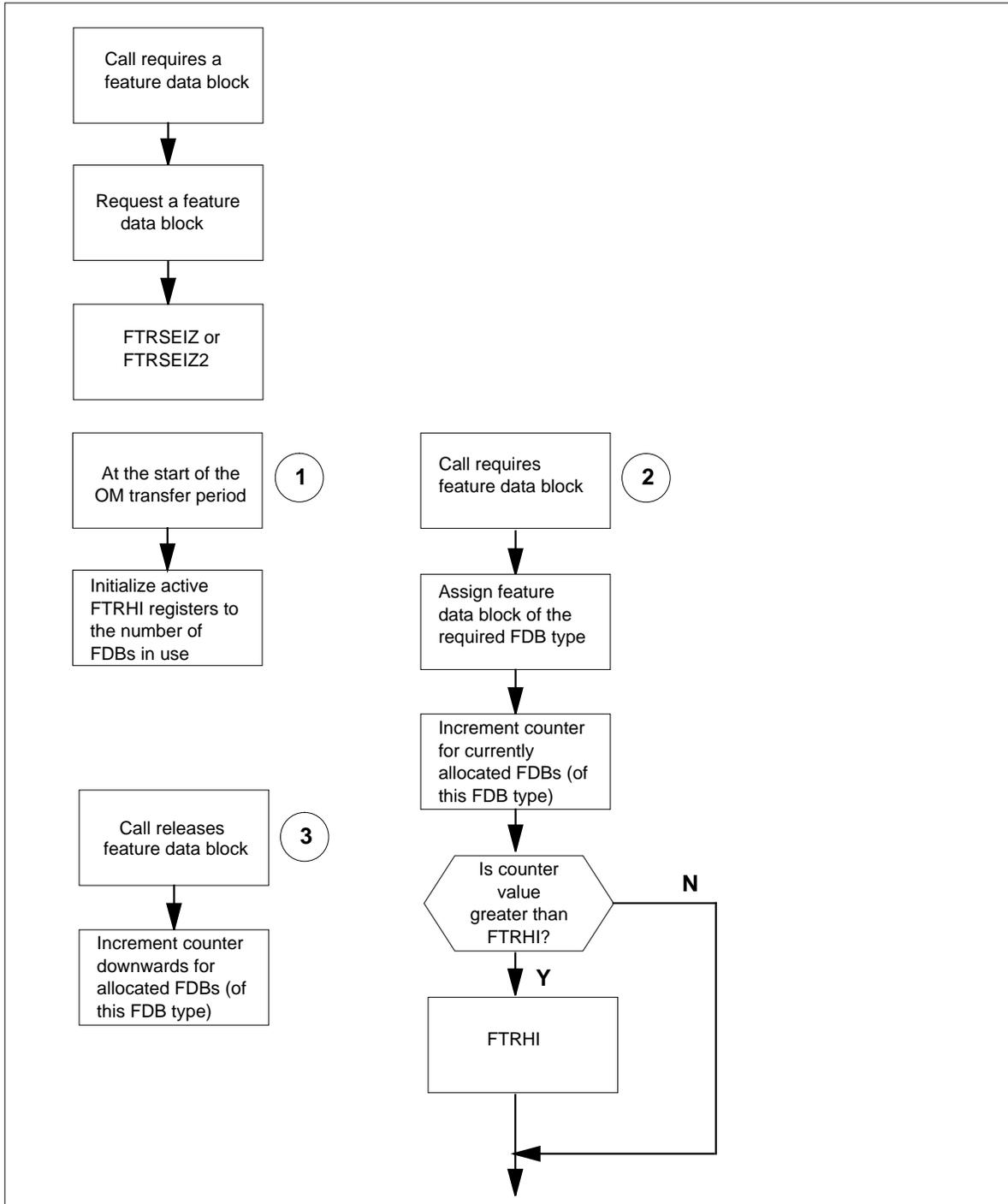
None

Associated functionality codes

None

OM group FTROM (continued)

OM group FTROM registers



OM group FTROM (continued)

Register FTRHI

Register maximum number of FDBs in simultaneous use

Register FTRHI records the maximum number of simultaneously allocated FDBs of a specific type, during an OM transfer period.

Register FTRHI release history

Register FTRHI is introduced in NA009.

Associated registers

EXTHI

Associated logs

None

Extension registers

None

Validation formula

None

Register FTRSEIZ

Register number of successful FDB allocations

Register FTRSEIZ records the number of successfully allocated FDBs of a specific type, during an OM transfer period.

Register FTRSEIZ release history

Register FTRSEIZ is introduced in NA009.

Associated registers

EXTSEIZ, EXTSEIZ2

Associated logs

None

Extension registers

FTRSEIZ2

Validation formula

Total of all tuples with info field SMALL = EXTSEIZ for tuple
SMALL_FEATURE_DATA

OM group FTROM (end)

Total of all tuples with info field MEDIUM = EXTSEIZ for tuple
MEDIUM_FEATURE_DATA

Total of all tuples with info field LARGE = EXTSEIZ for tuple
LARGE_FEATURE_DATA

Total of all tuples with infor field X_LARGE =EXTSEIZ for tuple
X_LARGE_FEATURE_DATA

Total of all tuples with info field CRITICAL = EXTSEIZ for tuple
CRITICAL_FEATURE_DATA

OM group FTRQ

OM description

Feature queue software resources.

FTRQ counts the number of successful and unsuccessful requests for feature queue blocks made in an OM transfer period. The high-water mark (register FTRQHI) records the maximum number of feature queue blocks to date that were in simultaneous use during a transfer period.

The data supplied by FTRQ is used to monitor the number of feature queue blocks used in an office and provides a measurement of the number of FTRQ features being used at a given time.

Release history**BASE 08**

Extension registers, FTRQHI2, FTRQSZ2 and FTRQOFL2, were added to registers FTRQHI, FTRQSEIZ and FTRQOVFL. Registers FTRQHI, FTRQSEIZ and FTRQOVFL do not change in functionality, but now work together with their extension registers to provide higher FTRQ feature measurement capacity.

BASE07

The following FTRQ office parameters in table OFCENG were eliminated and replaced by FTRQ pools in office parameter DYNAMIC_MEMORY_SIZE: FTRQAGENTS, FTRQ0WAREAS, FTRQ2WAREAS, FTRQ4WAREAS, FTRQ8WAREAS, FTRQ16WAREAS, FTRQ32WAREAS, FTRQ0WPERMS, FTRQ2WPERMS, FTRQ4WPERMS, FTRQ8WPERMS, FTRQ16WPERMS, and FTRQ32WPERMS.

BCS30

Feature queue blocks FTRQ32WAREAS and FTRQ32WPERMS were added to key field.

BCS29

Feature queue blocks FTRQ0WPERMS, FTRQ2WPERMS, FTRQ4WPERMS, FTRQ8WPERMS, and FTRQ16WPERMS were added to the key field.

BCS25

Register FTRQUSGE was deleted.

BCS23

Register FTRQUSGE was zeroed. Register FTRQHI was added.

OM group FTRQ (continued)

BCS20

OM group FTRQ was introduced.

Registers

OM group FTRQ registers are displayed on the MAP terminal as follows:

```
FTRQSEIZ FTRQSZ2 FTRQOVFL FTRQOFL2 FTRQHI FTRQHI2
```

Group structure

OM group FTRQ provides one tuple for each key field value.

Key field:

FTRQOM_TUPLE_KEY is the type of feature queue block. The possible types of feature queue blocks are FTRQAGENTS, FTRQ0WAREAS, FTRQ2WAREAS, FTRQ4WAREAS, FTRQ8WAREAS, FTRQ16WAREAS, FTRQ32WAREAS, FTRQ0WPERMS, FTRQ2WPERMS, FTRQ4WPERMS, FTRQ8WPERMS, FTRQ16WPERMS, FTRQ32WPERMS and FTRQTIMERS.

Info field:

FTRQOM_INFO is the number of feature queue blocks of one type that are allocated. With the availability of dynamic memory the required number of each type of FTRQ blocks are dynamically allocated and provisioned by office parameter DYNAMIC_MEMORY_SIZE.

The following pools in table OFCENG parameter DYNAMIC_MEMORY_SIZE define the number of feature queue blocks for each block type: FTRQAGENTS, FTRQ0WAREAS, FTRQ2WAREAS, FTRQ4WAREAS, FTRQ8WAREAS, FTRQ16WAREAS, FTRQ32WAREAS, FTRQ0WPERMS, FTRQ2WPERMS, FTRQ4WPERMS, FTRQ8WPERMS, FTRQ16WPERMS, and FTRQ32WPERMS.

Associated OM groups

CP2 records the use of extended call control blocks (ECCB). CP2 also contains the high-water OMs for call-processing software resources.

EXT records the use of extension blocks. EXT also contains the high-water OMs for extension block software resources.

OM group FTRQ (continued)

Associated functional groups

The following functional groups are associated with OM group FTRQ:

- DMS-100 Local
- DMS-100 International
- DMS-250 Toll/Tandem
- DMS-300 Gateway
- DMS-MTX Mobile Telephone Exchange
- Meridian SL-100 PBX
- Datapath
- CCS7 Trunk Signaling

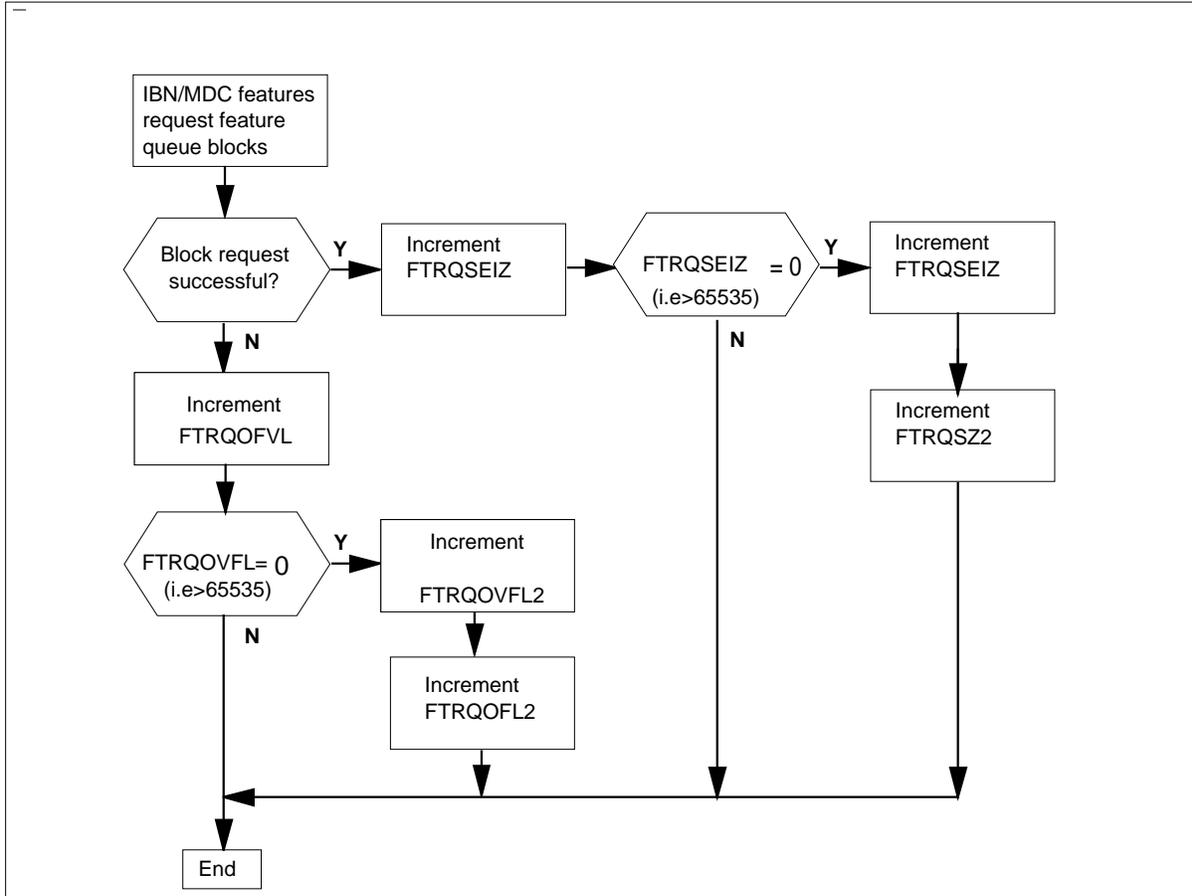
Associated functionality codes

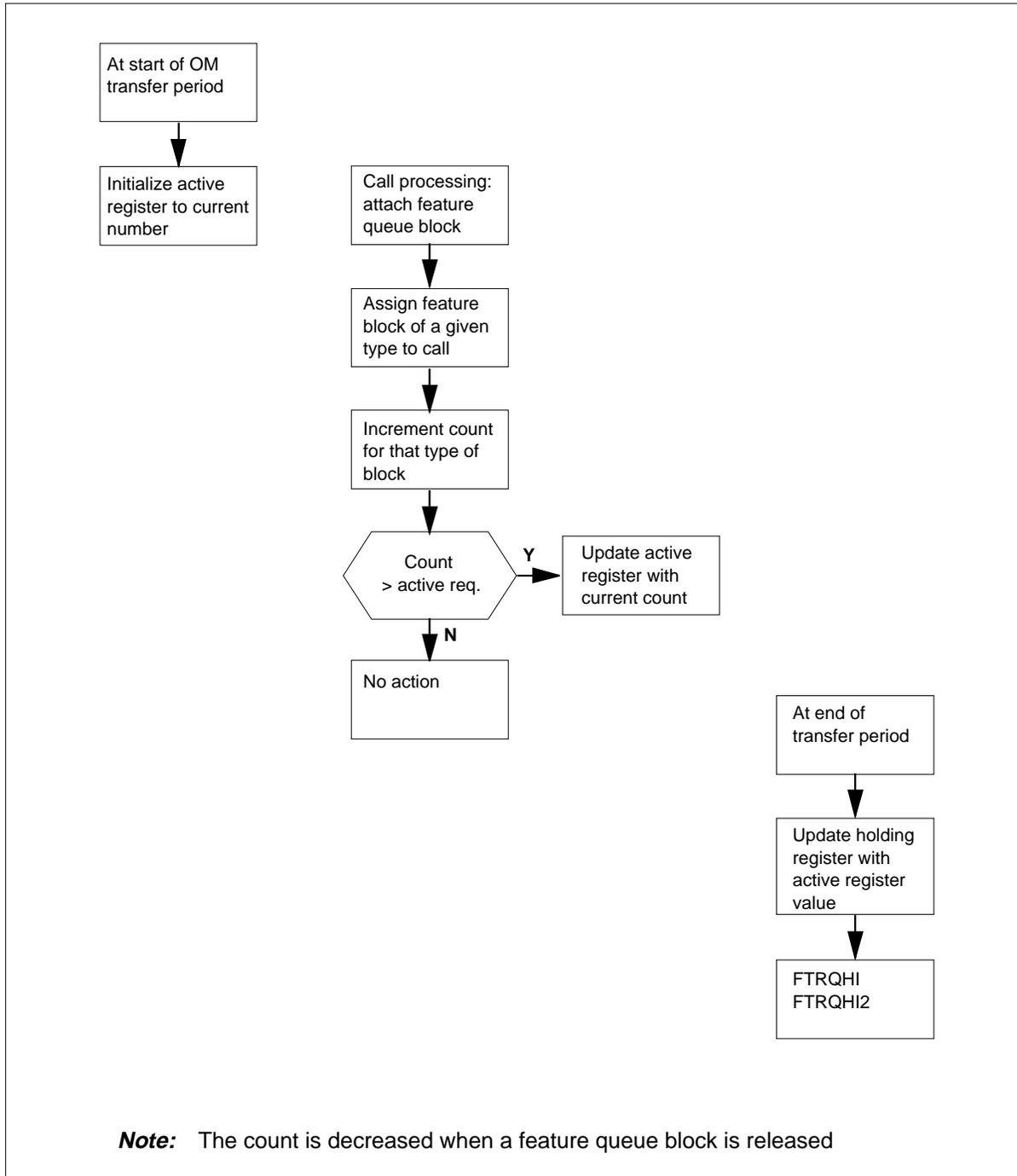
The functionality codes associated with OM group FTRQ are shown in the following table.

| Functionality | Code |
|--|-------------|
| Common Basic | NTX001AA |
| Integrated Business Networks—Basic (IBN) | NTX100AA |
| Network Message Service | NTXA68AA |
| ISUP/PRA to SMDI Interworking | NTXN34AA |

OM group FTRQ (continued)

OM group FTRQ registers



OM group FTRQ (continued)**OM group FTRQ high-water mark****Register FTRQHI**

Counts the feature queue high-water mark.

OM group FTRQ (continued)

Register FTRQHI indicates the High Water Mark value for the highest number of successful FTRQ block requests made during a transfer period to date. When register FTRQHI peg count exceeds 65535 the register is reset to zero and extension register FTRQHI2 is incremented.

Register FTRQHI release history

Register FTRQHI was introduced in BCS23.

Register FTRQHI was updated to employ extension register FTRQHI2 in release TL07.

Associated registers

Register FTRQHI2.

Associated logs

None.

Register FTRQHI2

Feature queue high-water mark extension register.

Register FTRQHI indicates the High Water Mark value for the highest number of successful FTRQ block requests made during an OM transfer period to date. When register FTRQHI peg count exceeds 65535 the register is reset to zero and extension register FTRQHI2 is incremented. Register FTRQHI in conjunction with extension register FTRQHI2 provides the total High Water Mark count.

Register FTRQHI2 release history

Register FTRQHI2 was introduced in TL07.

Associated registers

Register FTRQHI.

Associated logs

None.

Register FTRQOVFL

Counts the number of unsuccessful FTRQ block requests made during an OM transfer period.

FTRQOVFL counts the number of unsuccessful FTRQ block requests made during a transfer period. When register FTRQOVFL peg count exceeds 65535 it wraps back to zero and increments extension register FTRQOFL2. Register

OM group FTRQ (continued)

FTRQOVFL and its extension register FTRQOFL2 provide the total count of unsuccessful requests for FTRQ blocks made in a transfer period.

Register FTRQOVFL release history

Register FTRQOVFL was introduced in BCS20.

Register FTRQOVFL was updated to employ extension register FTRQOFL2 in release TL07.

Associated registers

Register FTRQOFL2

Associated logs

None.

Associated logs

None

Register FTRQOFL2

Extension register FTRQOFL2 in conjunction with register FTRQOVFL counts the total number of unsuccessful FTRQ block requests made during a transfer period.

Register FTRQOVFL counts the number of unsuccessful FTRQ block requests made during an OM transfer period. When register FTRQOVFL peg count exceeds 65535 it wraps back to zero, and increments extension register FTRQOFL2. Register FTRQOVFL and extension register FTRQOFL2 provide the total count of unsuccessful FTRQ blocks requests made in an OM transfer period.

Register FTRQOFL2 release history

Register FTRQOFL2 was introduced in release TL07.

Associated registers

Register FTRQOVFL

Associated logs

None.

Register FTRQSEIZ

Counts the number of successful FTRQ block requests.

OM group FTRQ (end)

Register FTRQSEIZ measures the number of successful FTRQ block requests during an OM transfer period. FTRQSEIZ is used in conjunction with extension register FTRQSZ2 to provide the total number of successful FTRQ block requests. Each peg to FTRQSEIZ indicates one successful FTRQ block request in the current OM transfer period. FTRQSEIZ can peg up to 65535 successful FTRQ block requests before it wraps around back to zero and pegs extension register FTRQSZ2.

Register FTRQSEIZ release history

Register FTRQSEIZ was introduced in BCS20.

Register FTRQSEIZ was updated to employ extension register FTRQSZ2 in TL07.

Associated registers

Register FTRQSZ2

Associated logs

None

Register FTRQSZ2

In conjunction with register FTRQSEIZ register FTRQSZ2 counts the total number of successful FTRQ block requests.

Register FTRQSEIZ counts the number of successful FTRQ block requests made during a transfer period. When this count exceeds 65535 register FTRQSEIZ wraps back to zero and extension register FTRQSZ2 is pegged.

Register FTRQSZ2 release history

Register FTRQSZ2 was introduced in TL07.

Associated registers

Register FTRQSEIZ.

Associated logs

None.

OM group FTS

OM description

FAX-Thru Service (FTS)

The OM group FTS allows operating company personnel to measure the number of activations of the FTS service.

Release history

The OM group FTS was introduced in NA006.

All FTS register names were changed in NA009.

Registers

The following OM group FTS registers appear on the MAP terminal as follows:

```

>OMSHOW FTS ACTIVE

CLASS:  ACTIVE
START: 1995/03/28 15:45:00 THU;STOP:1995/03/28 15:47:53
THU;
SHOWSAMPLES: 5 ; FASTSAMPLES: 50

FTSACTIV      FTSACTI2      FTSBSYAC      FTSRNAAC
          9              0              2              3

```

Group structure

The OM group FTS

The PM group FTS does not provide tuples for each office.

Key field:

There is no key field.

Info field:

There is no info field.

OM group FTS (continued)

Associated OM groups

The FTS feature uses the special delivery service (SDS) OM group to report events that are not normal. The FTS and SDS features share the same software framework.

Associated functional groups

The functional group MSA00001 (Message Service Application) associates with OM group FTS.

Associated functionality codes

The associated functionality codes for OM group FTS appear in the following table.

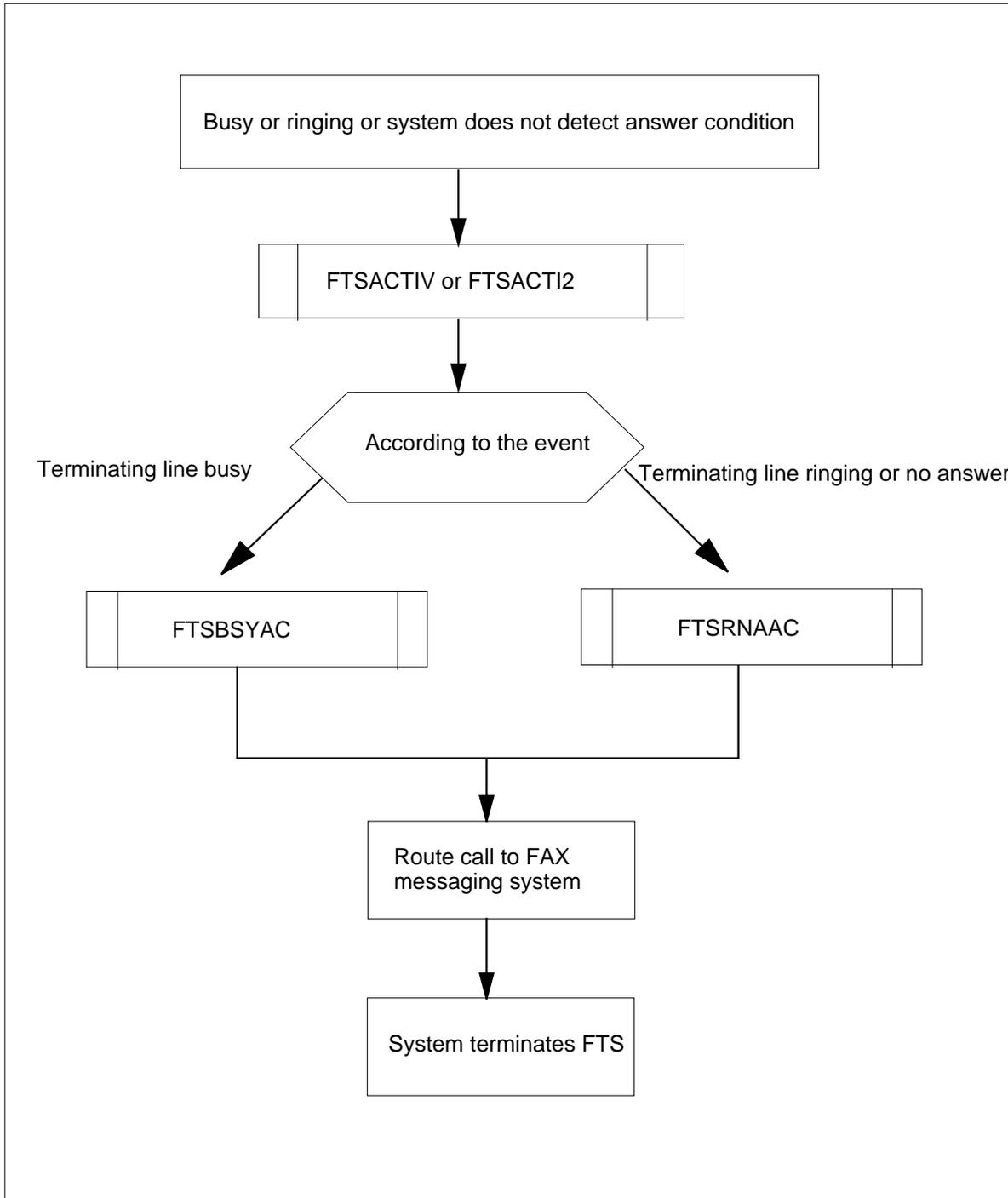
| Functionality | Code |
|-----------------|----------|
| Enhanced SDS | MSA00003 |
| MSA FAX Service | MSA00005 |

OM group FTS registers flowchart

The following flowchart shows information flow for the OM group FTS registers.

OM group FTS (continued)

OM group FTS registers



OM group FTS (continued)

Register FTSACTIV

Register FTS ACTIVATED (FTSACTIV)

Register FTSACTIV release history

Register FTSACTIV was introduced in NA006.

Associated registers

FTSACTI2

Associated logs

There are no associated logs.

Register FTSACTI2

Register FTS ACTIVATED 2 (FTSACTI2)

Register FTSACTI2 release history

Register FTSACTI2 was introduced in NA006.

Associated registers

FTSACTIV

Associated logs

There are no associate logs.

Register FTSBSYAC

Register FTS Busy Case Activation (FTSBSYAC)

Register FTSBSYAC release history

Register FTSBSYAC was introduced in NA006.

Associated registers

There are no associate registers.

Associated logs

There are no associated logs.

Register FTSRNAAC

Register FTS Ringing No-Answer Activation (FTSRNAAC)

Register FTSRNAAC release history

Register FTSRNAAC was introduced in NA006.r

OM group FTS (end)

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

OM group GIACGRP

OM description

Group intercom all call (GIACGRP)

The OM group GIACGRP monitors the use of the group intercom all call (GIAC) feature.

The GIAC feature allows a member of a group intercom (GIC) group to page members of the GIC group. The member can page a maximum of 29 selected members of the GIC group at the same time. These pages occur over the internal speakers of the business set of the GIAC member.

The GIACGRP contains three registers that count:

- attempts to originate a group intercom all call conference
- attempts to originate a group intercom all call conference that fail because of not enough available conference circuits
- attempts to originate a group intercom all call conference that fail because of not enough software or hardware resources

Release history

The OM group GIACGRP was introduced in BCS30.

Registers

The OM group GIACGRP registers appear on the MAP terminal as follows:



GIACATT GIACNOSC GIACCGRO

Group structure

The OM group GIACGRP provides one tuple for each customer group.

The Key field is IBNG_INDEX. The Info field is OMIBNGINFO. Refer to the following list:

IBNG_INDEX

is the customer group as defined in table CUSTHEAD.

OMIBNGINFO

is the customer group name entered in table CUSTHEAD.

Associated OM groups

There are no associated OM groups.

OM group GIACGRP (continued)

Associated functional groups

The MDC functional group associates with OM group GIACGRP.

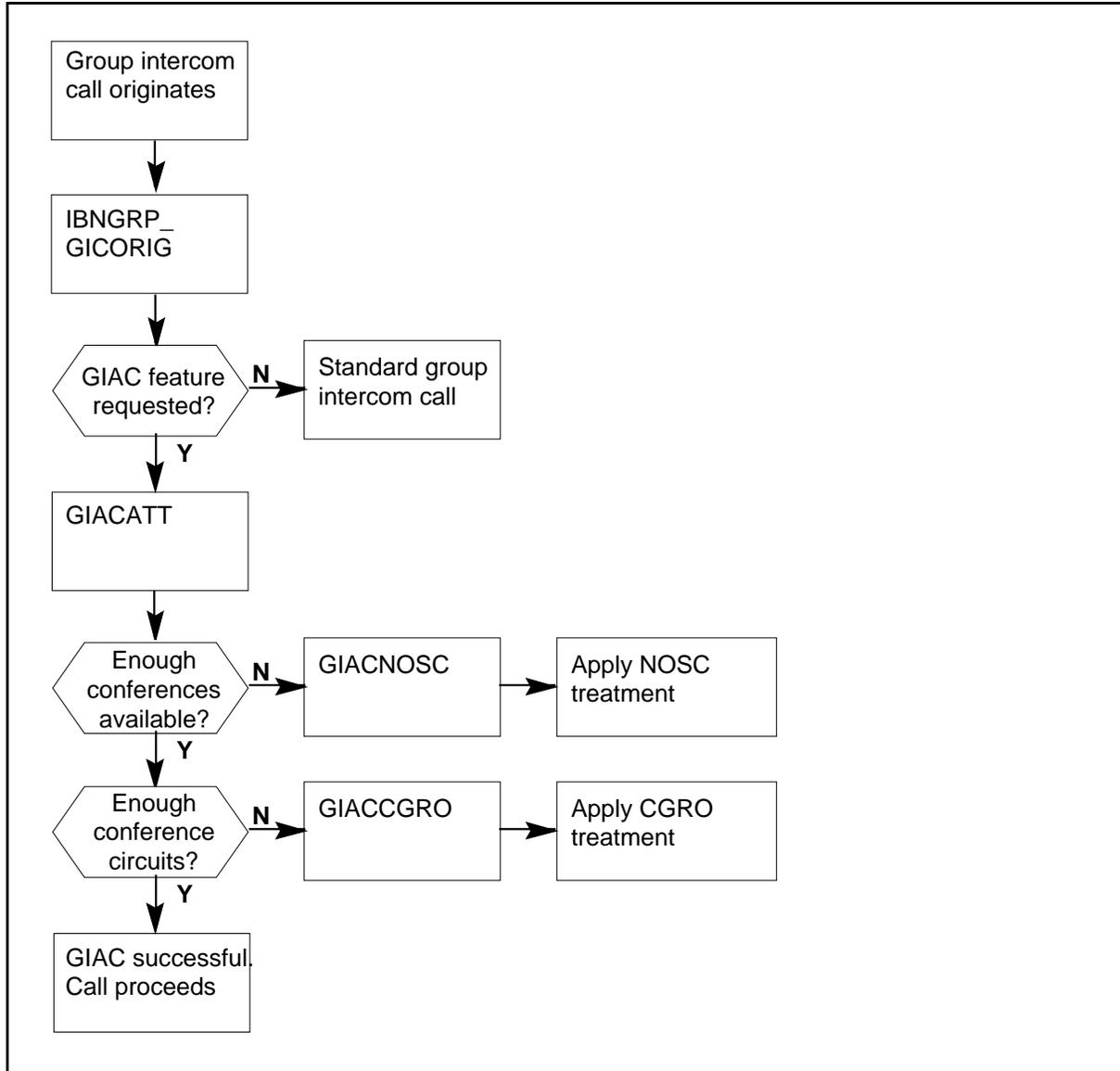
Associated functionality codes

The associated functionality codes for OM group GIACGRP appear in the following table.

| Functionality | Code |
|--|-------------|
| Enhanced Electronic Business Set Service | NTX878AC |

OM group GIACGRP (continued)

OM group GIACGRP registers



Register GIACATT

Group intercom all call origination attempts (GIACATT)

Register GIACATT counts attempts to originate a group intercom all call conference.

Register GIACATT release history

Register GIACATT was introduced in BCS30.

OM group GIACGRP (continued)

Associated registers

Register IBNGRP_GICORIG counts abbreviated dialing calls that originate from business sets and MDC lines in a customer group.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register GIACCGRO

Group intercom all call failure-no resources (GIACCGRO)

Register GIACCGRO counts attempts to originate a group intercom all call conference that fail because of not enough conference circuits. These conference circuits are assigned to the MDC customer group that contains the GIAC group. Field CONF6C in table CUSTENG contains the number of conference circuits assigned to an MDC customer group. The system routes the call to customer group resource overflow (CGRO) treatment.

Register GIACCGRO release history

Register GIACCGRO was introduced in BCS30.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register GIACNOSC

Group intercom all call failure-no conference circuits (GIACNOSC)

Register GIACNOSC counts attempts to originate a group intercom all call conference that fail. The GIAC fails because not enough conference circuits are available in the office. The system routes the call to no service circuit (NOSC) treatment.

Register GIACNOSC release history

Register GIACNOSC was introduced in BCS30.

OM group GIACGRP (end)

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

OM group GTID

OM description

Operational measurement Generic Logical Terminal Identifier (GTID) is used to assist in the monitoring of GLOGTID pools.

Release history

OM group GTID is added in TL17.

Group structure

OM group GTID provides one tuple for each pool.

Key field:

Is the number in the range 0-63 of the pool, followed by the name provided when the pool is registered.

Info field:

Is the number of TIDs currently allocated to the pool.

Register GTHIGH

Register GTHIGH is the least significant 16 bits of a 32 bit high water register.

Register GTHIGH release history

Register GTHIGH is added in TL17.

Associated registers

GTHIGH2

Associated logs

None.

Register GTHIGH2

Register GTHIGH2 is the most significant 16 bits of a 32 bit high water register.

Register GTHIGH2 release history

Register GTHIGH2 is added in TL17.

Associated registers

GTHIGH

Associated logs

None.

OM group GTID (end)

Register GTOVFL

Register GTOVFL is a usage register and records the number of times a GLOGTID is requested from a pool, but one is not available.

Register GTOVFL release history

Register GTOVFL is added in TL17.

Associated registers

None.

Associated logs

None.

Register GTSEIZ

Register GTSEIZ is the least significant 16 bits of a 32 bit usage register. This register records the seizure of a GLOGTID from the pool.

Register GTSEIZ release history

Register GTSEIZ is added in TL17.

Associated registers

GTSEIZ2.

Associated logs

None.

Register GTSEIZ2

Register GTSEIZ2 is the most significant 16 bits of a 32 bit usage register. This register records the seizure of a GLOGTID from the pool.

Register GTSEIZ2 release history

Register GTSEIZ2 is added in TL17.

Associated registers

GTSEIZ

Associated logs

None.

OM group HDBOM

OM description

The OM group History Data Block tracks the seizures for history data blocks (HDBs).

Note: This OM group was introduced in NA009, but is dormant.

Release history

OM group HDBOM was introduced in NA009.

Registers

The following OM group HDBOM registers display on the MAP terminal as follows:

```

HDBOM

CLASS:    ACTIVE
START:1998/08/04 08:30:00 TUE; STOP: 1998/08/04 08:56:02
TUE;
SLOWSAMPLES:      16 ; FASTSAMPLES:      156 ;

      KEY (HIS_FEAT_NAME)
      INFO (HDB_DATA_SIZES_INFO)
      HDBSEIZ  HDBSEIZ2

```

Note: The MAP display will show the OM group and register names, but no register values. The values are not displayed because this OM group is dormant.

Group structure

OM group HDBOM

Key field:

HDB_type

Info field:

Contains the size of the block of each HDB type.

OM group HDBOM (end)

Associated OM groups

None

Associated functional groups

None

Associated functionality codes

None

Register HDBSEIZ

Register number of successful HDB allocations

Register HDBSEIZ release history

Register HDBSEIZ was introduced in NA009.

Associated registers

None

Associated logs

None

Extension registers

HDBSEIZ2

OM group HFPOM

OM description

HFP CPU occupancy and Layer 2 OMs (HFPOM)

The OM group HFPOM monitor the HFP CPU use and frame traffic and indicate problems on XLIU channels.

The OM group HFPOM measures the CPU occupancy in the HFP for the following tasks:

- layer 1
- layer 2
- IPF interface
- maintenance
- utility
- tools
- idler
- other

Release history

Registers LINKCGST, LINKCGS2, RNRCGST, and RNRCGST2 were introduced in NA005.

The OM group HFPOM was introduced in NA002.

Registers

The OM group HFPOM registers appear on the MAP terminal as follows:

| | | | |
|----------|----------|----------|----------|
| HFPL1 | HFPL2 | HFPIPF | HFPMAINT |
| HFPUTIL | HFPTOOL | HFPIDLE | HFPOTHER |
| FRAMERX | FRAMERX2 | FRAMETX | FRAMETX2 |
| BADFRAME | BADFRAM2 | LINKCGST | LINKCGS2 |
| RNRCGST | RNRCGST2 | | |

Group structure

The OM group HFPOM

Table HFPOM provides one tuple for each XLIU entered in table LIUINV.

OM group HFPOM (continued)

Key field:

Integer value, range 0 to total number of tuples subtract one.

Info field:

Node name and number. Node name is always XLIU.

Number ranges from 0 to 511.

Associated OM groups

The OM group ISGBD indicates the number of Bd channel frames that the packet handler transmits and receives.

The OM group NCMCPUST indicates the CPU occupancy measurements for the IPF (XLIU) CPU.

Associated functional groups

The DMS Packet Handler functional group associates with OM group HFPOM.

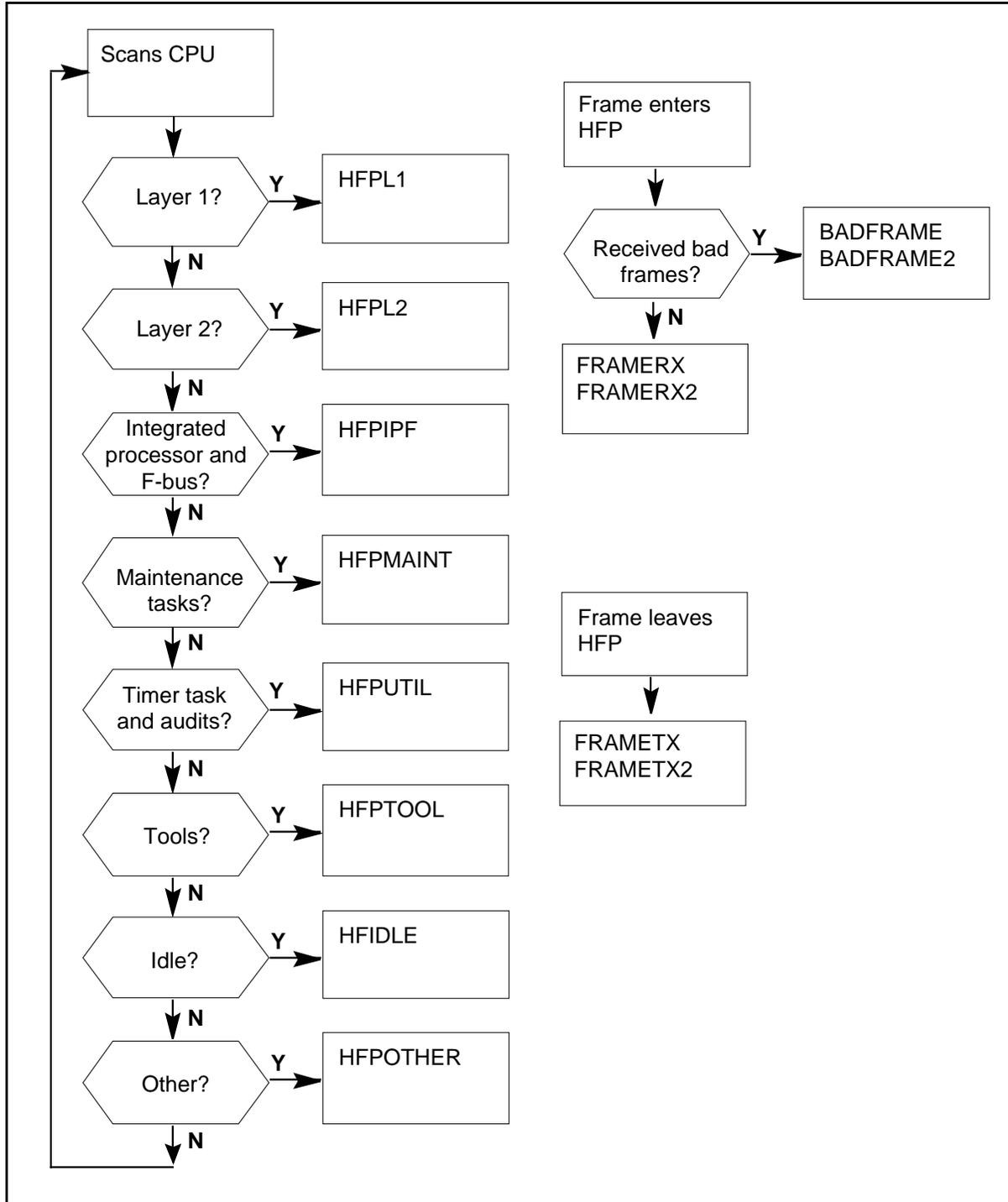
Associated functionality codes

The associated functionality codes for OM group HFPOM appear in the following table.

| Functionality | Code |
|-----------------|----------|
| NI0 NI-1 Packet | NI000010 |

OM group HFPOM (continued)

OM group HFPOM registers



OM group HFPOM (continued)

Register HFPL1

Register layer 1 occupancy (HFPL1)

Register HFPL1 monitors HFP CPU time spent processing the frame receiver task. The frame receiver task determines if the system can pass the frame to the layer 2 processing task. The system can pass the frame to the layer 2 processing task if the frame is not a bad frame.

Register HFPL1 release history

Register HFPL1 was introduced in NA002.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register HFPL2

Register layer 2 occupancy (HFPL2)

Register HFPL2 monitors HFP CPU time spent processing layer 2 frames.

Register HFPL2 release history

Register HFPL2 was introduced in NA002.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register HFPIPF

Register IPF interface occupancy (HFPIPF)

Register HFPIPF monitors HFP CPU time spent interfacing with Integrated Processor and F-bus messaging and passing frames for layer 3 processing.

OM group HFPOM (continued)

Register HFPIPF release history

Register HFPIPF was introduced in NA002.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register HFPMaint

Register maintenance occupancy (HFPMaint)

Register HFPMaint monitors HFP CPU time spent processing maintenance tasks, like loopbacks.

Register HFPMaint release history

Register HFPMaint was introduced in NA002.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register HFPUTIL

Register utility occupancy (HFPUTIL)

Register HFPUTIL monitors HFP CPU time spent processing the timer task and running audits.

Register HFPUTIL release history

Register HFPUTIL was introduced in NA002.

Associated registers

There are no associated registers.

OM group HFPOM (continued)

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register HFPTOOL

Register tools occupancy (HFPTOOL)

Register HFPTOOL monitors HFP CPU time spent running tools, like the CPU utilization and frame measurement tools.

Register HFPTOOL release history

Register HFPTOOL was introduced in NA002.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register HFPIDLE

Register idler occupancy (HFPIDLE)

Register HFPIDLE monitors HFP CPU time that is idle.

Register HFPIDLE release history

Register HFPIDLE was introduced in NA002.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register HFPOTHER

Register other occupancy (HFPOTHER)

OM group HFPOM (continued)

Register HFPOTHER monitors HFP CPU time spent processing a task other than the following:

- HFPL1
- HFPL2
- HFPIPF
- HFPMAINT
- HFPUTIL
- HFPTOOL
- HFPIDLE

Register HFPOTHER release history

Register HFPOTHER was introduced in NA002.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register FRAMERX

Register frames received by HFP (FRAMERX)

Register FRAMERX is the total number of frames that the HFP receives. These frames include I, RR, RNR, SABME, DM, DISC, UA, FRMR, and REJ frames. These frames also include incomplete, bad CRC, aborted, invalid length, and continuity test frames.

Register FRAMERX release history

Register FRAMERX was introduced in NA002.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

OM group HFPOM (continued)

Extension registers

Register FRAMERX2

Register FRAMERX2

Register frames received by HFP (FRAMERX2)

Register FRAMERX2 is an extension register. To determine the total number of frames received, multiple register FRAMERX2 by 65 536 and add FRAMERX register.

Register FRAMERX2 release history

Register FRAMERX2 was introduced in NA002.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register FRAMETX

Register frames transmitted from HFP (FRAMETX)

Register FRAMETX is the total number of frames that the HFP transmits. These frames include I, RR, RNR, SABME, DM, DISC, UA, FRMR, REJ, and continuity test frames.

Register FRAMETX release history

Register FRAMETX was introduced in NA002.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

Register FRAMETX2

Register FRAMETX2

Register frames transmitted from HFP (FRAMETX2)

OM group HFPOM (continued)

Register FRAMETX2 is an extension register. To determine the total number of frames transmitted, multiply by 65 536 and add register FRAMETX .

Register FRAMETX2 release history

Register FRAMETX2 was introduced in NA002.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register BADFRAME

Register bad frames received by HFP (BADFRAME)

Register BADFRAME is the total number of incomplete, bad CRC, aborted, and incorrect length frames that the HFP receives.

Register BADFRAME release history

Register BADFRAME was introduced in NA002.

Associated registers

There are no associated.

Associated logs

There are no associated logs.

Extension registers

Register BADFRAM2

Register BADFRAM2

Register bad frames received by HFP (BADFRAM2)

Register BADFRAM2 is an extension register. To determine the total number of bad frames, multiply by 65 536 and add register BADFRAME.

Register BADFRAM2 release history

Register BADFRAM2 was introduced in NA002.

OM group HFPOM (continued)

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register LINKCGST

Register Link Congestion (LINKCGST)

Register LINKCGST counts the number of times the build-up of data traffic congests a link. A build-up of data traffic occurs in the layer 2 processor output queue. The data terminal equipment (DTE) waits to receive the build-up of data traffic.

Register LINKCGST release history

Register LINKCGST was introduced in NA005.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

Register LINKCGS2

Register RNRCGST

Register Severe XLIU Congestion (RNRCGST)

Register RNRCGST counts the number of times the free buffer pools (layers 2 and 3) drop below the severe congestion threshold. This condition causes the system to send RNR messages to the DTE to stop the incoming traffic.

Register RNRCGST release history

Register RNRCGST was introduced in NA005.

Associated registers

There are no associated registers.

OM group HFPOM (end)

Associated logs

There are no associated logs.

Extension registers

Register RNRCGST2

OM group HPCBASIC

OM description

High Probability Completion - Basic

Note: The use of HPC Network Capabilities is restricted in the United States and U.S. Territories (Puerto Rico and U.S. Virgin Islands) to National Security/Emergency Preparedness (NS/EP) users authorized by the Office of the Manager, National Communication System (OMNCS). Operating company deployment of these HPC Network Capabilities must be coordinated with the OMNCS at the following address:

Office of the Manager
National Communications System
Attn: GETS Program Office
701 South Courthouse Rd.
Arlington, VA 22204-2198
email: gets@ncs.gov

The HPCBASIC OM group is used to measure HPC call traffic. Registers in this OM group count the number of HPC call attempts on lines and trunks, and keep track of how these calls are handled.

HPC is the term used to describe the Government Emergency Telecommunications Service (GETS) functionality in a DMS-100 call context. The equivalent functionality in the context of a DMS-250 call is referred to as Carrier GETS (CGETS). In a DMS-500 office that combines the functionality of the DMS-100 and DMS-250, the OMs in this group may be pegged by both HPC and Carrier GETS calls simultaneously.

HPC calls may peg all the registers in this group. Carrier GETS calls only peg selected OMs in this group as indicated in each OM description.

Note: Flowcharts indicating OM register hits, represent a single pass through an office. Calls can re-route within the office through call forward or AIN responses, and OM registers can be pegged multiple times during call processing.

Release history

OM group HPCBASIC was introduced in NA008.

1-2 Operational measurements

Registers EQQATT, EQQOVFL, EQQABDN, and EQQTMREX were added in NA012.

Support allowing Carrier GETS to use the existing EADAS interface to report the OM data related to Carrier GETS was added in CSP18/SN05.

Registers

The following OM group HPCBASIC registers display on the MAP terminal as follows:

```
> omshow hpcbasic holding

HPCBASIC

CLASS: HOLDING
START: 1997/06/24 14:00:00 THU;STOP:1997/06/24 14:15:00
THU;
SLOWSAMPLES:          3; FASTSAMPLES          23;

      LINEATT   TRKATT   TERMLINE   TERMTRK
      TERMNC    TERMIEC   TERMIECN   EXNMCTRL
      TQQATT    TQQOVFL   TQQABDN    TQQTMREX
      EQQATT    EQQOVFL   EQQABDN    EQQTMREX
      ACGEXMPT  ACGBLOCK

      0         0         0         0
      0         0         0         0
      0         0         0         0
      0         0         0         0
      0         0         0         0
```

Group structure

OM group HPCBASIC

Key field:

None

Info field:

None

Associated OM groups

None

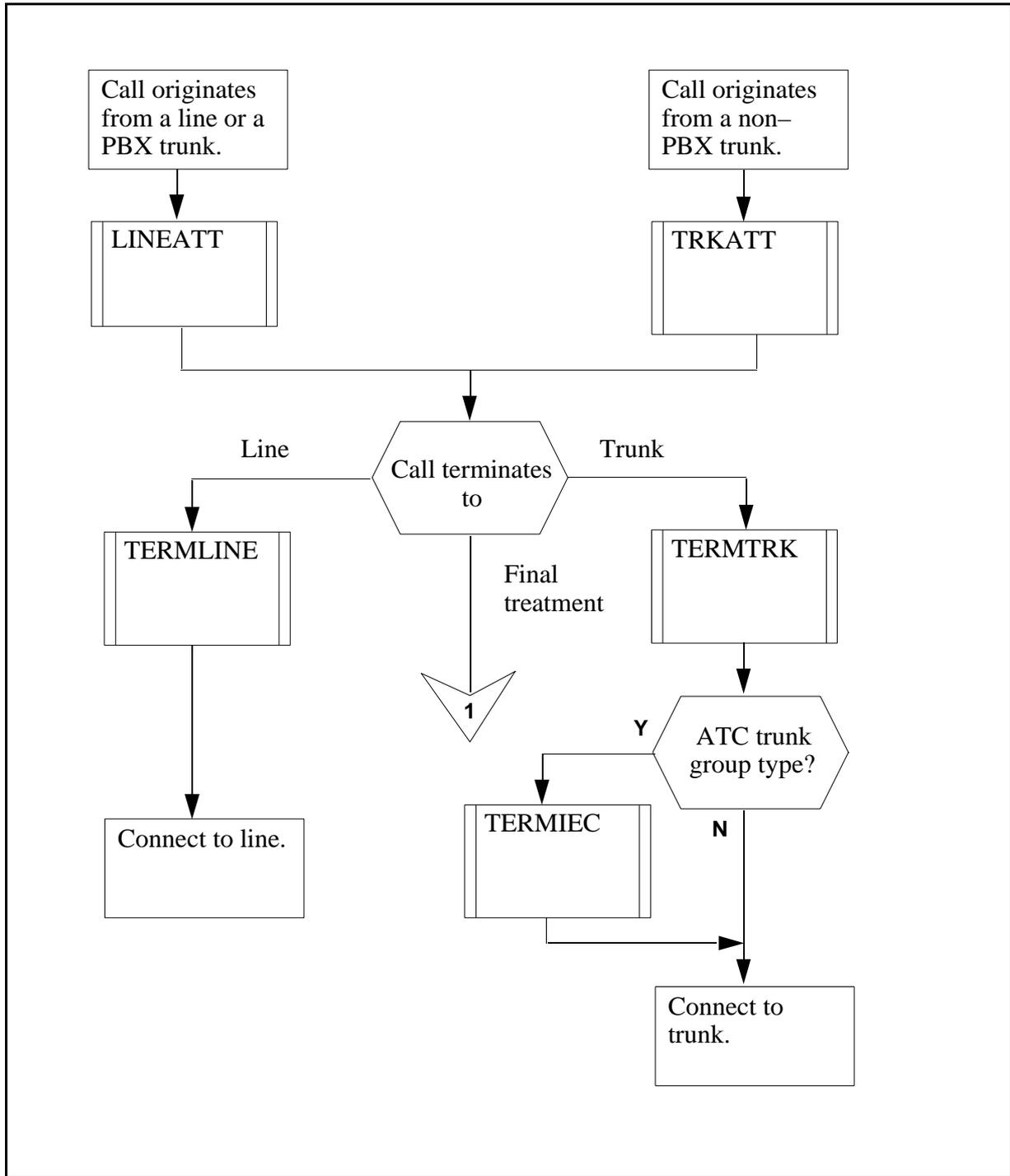
Associated functional groups

None

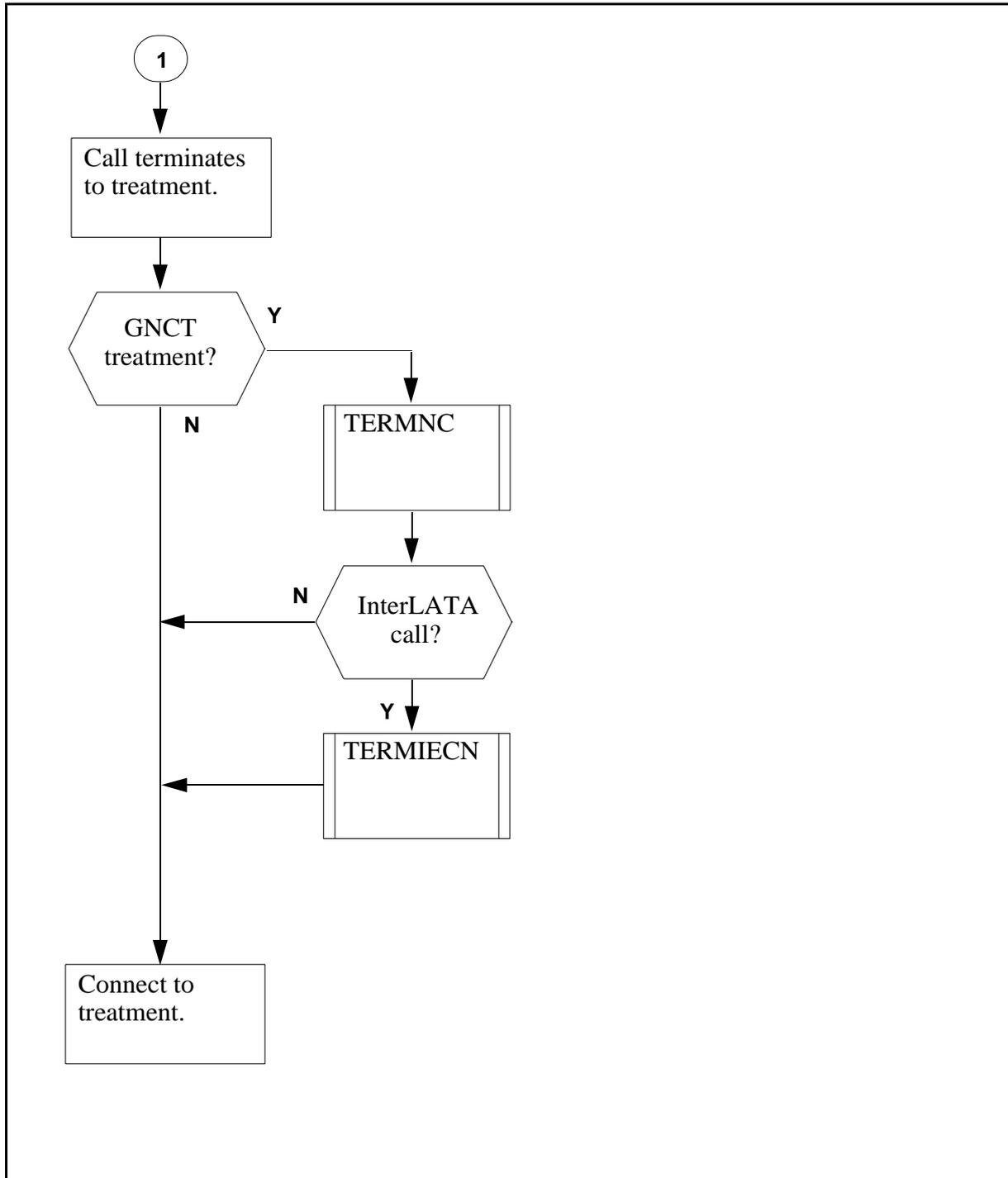
Associated functionality codes

None

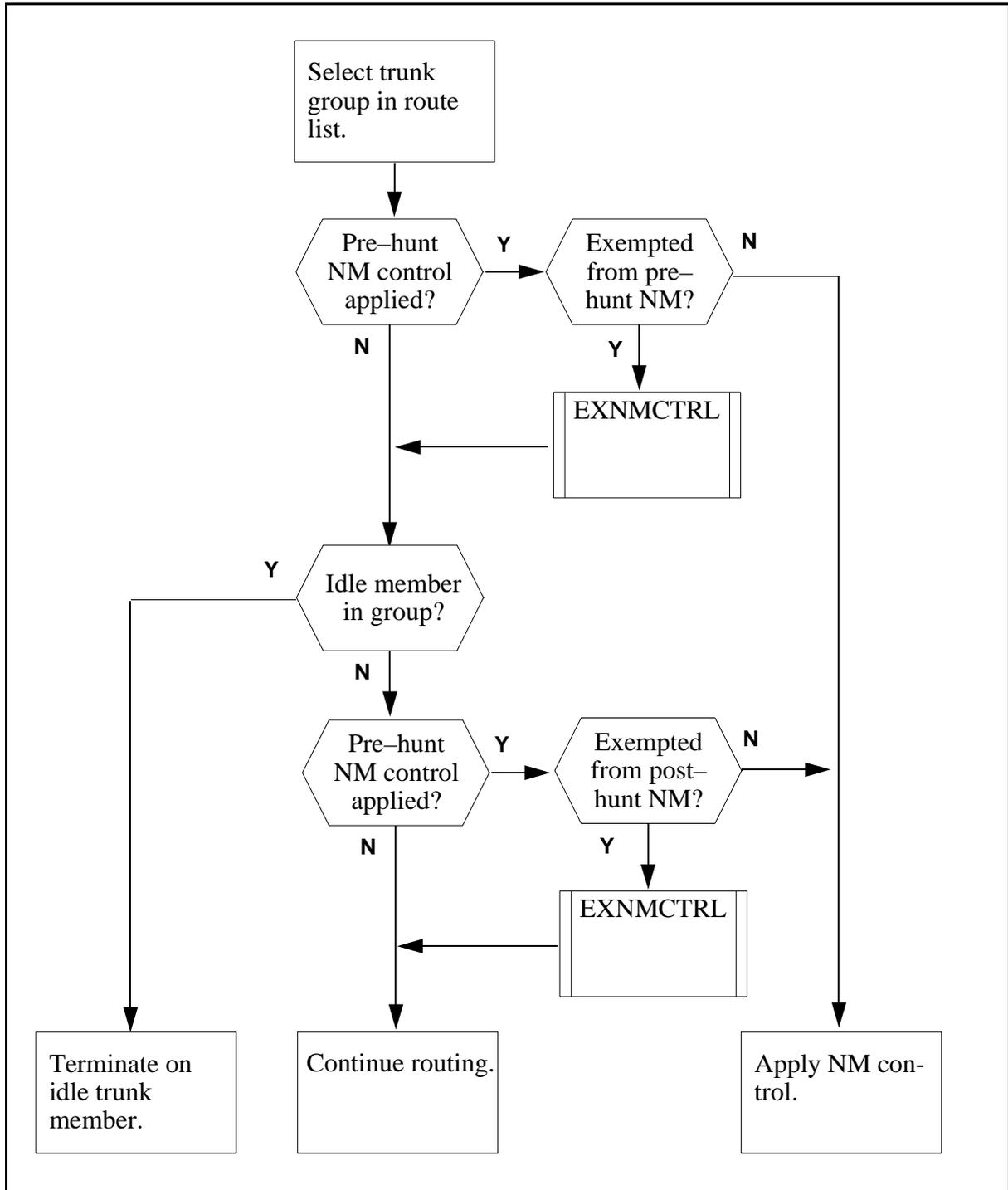
OM group HPCBASIC registers



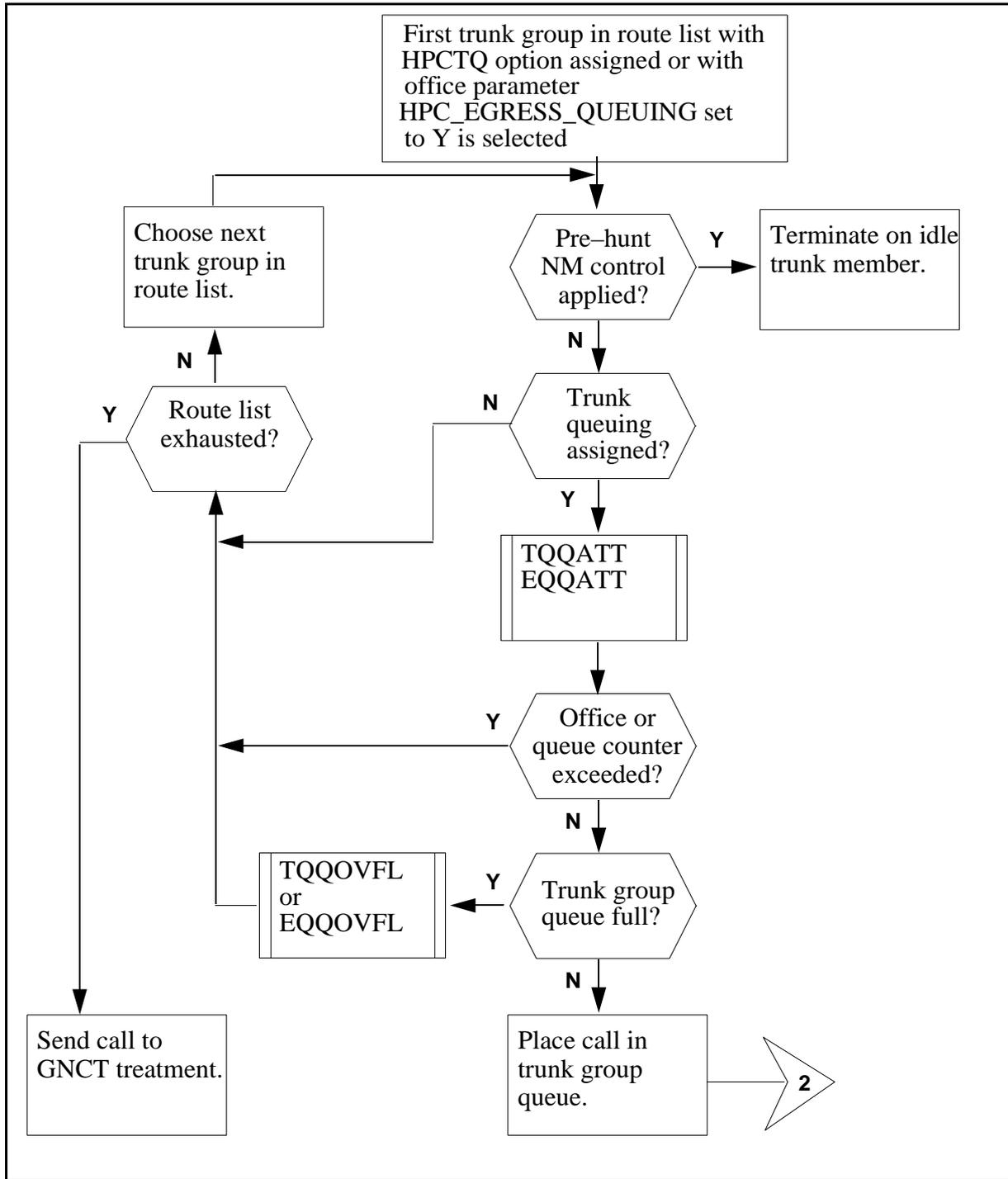
OM group HPCBASIC registers (continued)



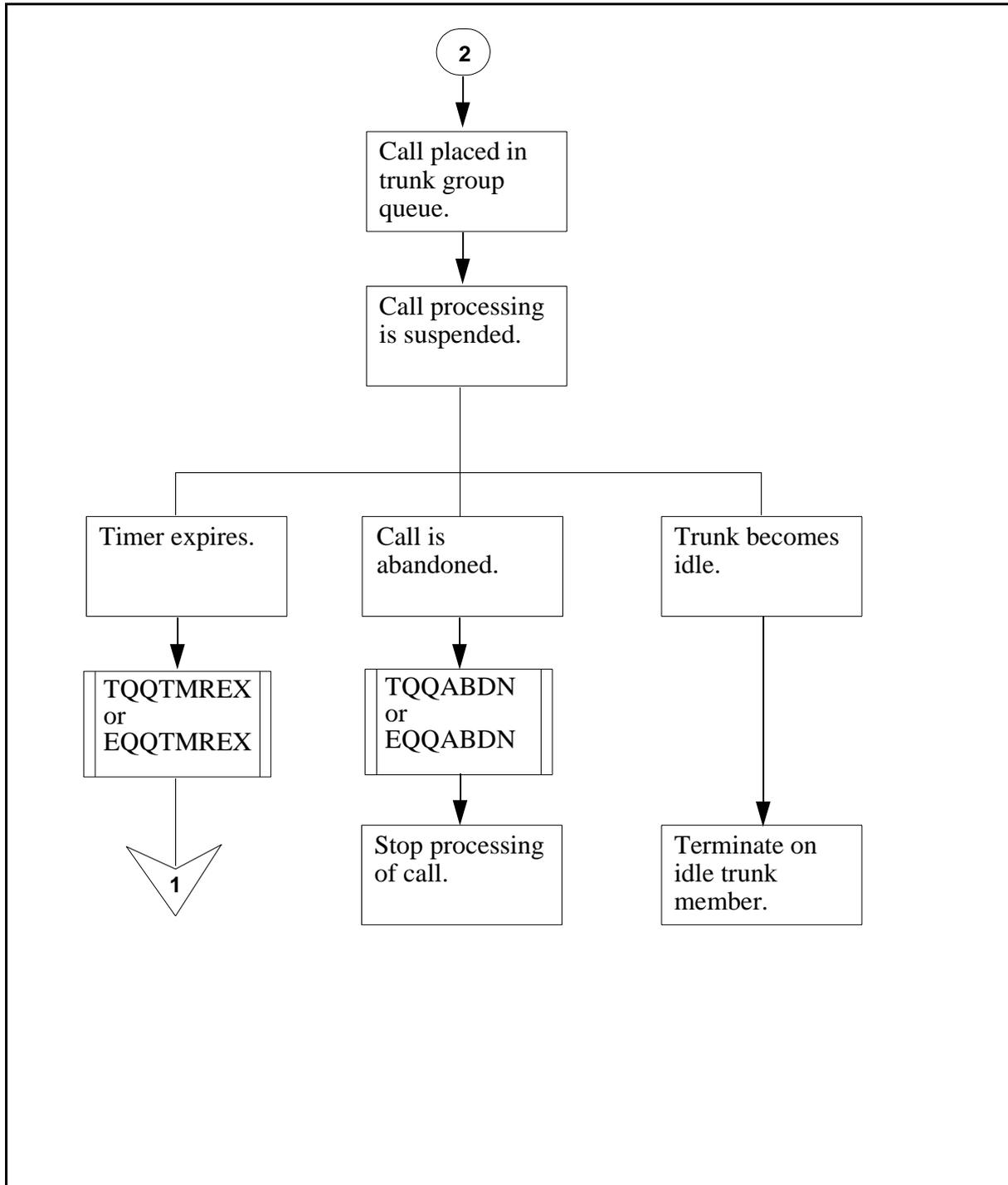
OM group HPCBASIC registers (continued)



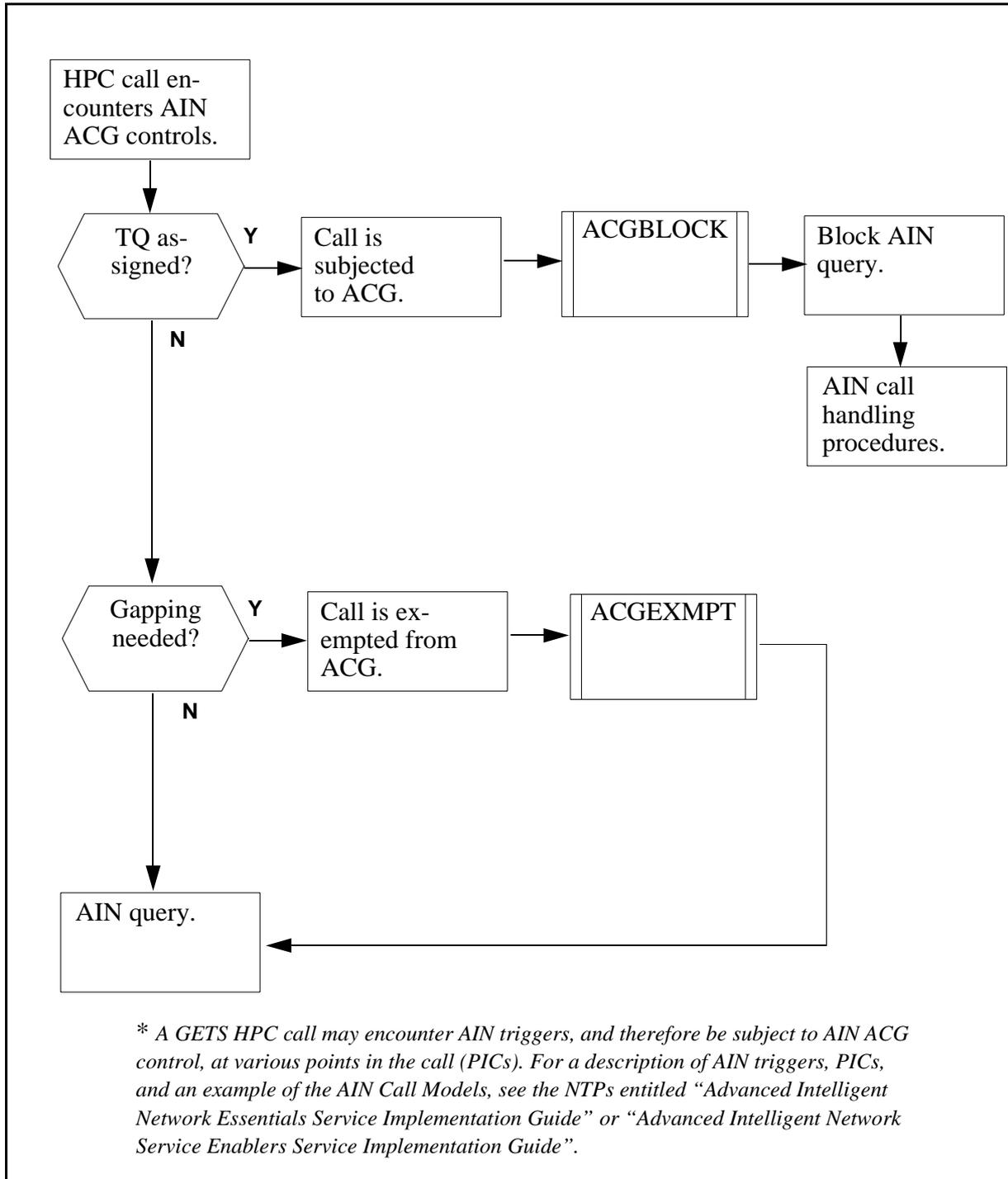
OM group HPCBASIC registers (continued)



OM group HPCBASIC registers (continued)



OM group HPCBASIC registers (continued)

**Register LINEATT**

Register Line Attempts

The LINEATT register counts the number of line origination attempts (including PX, P2, and PRI), recognized as HPC calls on lines served by the measuring switch. LINEATT is not pegged for Carrier GETS.

Register LINEATT release history

Register LINEATT was introduced in NA008.

Associated registers

None

Associated logs

None

Extension registers

None

Register TRKATT

Register Trunk Attempts

The TRKATT register counts the number of calls recognized as HPC calls, on incoming trunks of the measuring switch.

Note: TRKATT is pegged when an incoming call is recognized as a Carrier GETS call. TRKATT is pegged based on the CPC, thus it only applies to incoming ISUP trunk groups.

Register TRKATT release history

Register TRKATT was introduced in NA008.

Associated registers

None

Associated logs

None

Extension registers

None

Register TERMLINE

Register Termination - Line

The TERMLINE register counts the number of calls recognized by the measuring switch as HPC calls, whose destination is a line served by the measuring switch, including calls which have been call forwarded.

Note: TERMLINE will be pegged only if the HPC call successfully terminates on the line. TERMLINE will not be pegged if the terminating line is busy or if the HPC call is rejected by a feature such as Selective Call Rejection. TERMLINE is not pegged for Carrier GETS.

Register TERMLINE release history

Register TERMLINE was introduced in NA008.

Associated registers

None

Associated logs

None

Extension registers

None

Register TERMTRK

Register Termination - Trunk

The TERMTRK (Termination - Trunk) register counts the number of calls that complete on trunks to points outside the measuring switch, that the switch has recognized as HPC calls. TERMTRK is pegged each time an IAM message is sent from an ISUP trunk, or when the inband signaling trunk is seized.

Note: The TERMTRK register will be unpegged in the case of yielding to glare and COT failure event, provided the current value is greater than 0.

Note: TERMTRK can be pegged following the pegging of register TERMNC, when an HPC call is routed to a busy route, with the AIN Network Busy event armed. In this case TERMNC is pegged, the NB event is hit, and AIN sends a query to the SCP and receives a response of Analyze Route, or AFR trigger.

Note: TERMTRK is pegged when a Carrier GETS call completes on a trunk.

Register TERMTRK release history

Register TERMTRK was introduced in NA008.

Associated registers

None

Associated logs

None

Extension registers

None

Register TERMNC

Register Termination - No Circuit

The TERMNC register counts the number of outgoing HPC calls that cannot be routed on a trunk to a point outside the measuring switch, because no idle trunks are available.

Note: For the definition of TERMNC, a Virtual Facility Group (VFG) is considered as a trunk. Therefore, TERMNC is pegged when an HPC call is routed to a VFG with its maximum capacity reached.

Note: GETS HPC calls can interact with features that send the call to an alternate route, and therefore, affects the pegging of TERMNC.

The following illustrates examples of these calls.

- HPC calls with ACR or E-ACR peg TERMNC once, after all routes to carriers in the response fail to route the call.
- HPC calls with NEL Network Busy peg TERMNC before AIN takes control of the call.

- HPC calls incoming on ISUP that send back a release with cause message due to network busy, peg TERMNC.
- HPC calls that are forwarded and cannot be routed outside the measuring switch peg TERMNC (even when CFDA returns the call to the original terminating line).

Note: TERMTRK can be pegged following the pegging of register TERMNC, when an HPC call is routed to a busy route, with the AIN Network Busy event armed. In this case TERMNC is pegged, the NB event is hit, and AIN sends a query to the SCP and receives a response of Analyze Route, or AFR trigger.

Note: For Carrier GETS, TERMNC is pegged when a call cannot be routed because no idle trunks are available. This register is pegged on the second scan when the call is sent to GNCT treatment because no idle trunk members were found.

Register TERMNC release history

Register TERMNC was introduced in NA008.

Associated registers

None

Associated logs

None

Extension registers

None

Register TERMIEC

Register Termination - IEC

The TERMIEC register counts the number of HPC calls intended to complete on trunks to points outside the measuring switch, and that are intended for an IEC.

Note: TERMIEC is pegged only when the trunk group is of type ATC. TERMIEC is not pegged for Carrier GETS.

Register TERMIEC release history

Register TERMIEC was introduced in NA008.

Associated registers

None

Associated logs

None

Extension registers

None

Register TERMIECN

Register Termination - IEC No Circuit

The TERMIECN register counts the number of outgoing HPC calls that cannot be routed on a trunk to a point outside the measuring switch because no idle trunks are available, and that are intended for AIN IEC (interLATA call).

Note: For the definition of TERMIECN a Virtual Facility Group (VFG) is considered as a trunk. Therefore, TERMIECN is pegged when an HPC call is routed to a VFG with its maximum capacity reached.

Note: GETS HPC calls can interact with features that send the call to an alternate route, and therefore, affects the pegging of TERMIECN. TERMIECN is not pegged for Carrier GETS.

The following illustrates examples of these calls.

- HPC calls with ACR or E-ACR peg TERMIECN once, after all routes to carriers in the response fail to route the call.
- HPC calls with NEL Network Busy peg TERMIECN before AIN takes control of the call.
- HPC calls incoming on ISUP that send back a release with cause message due to network busy, peg TERMIECN.
- HPC calls that are forwarded and cannot be routed outside the measuring switch peg TERMIECN (even when CFDA returns the call to the original terminating line).

Note: TERMTRK can be pegged following the pegging of register TERMNC, when an HPC call is routed to a busy route, with the AIN Network Busy event armed. In this case TERMIECN is pegged, the NB event is hit, and AIN sends a query to the SCP and receives a response of Analyze Route, or AFR trigger.

Register TERMIECN release history

Register TERMIECN was introduced in NA008.

Associated registers

None

Associated logs

None

Extension registers

None

Register EXNMCTRL

Register Exemption from Network Management Control

The EXNMCTRL register counts the number of times an HPC call is exempted from an active network management control, on the first idle trunk scan.

Note: EXNMCTRL is pegged when a Carrier GETS call bypasses an active network management control on the first idle scan.

Register EXNMCTRL release history

Register EXNMCTRL was introduced in NA008.

Associated registers

None

Associated logs

None

Extension registers

None

Register TQQATT

Register Trunk Queuing Attempts

The TQQATT register counts the number of attempts to place HPC calls in all trunk group queues.

Note: TQQATT is only pegged when a call is placed on the trunk group queue. It is therefore assumed that the register is pegged only on the second idle trunk scan.

Note: TQQATT is pegged each time an attempt is made to place a GETS call in a trunk group queue.

For Carrier GETS, TQQATT is pegged for both trunk and office wide queuing.

Register TQQATT release history

Register TQQATT was introduced in NA008.

Associated registers

None

Associated logs

None

Extension registers

None

Register TQQOVFL

Register Trunk Queuing Overflow

The TQQOVFL register counts the number of attempts to place HPC calls in trunk group queues that failed because the queues were full.

Note: TQQOVFL is only pegged after a call has been placed on the trunk group queue. It is therefore assumed that the register is pegged only on the second idle trunk scan.

Note: For Carrier GETS, TQQOVFL is pegged when an attempt is made to place a Carrier GETS call in a queue but fails because the queue for the trunk group is full.

Register TQQOVFL release history

Register TQQOVFL was introduced in NA008.

Associated registers

None

Associated logs

None

Extension registers

None

Register TQQABDN

Register Trunk Queuing Abandon

The TQQABDN register counts the number of HPC calls that have been placed in trunk group queues, but were abandoned while in the queue.

Note: TQQABDN is only pegged after a call has been placed on the trunk group queue. It is therefore assumed that the register is pegged only on the second idle trunk scan.

Note: TQQABDN is pegged when a Carrier GETS call is in queue and the calling party abandons.

Register TQQABDN release history

Register TQQABDN was introduced in NA008.

Associated registers

None

Associated logs

None

Extension registers

None

Register TQQTMREX

Register Trunk Queuing Timer Expired

The TQQTMREX register counts the number of HPC calls removed from trunk group queues due to a timeout treatment.

Note: TQQTMREX is only pegged after a call has been placed on the trunk group queue. It is therefore assumed that the register is pegged only on the second idle trunk scan.

Note: TQQTMREX is pegged when a Carrier GETS call is removed from queue because it timed-out waiting for an idle trunk to become available.

Register ACGEXMPT release history

Register TQQTMREX was introduced in NA008.

Associated registers

None

Associated logs

None

Extension registers

None

Register ACGEXMPT

Register AIN Queries of HPC calls Exempted

The ACGEXMPT register counts the total number of AIN queries of all HPC calls exempted from AIN ACG controls. ACGEXMPT is not pegged for Carrier GETS.

Register ACGEXMPT release history

Register ACGEXMPT was introduced in NA008.

Associated registers

None

Associated logs

None

Extension registers

None

Register ACGBLOCK

Register AIN Queries of HPC calls Blocked

The ACGBLOCK register counts the total number of AIN queries of all HPC calls blocked by AIN ACG controls. ACBLOCK is not pegged for Carrier GETS.

Register ACGBLOCK release history

Register ACGBLOCK was introduced in NA008.

Associated registers

None

Associated logs

None

Extension registers

None

Register EQQABDN

Register Egress queuing queue abandons

The EQQABDN register counts the number of calls that were placed in egress trunk group queues, but were abandoned while in the queue. EQQABDN is not pegged for Carrier GETS.

Release history

Register EQQABDN was created in NA012.

Associated registers

None

Associated logs

None

Extension registers

None

Register EQQATT

Register Egress queuing queue attempts

The EQQATT register counts the number of attempts made to place HPC calls in egress trunk group queues. EQQATT is not pegged for Carrier GETS.

Release history

Register EQQATT was created in NA012.

Associated registers

None

Associated logs

None

Extension registers

None

Register EQQOVFL

Register Egress queuing queue overflow

The EQQOVFL register counts the number of failed attempts to place HPC calls in egress trunk group queues because the queues were full. EQQOVFL is not pegged for Carrier GETS.

Release history

Register EQQOVFL was created in NA012.

Associated registers

None

Associated logs

None

Extension registers

None

Register EQQTMREX

Register Egress queuing queue timeout

The EQQTMREX register counts the number of calls removed from egress trunk group queues due to timeout treatment. EQQTMREX is not pegged for Carrier GETS.

Release history

Register EQQTMREX was created in NA012.

Associated registers

None

Associated logs

None

Extension registers

None

OM group HPCTRKGP

OM description

High Probability Completion Trunk Group

Note: The use of HPC Network Capabilities is restricted in the United States and U.S. Territories (Puerto Rico and U.S. Virgin Islands) to National Security/Emergency Preparedness (NS/EP) users authorized by the Office of the Manager, National Communication System (OMNCS). Operating company deployment of these HPC Network Capabilities must be coordinated with the OMNCS at the following address:

Office of the Manager
National Communications System
Attn: GETS Program Office
701 South Courthouse Rd.
Arlington, VA 22204-2198
email: gets@ncs.gov

The HPCTRKGP OM group is used to measure HPC call traffic on a trunk group basis. Registers in this OM group count the number of HPC call attempts on a trunk group, the number of HPC calls that overflowed due to all members of a trunk group being busy, the number of trunk group queue overflows, and the number of queued calls encountering a timeout treatment.

HPC is the term used to describe the Government Emergency Telecommunications Service (GETS) functionality in a DMS-100 call context. The equivalent functionality in the context of a DMS-250 call is referred to as Carrier GETS (CGETS). In a DMS-500 office that combines the functionality of the DMS-100 and DMS-250, the OMs in this group may be pegged by both HPC and Carrier GETS calls simultaneously.

Note: Flowcharts indicating OM register hits, represent a single pass through an office. Calls can re-route within the office through call forward or AIN responses, and OM registers can be pegged multiple times during call processing.

Release history

OM group HPCTRKGP was introduced in NA008.

Support allowing Carrier GETS to use the existing EADAS interface to report the OM data related to Carrier GETS was added in CSP18/SN05.

Registers

The following OM group HPCTRKGP registers display on the MAP terminal as follows:

```
> omshow hpctrkgrp holding

HPCTRKGP

CLASS: HOLDING
START: 1997/06/24 14:00:00 THU;STOP:1997/06/24 14:15:00
THU;
SLOWSAMPLES:                3; FASTSAMPLES                27;

      KEY (COMMON_LANGUAGE_NAME)
      INFO (HPCTRKGPIINFO)
      HPCATT  HPCOVFL  QUETMREX  QUEOVFL

154 TERM105
   OG   0   0
           0           0           0           0
```

Group structure

OM group HPCTRKGP

Key field:

COMMON_LANGUAGE_NAME

Info field:

HPCTRKGPIINFO

Associated OM groups

None

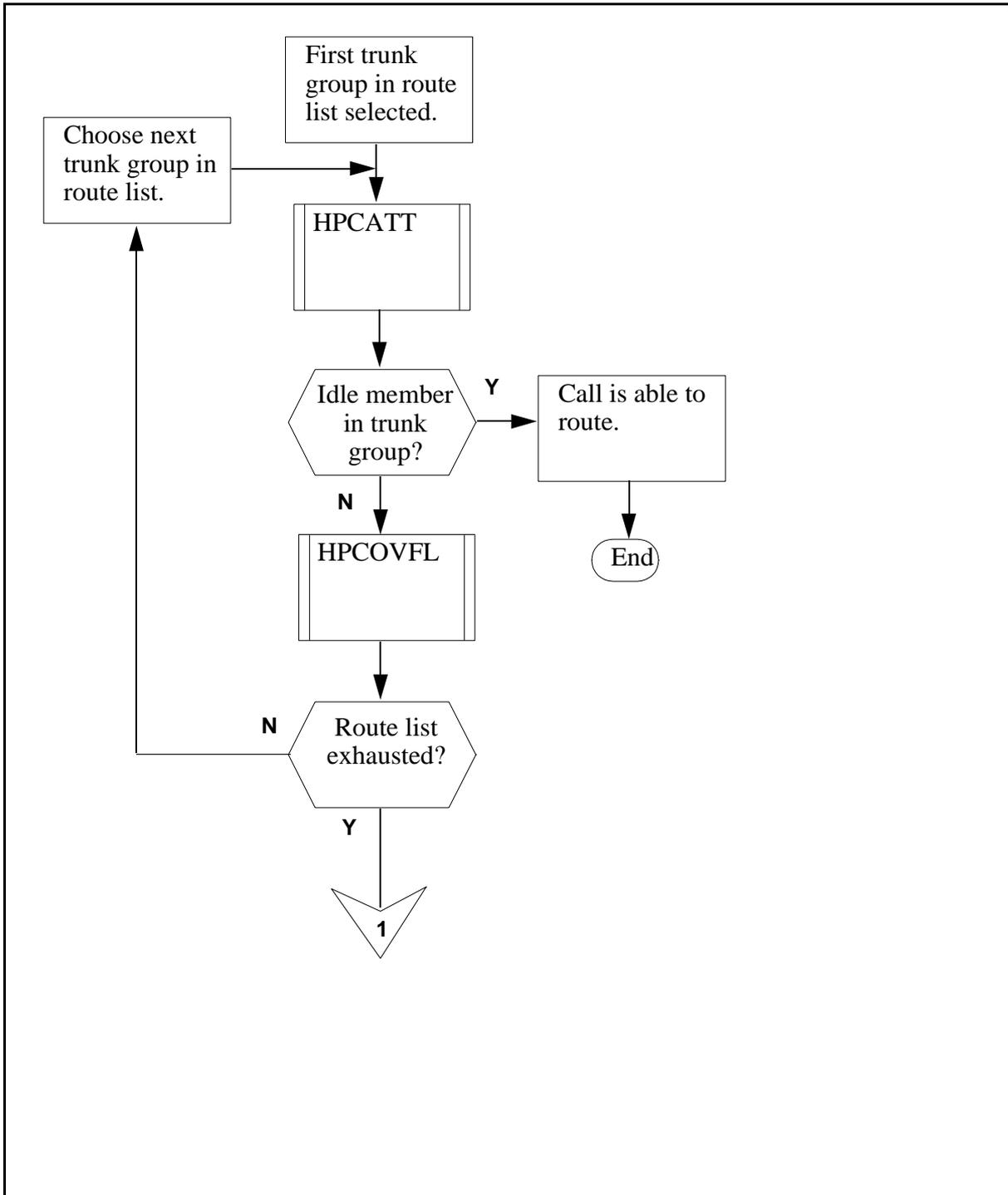
Associated functional groups

None

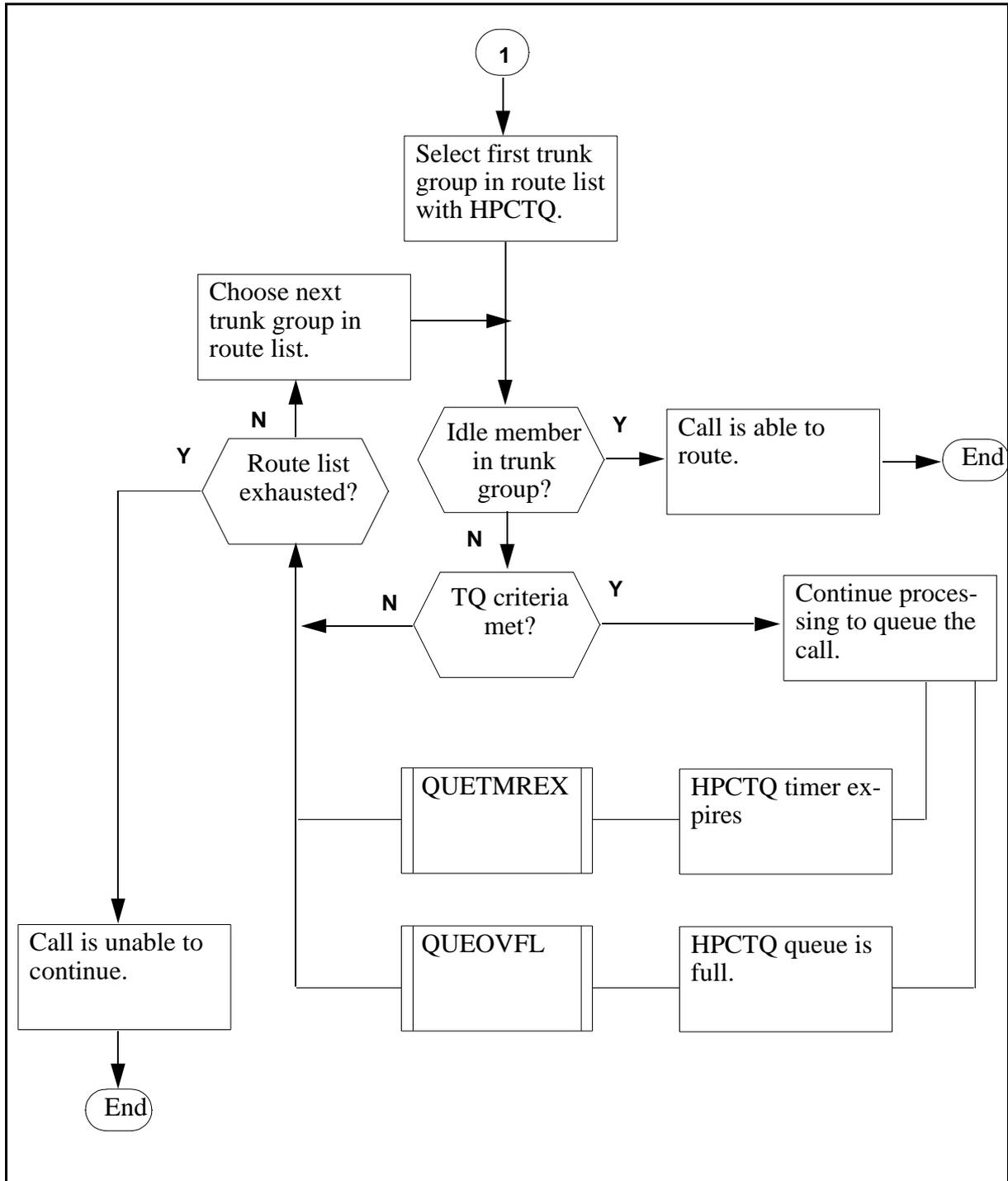
Associated functionality codes

None

OM group HPCTRKGP registers



OM group HPCTRKGP registers



Register HPCATT

Register HP Call Attempts

The HPCATT register counts the number of times the switch tries to access a trunk in the trunk group to serve an HPC call. This register is pegged only on the first idle trunk scan.

Note: For Carrier GETS, the HPCATT register is pegged each time a call attempts to access a trunk in the trunk group to serve a Carrier GETS call. HPCATT is pegged only on the first idle trunk scan.

Register HPCATT release history

Register HPCATT was introduced in NA008.

Associated registers

None

Associated logs

None

Extension registers

None

Register HPCOVFL

HPC Call Overflow

The HPCOVFL register counts the number of times the switch tries to access a trunk in the trunk group to serve an HPC call, when all trunks are busy. This register is pegged only on the first idle trunk scan.

Note: For Carrier GETS, the HPCOVFL register is pegged when the DMS switch tries to access a trunk in the trunk group to serve a Carrier GETS call, when all trunks are busy. This register is only pegged on the first idle trunk scan.

Register HPCOVFL release history

Register HPCOVFL was introduced in NA008.

Associated registers

None

Associated logs

None

Extension registers

None

Register QUETMREX

Trunk Queuing Timer Expired

The QUETMREX register counts the number of HPC calls removed from the trunk group queue due to timeout treatment. This register is only pegged when a call is put on the trunk group queue. It is therefore assumed that the register is pegged only on the second scan.

Note: For Carrier GETS, the QUETMREX register is pegged when a Carrier GETS call is removed from queue because it timed-out waiting for an idle trunk to become available.

Register QUETMREX release history

Register QUETMREX was introduced in NA008.

Associated registers

None

Associated logs

None

Extension registers

None

Register QUEOVFL

Trunk Queuing Overflow

The QUEOVFL register counts the number of attempts to place HPC calls in the trunk group queue that failed because the trunk group queue was full. This register is only pegged when a call is put on the trunk group queue. It is therefore assumed that the register is pegged only on the second scan.

Note: For Carrier GETS, the QUEOVFL register is pegged when a Carrier GETS call attempts to queue on the trunk group but fails to do so because the queue is full. QUEOVFL is pegged on the second idle scan.

Register QUEOVFL release history

Register QUEOVFL was introduced in NA008.

Associated registers

None

Associated logs

None

Extension registers

None

OM group HTR

OM description

Hard To Reach (HTR) codes

The OM group HTR is used for pegging the Answer and Bid counts for all Hard To Reach codes. A code is tagged Hard To Reach when the probability of call completion is extremely low. The Engineering and Administration Data Acquisition System (EADAS) machine uses these counts to calculate the Answer to Bid ratio.

Registers

OM group HTR registers appear on the MAP terminal as follows.

```
CLASS:    ACTIVE
START:2001/06/02 20:00:00 SAT; STOP: 2001/06/02 20:00:10 SAT;
SLOWSAMPLES:      1 ; FASTSAMPLES:      1 ;
```

```
INFO (HTR_INFO)
CAONHTRC  CCONHTRC
```

Group structure

OM group HTR provides one tuple for each Hard To Reach code.

Key field:

None

Info field:

The HTR_INFO information field identifies Hard To Reach call codes.

The information field contains the following:

- The code control type (CCODE/ACODE/NAC/PFX)
- The destination code on which the HTR code control is applied
- SNPA/STS/ALL

Related OM groups

There are no associated OM groups.

Related functional groups

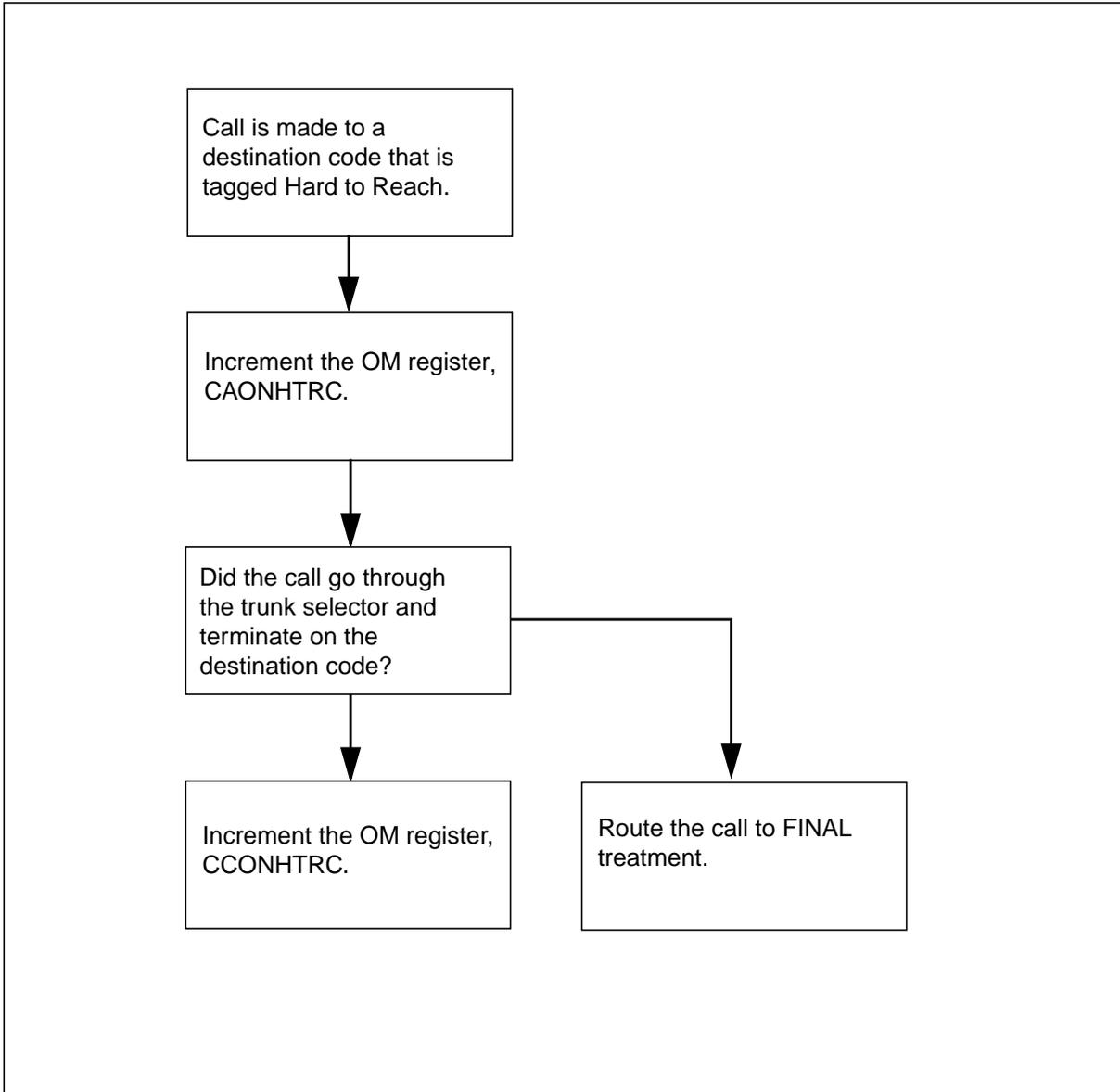
There are no associated functional groups.

OM group HTR (continued)

Related functionality codes

There are no associated functionality codes for OM group HTR.

OM group HTR registers



Register CAONHTRC

Call Attempts on Hard To Reach codes (CAONHTRC)

Register CAONHTRC keeps track of the number of call attempts on a destination code tagged Hard to Reach.

OM group HTR (end)

Register CAONHTRC release history

NA016 introduced register CAONHTRC.

Related registers

There are no related registers.

Related logs

There are no related logs.

Extension registers

There are no extension registers

Register CCONHTRC

Call Completions on Hard To Reach codes (CCONHTRC)

Register CCONHTRC keeps track of the number of call completions on a destination code tagged Hard to Reach.

Register CCONHTRC release history

NA016 introduced register CCONHTRC.

Related registers

There are no related registers.

Related logs

There are no related logs.

Extension registers

There are no extension registers

Release history

NA016

NA0016 introduced OM group HTR.

OM group HUNT

OM description

Hunt (HUNT)

The register in HUNT provides information on the performance of each hunt group in the DMS switch. The OM group HUNT counts:

- attempts to terminate calls on lines in the hunt group
- attempts that fail to find an available line and overflow
- calls attempted again that terminate on a line and fail

A hunt group is a group of lines where an office searches for an available line to terminate a call. A DMS-100 switch has several types of hunt groups:

- directory number hunt (DNH)
- distributed line hunt (DLH)
- multiline hunt (MLH)
- bridged night number (BNN)

Release history

The OM group HUNT was introduced in BCS20.

NA009

The HUNTGRP OM Enhancements feature added the following usage registers to the existing HUNT OM group:

- HUNTTRF. This usage register records call processing traffic on the hunt groups in the office.
- HUNTMNT. This usage register records maintenance traffic on the hunt groups in the office.

APC005

Functionality is added to support

- Meridian Digital Centrex (MDC) features, such as DNH, DLH, and MLH
- Global Peripheral Platform (GPP) lines for Australian telephone user part (ATUP), ANSI ISDN user part (ANSI ISUP), and Australian ISUP (AISUP) trunk signaling

BCS30

Registers HUNTATT, HUNTOVFL, and HUNTRHNT count multiple position hunt (MPH) group calls.

OM group HUNT (continued)

Registers

The OM group HUNT registers appear on the MAP terminal as follows:

| | | | |
|---------|----------|----------|---------|
| HUNTATT | HUNTOVFL | HUNTRHNT | HUNTTRF |
| HUNTMNT | | | |

Group structure

The OM group HUNT provides one tuple for each hunt group.

Key field:

There is no key field.

Info field:

HUNT_OM_INFO_TYPE - fields:

SNPA

DN

GROUPTYPE

SIZE

The SNPA is the serving numbering plan area of the pilot line. The DN is the seven-digit directory number of the pilot line. The GROUPTYPE is the hunt group type, and SIZE is the maximum number of members.

Associated OM groups

There are no associated OM groups.

Associated functional groups

There are no associated functional groups.

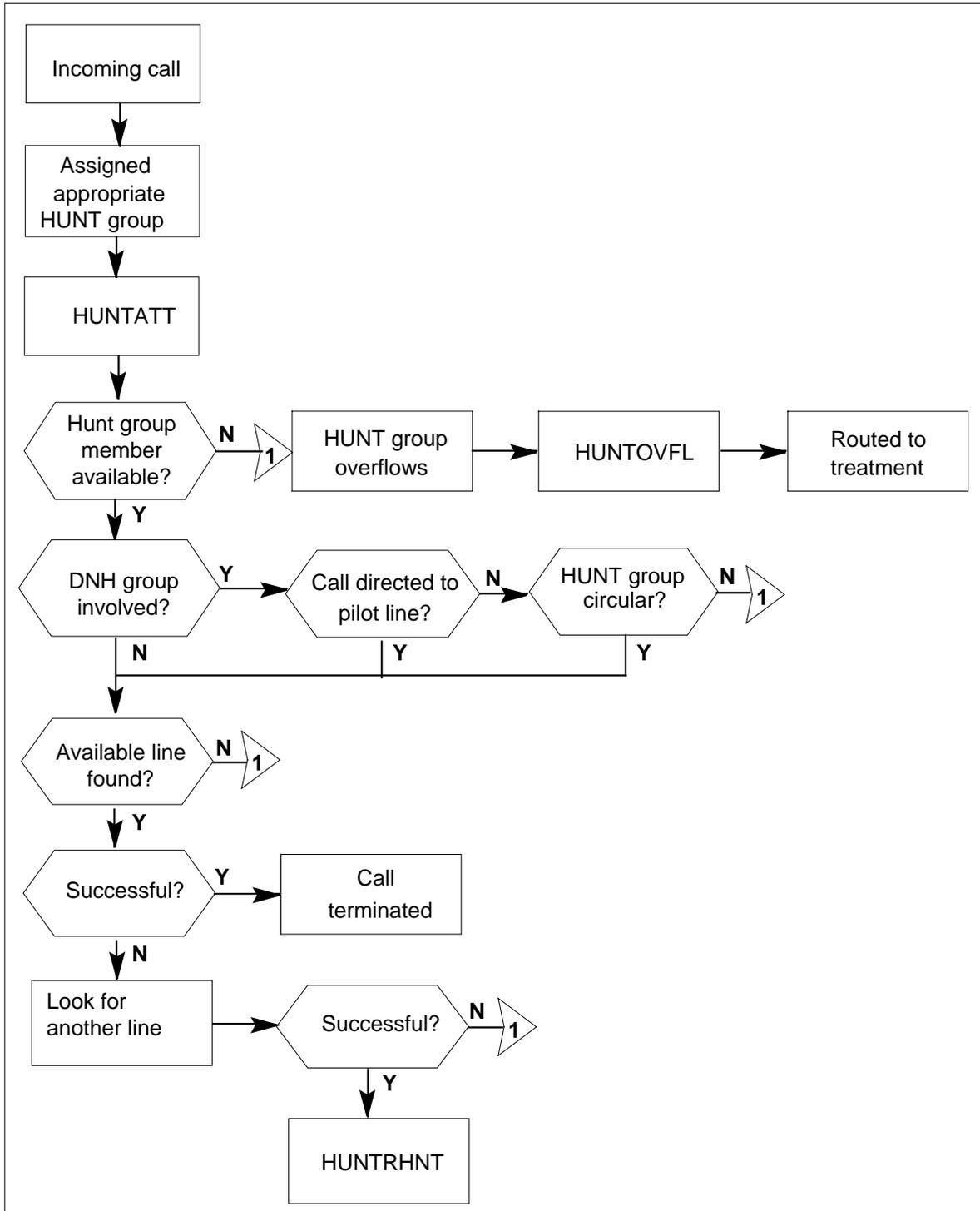
Associated functionality codes

The associated functionality codes of OM group HUNT appear in the following table.

| Functionality | Code |
|------------------------------------|----------|
| Hunt Group Enhancements | NTX007AB |
| Hunt Group Enhancements | NTX472AB |
| Interface to Non-Data Link Console | NTX977AB |

OM group HUNT (continued)

OM group HUNT registers



OM group HUNT (continued)

Register HUNTATT

Hunt attempts (HUNTATT)

Register HUNTATT counts attempts to terminate a call on a line that is a member of a hunt group.

Register HUNTATT release history

Register HUNTATT was introduced in BCS20.

BCS30

Register HUNTATT counts attempts to terminate a call on a line that is a member of a multiple position hunt group.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register HUNTOVFL

Hunt overflow (HUNTOVFL)

Register HUNTOVFL counts failed attempts to terminate a call on a line that is a member of a hunt group. The attempts HUNTOVFL counts fail because no line is available. The lines can be in a call processing busy state or a maintenance busy state.

If the system directs the call at a line other than the pilot line and the hunt group is not circular, overflow can occur. In this case overflow occurs on a directory number hunt (DNH) group. Overflow can occur even if hunt group members are available.

Register HUNTOVFL release history

Register HUNTOVFL was introduced in BCS20.

BCS30

Register HUNTOVFL counts failed attempts to terminate a call on a line that is a member of a multiple position hunt group. Register HUNTOVFL counts attempts that fail because no line is available.

OM group HUNT (continued)

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register HUNTRHNT

Hunt rehunt (HUNTRHNT)

Register HUNTRHNT increases if the system selects an alternate line in a hunt group because of

- a connection failure on the first line
- a ringing failure on the first line
- other problems on the first line

Register HUNTRHNT release history

Register HUNTRHNT was introduced in BCS20.

BCS30

Register HUNTRHNT increases if the system selects an alternate line in a multiple position hunt group.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register HUNTTRF

Hunt traffic

Hunt traffic (HUNTTRF) records call processing traffic on the hunt groups in the office. Each hunt group is scanned every 100 seconds to record the call processing usage for each member. The HUNTTRF register records the number of call processing busy members during the sample time. The register will accumulate between transfer periods.

OM group HUNT (continued)

Register HUNTTRF release history

HUNTTRF was introduced in NA009.

Associated registers

There are no associated register.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register HUNTMNT

Hunt maintenance

Hunt maintenance (HUNTMNT) records maintenance traffic on the hunt groups in the office. Each hunt group is scanned every 100 seconds to record the maintenance usage for each member. The HUNTMNT register records the number of maintenance busy members during the sample time. The register will accumulate between transfer periods.

Register HUNTMNT release history

Register HUNTMNT was introduced in NA009.

Associated registers

There are no associated register.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

OM group IADL

OM Description

International abbreviated dialing (IADL)

The OM group IADL provides information about the use and performance of the Abbreviated Dialing (ADL) feature. This feature allows a subscriber to “speed dial” a telephone number by the use of an abbreviated code. Four sizes of lists are available containing 10, 30, 60 or 100 codes. This OM group provides counts of successful attempts to use, program, and interrogate the feature. This OM group also provides counts of unsuccessful attempts or conditions causing the feature to fail.

Release history

OM group IADL was introduced in BCS24.

Registers

The MAP terminal displays OM group IADL registers appear on the MAP terminal as follows:

| | | | |
|----------|----------|----------|----------|
| AL10PROG | AL10INTG | AL10USGE | AL10CERR |
| AL30PROG | AL30INTG | AL30USGE | AL30CERR |
| AL60PROG | AL60INTG | AL60USGE | AL60CERR |
| ALHNPROG | ALHNINTG | ALHNUSGE | ALHNCERR |
| ADLCERR | | | |

Group structure

OM group IADL provides one tuple per office.

Key field:

There is no associated key field

Info field:

There is no associated info field

Associated OM groups

There are no associated OM groups.

Associated functional groups

There are no associated functional groups.

OM group IADL (continued)

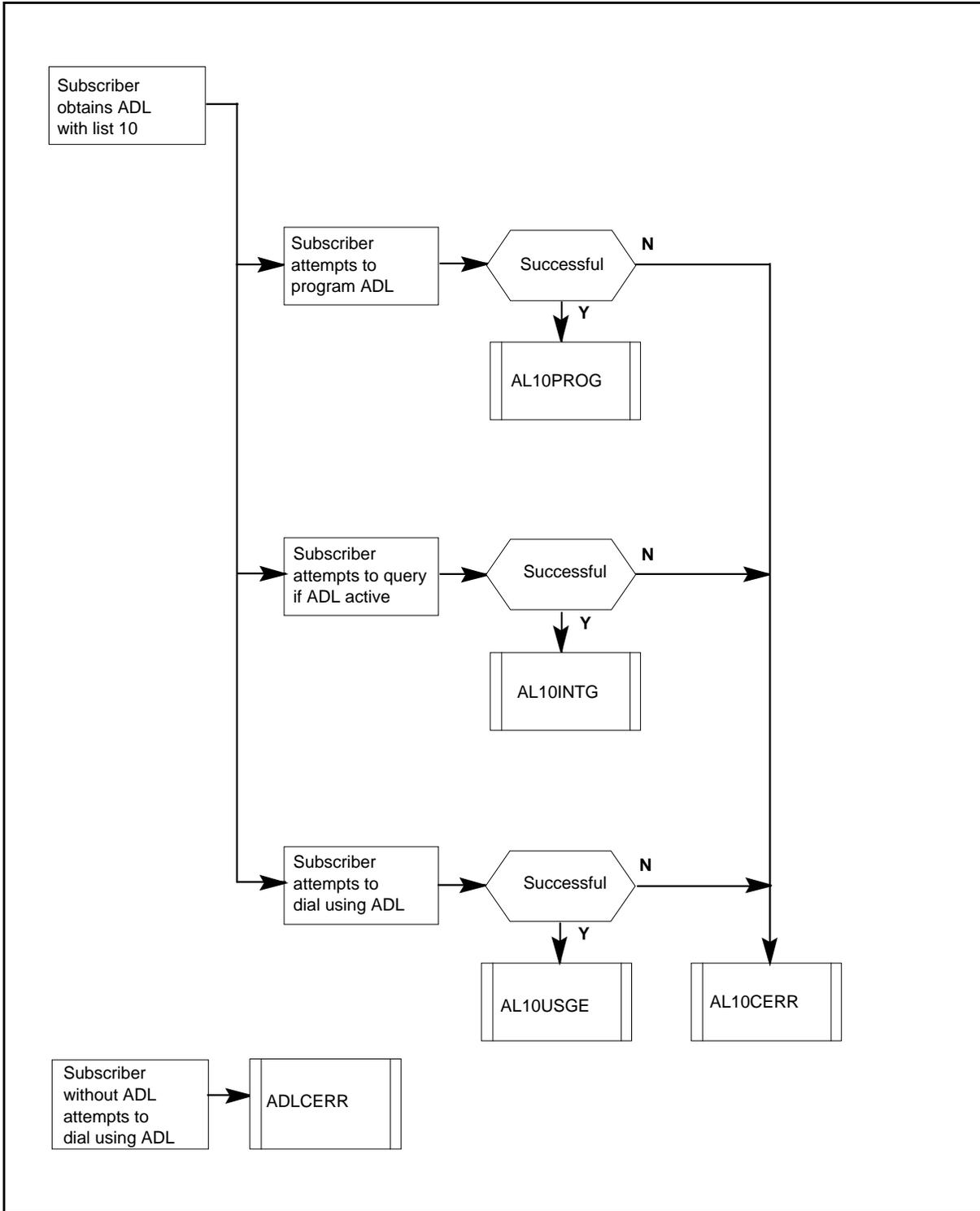
Associated functionality codes

The associated functionality code of OM group IADL appears in the following table.

| Functionality | Code |
|---|----------|
| International - Local Basic (UPCR NTX472AA) | NTX472AB |

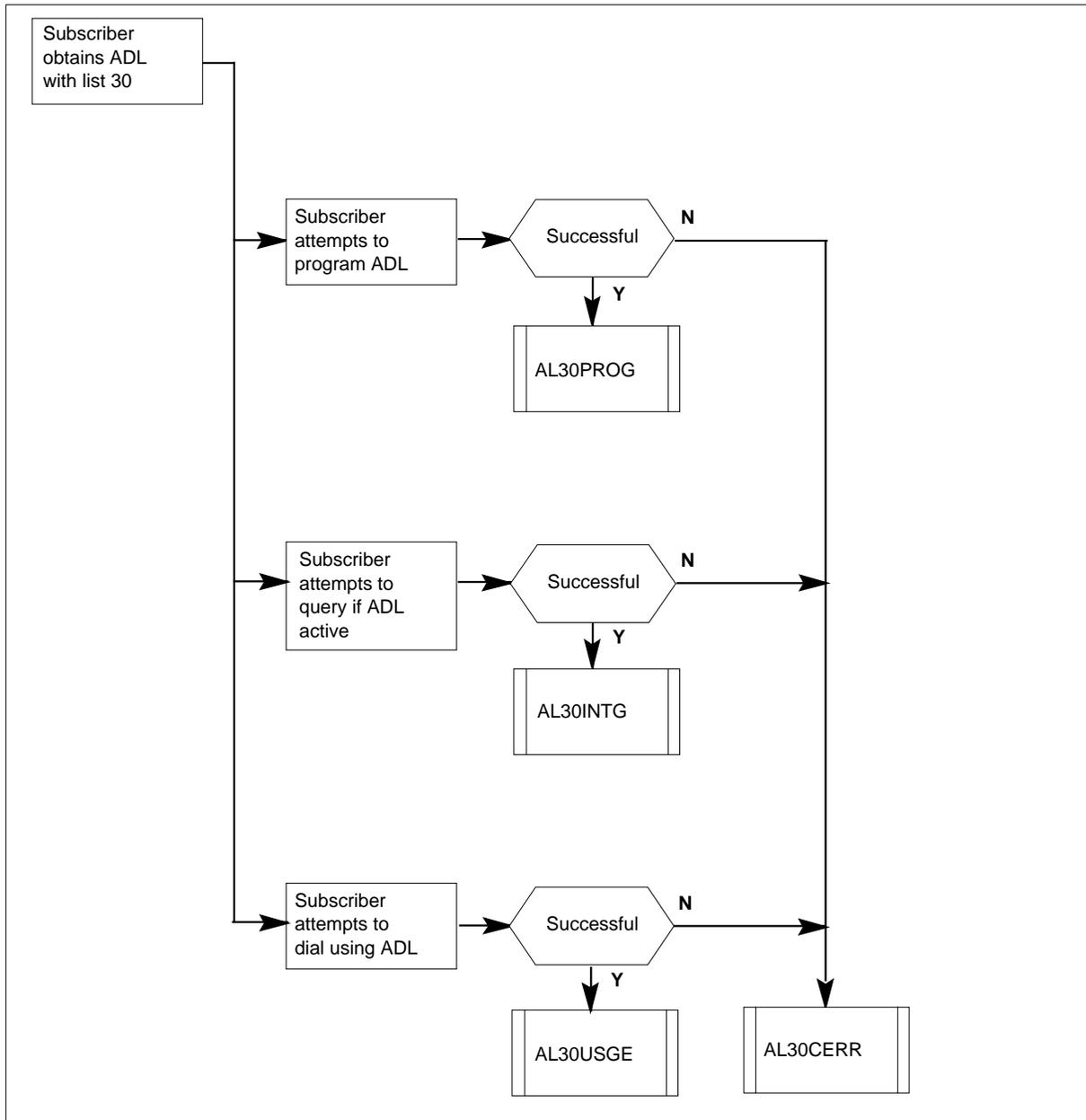
OM group IADL (continued)

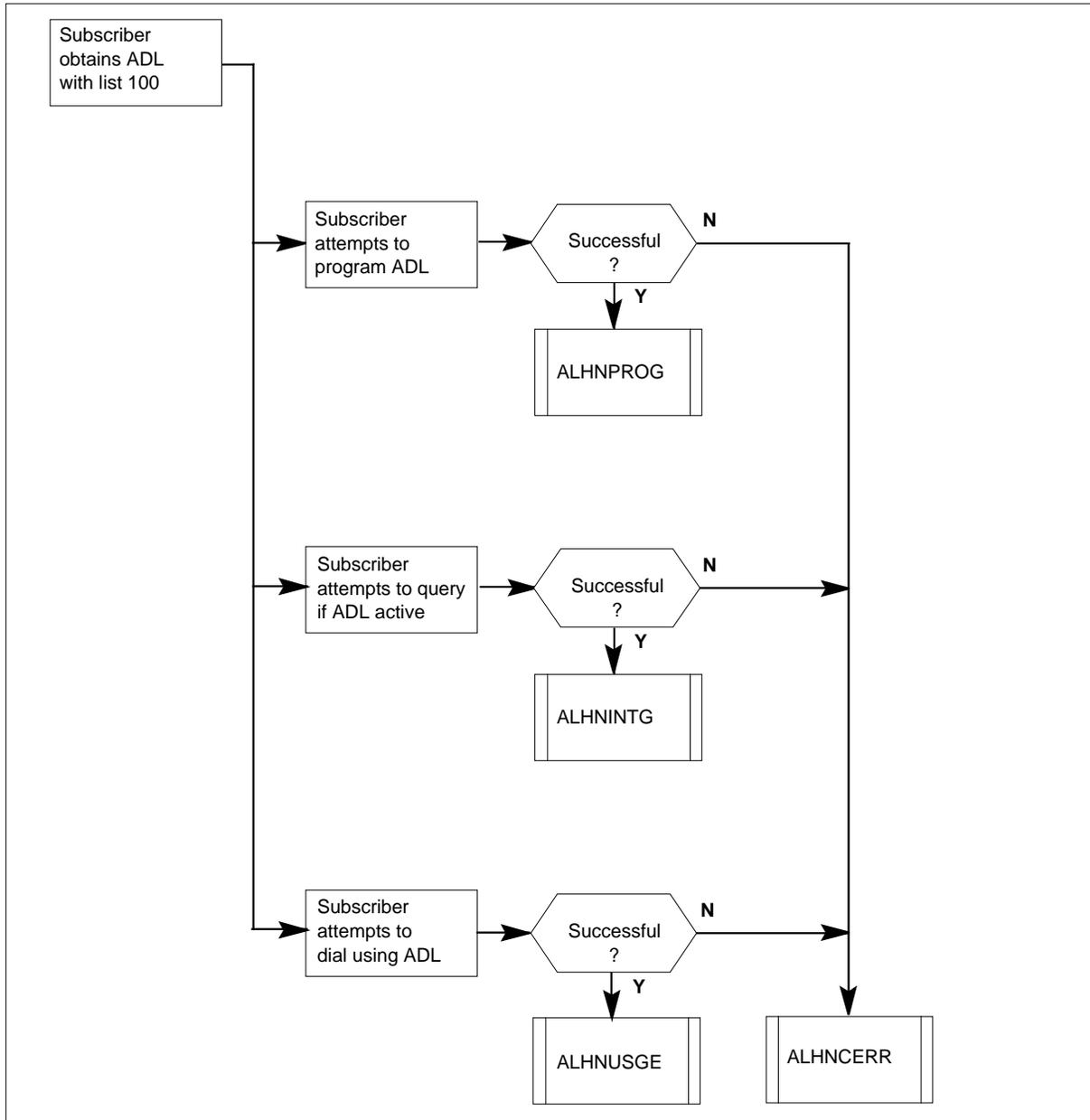
OM group IADL list 10 registers



OM group IADL (continued)

OM group IADL list 30 registers



OM group IADL (continued)**OM group IADL list 100 registers****Register ADLCERR**

Abbreviated dialing customer error (ADLCERR)

Register ADLCERR counts the frequency a subscriber does not use ADL correctly. The subscriber receives the "feature not allowed" tone.

OM group IADL (continued)

Register ADLCERR release history

Register ADLCERR was introduced in BCS24.

Associated registers

There are no associated registers.

Associated logs

The system generates FTR138 when a caller uses or attempts to use a feature and receives a treatment tone.

Register AL10CERR

ADL list 10 customer error (AL10CERR)

Register AL10CERR counts the frequency a subscriber with an ADL list size of 10 numbers does not use ADL correctly. The subscriber receives the "negative acknowledgement" tone followed by the "reorder" tone.

Register AL10CERR release history

Register AL10CERR was introduced in BCS24.

Associated registers

There are no associated registers.

Associated logs

The system generates FTR138 when a caller uses or attempts to use a feature and receives a treatment tone.

Register AL10INTG

ADL list 10 interrogation (AL10INTG)

Register AL10INTG counts the frequency a subscriber with an ADL list size of 10 numbers checks if the feature is activated. The subscriber receives a tone that indicates a confirmation or negative acknowledgement of the action.

Register AL10INTG release history

Register AL10INTG was introduced in BCS24.

Associated registers

There are no associated registers.

Associated logs

The system generates FTR138 when a caller uses or attempts to use a feature and receives a treatment tone.

OM group IADL (continued)

Register AL10PROG

ADL list 10 programming (AL10PROG)

Register AL10PROG counts the frequency a subscriber with an ADL list size of 10 numbers correctly programs a number into the list. The subscriber receives a tone that indicates confirmation of the action.

Register AL10PROG release history

Register AL10PROG was introduced in BCS24.

Associated registers

There are no associated registers.

Associated logs

The system generates FTR138 when a caller uses or attempts to use a feature and receives a treatment tone.

Register AL10USGE

ADL list 10 usage (AL10USGE)

Register AL10USGE counts the frequency a subscriber with an ADL list size of 10 numbers uses the ADL to dial a number.

Register AL10USGE release history

Register AL10USGE was introduced in BCS24.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Register AL30CERR

ADL list 30 customer error (AL30CERR)

Register AL30CERR counts the frequency a subscriber with an ADL list size of 30 numbers does not use ADL correctly. The subscriber receives the "negative acknowledgement" tone and then receives the "reorder" tone.

Register AL30CERR release history

Register AL30CERR was introduced in BCS24.

OM group IADL (continued)

Associated registers

There are no associated registers.

Associated logs

The system generates FTR138 when a caller uses or attempts to use a feature and receives a treatment tone.

Register AL30INTG

ADL list 30 interrogation (AL30INTG)

Register AL30INTG counts the frequency a subscriber with an ADL list size of 30 numbers checks if the feature is activated. The subscriber receives a tone that indicates a confirmation or negative acknowledgement of the action.

Register AL30INTG release history

Register AL30INTG was introduced in BCS24.

Associated registers

There are no associated registers.

Associated logs

The system generates FTR138 when a caller uses or attempts to use a feature and receives a treatment tone.

Register AL30PROG

ADL list 30 programming (AL30PROG)

Register AL30PROG counts the frequency a subscriber with an ADL list size of 30 numbers correctly programs a number into the list. The subscriber receives a tone that indicates confirmation of the action.

Register AL30PROG release history

Register AL30PROG was introduced in BCS24.

Associated registers

There are no associated registers.

Associated logs

The system generates FTR138 when a caller uses or attempts to use a feature and receives a treatment tone.

Register AL30USGE

ADL list 30 usage (AL30USGE)

OM group IADL (continued)

Register AL30USGE counts the frequency a subscriber with an ADL list size of 30 numbers uses the ADL to dial a number.

Register AL30USGE release history

Register AL30USGE was introduced in BCS24.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Register AL60CERR

ADL list 60 customer error (AL60CERR)

Register AL60CERR counts the frequency a subscriber with an ADL list size of 60 numbers attempts to use ADL wrong. The subscriber receives the "negative acknowledgement" tone and then receives the "reorder" tone.

Register AL60CERR release history

Register AL60CERR was introduced in BCS24.

Associated registers

There are no associated registers.

Associated logs

The system generates FTR138 when a caller uses or attempts to use a feature and receives a treatment tone.

Register AL60INTG

ADL list 60 interrogation (AL60INTG)

Register AL60INTG counts the frequency a subscriber with an ADL list size of 60 numbers checks if the feature is activated. The subscriber receives a tone that indicates a confirmation or negative acknowledgement of the action.

Register AL60INTG release history

Register AL60INTG was introduced in BCS24.

Associated registers

There are no associated registers.

OM group IADL (continued)

Associated logs

The system generates FTR138 when a caller uses or attempts to use a feature and receives a treatment tone.

Register AL60PROG

ADL list 60 programming (AL60PROG)

Register AL60PROG counts the frequency a subscriber with an ADL list size of 60 numbers correctly programs a number into the list. The subscriber receives a tone that indicates confirmation of the action.

Register AL60PROG release history

Register AL60PROG was introduced in BCS24.

Associated registers

There are no associated registers.

Associated logs

The system generates FTR138 when a caller uses or attempts to use a feature and receives a treatment tone.

Register AL60USGE

ADL list 60 usage (AL60USGE)

Register AL60USGE counts the frequency a subscriber with an ADL list size of 60 numbers uses the ADL to dial a number.

Register AL60USGE release history

Register AL60USGE was introduced in BCS24.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Register ALHNCERR

ADL list 100 customer error (ALHNCERR)

Register ALHNCERR counts the frequency a subscriber with an ADL list size of 100 numbers does not use ADL correctly. The subscriber receives the "negative acknowledgement" tone followed by the "reorder" tone.

OM group IADL (continued)

Register ALHNCERR release history

Register ALHNCERR was introduced in BCS24.

Associated registers

There are no associated registers.

Associated logs

The system generates FTR138 when a caller uses or attempts to use a feature and receives a treatment tone.

Register ALHNINTG

ADL list 100 interrogation (ALHNINTG)

Register ALHNINTG counts the frequency a subscriber with an ADL list size of 100 numbers checks if the feature is activated. The subscriber receives a tone that indicates a confirmation or negative acknowledgement of the action.

Register ALHNINTG release history

Register ALHNINTG was introduced in BCS24.

Associated registers

There are no associated registers.

Associated logs

The system generates FTR138 when a caller uses or attempts to use a feature and receives a treatment tone.

Register ALHNPROG

ADL list 100 programming (ALHNPROG)

Register ALHNPROG counts the frequency a subscriber with an ADL list size of 100 numbers correctly programs a number into the list. The subscriber receives a tone that indicates confirmation of the action.

Register ALHNPROG release history

Register ALHNPROG is introduced in BCS24.

Associated registers

There are no associated registers.

Associated logs

The system generates FTR138 when a caller uses or attempts to use a feature and receives a treatment tone.

OM group IADL (end)

Register ALHNUSGE

ADL list 100 usage (ADLCERR)

Register ADLCERR counts the frequency a subscriber with an ADL list size of 100 numbers uses the ADL to dial a number.

Register ALHNUSGE release history

Register ALHNUSGE was introduced in BCS24.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

OM group IBNAC

OM description

Integrated Business Network attendant console (IBNAC)

The OM group IBNAC provides information on the number and types of calls handled by individual attendant consoles.

The types of calls IBNAC counts include listed directory number, O type, intercepted, transferred, forwarded, recalled, and a miscellaneous category for any other calls. This DM group also counts the number of times attendants hold, originate, and extend calls.

Usage registers record when consoles are in use, in a talking state, and in a position busy state.

Supervisory personnel can use information collected in IBNAC to manage work loads, monitor productivity, and identify training requirements.

This information can be used to determine if attendant console resources are able to handle the expected number of calls. IBNAC can be used to determine the types of calls that occur most often. IBNAC can also be used to determine the time the attendant needs to handle the calls.

You can schedule IBNAC with the same method as other OM group reports. You can view the counts on the MAP at the INACOM display level. INACOM provides real-time counts on an individual attendant console basis. The ACOM and ACDYMS MAP displays provide information on a sub-group basis.

Individual register descriptions contain information on relationships between the registers and MAP displays. The MAP does not display usage counts.

Release history

OM group IBNAC was introduced in BCS26.

BCS27

IACLDN1, IACLDN2, IACLDN3, IACLDN4, IACLDN5, IACLDN6, IACLDN7, IACLDNR added to count calls to specified listed directory numbers.

Registers

The OM group IBNAC registers appear on the MAP terminal as follows:

OM group IBNAC (continued)

| | | | |
|----------|----------|----------|----------|
| IACLDN | IACINTRP | IACDIAL0 | IACXFRAT |
| IACCFW | IACRECAL | IACSPCL | IACQTOTL |
| IACHLD | IACORIG | IACEXTD | IACPOSBY |
| IACAUTH | IACTOTDR | IACORGDR | IACCTVTU |
| IACBSYDR | IACLDN1 | IACLDN2 | IACLDN3 |
| IACLDN4 | IACLDN5 | IACLDN6 | IACLDN7 |
| IACLDNR | | | |

Group structure

The OM group IBNAC provides one tuple for each attendant console.

Key field:

an integer (0-254) representing an individual attendant console.

Info field:

customer group name defined in table IBNGRP (maximum: 256).

Subgroup number (0-7).

Console CLLI defined in table ATTCONS (maximum: 255).

The CLLI for each attendant console must be defined in table ATTCONS.

Customer group name and subgroup number for each attendant console must be entered in table IBNGRP.

Associated OM groups

The OM group IBNSG provides similar information on the number and types of calls subgroups handle.

Associated functional groups

The IBN Attendant Console is an associated functional group of OM group IBNAC.

OM group IBNAC (continued)

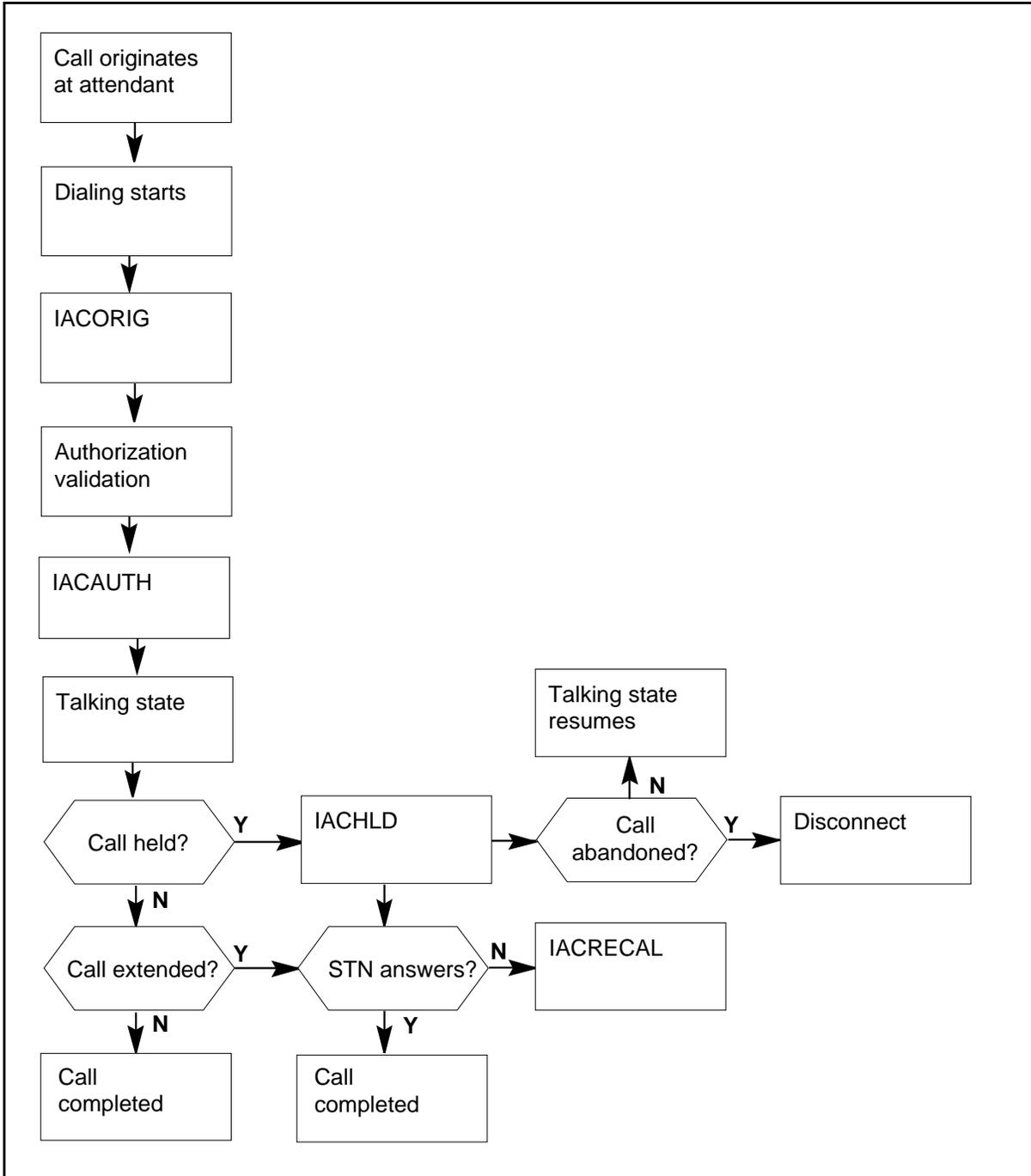
Associated functionality codes

The associated functionality code of OM group IBNAC appears in the following table.

| Functionality | Code |
|---|-------------|
| IBN Attendant Console OM on an Individual Console Basis | NTX856AA |

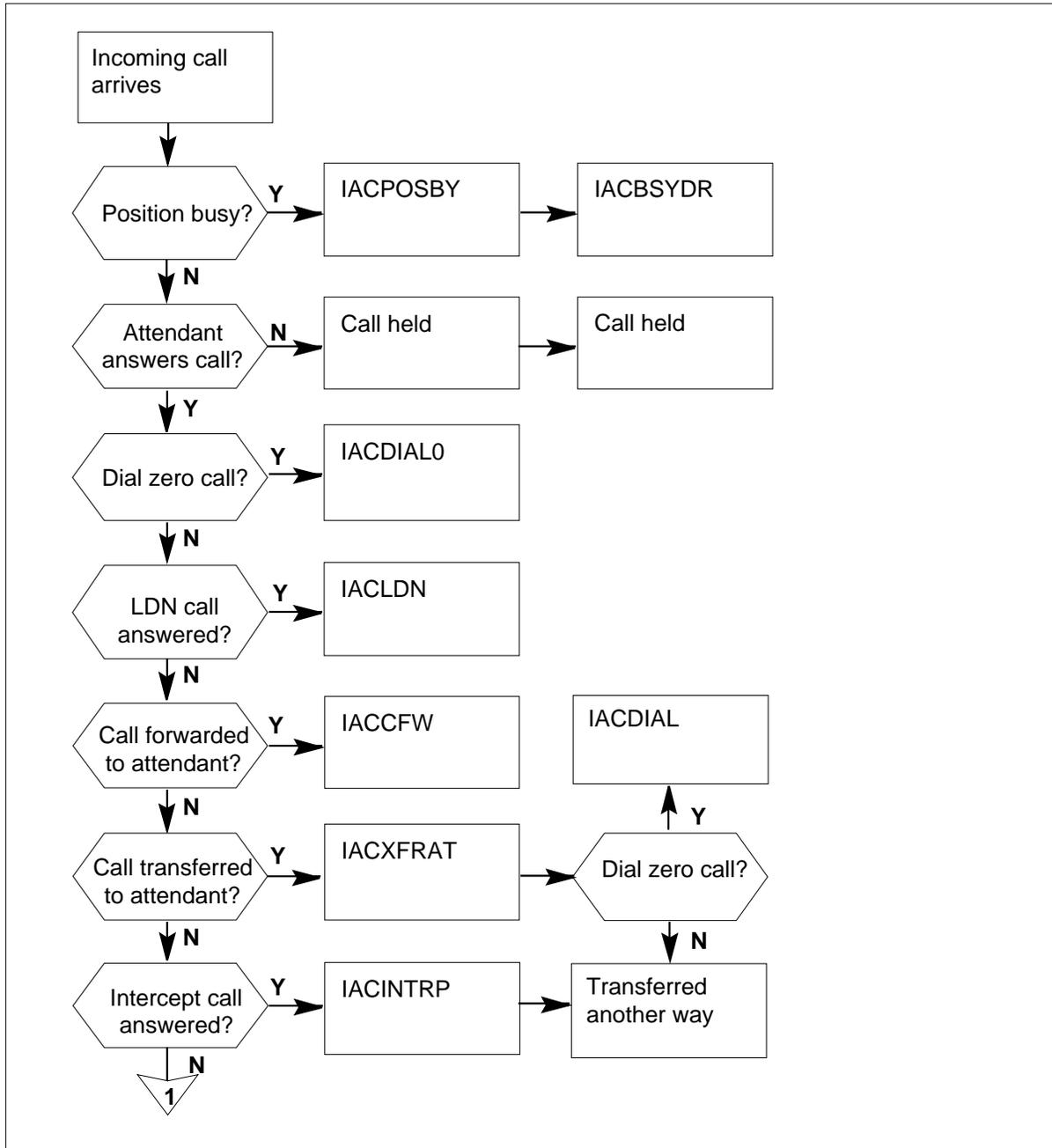
OM group IBNAC (continued)

OM group IBNAC registers - outgoing calls



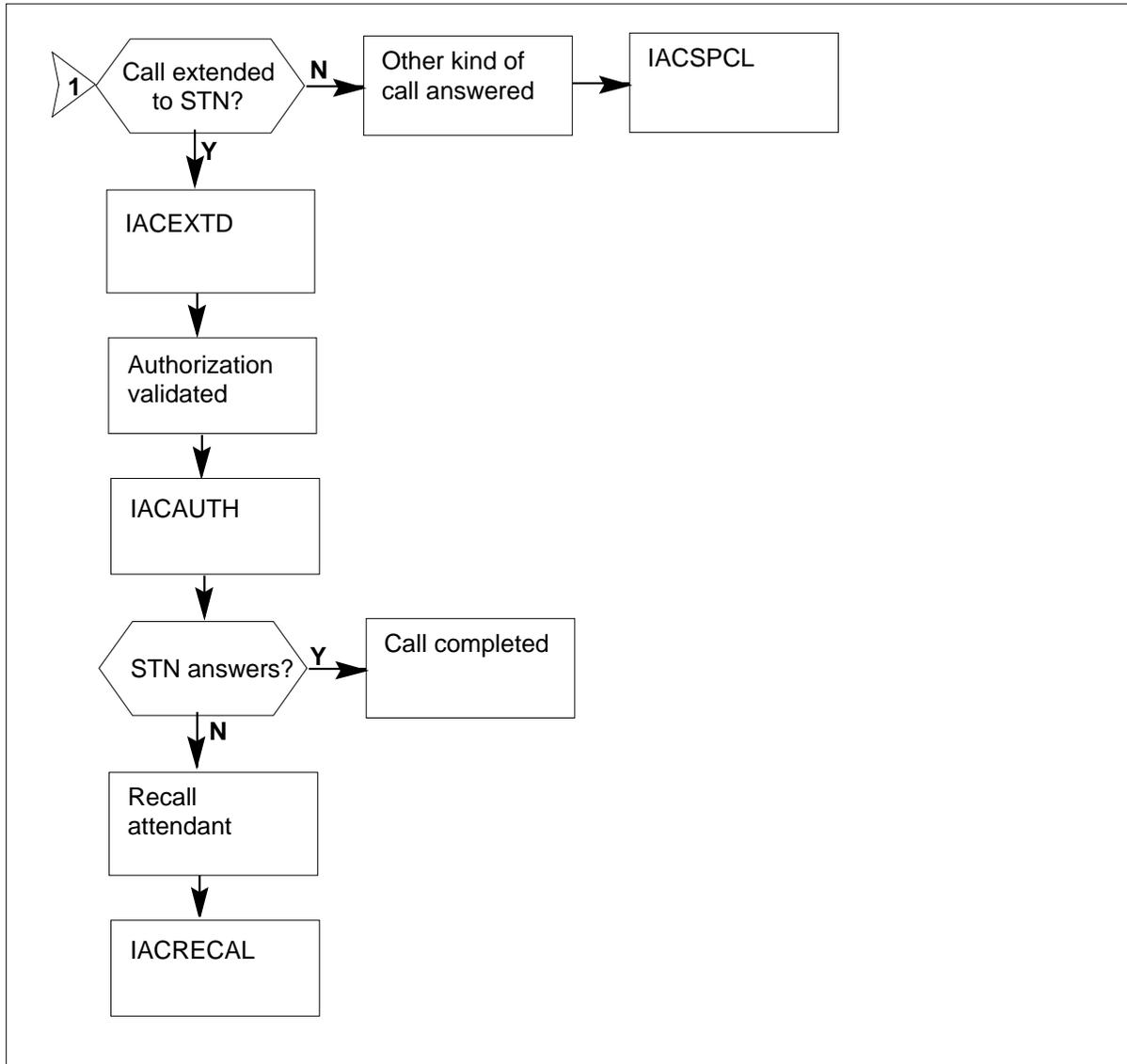
OM group IBNAC (continued)

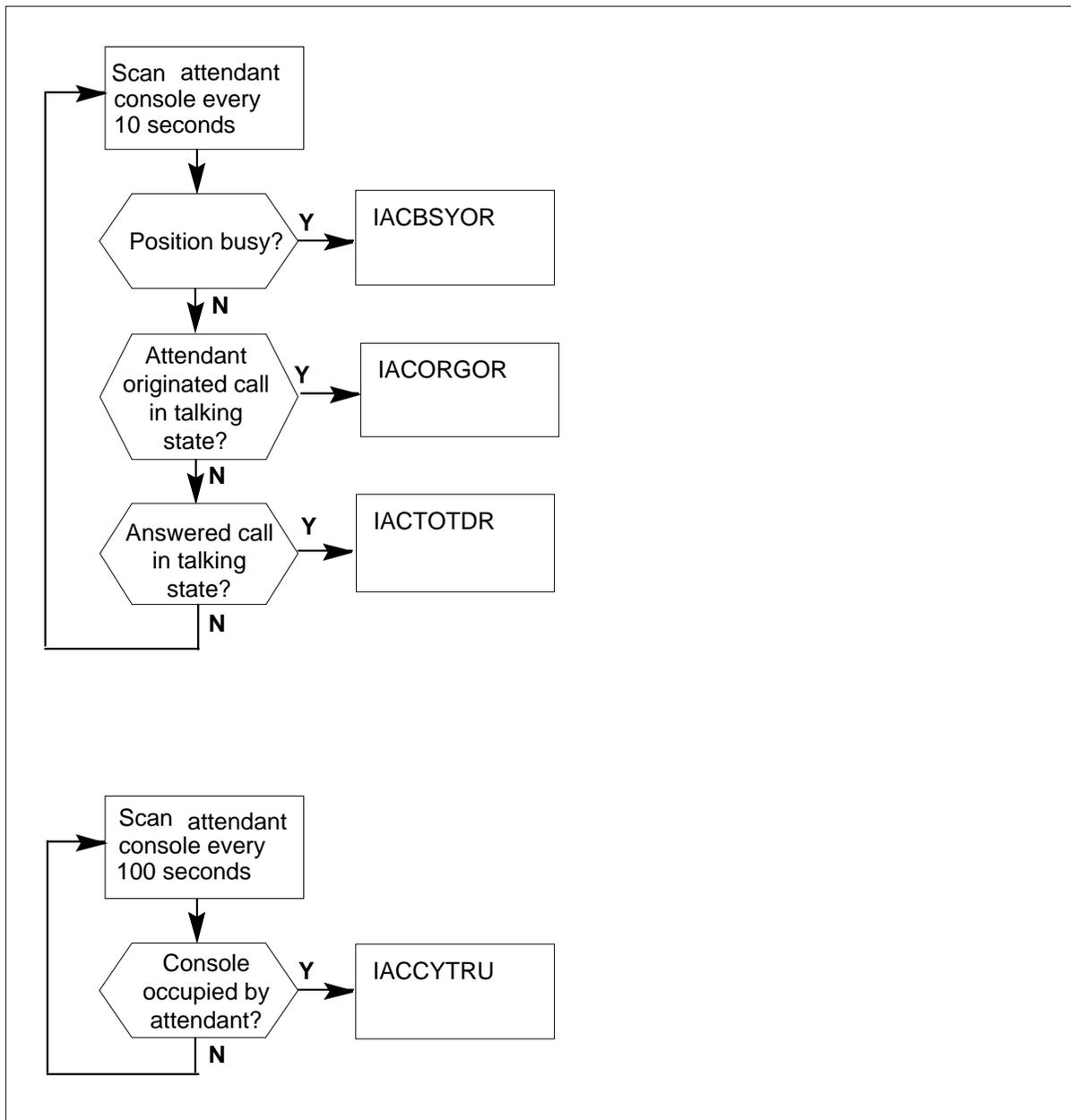
OM group IBNAC registers - incoming calls



OM group IBNAC (continued)

OM group IBNAC registers - incoming calls (continued)



OM group IBNAC (continued)**OM group IBNAC usage registers****Register ICAUTH**

Individual attendant console calls involving authorization codes (ICAUTH)

Register ICAUTH increases when an attendant enters an authorization code and presses an AUTH code key.

OM group IBNAC (continued)

Register ICAUTH release history

Register ICAUTH was introduced in BCS26.

Associated registers

Register IBNSG_AUTHCALL counts the same information for a subgroup.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register IACBSYDR

Individual attendant console position busy duration (IACBSYDR)

Register IACBSYDR is a usage register. The scan rate is 10. IACBSYDR records if an attendant console is in the position busy state. The count starts when an attendant presses the position busy key and stops when position busy deactivates. To deactivate position busy, press the position busy key again if night service is not active. Press the night service key if night service is active.

Register IACBSYDR release history

Register IACBSYDR was introduced in BCS26.

Associated registers

Register IBNSG_ACBSYSDR provides the same information for a subgroup.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register IACCFW

Individual attendant console answered call forward calls (IACCFW)

Register IACCFW increases when an attendant answers a forwarded call.

Register IACCFW release history

Register IACCFW was introduced in BCS26.

Associated registers

Register IBNSG_ANSCFW provides the same information for a subgroup.

OM group IBNAC (continued)

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register IACCTVTU

Individual attendant console activated usage (IACCTVTU)

Register IACCTVTU is a usage register. The scan rate is slow: 100 seconds. IACCTVTU records if an attendant occupies a console. An attendant console is occupied if the headset is plugged in, even if the console is in position busy or night service mode.

Register IACCTVTU release history

Register IACCTVTU was introduced in BCS26.

Associated registers

Register IBNSG_ACTVTU provides the same information for a subgroup.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register IACDIAL0

Individual attendant console answered dial 0 (IACDIAL0)

Register IACDIAL0 increases when an attendant answers a dial 0 type call. Calls counted by IACDIAL0 include:

- all station dial 0 regardless of station type
- automatic station originations routed to the attendant
- incoming calls on attendant trunks

Register IACDIAL0 release history

Register IACDIAL0 was introduced in BCS26.

Associated registers

Register IBNSG_ANSDIAL0 provides the same information for a subgroup.

OM group IBNAC (continued)

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register IACEXTD

Individual attendant console extended calls (IACEXTD)

Register IACEXTD counts calls that an attendant extends. The register increases after the attendant dials the destination number.

Register IACEXTD release history

Register IACEXTD was introduced in BCS26.

Associated registers

Register IBNSG_EXTCALL provides the same information for a subgroup.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register IACHLD

Individual attendant console hold calls (IACHLD)

Register IACHLD increases when an attendant presses the hold key or a loop key to place a call on hold while remaining active on another loop key.

Register IACHLD release history

Register IACHLD was introduced in BCS26.

Associated registers

Register IBNSG_HLDCALL provides the same information for a subgroup.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

OM group IBNAC (continued)

Register IACINTRP

Individual attendant console answered intercept (IACINTRP)

Register IACINTRP increases when an attendant answers an intercept-type call. Intercept type calls include:

- station intercept
- incoming intercepted DID
- calls incoming on intercept trunks

Register IACINTRP release history

Register IACINTRP was introduced in BCS26.

Associated registers

Register IBNSG_ANSINTRP provides the same information for a subgroup.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register IACLDN

Individual attendant console listed directory number (IACLDN)

Register IACLDN increases when an attendant answers a call to its assigned listed directory number(s).

Register IACLDN release history

Register IACLDN was introduced in BCS26.

Associated registers

Register IBNSG_ANSLDN provides the same information for a subgroup.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register IACLDN1

Individual attendant console listed directory number one (IACLDN1)

OM group IBNAC (continued)

Register IACLDN1 counts call attempts for a listed directory number (LDN) designated as LDN1 for separate attendant consoles.

This register counts call attempts for an LDN in table WRDN if the LDNREPRT field is set to Y for yes.

Register IACLDN1 release history

Register IACLDN1 was introduced in BCS27.

Associated registers

Register IBNSG_LDN1 provides the same information for a subgroup.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register IACLDN2

Individual attendant console listed directory number two (IACLDN2)

Register IACLDN2 counts call attempts for a listed directory number (LDN) designated as LDN2 for separate attendant consoles.

This register counts call attempts for an LDN in table WRDN if the LDNREPRT field is set to Y for yes.

Register IACLDN2 release history

Register IACLDN2 was introduced in BCS27.

Associated registers

Register IBNSG_LDN2 provides the same information for a subgroup.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register IACLDN3

Individual attendant console listed directory number three (IACLDN3)

OM group IBNAC (continued)

Register IACLDN3 counts call attempts for a listed directory number (LDN) designated as LDN3 for separate attendant consoles.

This register counts call attempts for an LDN in table WRDN if the LDNREPRT field is set to Y for yes.

Register IACLDN3 release history

Register IACLDN3 was introduced in in BCS27.

Associated registers

Register IBNSG_LDN3 provides the same information for a subgroup.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register IACLDN4

Individual attendant console listed directory number four (IACLDN4)

Register IACLDN4 counts call attempts for a listed directory number (LDN) designated as LDN4 for separate attendant consoles.

This register counts call attempts for an LDN in table WRDN if the LDNREPRT field is set to Y for yes.

Register IACLDN4 release history

Register IACLDN4 was introduced in BCS27.

Associated registers

Register IBNSG_LDN4 provides the same information for a subgroup.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register IACLDN5

Individual attendant console listed directory number five (IBNAC_IACLDN5)

OM group IBNAC (continued)

Register IBNAC_IACLDN5 counts call attempts for a listed directory number (LDN) designated as LDN5 for separate attendant consoles.

This register counts call attempts for an LDN in table WRDN if the LDNREPRT field is set to Y for yes.

Register IACLDN5 release history

Register IACLDN5 was introduced in BCS27.

Associated registers

Register IBNSG_LDN5 provides the same information for a subgroup.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register IACLDN6

Individual attendant console listed directory number six (IBNAC_IACLDN6)

Register IBNAC_IACLDN6 counts call attempts for a listed directory number (LDN) designated as LDN6 for separate attendant consoles.

This register counts call attempts for an LDN in table WRDN if the LDNREPRT field is set to Y for yes.

Register IACLDN6 release history

Register IACLDN6 was introduced in BCS27.

Associated registers

Register IBNSG_LDN6 provides the same information for a subgroup.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register IACLDN7

Individual attendant console listed directory number seven (IBNAC_IACLDN7)

OM group IBNAC (continued)

Register IBNAC_IACLDN7 counts call attempts for a listed directory number (LDN) designated as LDN7 for separate attendant consoles.

This register counts call attempts for an LDN in table WRDN if the LDNREPRT field is set to Y for yes.

Register IACLDN7 release history

Register IACLDN7 was introduced in BCS27.

Associated registers

Register IBNSG_LDN7 provides the same information for a subgroup.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register IACLDNR

Individual attendant console routed listed directory number (IACLDNR)

Register IACLDNR counts call attempts to a routed listed directory number (LDN) that an attendant answers.

Register IACLDNR release history

Register IACLDNR was introduced in BCS27.

Associated registers

Register IBNSG_LDNR provides the same information for a subgroup.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register IACORGDR

Individual attendant console duration of originated calls (IACORGDR)

Register IACORGDR is a usage register. The scan rate is 10. IACORGDR records if an attendant-originated call is in the talking state. An attendant-originated call starts when an idle loop key is pressed, and stops

OM group IBNAC (continued)

when the hold key, release key, or other loop key is pressed while the attendant is active on a different loop.

Register IACORGDR release history

Register IACORGDR was introduced in BCS26.

Associated registers

Register IBNSG_ORIGDR provides the same information for a subgroup.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register IACORIG

Individual attendant console originated calls (IACORIG)

Register IACORIG counts calls that originate at an attendant console. The register increases each time the attendant presses an idle loop key and starts to dial.

Register IACORIG release history

Register IACORIG was introduced in BCS26.

Associated registers

Register IBNSG_ORIGCALL provides the same information for a subgroup.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register IACPOSBY

Individual attendant console position busy (IACPOSBY)

Register IACPOSBY increases when an attendant presses the position busy key to place the attendant console in the position busy state.

Register IACPOSBY release history

Register IACPOSBY was introduced in BCS26.

OM group IBNAC (continued)

Associated registers

Register IBNSG_ACPOSBY provides the same information for a subgroup.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register IACQTOTL

Individual attendant console (IACQTOTL)

Register IACQTOTL counts the calls an attendant answers. The register increases when the attendant presses a loop or incoming call identification (ICI) key. IACQTOTL increases each time one of the following registers increases:

- IACLDN
- IACINTRP
- IACDIAL0
- IACXFRAT
- IACCFW
- IACRECAL
- IACSPCL

Register IACQTOTL release history

Register IACQTOTL was introduced in BCS26.

Associated registers

Register IBNSG_QTOTAL provides the same information for a subgroup.

$$\text{IACQTOTAL} = \text{IACLDN} + \text{IACINTRP} + \text{IACDIAL0} + \text{IACXFRAT} + \text{IACCFW} + \text{IACRECAL} + \text{IACSPCL}$$
Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

OM group IBNAC (continued)

Register IACRECAL

Individual attendant console answered timed recalls (IACRECAL)

Register IACRECAL increases when an attendant answers a recall that results from use of Call Waiting, Camp-on or No-Answer features.

Register IACRECAL release history

Register IACRECAL was introduced in BCS26.

Associated registers

Register IBNSG_RECALS provides the same information for a subgroup.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register IACSPCL

Individual attendant console answered miscellaneous calls (IACSPCL)

Register IACSPCL increases when an attendant answers a call type that any of the following registers do not count:

- IACLDN
- IACINTRP
- IACDIAL0
- IACXRAT
- IACCFW
- IACRECAL

Register IACSPCL release history

Register IACSPCL was introduced in BCS26.

Associated registers

Register IBNSG_SPCLCCT provides the same information for a subgroup.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register IACTOTDR

Individual attendant console total duration of answered calls (IACTOTDR)

Register IACTOTDR is a usage register. The scan rate is 10. IACTOTDR records if an answered call is in the talking state. The call starts when the attendant presses a loop or ICI key. The call stops when the attendant presses the hold key, release key, or other loop key while the attendant is active on a different loop.

Register IACTOTDR release history

Register IACTOTDR was introduced in BCS26.

Associated registers

Register IBNSG_TOTDR provides the same information for a subgroup.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register IACXFRAT

Individual attendant console answered transfer to attendant (IACXFRAT)

Register IACXFRAT counts calls that a switch flash and dial 0 or 2 transfers from a station by switch flash and dial 0 or 2. IACXFRAT also counts calls that are recalled to the attendant over tie trunks.

Register IACXFRAT release history

Register IACXFRAT was introduced in BCS26.

Associated registers

Register IBNSG_ANSXFRAT provides the same information for a subgroup.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

OM group IBNGRP

OM description

Integrated Business Network Group (IBNGRP)

The IBNGRP registers provide information about the use of Integrated Business Network (IBN) call processing by a customer group. A customer group is a set of lines that belong to a group of individuals that request special services.

Registers in this group are package dependent. The basic registers, NORIG0, NORIG1, DOD, STNSTN, NDIAL0, CXFRTOAT, CXFR, GINTRCPT, GINCATOT, and CODEBLK appear in feature package NTX100AA. The remaining registers will only appear if the required feature package is present.

The group intercom feature in feature package NTX106AA allows a customer to use abbreviated dialing to call a part of a set group. Register GICORIG increases when the customer uses the group intercom feature.

The security code feature in package NTX573AA and NTX574AA allows the system to assign a code to an IBN station directory number (DN). The code allows the system to restrict feature activation for the DN. Register SECINVAL counts the invalid security codes dialed.

The ring again (RAG) feature in package NTX106AA allows a station to monitor a busy DN. The station can also notify the user when the DN becomes free. Registers SRGACMPL, RGADEACT, RGADELTN, and RGAOVWRT count successful and unsuccessful RAG completions, deactivations, deletions, and overwrites.

The permanent hold feature in package NTX106AA allows a business set to hold an active call against the DN of the business set. The business set can then retrieve the held call from the same station. Registers HLDRES, HLDSUCC, HLDRCLL, and HLDABAN, count the following calls:

- correctly held calls
- calls held without completion
- held calls that abandon
- held calls that recall

The inspect key feature in package NTXE40AA allows a business set user to display information about keys. These keys include feature keys, directory number keys, and calling numbers. Register INSPECT increases when the business set user uses the inspect key.

OM group IBNGRP (continued)**Release history**

The OM group IBNGRP was introduced before BCS20.

APC005

Functionality added to support Meridian Digital Centrex (MDC) features on Global Peripheral Platform (GPP) lines for Australian telephone user part (ATUP), ANSI ISDN user part (ANSI ISUP), and Australian ISUP (AISUP) trunk signaling.

BCS30

Register CXFRTOAT was deleted from OM group IBNGRP.

BCS28

Register INSPECT was introduced in BCS28.

BCS23

Registers ACALARM, CXFR deleted from OM group IBNGRP.

BCS22

Registers ACALARM, CXFR set to zero

Registers

The OM group IBNGRP register appears on the MAP terminal as follows:

| | | | |
|----------|----------|----------|---------|
| NORIG0 | NORIG1 | DOD | STNSTN |
| NDIAL0 | GINTRCPT | GINCATOT | CODEBLK |
| GICORIG | SECINVAL | SRGACMPL | RGAEACT |
| RGADELTN | RGAOVWRT | HLDFRES | HLDSUCC |
| HLDRCLL | HLDABAN | INSPECT | |

Group structure

OM group IBNGRP provides one tuple for each customer group.

Key field:

There is no associated key field

Info field:

OMIBNGINFO, the customer group as field CUSTNAME defines in table CUSTENG. One customer name for each customer group

OM group IBNGRP (continued)

(maximum 4095). The tuple number of IBNGRP functions as the key in the OMSHOW command.

Parameter CUSTOMER_GROUP_IBNGRP_OM_COUNT in table OFCENG specifies the data store for the customer group operational measurements.

Parameter NO_OF_FTR_DATA_BLKs in table OFCENG specifies the number of feature data blocks available.

Parameter NO_OF_FTR_CONTROL_BLKs in table OFCENG specifies the number of feature control blocks available.

Parameter FTRQ2WAREAS in table OFCENG specifies the maximum number of FTRQ two-word areas the engineering interval requires.

Parameter FTRQ8WAREAS in table OFCENG specifies the maximum number of FTRQ8WAREAS blocks the ring again feature requires.

Parameter FTRQAGENTS in table OFCENG specifies the number of agents that can have the ring again feature waiting or active.

The group intercom feature is assigned in the DF field of table IBNFEAT.

The security code feature is assigned in the DF field of table IBNFEAT and the FEAT field of table KSETFEAT.

The ring again feature is assigned in the OPTLIST field of table IBNLINES and the FEAT field of table KSETLINES.

The permanent hold feature is assigned in the OPTLIST field of table IBNLINES.

The inspect key feature is assigned in the DF field of table KSETFEAT.

Associated OM groups

The OM group IBNSG provides information about the activities of a customer group attendant consoles by subgroup.

Associated functional groups

The following are associated functional groups of OM group IBNGRP:

- Integrated Business Network (IBN)
- 500/2500 set

OM group IBNGRP (continued)

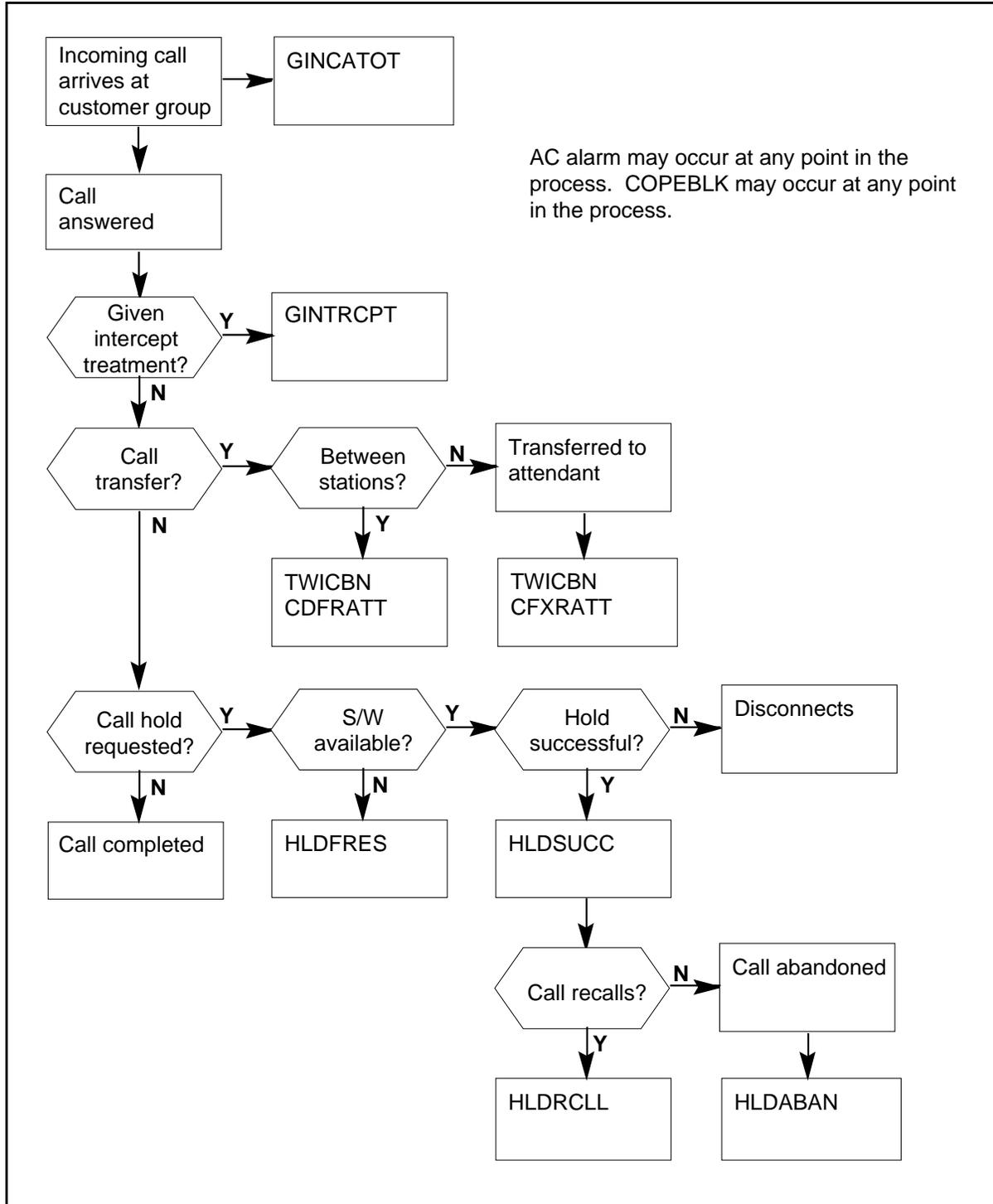
Associated functionality codes

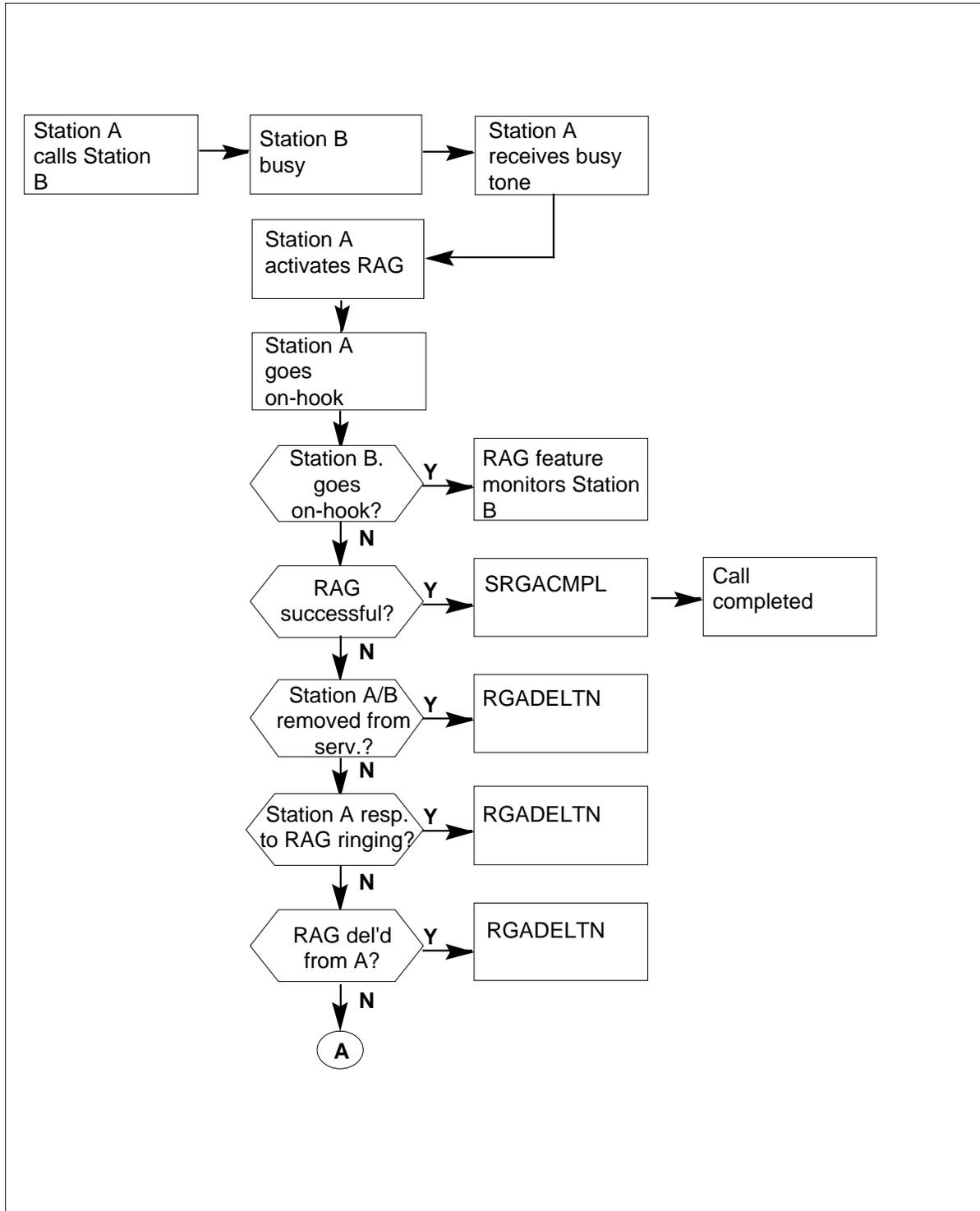
The associated functionality codes of OM group IBNGRP appear in the following table.

| Functionality | Code |
|--|-------------|
| Integrated Business Networks - Basic (IBN) | NTX100A |
| IBN Proprietary Business Set | NTX106AA |
| IBN Security Code - 2500 Only | NTX573AA |
| IBN Security Code - 2500 and business sets | NTX574AA |
| Meridian Business Set Inspect Key | NTXE40AA |

OM group IBNGRP (continued)

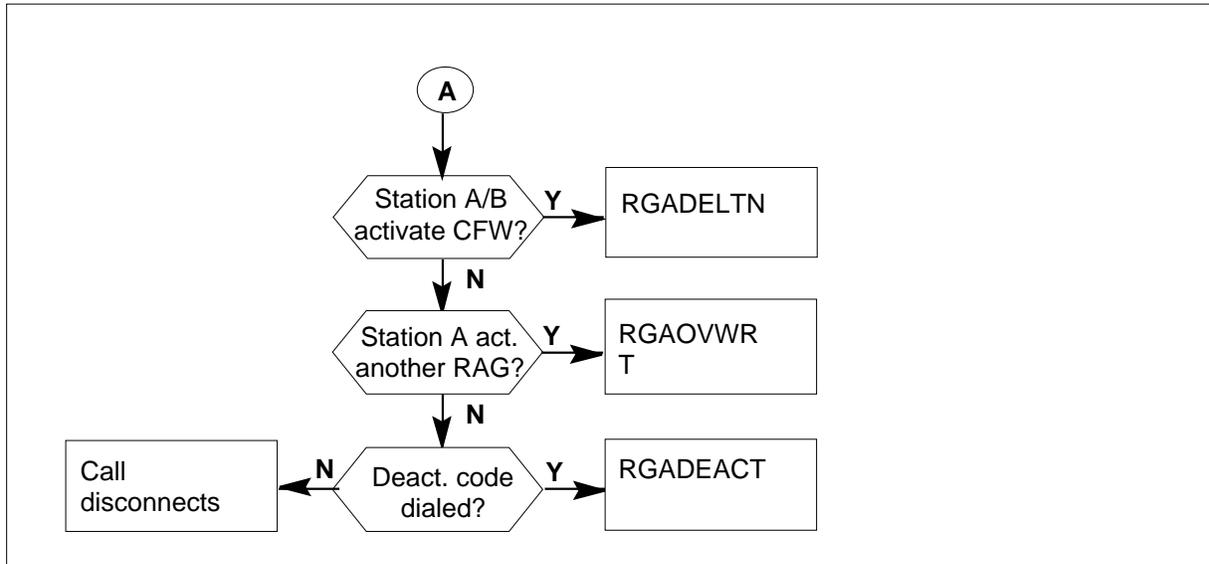
OM group IBNGRP registers: incoming call to IBN customer group



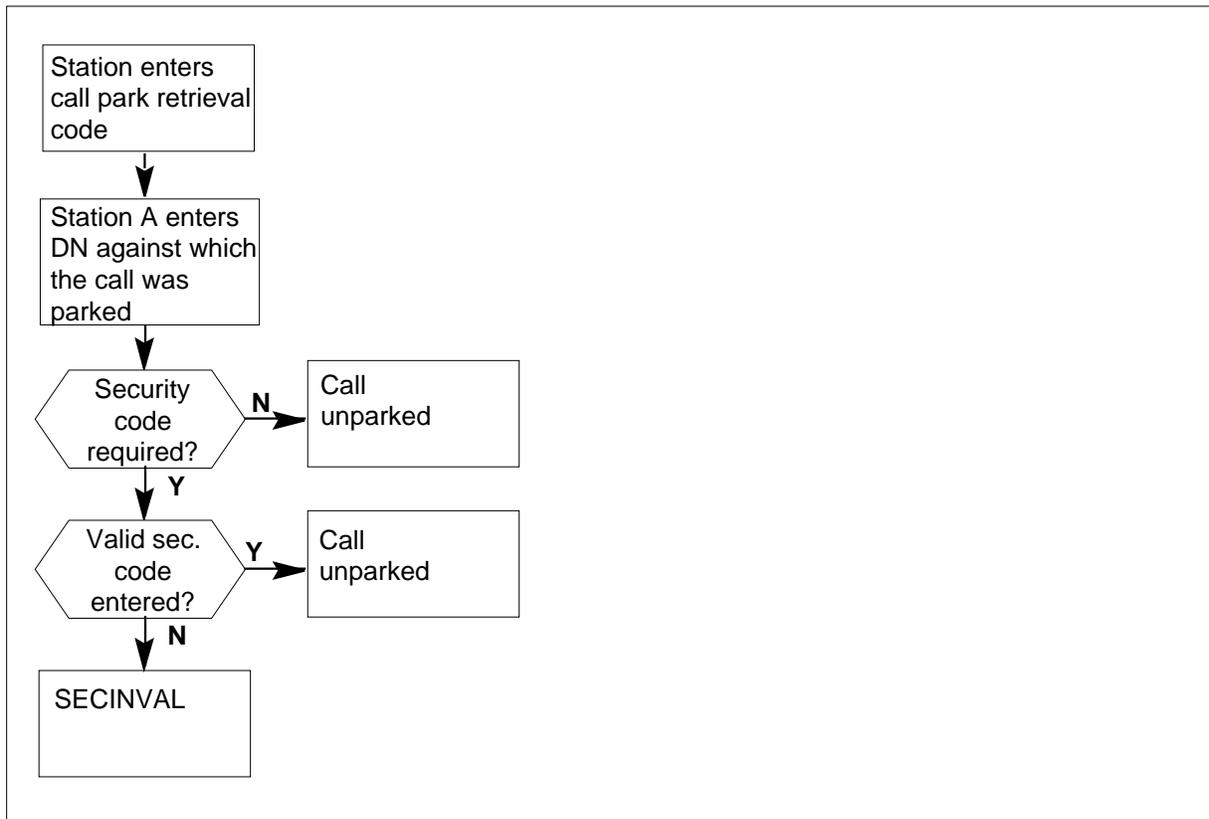
OM group IBNGRP (continued)**OM group IBNGRP registers: ring again feature xx**

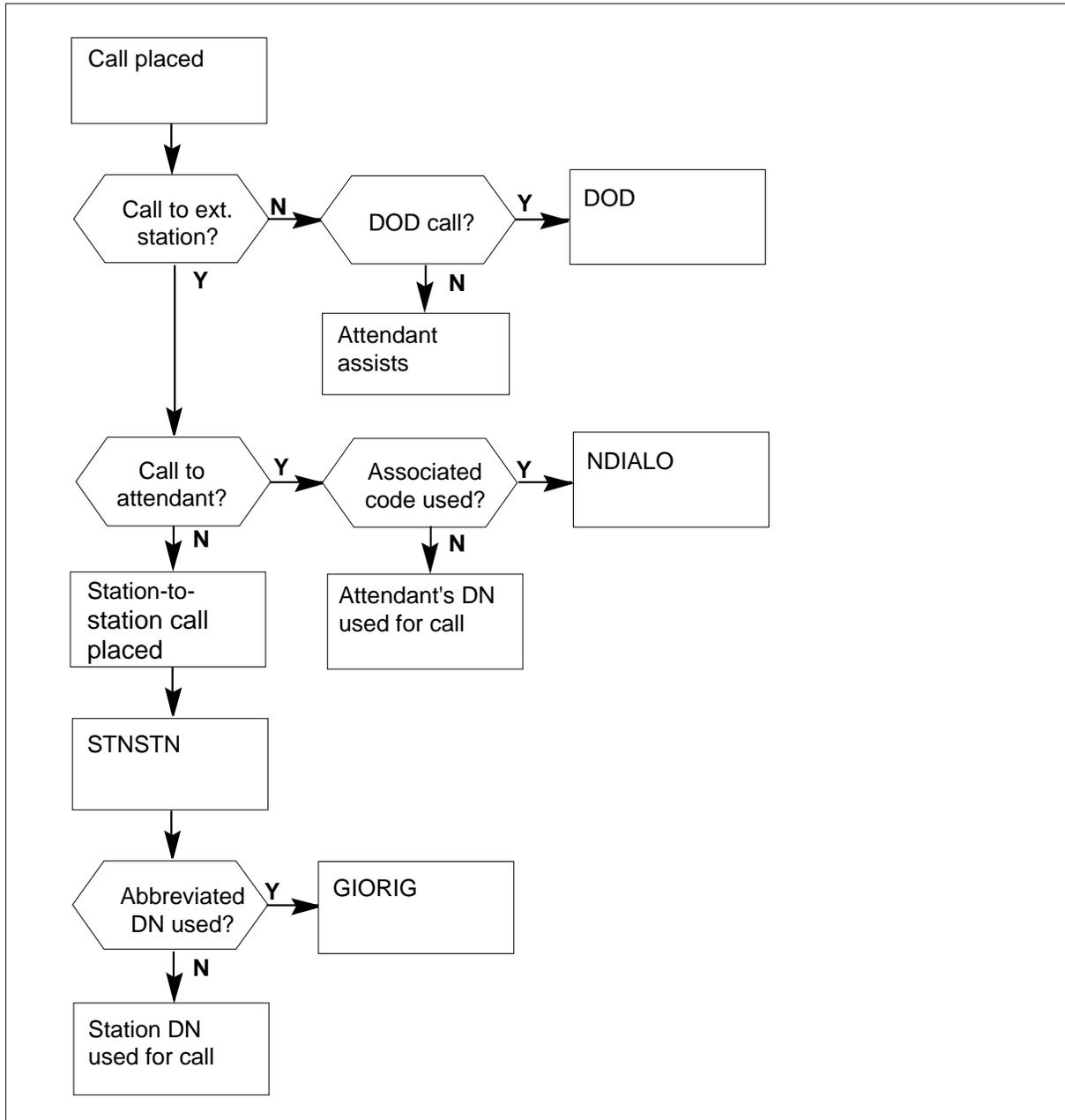
OM group IBNGRP (continued)

OM group IBNGRP registers: ring again feature xx (continued)



OM group IBNGRP registers: security code feature



OM group IBNGRP (continued)**OM group IBNGRP registers: internal calls****Register CODEBLK**

Code blocked (CODEBLK)

Register CODEBLK increases when the system blocks a call because of integrated business networks (IBN) code restrictions.

OM group IBNGRP (continued)

Register CODEBLK release history

Register CODEBLK was introduced before BCS20.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register DOD

Direct outward dial (DOD)

Register DOD increases when a station or attendant places a direct outward dial (DOD) call.

To dial a DOD call to the exchange network without attendant help, dial the DOD access code. After you receive a second dial tone, dial the external number. Access codes are assigned in table IBNXLA. Calls that are successful and not successful are counted.

Register DOD release history

Register DOD was introduced before BCS20.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register GICORIG

Group intercom originations (GICORIG)

Register GICORIG counts abbreviated dialing calls that originate from business sets and integrated business network (IBN) lines in the customer group.

OM group IBNGRP (continued)

The group intercom (GIC) feature allows customers to use abbreviated dialing to call a member of a set group.

This register increases when a station uses the GIC feature and the call is answered or not answered.

Register GICORIG release history

Register GICORIG was introduced before BCS20.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register GINCATOT

Group incoming total (GINCATOT)

Register GINCATOT counts incoming calls for a customer group.

Register GINCATOT counts calls between customer groups in the same switch only when field INTRAGOUP in table IBNXLA is set to N.

Register GINCATOT release history

Register GINCATOT was introduced before BCS20.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register GINTRCPT

Given intercept (GINTRCPT)

Register GINTRCPT increases when a call is given intercept treatment.

OM group IBNGRP (continued)

Register GINTRCPT also counts originating, terminating, and tandem class of service and code restriction problems. The register also counts attendant attempts to complete calls to denied incoming (DIN) stations.

The register does not count calls that the system routes to announcements, tones, and attendant answers.

Register GINTRCPT release history

Register GINTRCPT was introduced before BCS20.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register HLDABAN

Held abandons (HLDABAN)

Register HLDABAN counts held calls that abandon the line before the calls recall.

Register HLDABAN release history

Register HLDABAN was introduced before BCS20.

Associated registers

HLDSUCC - HLDABAN = held calls that do not abandon the line before the calls recall.

Associated logs

There are no associated logs.

Extension registers

There are no associated registers.

Register HLDFRES

Held call failures resources (HLDFRES)

Register HLDFRES counts calls that the system cannot place on hold because of not enough of feature data blocks. No software resource treatment is given.

OM group IBNGRP (continued)

Parameter NO_OF_FTR_DATA_BLKs in table OFCENG specifies the number of data blocks available.

Register HLDFRES release history

Register HLDFRES was introduced before BCS20.

Associated registers

When no software resource treatment is given, register TRSNOSR in OM group TRMTRS increases.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register HLDRCLL

Held recalls (HLDRCLL)

Register HLDRCLL counts calls on hold that recall.

When station A has the recall option, HLDRCLL increases when that recall is to occur. The recall can be in the form of receiver off-hook (ROH) tone or ringing.

Register HLDRCLL release history

Register HLDRCLL was introduced before BCS20.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register HLDSUCC

Held successful (HLDRCLL)

HLDRCLL counts calls that are correctly placed on hold.

OM group IBNGRP (continued)

Register HLDSUCC release history

Register HLDSUCC was introduced before BCS20.

Associated registers

Register HLDABDN counts held calls that abandon the line before the calls recall.

$HLDSUCC - HLDABDN =$ held calls that did not abandon the line before the calls recall.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register INSPECT

IBN INSPECT key use (INSPECT)

Register INSPECT increases when the you use the inspect key on a display electronic business set.

You can use the inspect key to view associated information for feature or directory number (DN) key on a business set. The inspect key also displays call information on an incoming call. The information displays even if the call is not answered.

Register INSPECT release history

Register INSPECT was introduced before BCS20.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register NDIAL0

Number of dial 0 attempts (NDIAL0)

OM group IBNGRP (continued)

Register NDIAL0 increases when a station or tie trunk user dials a code to reach an attendant instead of dialing the attendant's directory number.

NDIAL0 includes:

- station dial attendant
- automatic line originations if the route is to the attendant

Note: Attempts and seizures on incoming attendant trunks do not increase.

Register NDIAL0 release history

Register NDIAL0 was introduced before BCS20.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register NORIG0

Number of originations (NORIG0)

Register NORIG0 counts calls that originated at a station or with an attendant.

The register counts permanent signal partial dial calls. The register does not count attendant extended calls.

Register NORIG0 release history

Register NORIG0 was introduced before BCS20.

Associated registers

Register NORIG in OM group OFZ counts originating calls that the central controller (CC) recognizes.

Associated logs

There are no associated logs.

Extension Registers

NORIG1

OM group IBNGRP (continued)

Register RGADEACT

Ring again deactivation (RGADEACT)

Register RGADEACT counts ring again (RAG) attempts the user deletes when the user dials the release code.

RAG release occurs when a user with a pending RAG request activates RAG for another directory number.

Register RGADEACT release history

Register RGADEACT was introduced before BCS20.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register RGADELTN

Ring again deletions (RGADELTN)

Register RGADELTN counts ring again (RAG) attempts that the system deletes for any of the following reasons:

- no response to RAG ringing
- lines removed from service
- RAG feature deleted from caller
- call forwarding activated

Register RGADELTN release history

Register RGADELTN was introduced before BCS20.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

OM group IBNGRP (continued)

Extension registers

There are no extension registers.

Register RGAOVWRT

Ring again overwrites (RGAOVWRT)

Register RGAOVWRT increases when a ring again (RAG) overwrite occurs.

A RAG overwrite occurs when station A has a ring again request pending to a busy station B. If station A dials another busy station and activates RAG again, the new RAG request overwrites the previous RAG request.

Register RGAOVWRT release history

Register RGAOVWRT was introduced before BCS20.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register SECINVAL

Security code invalid (SECINVAL)

Register SECINVAL increases when a user dials an invalid security code number.

A security code allows a code to be assigned to an integrated business network (IBN) station directory number. The code can restrict feature activation for the directory number.

Register SECINVAL release history

Register SECINVAL was introduced before BCS20.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

OM group IBNGRP (continued)

Extension registers

There are no extension registers.

Register SRGACMPL

Successful ring again completions (SRGACMPL)

Register SRGACMPL counts successful ring again (RAG) attempts.

RAG allows a station to monitor a busy directory number in the same customer group. Rag also allows a station to notify the user when the directory number becomes free.

Register SRGACMPL release history

Register SRGACMPL was introduced before BCS20.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register STNSTN

Station to station (STNSTN)

Register STNSTN increases when a station dials another station within a customer group.

STNSTN does not count call transfer attempts by stations or attendant-originated calls.

Register STNSTN release history

Register STNSTN was introduced before BCS20.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

OM group IBNGRP (end)

Extension registers

There are no extension registers.

OM group IBNSG

OM description

Integrated business network subgroup (IBNSG)

The OM group (IBNSG) provides information about the activities of customer group attendant consoles by the subgroup.

A customer group is a set of lines which belong to a group of individuals that request special services. Subgroups allow customers to have attendant-type calls that the subgroups answer locally during the day or busy hours. Subgroups centralize this function. A customer group can have up to seven subgroups. A subgroup can have up to 32 consoles.

Release history

The OM group IBNSG was introduced before BCS20.

BCS30

Register LPHLDREC increases when an attendant re-enters any held loop where a call hold recall is in effect.

BCS29

Register SERIALRC was introduced in BC329.

BCS26

Register ORIGCALL, EXTDCALL, HLDCALL, AUTHCALL, TOTDR, ORIGDIR, ACPOSBY, ACBSYSDR were introduced on BCS26.

Registers

The OM group IBNSG registers appear on the MAP terminal as follows:

| | | | |
|----------|----------|----------|----------|
| WRKTMU | LPU | CWINQU | ACTVTU |
| LPOVFL | ATQDFL | ABNDN | NSCALLS |
| ANSLDN | ANSINTRP | ANSDIAL0 | ANSXFRAT |
| CWRECALL | CORECALL | DARECALL | RECALLS |
| SPCLCCT | ANSCFW | LPHLDREC | ANSDELAY |
| QTOTAL | ORIGCALL | EXTDCALL | HLDCALL |
| AUTHCALL | TOTDR | ORIGDR | ACPOSBY |
| ACBSYSDR | SERIALRC | | |

Group structure

OM group IBNSG provides one tuple for each subgroup.

OM group IBNSG (continued)

Key field:

There are no key fields.

Info field:

Contains the customer group name and subgroup name. This field has an integer range (0 to 2047) and represents the 256 customer groups that can have attendant consoles and the eight possible subgroups within each customer group (256 x 8 = 2048).

Associated OM groups

The OM group IBNAC provides equal measurements for each attendant console in a subgroup.

Associated functional groups

The following are the associated functional groups of OM group IBNSG:

- Integrated Business Network
- Attendant Consoles

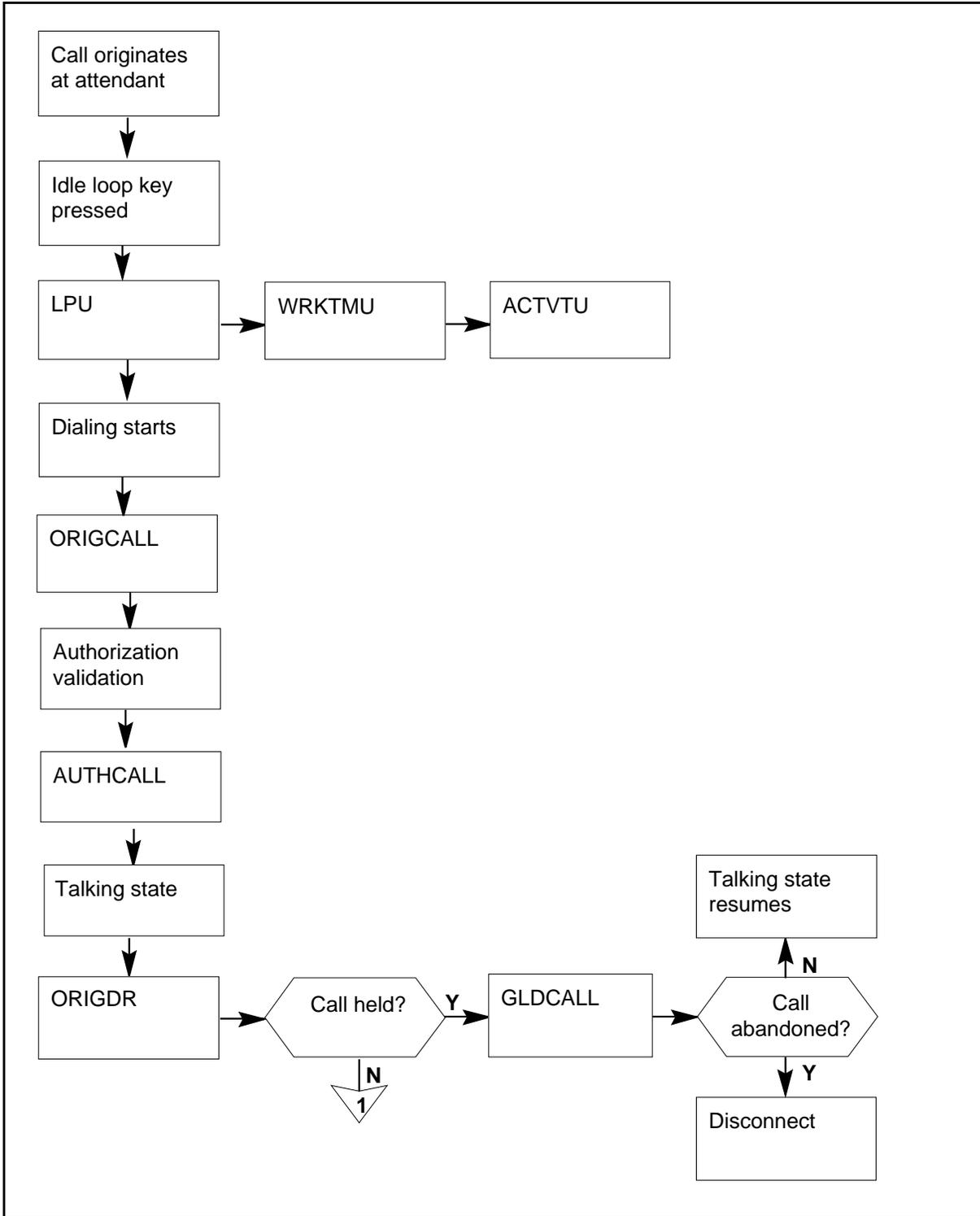
Associated functionality codes

The associated functionality codes for OM group IBNSG appear in the following table.

| Functionality | Code |
|--|----------|
| Integrated Business Networks - Basic (IBN) | NTX100AA |

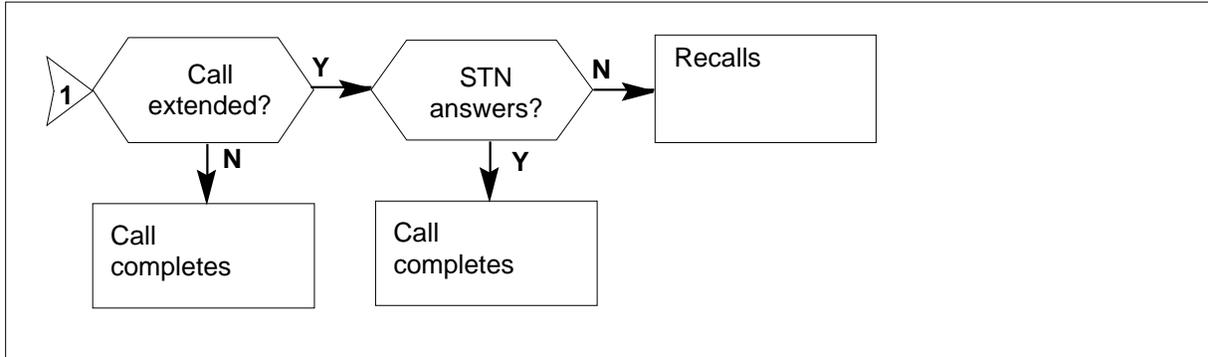
OM group IBNSG (continued)

OM group IBNSG registers - outgoing calls



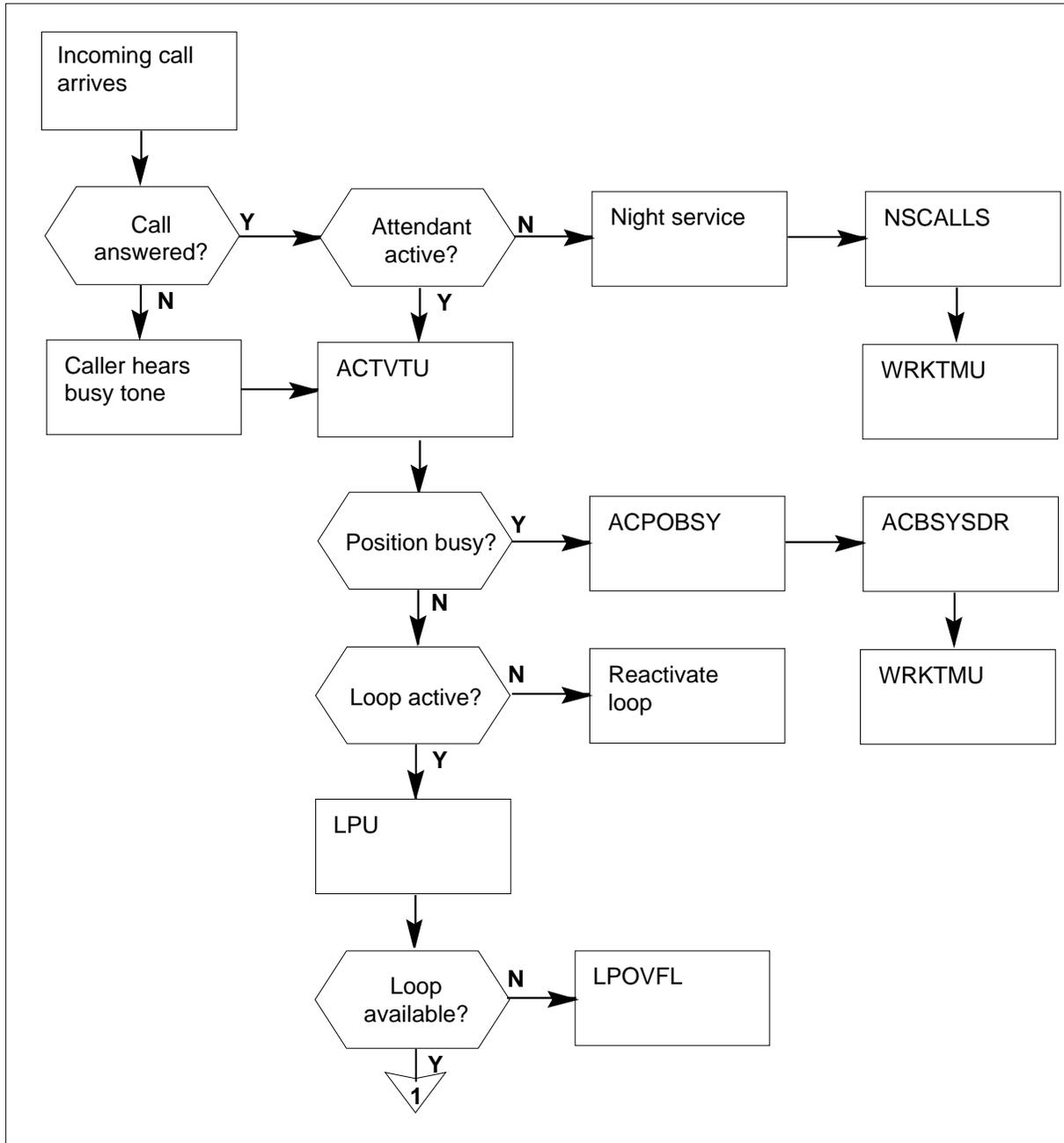
OM group IBNSG (continued)

OM group IBNSG registers - outgoing calls (continued)



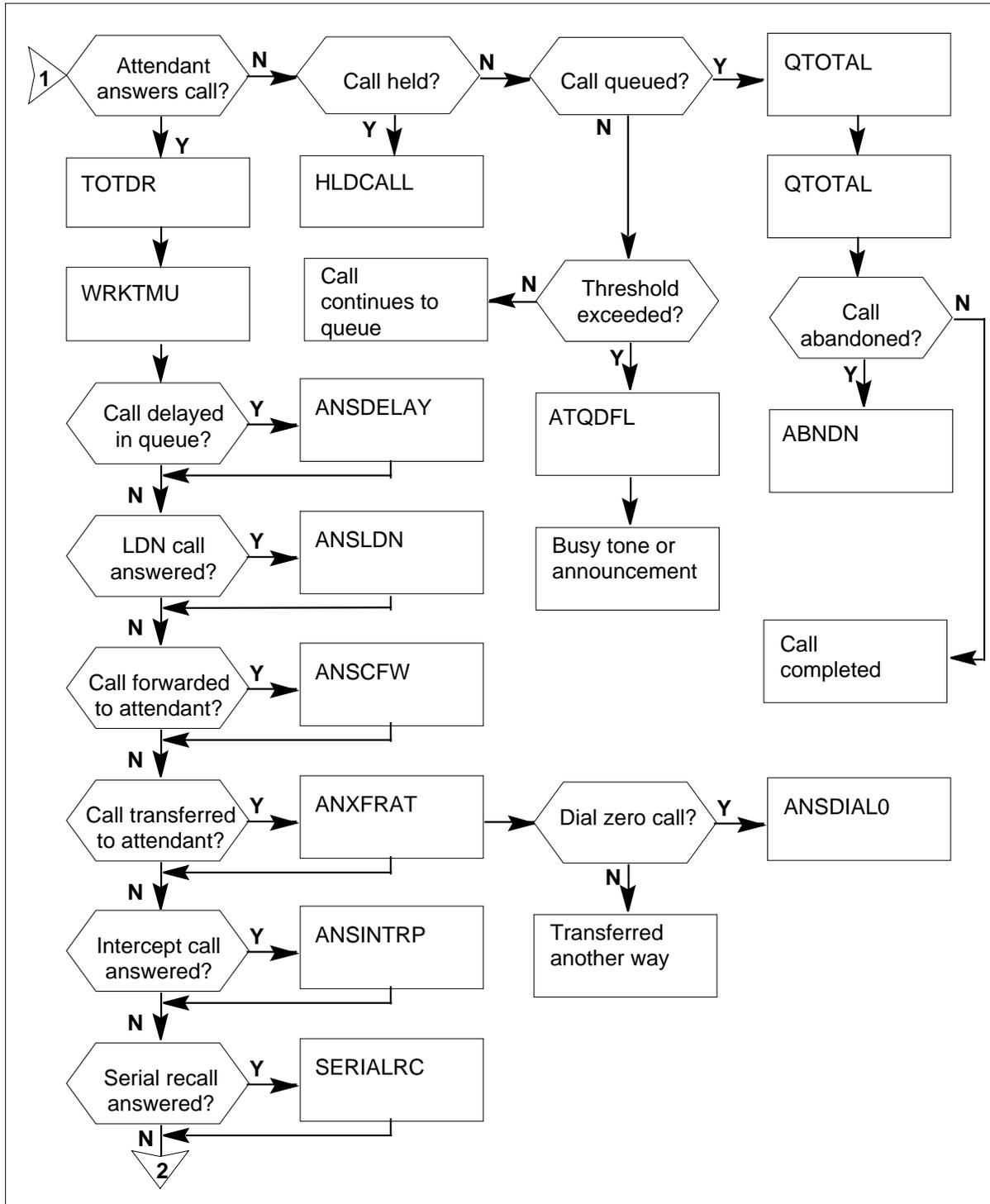
OM group IBNSG (continued)

OM group IBNSG registers - incoming calls



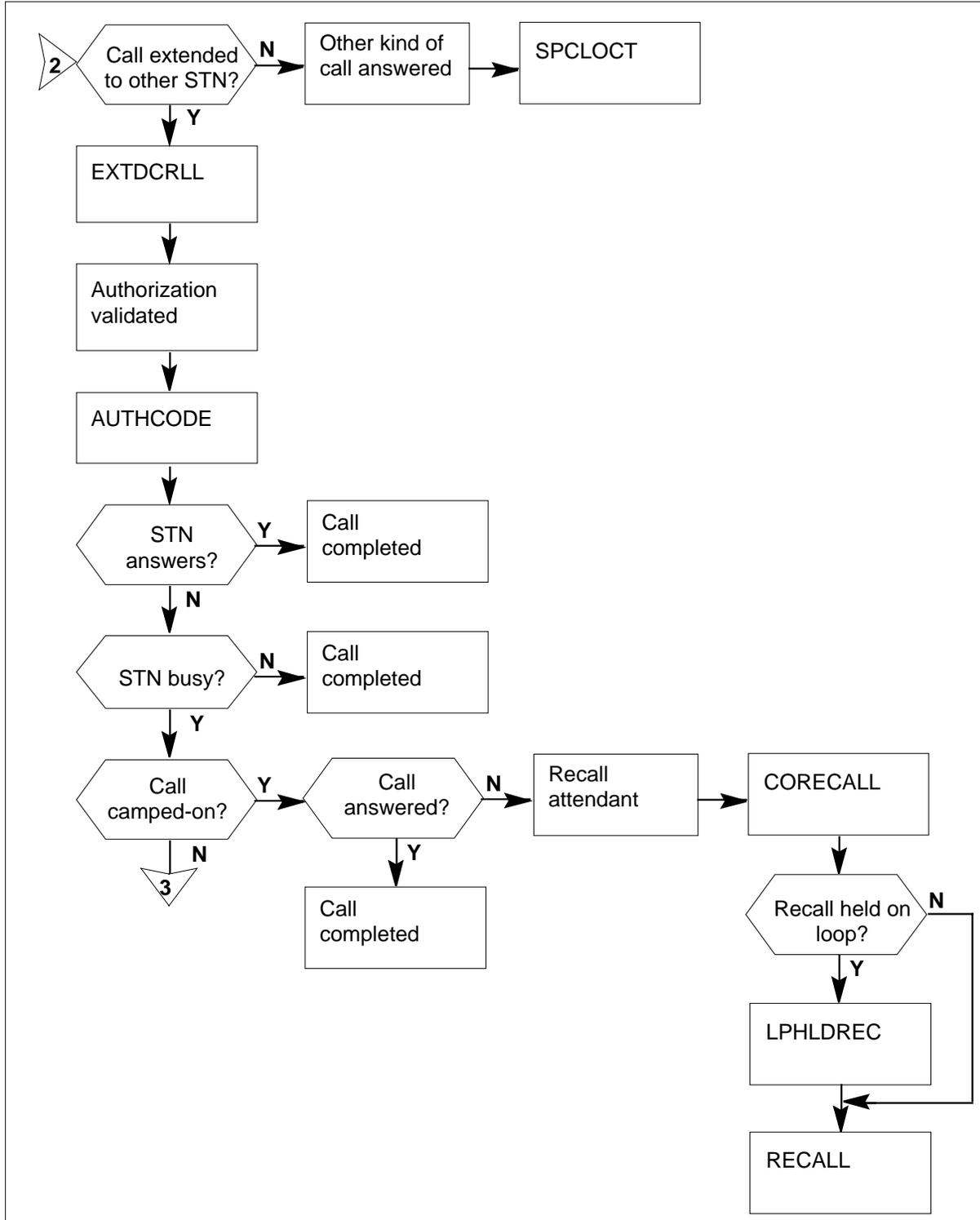
OM group IBNSG (continued)

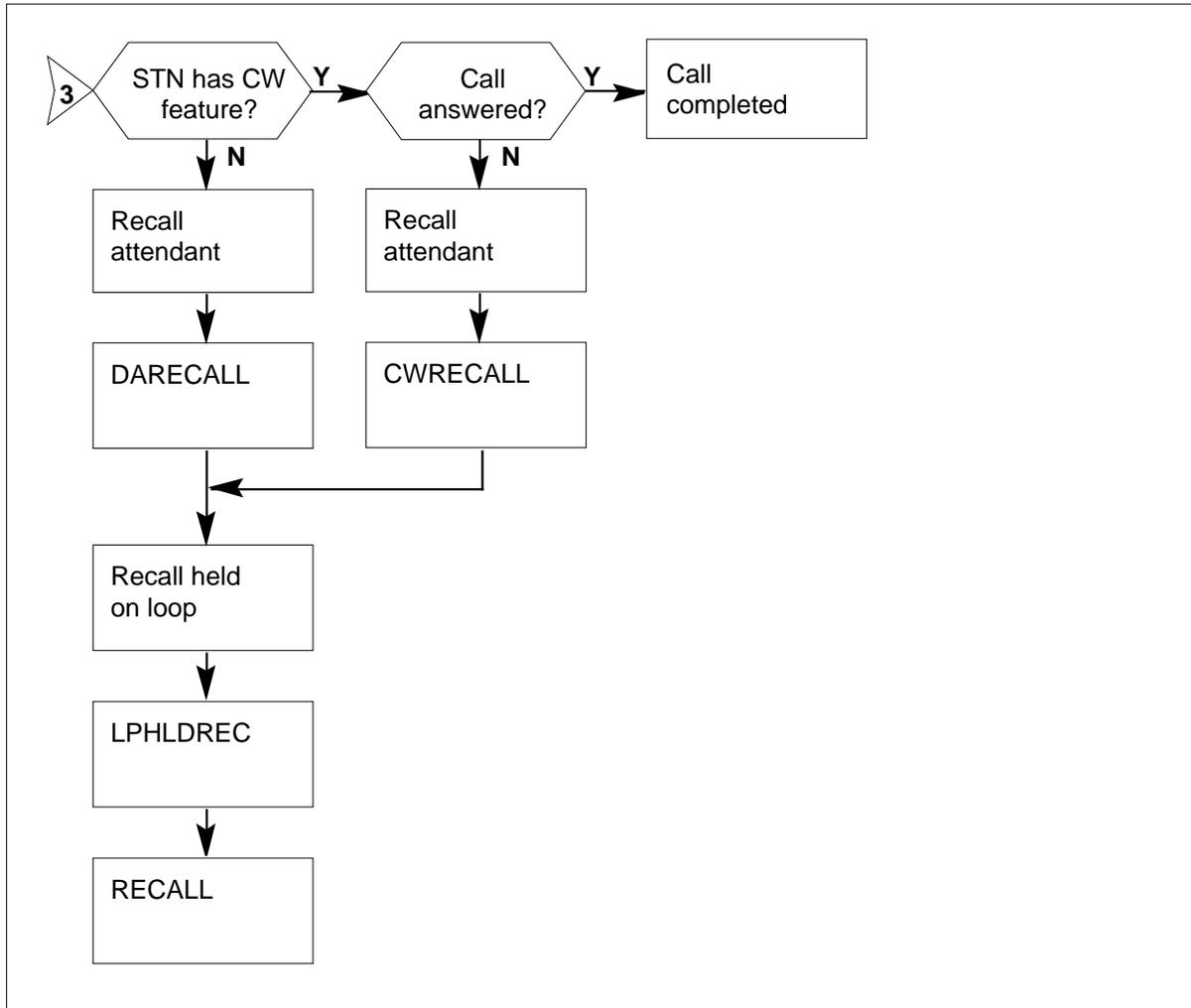
OM group IBNSG registers - incoming calls (continued)



OM group IBNSG (continued)

OM group IBNSG registers - incoming calls (continued)



OM group IBNSG (continued)**OM group IBNSG registers - incoming calls (continued)****Register ABNDN**

Abandoned calls to attendant

ADNDN increases when a caller in the subgroup queue abandons the call before a console answers. The caller abandons the call as the caller listens to audible ringing,

Register ABNDN release history

ABNDN was introduced to BCS20.

Associated registers

There are no associated registers.

OM group IBNSG (continued)

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register ACBSYSDR

Attendant console busy position duration (ACBSYSDR)

Register ACBSYSDR is a usage register. The scan rate is fast: 10 seconds.
Register ACBSYSDR records if an attendant console is position busy.

Register ACBSYSDR release history

ACBSYSDR was introduced before BCS20.

Associated registers

Register IBNAC_IACBSYDR records the same information for separate attendant consoles.

Associated logs

There are no associated logs.

Extension registers

There are no associated registers.

Register ACPOSBY

Attendant console position busy (ACPOSBY)

Register ACPOSBY increases when the attendant presses the position busy key and makes the attendant console position busy.

Register ACPOSBY release history

ACPOSBY was introduced in BCS26.

Associated registers

Register IBNAC_IACPOSBY counts the same information for separate attendant consoles.

Associated logs

There are no associated logs.

Extension registers

There are no associated registers.

OM group IBNSG (continued)

Register ACTVTU

Activated usage (ACTVTU)

Register ACTVTU is a usage register. The scan rate is 100. Register ACTVTU records if an attendant console in a customer subgroup is active. A console is active as long as a headset is plugged in. The register also counts consoles in the "position busy" or "night" state.

Register ACTVTU release history

ACTVTU was introduced before BCS20.

Associated registers

Register IBNAC_IACCTVTU records the same information for separate attendant consoles.

Associated logs

There are no associated logs.

Extension registers

There are no associated registers.

Register ANSCFW

Answered call forward calls (ANSCFW)

Register ANSCFW increases when an attendant answers a call that comes in to a station. The register counts the call when the call forward feature is set to "forward to the attendant".

The numbers five, six, or seven on the console display indicate that a call is call forwarded.

Register ANSCFW release history

Register ANSCFW was introduced before BCS20.

Associated registers

Register IBNAC_IACCFW counts the same information for an individual attendant console.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

OM group IBNSG (continued)

Register ANSDELAY

Answer delay (ANSDELAY)

Register ANSDELAY increases when an attendant answers a call that waits in the queue longer than a specified time.

The customer assigns the specified time (from four to 60 seconds) in field ANSTIME in table CUSTCONS.

Register ANSDELAY release history

Register ANSDELAY was introduced before BCS20.

Associated registers

Register QTOTAL counts enqueued calls of attendant consoles in a subgroup.

Register $IBNSG_ANSDELAY / IBNSG_QTOTAL \times 100$ = percentage of answered calls delayed more than the specified time.

Associated logs

There are no associated logs.

Extension registers

There are no associated registers.

Register ANSDIAL0

Answered dial 0 (ANSDIAL0)

Register ANSDIAL0 increases when an attendant answers an incoming call indicator (ICI) with the number 1 (ICI-1).

The ICI-1 is associated with station-dialed zero calls, automatic station originations to the attendant, and incoming calls on attendant trunks.

Table IBNXLA specifies the type of call assigned to field ICI-1.

Register ANSDIAL0 release history

Register ANSDIAL0 was introduced before BCS20.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

OM group IBNSG (continued)

Extension registers

There are no extension registers.

Register ANSINTRP

Answer intercept (ANSINTRP)

Register ANSINTRP increases when an attendant answers an intercept call. The number 8 on the console display indicates an intercept call.

The following intercept call categories are included:

- station intercept
- incoming intercepted DID
- extended private switched communication service (EPSCS) calls
- calls incoming on intercept trunks from other PBXs

Register ANSINTRP release history

Register ANSINTRP was introduced before BCS20.

Associated registers

Register IBNAC_IACINTRP counts the same information for separate attendant consoles.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register ANSLDN

Answered listed directory numbers (ANSLDN)

Register ANSLDN increases when an attendant answers a call to the listed directory number (LDN). If a customer has more than one LDN, all LDN-answered calls increases this register.

LDNs are in field DNNM in table WRDN.

Register ANSLDN release history

Register ANSLDN was introduced before BCS20.

OM group IBNSG (continued)

Associated registers

Register IBNAC_IACLDN counts the same information for separate attendant consoles.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register ANSXFRT

Answered transfer attendant (ANSXFRT)

Register ANSXFRT increases when an attendant answers a call a station tranfered to an attendant by switch-hook flash and dialing zero. This register also increases when a station does not answer for a specified amount of time and recalls the attendant.

The specified time before the station recalls the attendant is in field CWNATO in table CUSTCONS.

Register ANSXFRT release history

Register ANSXFRT was introduced before BCS20.

Associated registers

Register IBNAC_IACXFRT counts the same information for an individual attendant console.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register ATQDFL

Attendant queue deflection (ATQDFL)

Register ATQDFL increases when a call deflects from the customer subgroup queue to a busy tone or announcement. The call deflects because the attendant queue size exceeds the threshold size. Deflections do not occur for do not answer recalls, camp-on recalls, or call waiting recalls.

The attendant queue threshold is in field CQDIVTHR in table SUBGRP.

OM group IBNSG (continued)

Register ATQDFL release history

Register ATQDFL was introduced before BCS20.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register AUTHCALL

Authorization call (AUTHCALL)

Register AUTHCALL increases when an attendant in a customer subgroup presses the authorization validation (AUTH) key. The register increases after the attendant enters an authorization code when the attendant originates or extends a call.

Register AUTHCALL release history

Register AUTHCALL was introduced in BCS26.

Associated registers

Register IBNAC_IACAUTH counts the same information for an individual attendant console.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register CORECALL

Camp-on recall (CORECALL)

Register CORECALL counts camp-on recalls that an attendant answers.

An attendant directs a call to a busy station and the call is camped-on to the station. When the busy station goes on-hook, the call rings and connects. If the call is not answered within a specific time, the system routes the camped-on call back to the attendant.

OM group IBNSG (continued)

The specified time is in field ACORECTO in table CUSTCONS.

The number 3 on the console display indicates a camped-on recall.

Register CORECALL release history

Register CORECALL was introduced before BCS20.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register CWINQU

Calls waiting in queue (CWINQU)

Register CWINQU is a usage register. The scan rate is 10. The register records the number of calls in the customer subgroup that wait in the attendant queue for a free attendant console. The register also records calls that are abandoned while the call waits in the queue.

Register CWINQU release history

Register CWINQU was introduced before BCS20.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register CWRECALL

Call waiting recall (CWRECALL)

Register CWRECALL counts attendant-answered recalls from attendant-extended calls to busy stations with the call waiting feature. The register increases when the attendant does not answer the calls within a specified time.

OM group IBNSG (continued)

The number four on the console display indicates a call waiting recall.

The specified time is assigned in field CWNATO in table CUSTCONS.

Register CWRECALL release history

Register CWRECALL was introduced before BCS20.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register DARECALL

Attendant answered recalls (DARECALL)

Register DARECALL counts calls that an attendant directs to a station and receives no answer. The system redirects unanswered calls back to the attendant, and the attendant answers the call.

The number two on the console display indicates a recall.

Register DARECALL release history

Register DARECALL was introduced before BCS20.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register EXTDCALL

Extended calls (EXTDCALL)

Register EXTDCALL counts calls that attendants in a customer subgroup extend.

OM group IBNSG (continued)

Register EXTDCALL release history

Register EXTDCALL was introduced in BCS26.

Associated registers

Register IBNAC_IACEXTD counts the same information for an individual attendant console.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register HLDCALL

Held call (HLDCALL)

Register HLDCALL increases when an attendant presses the hold key or another loop key while active on a loop.

Register HLDCALL release history

Register HLDCALL was introduced in BCS26.

Associated registers

IBNAC_IACHLD counts the same information for an individual attendant console.

Associated logs

There are no associated logs.

Extension registers

There are no associated extension.

Register LPHLDREC

Loop held recalls (LPHLDREC)

Register LPHLDREC increases when an attendant answers a recall held on a loop.

Register LPHLDREC release history

Register LPHLDREC was introduced before BCS20.

OM group IBNSG (continued)

BCS30

Register LPHLDREC increases when an attendant re-enters any held loop where a call hold recall is in effect.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register LPOVFL

Loop overflows (LPOVFL)

Register LPOVFL counts loops in a subgroup attendant consoles that are busy because the loop has held and queued calls. The calls wait for an attendant console to become free.

This register does not count direct console-to-console calls, or night service calls the system redirects from another subgroup.

Register LPOVFL release history

Register LPOVFL was introduced before BCS20.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register LPU

Loop usage (LPU)

Register LPU is a usage register. The scan rate is 10. Register LPU records if the customer subgroup uses attendant loops.

OM group IBNSG (continued)

Register LPU counts loops on which attendants are active and loops that have held calls. The register also counts consoles in the position busy or night state with plugged in headsets.

Register LPU release history

Register LPU was introduced before BCS20.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

There are no extension register.

Register NSCALLS

Night service calls (NSCALLS)

Register NSCALLS increases when a call requires night service treatment.

Register NSCALLS release history

Register NSCALLS was introduced before BCS20.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register ORIGCALL

Originated calls (ORIGCALL)

Register ORIGCALL counts calls that an attendant in a customer subgroup originates. This register increases when an attendant presses an idle loop key and starts to dial.

Register ORIGCALL release history

Register ORIGCALL was introduced in BCS26.

OM group IBNSG (continued)

Associated registers

There are no associated registers.

Associated logs

Log IBNAC_IACORIG counts the same information for an individual attendant console.

Extension registers

There are no associated registers.

Register ORIGDR

Originated duration (ORIGDR)

Register ORIGDR is a usage register. The scan rate is fast: 10 seconds. ORIGDR records when a call that an attendant originates is in the talking state.

Register ORIGDR release history

Register ORIGDR was introduced in BCS26.

Associated registers

Register IBNAC_IACORGDR records the same information for an individual attendant console.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register QTOTAL

Queue total (QTOTAL)

Register QTOTAL counts calls the enqueue calls of attendant consoles in a subgroup.

Register QTOTAL release history

Register QTOTAL was introduced before BCS20.

Associated registers

Register ANSCFW increases when an attendant answers a call that comes into a station. The register counts the call when the call forward feature is set to "forward to the attendant".

OM group IBNSG (continued)

Register ANSDIAL0 increases when an attendant answers an ICI-1.

Register ANSINTRP increases when an attendant answers an intercept call.

Register ANSLDN increases when an attendant answers a call to a listed directory number.

Register ANSXFRAT increases when an attendant answers a call that a station transfers to an attendant by switch-hook flash and dialing zero.

Register RECALLS counts recalls in a customer subgroup.

Register SERIALSC counts serial call recalls that attendant consoles in a subgroup answer.

Register SPCLCCT increases when an attendant answers a call.

$$\text{IBNSG_QTOTAL} = \text{IBNSG_ANSLDN} + \text{IBNSG_ANSINTRP} + \text{IBNSG_ANSDIAL0} + \text{IBNSG_ANSXFRAT} + \text{IBNSG_RECALLS} + \text{IBNSG_SPCLCCT} + \text{IBNSG_ANSCFW} + \text{IBNSG_SERIALRC}$$

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register RECALLS

Recalls (RECALLS)

Register RECALLS counts recalls in a customer subgroup.

Register RECALLS release history

Register RECALLS was introduced before BCS20.

Associated registers

Register CORECALL counts camp-on recalls that an attendant answers.

Register CWRECALL counts attendant-answered recalls from attendant-extended calls to busy stations, with the call waiting feature, not answered within a specified time.

Register DARECALL counts calls that an attendant directs to a station, receive no answer, return to the attendant, and the attendant answer.

OM group IBNSG (continued)

Register SERIALSC counts serial call recalls that attendant consoles in a subgroup answers.

$$\text{IBNSG_QTOTAL} = \text{IBNSG_ANSLDN} + \text{IBNSG_ANSINTRP} + \text{IBNSG_ANSDIAL0} + \text{IBNSG_ANSXFRAT} + \text{IBNSG_RECALLS} + \text{IBNSG_SPCLCCT} + \text{IBNSG_ANSCFW} + \text{IBNSG_SERIALRC}$$

IBNAC_IACRECAL counts the same information for an individual attendant console.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register SERIALRC

Serial call recalls (SERIALRC)

Register SERIALRC counts serial call recalls that an attendant consoles in a subgroup answers.

Register SERIALRC release history

Register SERIALRC was introduced in BCS29.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register SPCLCCT

Special calls accounted (SPCLCCT)

Register SPCLCCT increases when an attendant answers a call.

This register does not count the following calls.

- transfer-to-attendant calls
- dial zero calls

OM group IBNSG (continued)

- recall calls
- call forward calls
- intercepted calls
- listed directory number calls

Register SPCLCCT also counts attendant-answered station calls that other attendant-answered registers do not count because of data entry errors. This register also counts calls with an unassigned translation selector field (ATT).

Register SPCLCCT release history

Register SPCLCCT was introduced before BCS20.

Associated registers

There are no associated registers.

Associated logs

Register IBNAC_IACSPCL counts the same information for an individual attendant console.

Extension registers

There are no extension registers.

Register TOTDR

Total duration (TOTDR)

Register TOTDR is a usage register. The scan rate is 10. TOTDR records if an attendant-answered call is in a talking state.

Register TOTDR release history

Register TOTDR was introduced in BCS26.

Associated registers

Register IBNAC_IACTOTDR records the same information for an individual attendant console.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register WRKTMU

Work time usage (WRKTMU)

Register WRKTMU is a usage register. The scan rate is 10. Register WRKTMU records if attendants in a customer subgroup are active on a loop.

An attendant is active on a loop when one of the following occurs:

- an attendant answers a loop key to answer a call, originate a call, or access a call held before
- an attendant presses a loop key or an incoming call identification indicator (ICI) key to answer an ICI lamp indication
- a console is in the position busy or night state with an attached headset

Register WRKTMU release history

Register WRKTMU was introduced before BCS20.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

OM group IBNSGLDN

OM description

Integrated business network subgroup listed directory number (IBNSGLDN)

The OM group IBNSGLDN provides separate peg counts for each listed directory number (LDN) assigned to a subgroup in a console customer group. The OM group IBNSGLDN can collect measurements for up to seven LDNs in a subgroup. An eighth register counts calls the system routes from other groups or subgroups.

Release history

The OM group IBNSGLDN was introduced in BCS27.

Registers

The OM group IBNSGLDN registers appear on the MAP terminal as follows:

| | | | |
|------|------|------|------|
| LDN1 | LDN2 | LDN3 | LDN4 |
| LDN5 | LDN6 | LDN7 | LDNR |

Group structure

The OM group IBNSGLDN provides one tuple for each subgroup.

Key field:

IBNSG_INDEX identifies IBN subgroup

Info field:

OMIBNSGINFO identifies customer group and subgroup by name

You must enter LDNs in table WRDN (DN_SEL= 'M') to increase registers in IBNSGLDN.

Associated OM groups

The OM group IBNAC provides the same information as IBNSGLDN. The OM group IBNAC provides this information for separate attendant consoles.

Associated operating groups

The MDC operating group associates with OM group IBNSGLDN.

OM group IBNSGLDN (continued)

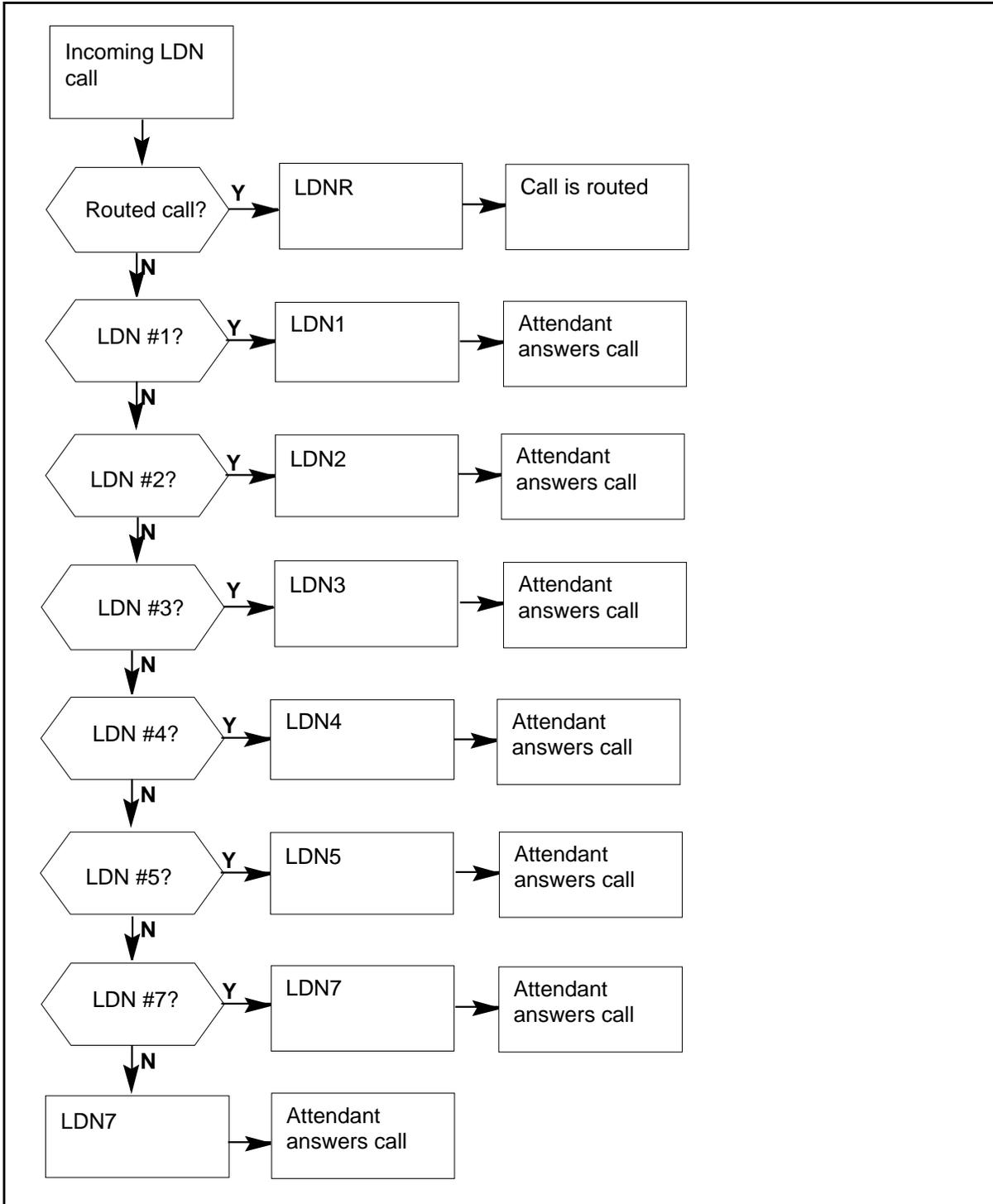
Associated functionality codes

The functionality codes associated with OM group IBNSGLDN appear in the following table.

| Functionality | Code |
|--------------------------|-------------|
| IBN ATTENDANT CONSOLE OM | NTX856AA |

OM group IBNSGLDN (continued)

OM group IBNSGLDN registers



OM group IBNSGLDN (continued)

Register LDN1

Listed directory number one calls (LDN1)

Register LDN1 counts calls that an attendant answers on LDN1.

Register LDN1 release history

Register LDN1 was introduced in BCS27.

Associated registers

Register IBNAC_IACLDN1 provides the same information as register LDN1.
Register IBNAC_IACLDN1 provides this information for separate attendant consoles.

Associated logs

There are no associated logs.

Extension registers

There are no associated registers.

Register LDN2

Listed directory number two calls (LDN2)

Register LDN2 counts calls that an attendant answers on LDN2.

Register LDN2 release history

Register LDN2 was introduced in BCS27.

Associated registers

Register IBNAC_IACLDN2 provides the same information as LDN2.
Register IBNAC_IACLDN2 provides this information for separate attendant consoles.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register LDN3

Listed directory number three calls (LDN3)

Register LDN3 counts calls that an attendant answers on LDN3.

OM group IBNSGLDN (continued)

Register LDN3 release history

Register LDN3 was introduced in BCS27.

Associated registers

Register IBNAC_IACLDN3 provides the same information as LDN3.
Register IBNAC_IACLDN3 provides this information for separate attendant consoles.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register LDN4

Listed directory number four calls (LDN4)

Register LDN4 counts calls that an attendant answers on LDN4.

Register LDN4 release history

Register LDN4 was introduced in BCS27.

Associated registers

Register IBNAC_IACLDN4 provides the same information as LDN4.
Register IBNAC_IACLDN4 provides this information for separate attendant consoles.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register LDN5

Listed directory number five calls (LDN5)

Register LDN5 counts calls that an attendant answers on LDN5.

Register LDN5 release history

Register LDN5 was introduced in BCS27.

OM group IBNSGLDN (continued)

Associated registers

Register IBNAC_IACLDN5 provides the same information as LDN5.
Register IBNAC_IACLDN5 provides this information for separate attendant consoles.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register LDN6

Listed directory number six calls (LDN6)

Register LDN6 counts calls that an attendant answers on LDN6.

Register LDN6 release history

Register LDN6 was introduced in BCS27.

Associated registers

Register IBNAC_IACLDN6 provides the same information as LDN6.
Register IBNAC_IACLDN6 provides this information for separate attendant consoles.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register LDN7

Listed directory number seven calls (LDN7)

Register LDN7 counts calls that an attendant answers on LDN7.

Register LDN7 release history

Register LDN7 was introduced in BCS27.

Associated registers

Register IBNAC_IACLDN7 provides the same information as LDN7.
Register IBNAC_IACLDN7 provides this information for separate attendant consoles.

OM group IBNSGLDN (end)

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register LDNR

Routed listed directory number calls (LDNR)

Register LDNR counts calls that an attendant answers for routed listed directory numbers (LDN).

Register LDNR release history

Register LDNR was introduced in BCS27.

Associated registers

Register IBNAC_IACLDNR provides the same information as LDNR.
Register IBNAC_IACLDNR provides this information for separate attendant consoles.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

OM group ICDIVF

OM description

International call diversion fixed (ICDIVF)

The OM group ICDIVF provides information about:

- the use and performance of the international subscriber features.
- Call Diversion to Operator (CDO). The subscriber diverts calls to the operator.
- Call Diversion Fixed (CDF). The subscriber diverts calls to a fixed number that the administration provides.

This OM group provides counts of successful attempts to activate, deactivate, interrogate and use this feature. This OM group provides counts of attempts that did not complete or errors that cause the feature to fail.

Release history

The OM group ICDIVF was introduced in BCS24.

Registers

The OM group ICDIVF registers appear on the MAP terminal as follows:

| | | | |
|---------|---------|---------|---------|
| CDOACT | CDODACT | CDOINTG | CDOUSGE |
| CDODENY | CDOOVFL | CDOCERR | CDODERR |
| CDFACT | CDFDACT | CDFINTG | CDFUSGE |
| CDFDENY | CDFOVFL | CDFCERR | CDFDERR |

Group structure

The OM group ICDIVF provides one tuple for each office.

Key field:

There are no key fields

Info field:

There are no info fields.

Associated OM groups

There are no associated OM groups.

Associated operating groups

There are no associated operating groups.

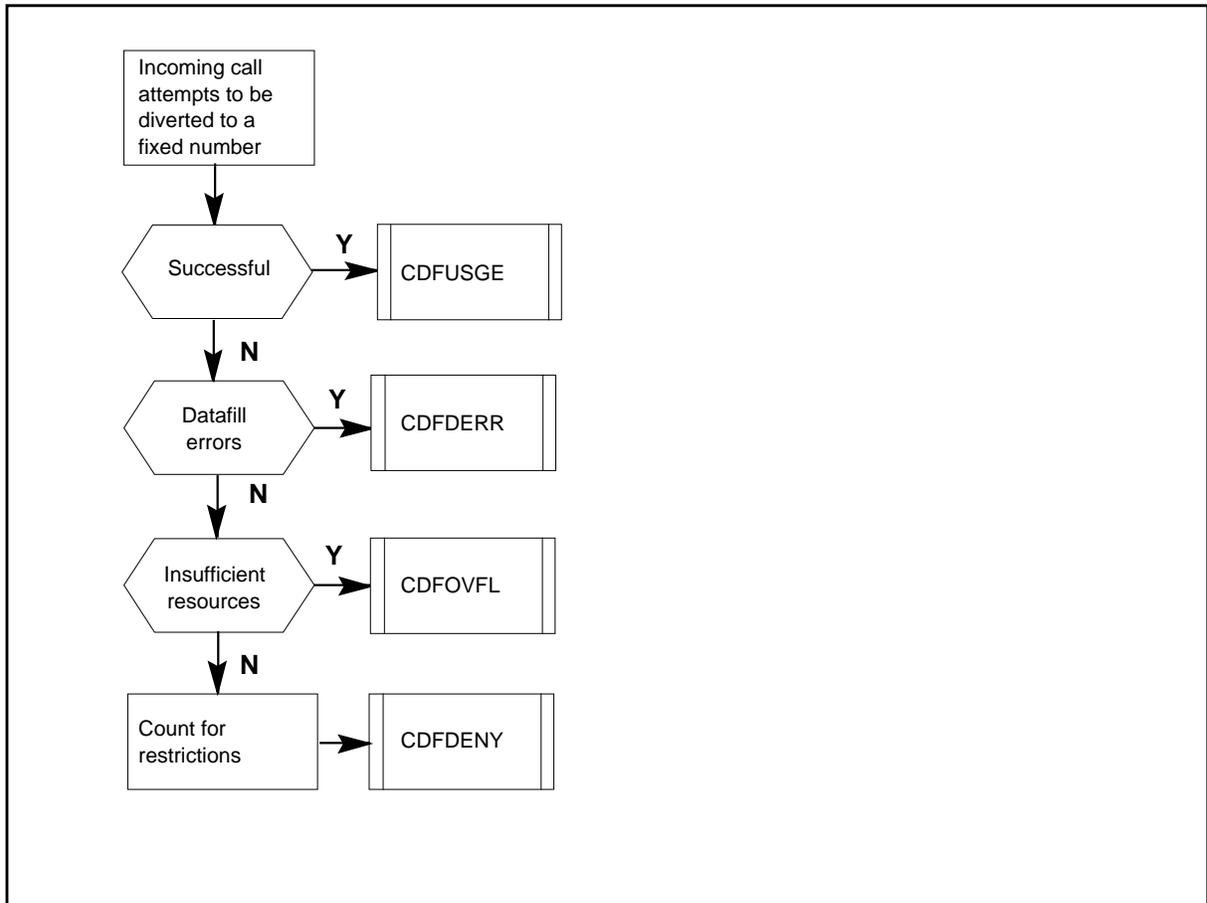
OM group ICDIVF (continued)

Associated functionality codes

The following table shows the functionality codes for OM group ICDIVF.

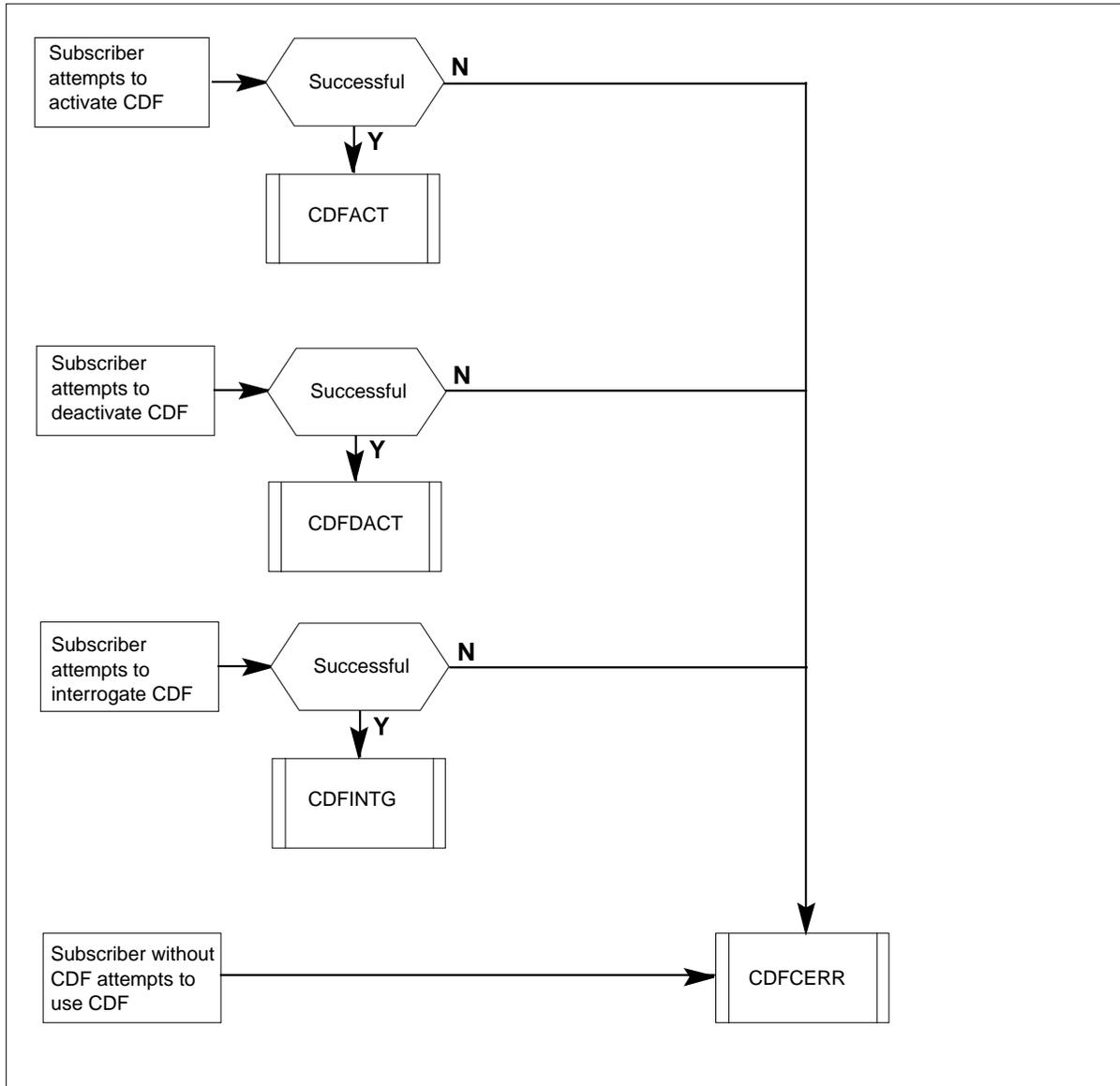
| Functionality | Code |
|---|----------|
| International - Local Basic (UPCR NTX472AA) | NTX472AB |

OM group ICDIVF CDF registers



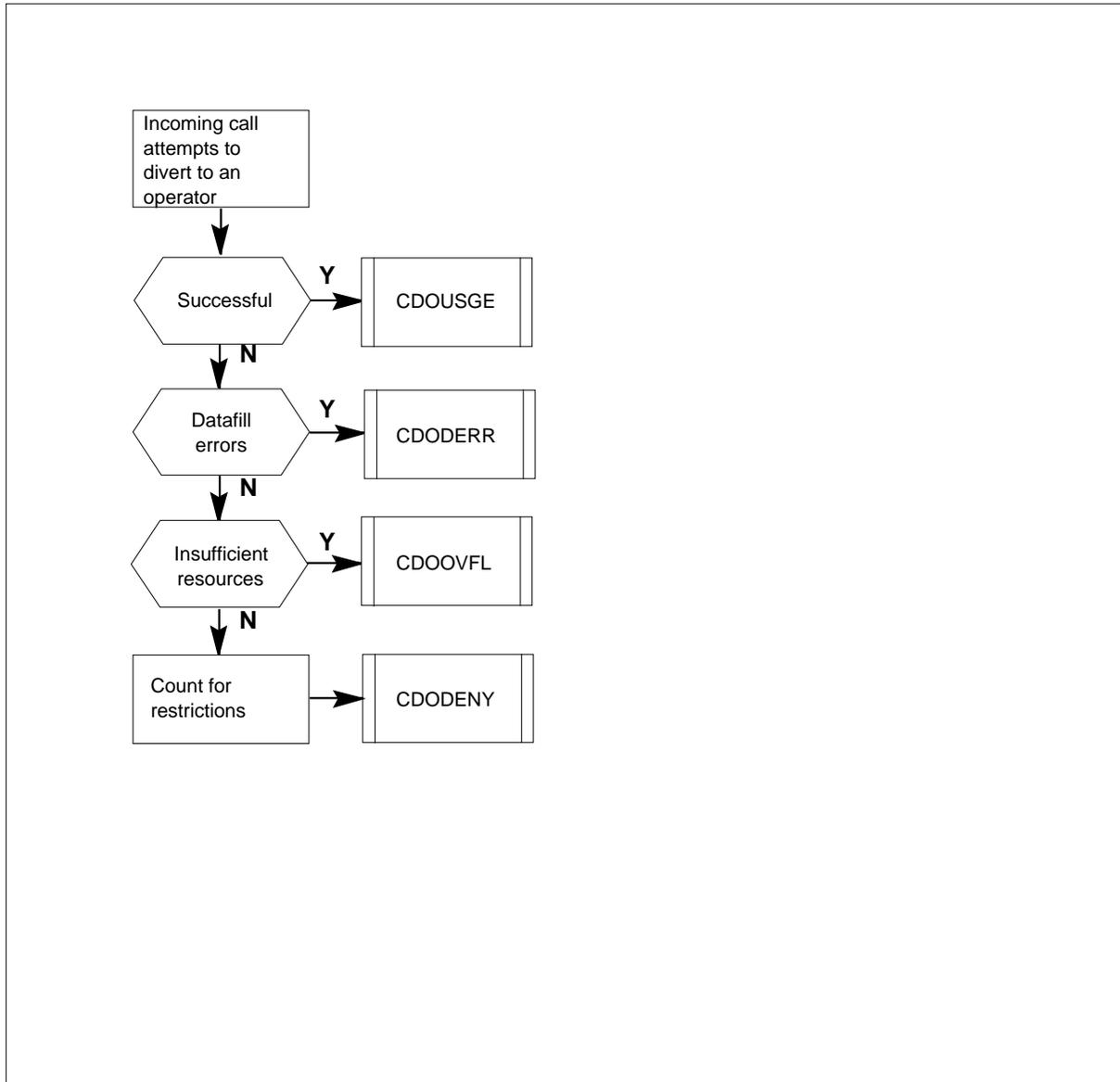
OM group ICDIVF (continued)

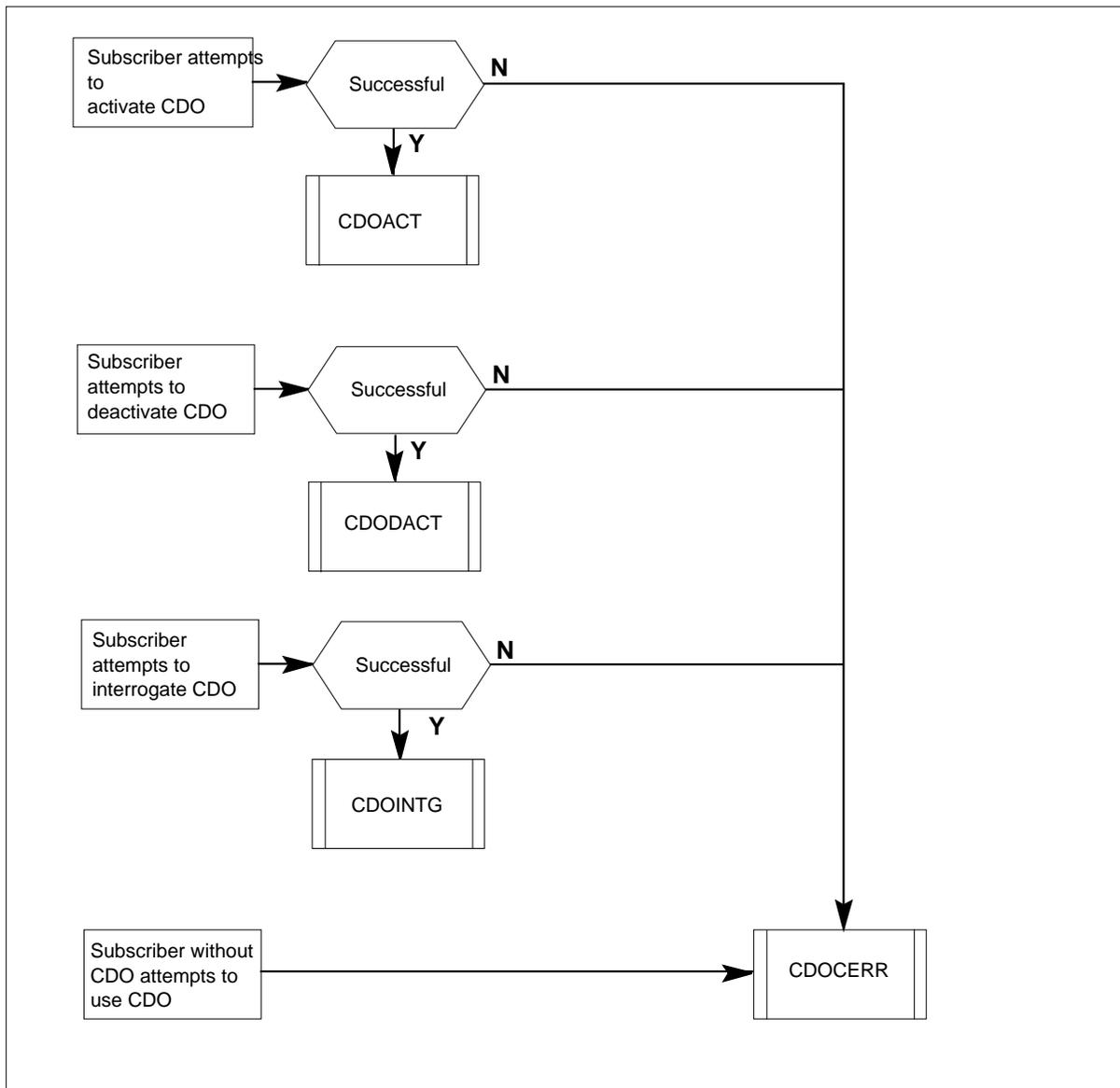
OM group ICDIVF CDF registers (continued)



OM group ICDIVF (continued)

OM group ICDIVF CDO registers



OM group ICDIVF (continued)**OM group ICDIVF CDO registers (continued)****Register CDFACT**

CDF activate (CDFACT)

Register CDFACT counts the number of times a subscriber correctly activates the CDF feature. The subscriber receives the confirm tone.

Register CDFACT release history

Register CDFACT was introduced in BCS24.

OM group ICDIVF (continued)

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Register CDFCERR

CDF customer error (CDFACT)

Register CDFACT counts the number of times a subscriber attempts to use the CDF feature and fails. This event occurs when:

- a subscriber misdials.
- another Call Diversion feature is active.
- the CDF feature is denied.
- the subscriber does not have the CDF feature but attempts to use the feature.

The subscriber receives the feature not allowed tone or the negative acknowledgment tone. The tone the subscriber receives depends on the action.

Register CDFCERR release history

Register CDFCERR was introduced in BCS24.

Associated registers

There are no associated registers.

Associated logs

The system generates log FTR138 when a caller uses or attempts to use a feature and receives a treatment tone.

Register CDFDACT

CDF deactivate (CDFACT)

Register CDFACT counts the number of times a subscriber correctly deactivates the CDF feature. The subscriber receives a tone that indicates confirmation of the action.

Register CDFDACT release history

Register CDFDACT was introduced in BCS24.

Associated registers

There are no associated registers.

OM group ICDIVF (continued)

Associated logs

The system generates log FTR138 when a caller uses or attempts to use a feature and receives a treatment tone.

Register CDFDENY

CDF denied (CDFACT)

Register CDFACT counts the number of times the system does not divert a call. This event occurs when:

- the system diverted the call five times before.
- the system diverts another call.
- a call comes in on an operator trunk.

The subscriber receives the busy tone.

Register CDFDENY release history

Register CDFDENY was introduced in BCS24.

Associated registers

There are no associated registers.

Associated logs

The system generates log FTR138 when a caller uses or attempts to use a feature and receives a treatment tone.

Register CDFDERR

CDF datafill error (CDFACT)

Register CDFACT counts the number of times the system does not divert a call. The system does not divert the call because the destination number or translation entry is not correct. The caller receives the feature data error tone.

Register CDFDERR release history

Register CDFDERR was introduced in BCS24.

Associated registers

There are no associated registers.

Associated logs

The system generates log FTR138 when a caller uses or attempts to use a feature and receives a treatment tone.

OM group ICDIVF (continued)

Register CDFINTG

CDF interrogate (CDFINTG)

Register CDFINTG counts the number of times a subscriber checks if the CDF feature is active. The subscriber receives a tone that indicates confirmation or negation of the activity.

Register CDFINTG release history

Register CDFINTG was introduced in BCS24.

Associated registers

There are no associated registers.

Associated logs

The system generates log FTR138 when a caller uses or attempts to use a feature and receives a treatment tone.

Register CDFOVFL

CDF overflow (CDFACT)

Register CDFACT increases when the system does not divert a call because of software resource problems. This event occurs when CCMTR_FAILURE_FREE_CALL in table OFCENG is set to N and CC metering. This event also occurs when the call diversion extension blocks are not available. The caller receives a tone that indicates no software resources.

Register CDFOVFL release history

Register CDFOVFL was introduced in BCS24.

Associated registers

There are no associated registers.

Associated logs

The system generates log FTR138 when a caller uses or attempts to use a feature and receives a treatment tone.

Register CDFUSGE

CDF usage (CDFUSGE)

Register CDFUSGE increases when the system diverts an incoming call for subscriber to a fixed number.

OM group ICDIVF (continued)

Register CDFUSGE release history

Register CDFUSGE was introduced in BCS24.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Register CDOACT

CDO activate (CDOACT)

Register CDOACT counts the number of times a subscriber correctly activates the CDO feature. The subscriber receives a tone that indicates confirmation of the action.

Register CDOACT release history

Register CDOACT was introduced in BCS24.

Associated registers

There are no associated registers.

Associated logs

The system generates log FTR138 when a caller uses or attempts to use a feature and receives a treatment tone.

Register CDOCERR

CDO customer error (CDOCERR)

Register CDOCERR counts the number of times a subscriber fails to activate CDO. This event occurs when:

- a subscriber misdials.
- a call diversion feature is already active.
- the system denies the CDO feature.
- the subscriber does not have CDO.

The subscriber receives the feature not available or negative acknowledgment.

Register CDOCERR release history

Register CDOCERR was introduced in BCS24.

OM group ICDIVF (continued)

Associated registers

There are no associated registers.

Associated logs

The system generates log FTR138 when a caller uses or attempts to use a feature and receives a treatment tone.

Register CDODACT

CDO deactivate (CDODACT)

Register CDODACT counts the number of times a subscriber deactivates CDO. The subscriber receives a tone that indicates confirmation of the action.

Register CDODACT release history

Register CDODACT was introduced in BCS24.

Associated registers

There are no associated registers.

Associated logs

The system generates log FTR138 when a caller uses or attempts to use a feature and receives a treatment tone.

Register CDODENY

CDO denied (CDODENY)

Register CDODENY increases when the system does not divert a call because of limits. Examples of limits are:

- the system already diverts the call five times
- the system diverts another call
- the incoming call is on an operator trunk

The caller receives the busy tone.

Register CDODENY release history

Register CDODENY was introduced in BCS24.

Associated registers

There are no associated registers.

OM group ICDIVF (continued)

Associated logs

The system generates log FTR138 when a caller uses or attempts to use a feature and receives a treatment tone.

Register CDODERR

CDO data error (CDFACT)

Register CDFACT counts the number of times the system does not divert a call to the operator because of data entry errors. Data entry errors can be an invalid destination, invalid translation field, or other errors. The caller receives the feature data error tone.

Register CDODERR release history

Register CDODERR was introduced in BCS24.

Associated registers

There are no associated registers.

Associated logs

The system generates log FTR138 when a caller uses or attempts to use a feature and receives a treatment tone.

Register CDOINTG

CDO interrogate (CDOINTG)

Register CDOINTG counts the number of times a subscriber checks if the system activates the CDO feature. The subscriber receives a tone that indicates confirmation or negation of the action.

Register CDOINTG release history

Register CDOINTG was introduced in BCS24.

Associated registers

There are no associated registers.

Associated logs

The system generates log FTR138 when a caller uses or attempts to use a feature and receives a treatment tone.

Register CDOOVFL

CDO overflow (CDFACT)

OM group ICDIVF (end)

Register CDFACT counts the number of times the system diverts a call. The system diverts a call when not enough software resources are present.

Examples of not enough software resources present are:

- no CC metering or call diversion extension blocks
- CCMTR_FAILURE_FREE_CALL in table OFCENG is set to N

The caller receives the no software resources tone.

Register CDOOVFL release history

The register CDOOVFL was introduced in BCS24.

Associated registers

There are no associated registers.

Associated logs

The system generates log FTR138 when a caller uses or attempts to use a feature and receives a treatment tone.

Register CDOUSGE

CDO usage (CDOUSGE)

The register CDOUSGE counts the number of times the system diverts a call to the operator.

Register CDOUSGE release history

The register CDOUSGE was introduced in BCS24.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

OM group ICDIVP

OM description

International call diversion programmable

OM group ICDIVP provides information about:

- the use and performance of the international call diversion programmable features
- Call Diversion to Announcement (CDA)
- Call Diversion on Busy (CDB)
- Call Diversion to Subscriber (CDS)

This OM group provides counts of successful attempts to activate, deactivate, interrogate, and use these features. This OM group also provides counts of unsuccessful attempts or errors that cause the features to fail.

Release history

OM group ICDIVP was introduced in BCS24.

Registers

OM group ICDIVP registers display on the MAP terminal as follows:

| | | | |
|---------|---------|---------|---------|
| CDAACT | CDAPROG | CDADACT | CDAINTG |
| CDAUSGE | CDADENY | CDAOVFL | CDACERR |
| CDADERR | CDSACT | CDSPROG | CDSDACT |
| CDSINTG | CDSUSGE | CSDENY | CDSOVFL |
| CDSCERR | CSDERR | CDBACT | CDBPROG |
| CDBDACT | CDBINTG | CDBUSGE | CDBDENY |
| CDBOVFL | CDBCERR | CDBDERR | |

Group structure

OM group ICDIVP provides one tuple per office.

Key field:

There are no key fields.

Info field:

There are no info fields.

Associated OM groups

There are no associated OM groups.

OM group ICDIVP (continued)

Associated functional groups

There are no associated functional groups.

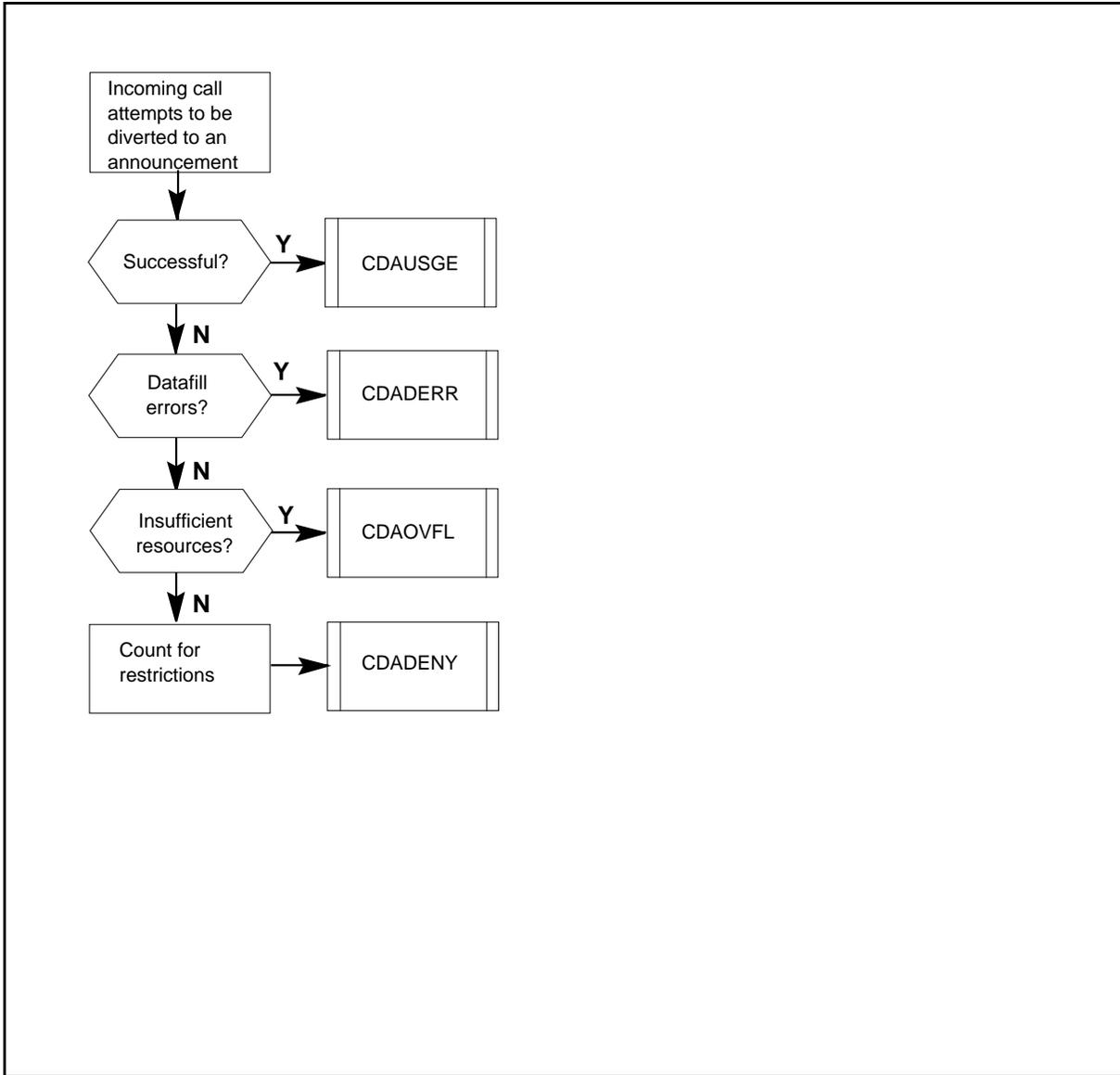
Associated functionality codes

The functionality codes for OM group ICDIVP are shown in the following table.

| Functionality | Code |
|---|----------|
| International - Local Basic (UPCR NTX472AA) | NTX472AB |

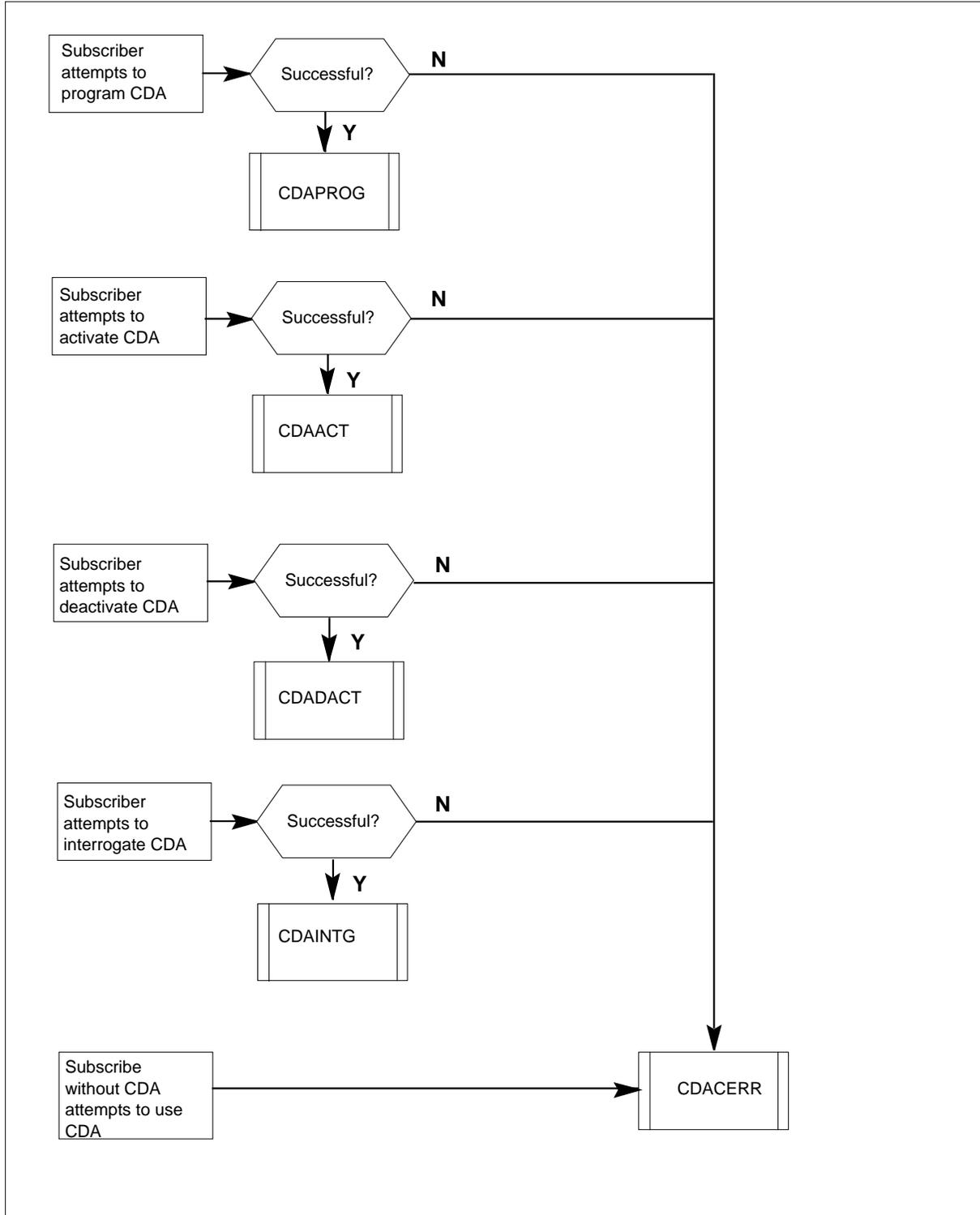
OM group ICDIVP (continued)

OM group ICDIVP CDA registers



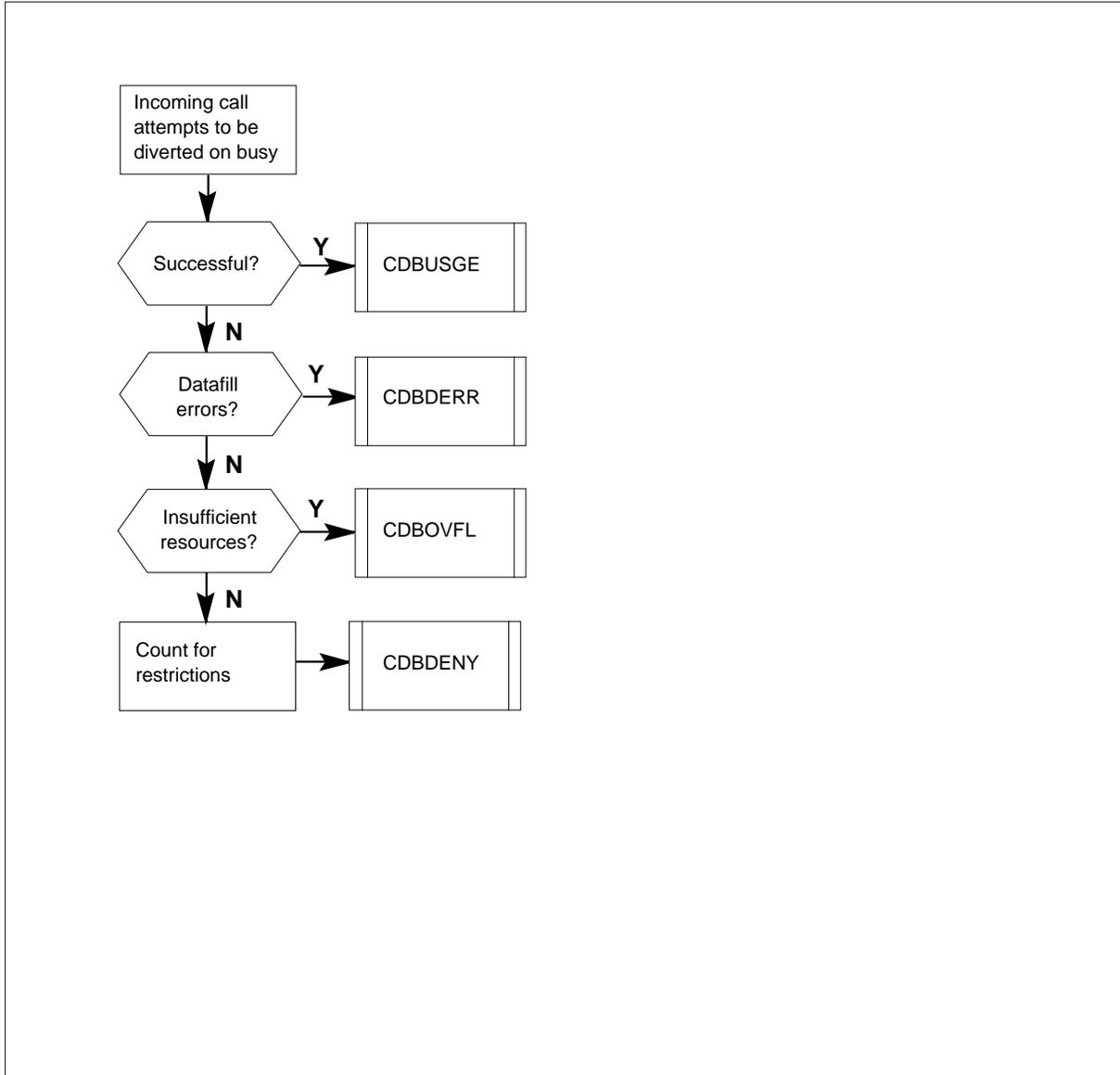
OM group ICDIVP (continued)

OM group ICDIVP CDA registers (continued)



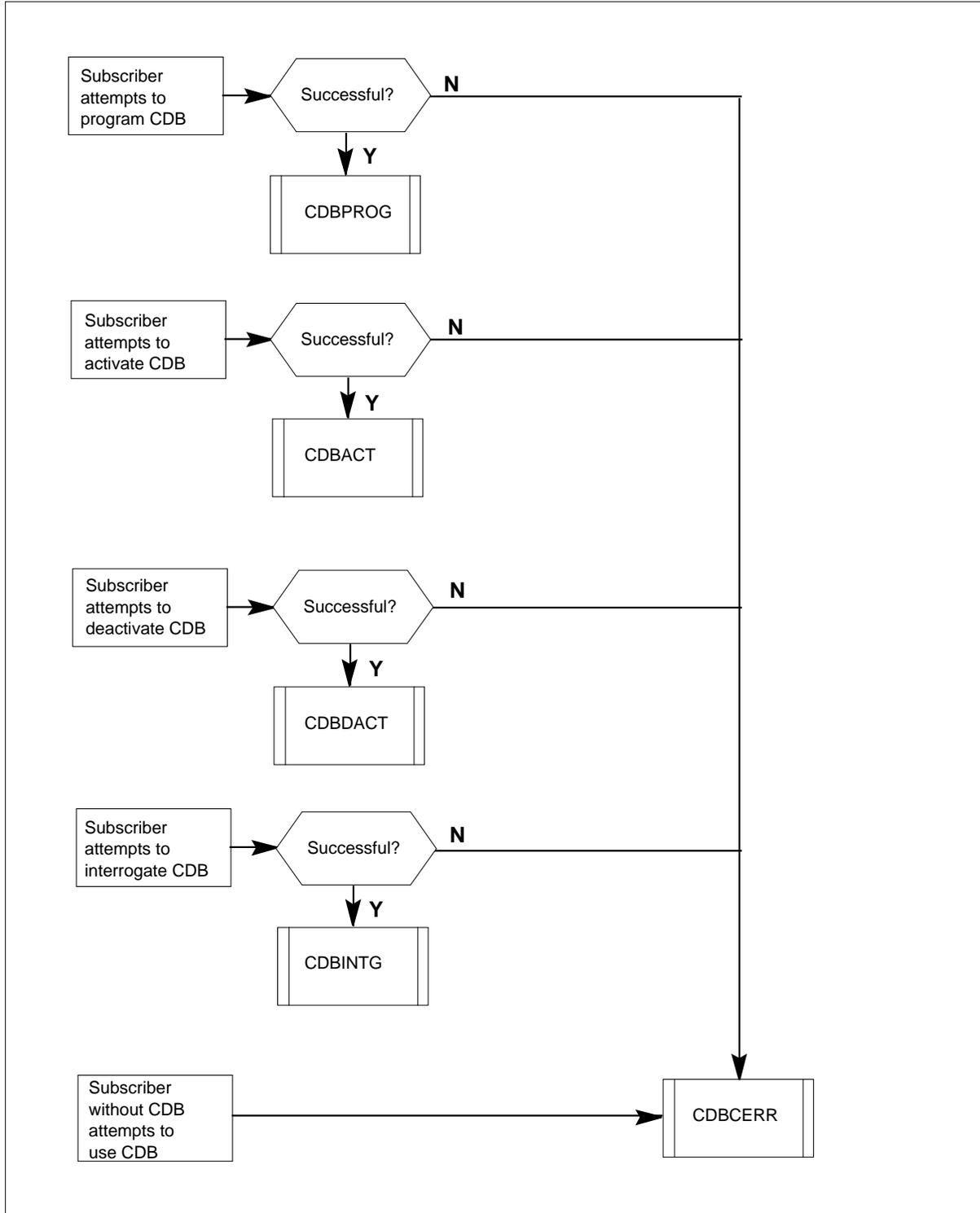
OM group ICDIVP (continued)

OM group ICDIVP CDB registers



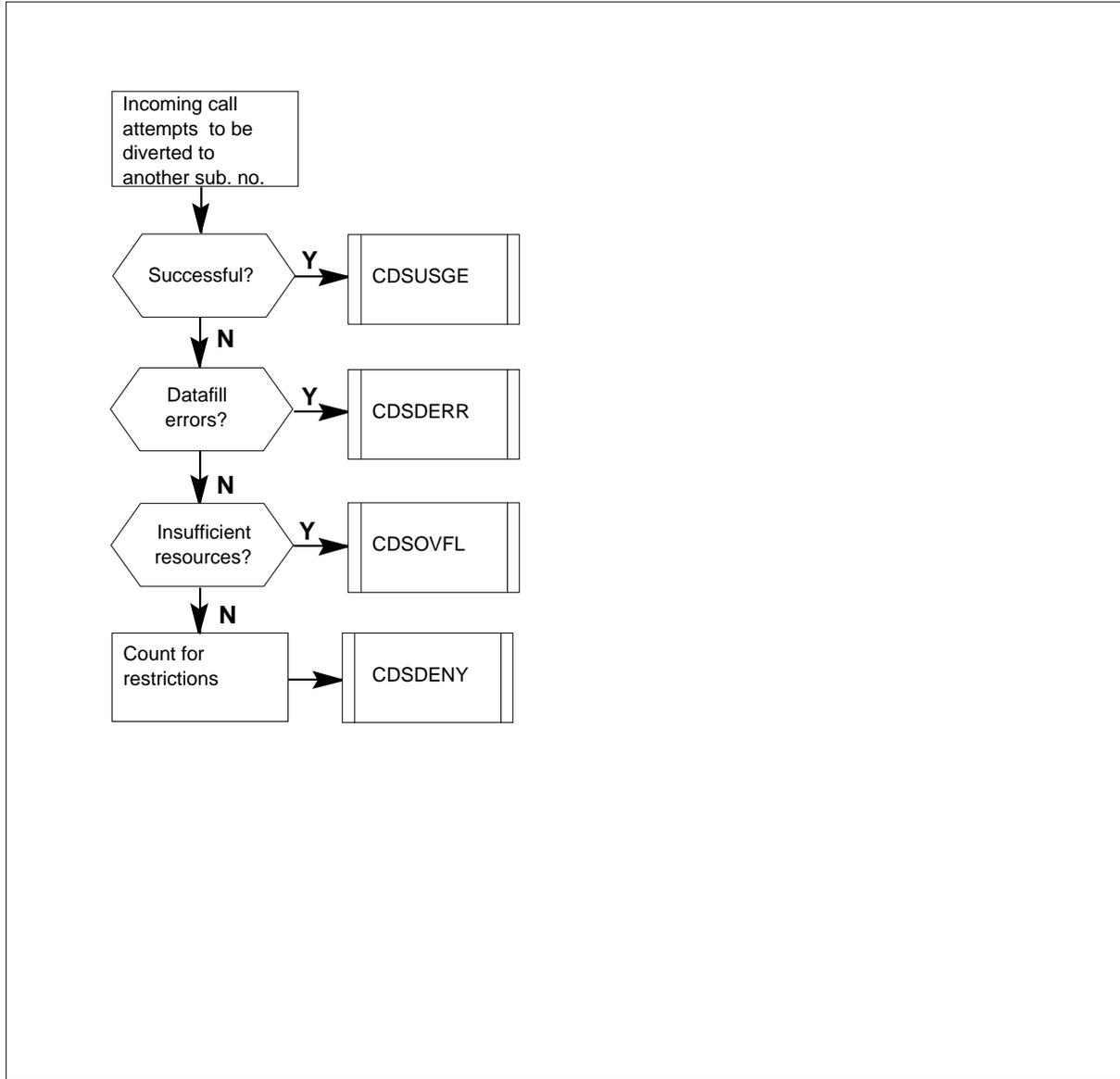
OM group ICDIVP (continued)

OM group ICDIVP CDB registers (continued)



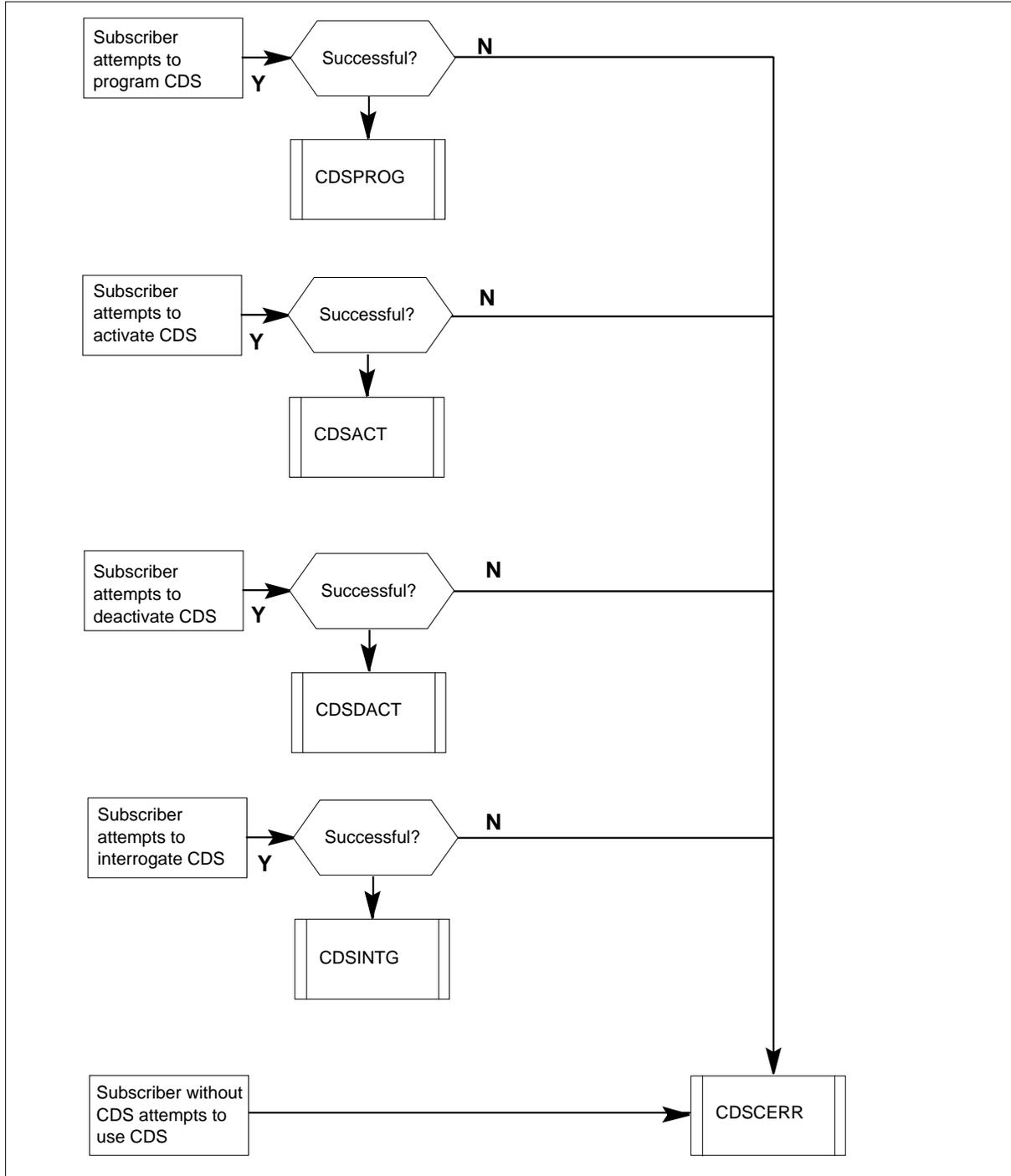
OM group ICDIVP (continued)

OM group ICDIVP CDB registers (continued)



OM group ICDIVP (continued)

OM group ICDIVP CDB registers (continued)



OM group ICDIVP (continued)

Register CDAACT

CDA activate (CDAACT)

Register CDAACT increases when a subscriber successfully activates CDA. The subscriber receives a "confirmation" tone.

Register CDAACT release history

Register CDAACT was introduced in BCS24.

Associated registers

There are no associated registers.

Associated logs

The system generates log FTR138 when a caller uses or attempts to use a feature and receives a treatment tone.

Register CDACERR

CDA customer error (CDACERR)

Register CDACERR increases when a subscriber attempts to use CDA wrong. This event occurs when:

- a subscriber dials wrong
- a call diversion feature is already active
- the system denies the CDA feature
- the subscriber does not have CDA

The action of the subscriber determines if the subscriber receives the "feature not allowed" or "negative acknowledgement" tone.

Register CDACERR release history

Register CDACERR was introduced in BCS24.

Associated registers

There are no associated registers.

Associated logs

The system generates log FTR138 when a caller uses or attempts to use a feature and receives a treatment tone.

Register CDADACT

CDA deactivate (CDADACT)

OM group ICDIVP (continued)

Register CDADACT increases when a subscriber deactivates CDA. The subscriber receives a “confirmation” tone.

Register CDADACT release history

Register CDADACT was introduced in BCS24.

Associated registers

There are no associated registers.

Associated logs

The system generates log FTR138 when a caller uses or attempts to use a feature and receives a treatment tone.

Register CDADENY

CDA denied (CDADENY)

Register CDADENY increases when the system does not divert a call because of restrictions. Examples of restrictions are:

- the system already diverts the call five times
- the system diverts another call
- the incoming call is on an operator trunk

The caller receives a “busy” tone.

Register CDADENY release history

Register CDADENY was introduced in BCS24.

Associated registers

There are no associated registers.

Associated logs

The system generates log FTR138 when a caller uses or attempts to use a feature and receives a treatment tone.

Register CDADERR

CDA datafill error (CDADERR)

Register CDADERR increases when the system does not divert a call because the destination number or translation entry is wrong. The caller receives the “feature data error” tone.

OM group ICDIVP (continued)

Register CDADERR release history

Register CDADERR was introduced in BCS24.

Associated registers

There are no associated registers.

Associated logs

The system generates log FTR138 when a caller uses or attempts to use a feature and receives a treatment tone.

Register CDAINTG

CDA interrogate (CDAINTG)

Register CDAINTG increases when a subscriber checks if the CDA feature is active. The subscriber receives the "confirmation" or "negative acknowledgement" tone that indicates the feature status.

Register CDAINTG release history

Register CDAINTG was introduced in BCS24.

Associated registers

There are no associated registers.

Associated logs

The system generates log FTR138 when a caller uses or attempts to use a feature and receives a treatment tone.

Register CDAOVFL

CDA overflow (CDAOVFL)

Register CDAOVFL increases when the system does not divert a call because of insufficient software resources. Examples of insufficient software resources are:

- no CC metering blocks
- no call diversion extension blocks
- CCMTR_FAILURE_FREE_CALL in table OFCENG is set to N

The caller receives the "no software resources" tone.

Register CDAOVFL release history

Register CDAOVFL was introduced in BCS24.

OM group ICDIVP (continued)

Associated registers

There are no associated registers.

Associated logs

The system generates log FTR138 when a caller uses or attempts to use a feature and receives a treatment tone.

Register CDAPROG

CDA programming (CDAPROG)

Register CDAPROG increases when a subscriber successfully programs the CDA feature. The subscriber receives the "confirmation" tone.

Register CDAPROG release history

Register CDAPROG was introduced in BCS24.

Associated registers

There are no associated registers.

Associated logs

The system generates log FTR138 when a caller uses or attempts to use a feature and receives a treatment tone.

Register CDAUSGE

CDA usage (CDAUSGE)

Register CDAUSGE increases when the system diverts an incoming call to an announcement.

Register CDAUSGE release history

Register CDAUSGE was introduced in BCS24.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Register CDBACT

CDB activate (CDBACT)

Register CDBACT increases when a subscriber successfully activates CDB. The subscriber receives a "confirmation" tone.

OM group ICDIVP (continued)

Register CDBACT release history

Register CDBACT was introduced in BCS24.

Associated registers

There are no associated registers.

Associated logs

The system generates log FTR138 when a caller uses or attempts to use a feature and receives a treatment tone.

Register CDBCERR

CDB customer error (CDBCERR)

Register CDBCERR increases when a subscriber attempts to use CDB wrong. This event occurs when:

- a subscriber dials wrong
- a call diversion feature is already active
- the system denies the CDB feature
- the subscriber does not have CDB

The action of the subscriber determines if the subscriber receives the “feature not allowed” or “negative acknowledgement” tone.

Register CDBCERR release history

Register CDBCERR was introduced in BCS24.

Associated registers

There are no associated registers.

Associated logs

The system generates log FTR138 when a caller uses or attempts to use a feature and receives a treatment tone.

Register CDBDACT

CDB deactivate (CDBDACT)

Register CDBDACT increases when a subscriber deactivates CDB. The subscriber receives a “confirmation” tone.

Register CDBDACT release history

Register CDBDACT was introduced in BCS24.

OM group ICDIVP (continued)

Associated registers

There are no associated registers.

Associated logs

The system generates log FTR138 when a caller uses or attempts to use a feature and receives a treatment tone.

Register CDBDENY

CDB denied (CDBDENY)

Register CDBDENY increases when the system does not divert a call because of restrictions. Examples of restrictions are:

- the system already diverts the call five times
- the system diverts another call
- the incoming call is on an operator trunk

The caller receives a "busy" tone.

Register CDBDENY release history

Register CDBDENY was introduced in BCS24.

Associated registers

There are no associated registers.

Associated logs

The system generates log FTR138 when a caller uses or attempts to use a feature and receives a treatment tone.

Register CDBDERR

CDB datafill error (CDBDERR)

Register CDBDERR increases when the system does not divert a call because the destination number or translation entry is wrong. The caller receives the "feature data error" tone.

Register CDBDERR release history

Register CDBDERR was introduced in BCS24.

Associated registers

There are no associated registers.

OM group ICDIVP (continued)

Associated logs

The system generates log FTR138 when a caller uses or attempts to use a feature and receives a treatment tone.

Register CDBINTG

CDB interrogate (CDBINTG)

Register CDBINTG increases when a subscriber checks if the CDB feature is active. The action of the subscriber determines if the subscriber receives the "confirmation" or "negative acknowledgement" tone.

Register CDBINTG release history

Register CDBINTG was introduced in BCS24.

Associated registers

There are no associated registers.

Associated logs

The system generates log FTR138 when a caller uses or attempts to use a feature and receives a treatment tone.

Register CDBOVFL

CDB overflow (CDBOVFL)

Register CDBOVFL increases when the system does not divert a call because of insufficient software resources. Examples of insufficient software resources are:

- no CC metering blocks
- no call diversion extension blocks
- CCMTR_FAILURE_FREE_CALL in table OFCENG is set to N

The caller receives the "no software resources" tone.

Register CDBOVFL release history

Register CDBOVFL was introduced in BCS24.

Associated registers

There are no associated registers.

Associated logs

The system generates log FTR138 when a caller uses or attempts to use a feature and receives a treatment tone.

OM group ICDIVP (continued)

Register CDBPROG

CDB programming (CDBPROG)

Register CDBPROG increases when a subscriber successfully programs the CDB feature. The subscriber receives the “confirmation” tone.

Register CDBPROG release history

Register CDBPROG was introduced in BCS24.

Associated registers

There are no associated registers.

Associated logs

The system generates log FTR138 when a caller uses or attempts to use a feature and receives a treatment tone.

Register CDBUSGE

CDB usage (CDBUSGE)

Register CDBUSGE increases when the system diverts an incoming call to a programmed directory number when the subscriber line is busy.

Register CDBUSGE release history

Register CDBUSGE was introduced in BCS24.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Register CDSACT

CDS activate (CDSACT)

Register CDSACT increases when a subscriber successfully activates CDS. The subscriber receives a “confirmation” tone.

Register CDSACT release history

Register CDSACT was introduced in BCS24.

Associated registers

There are no associated registers.

OM group ICDIVP (continued)

Associated logs

The system generates log FTR138 when a caller uses or attempts to use a feature and receives a treatment tone.

Register CDSCERR

CDS customer error (CDSCERR)

Register CDSCERR increases when a subscriber attempts to use CDS wrong. This event occurs when:

- a subscriber misdials
- a call diversion feature is already active
- the system denies the CDS feature
- the subscriber does not have CDS

The action of the subscriber determines if the subscriber receives the “feature not allowed” or “negative acknowledgement” tone.

Register CDSCERR release history

Register CDSCERR was introduced in BCS24.

Associated registers

There are no associated registers.

Associated logs

The system generates log FTR138 when a caller uses or attempts to use a feature and receives a treatment tone.

Register CDSDACT

CDS deactivate (CDSDACT)

Register CDSDACT increases when a subscriber deactivates CDS. The subscriber receives a “confirmation” tone.

Register CDSDACT release history

Register CDSDACT was introduced in BCS24.

Associated registers

There are no associated registers.

Associated logs

The system generates log FTR138 when a caller uses or attempts to use a feature and receives a treatment tone.

OM group ICDIVP (continued)

Register CSDENY

CDS denied (CSDENY)

Register CSDENY increases when the system does not divert a call because of restrictions. Examples of restrictions are:

- the system already diverts the call five times
- the system diverts another call
- the incoming call is on an operator trunk

The caller receives a “busy” tone.

Register CSDENY release history

Register CSDENY was introduced in BCS24.

Associated registers

There are no associated registers.

Associated logs

The system generates log FTR138 when a caller uses or attempts to use a feature and receives a treatment tone.

Register CSDERR

CDS datafill error (CSDERR)

Register CSDERR increases when the system does not divert a call because the destination number or translation entry is wrong. The caller receives the “feature data error” tone.

Register CSDERR release history

Register CSDERR was introduced in BCS24.

Associated registers

There are no associated registers.

Associated logs

The system generates log FTR138 when a caller uses or attempts to use a feature and receives a treatment tone.

Register CDSINTG

CDS interrogate (CDSINTG)

OM group ICDIVP (continued)

Register CDSINTG increases when a subscriber checks if the CDS feature is active. The action of the subscriber determines if the subscriber receives the "confirmation" or "negative acknowledgement" tone.

Register CDSINTG release history

Register CDSINTG was introduced in BCS24.

Associated registers

There are no associated registers.

Associated logs

The system generates log FTR138 when a caller uses or attempts to use a feature and receives a treatment tone.

Register CDSOVFL

CDS overflow (CDSOVFL)

Register CDSOVFL increases when the system does not divert a call because of insufficient software resources. Examples of insufficient software resources are:

- no CC metering blocks
- no call diversion extension blocks
- CCMTR_FAILURE_FREE_CALL in table OFCENG is set to N

The caller receives the "no software resources" tone.

Register CDSOVFL release history

Register CDSOVFL was introduced in BCS24.

Associated registers

There are no associated registers.

Associated logs

The system generates log FTR138 when a caller uses or attempts to use a feature and receives a treatment tone.

Register CDSPROG

CDS programming (CDSPROG)

Register CDSPROG increases when a subscriber successfully programs the CDS feature. The subscriber receives the "confirmation" tone.

OM group ICDIVP (end)

Register CDSPROG release history

Register CDSPROG was introduced in BCS24.

Associated registers

There are no associated registers.

Associated logs

The system generates log FTR138 when a caller uses or attempts to use a feature and receives a treatment tone.

Register CDSUSGE

CDS usage (CDSUSGE)

Register CDSUSGE increases when an incoming call diverts to a directory number that the subscriber programs.

Register CDSUSGE release history

Register CDSUSGE was introduced in BCS24.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

OM group ICONF

OM Description

International conference (ICONF)

The OM group ICONF provides information about the use and performance of the international Three-Way Call and Six-Way Call features. This OM group provides counts of all attempts to use these features.

Release history

The OM group ICONF was introduced in BCS24.

Registers TWCUNIV and UTWCDENY were introduced in GL04.

Registers

The OM group ICONF registers appear on the MAP terminal as follows:

| | | | | |
|----------|----------|----------|----------|---------|
| UTWCDENY | TWCUSGE | TWCDENY | TWCOVRFL | WCCERR |
| TWCUNIV | SWCUSGE | SWCDENY | SWCOVFL | SWCCERR |
| ADDNUSGE | ADDNDENY | ADDNOVFL | ADDNCERR | |

Group structure

The OM group ICONF provides one tuple per office.

Key field:

There is no Key field.

Info field:

There is no Info field.

Associated OM groups

There are no associated groups.

Associated functional groups

There are no associated functional groups.

OM group ICONF (continued)

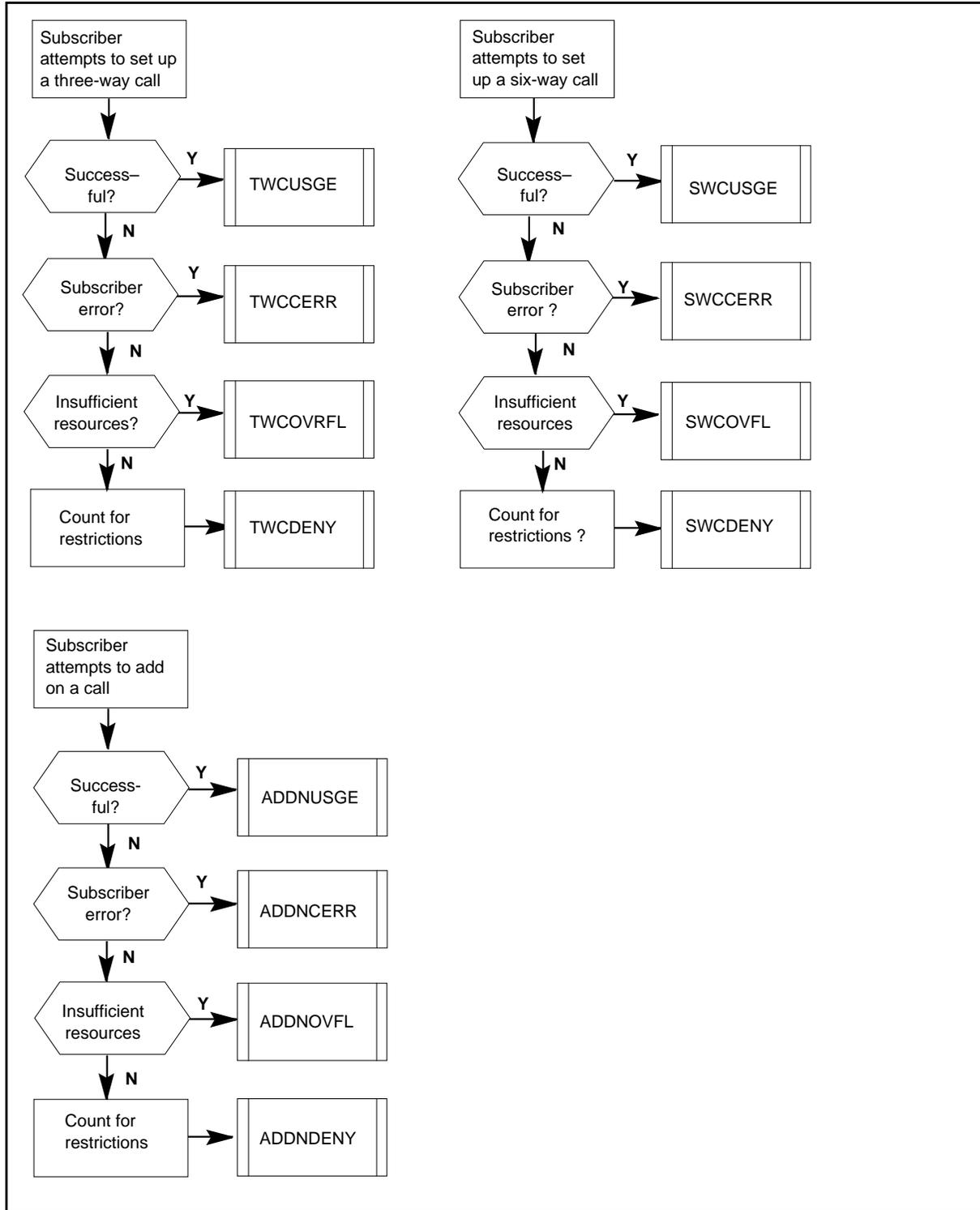
Associated functionality codes

The associated functionality codes for OM group ICONF appear in the following table.

| Functionality | Code |
|---|----------|
| International - Local Basic (UPCR NTX472AA) | NTX472AB |

OM group ICONF (continued)

OM group ICONF registers



OM group ICONF (continued)

Register ADDNCERR

Add-on-call customer error (ADDNCERR)

Register ADDNCERR counts the times a subscriber attempts not correctly to add on a call to a conference setup. The subscriber receives the "feature data error" tone or the "partial dial timeout" tone.

Register ADDNCERR release history

The ADDNCERR was introduced in BCS24.

Associated registers

There are no associated registers.

Associated logs

The system generates FTR13 when a caller uses or attempts to use a feature and receives a treatment tone.

Register ADDNDENY

Add-on-call denied (ADDNDENY)

Register ADDNDENY counts the times a subscriber is not able to add on a call because of a restriction. The subscriber receives the "feature not allowed" tone.

Register ADDNDENY release history

The ADDNDENY was introduced in BCS24.

Associated registers

There are no associated registers.

Associated logs

The system generates FTR138 when a caller uses or attempts to use a feature and receives a treatment tone.

Register ADDNOVFL

Add-on-call overflow (ADDNOVFL)

Register ADDNOVFL counts the number of times a subscriber is unable to add on a call because of insufficient software resources such as no feature-data blocks. The subscriber receives the "no software resources" tone. ADDNOVFL is not incremented on the DMS-100G switch.

OM group ICONF (continued)

Register ADDNOVFL release history

Register ADDNOVFL was introduced in BCS24.

Associated registers

There are no associated registers.

Associated logs

The system generates FTR138 when a caller uses or attempts to use a feature and receives a treatment tone.

Register ADDNUSGE

Add-on-call usage (ADDNUSGE)

Register ADDNUSGE counts the times a subscriber adds on a call to a conference set-up.

Register ADDNUSGE release history

Register ADDNUSGE was introduced in BCS24.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Register UTWCDENY

Register UTWCDENY counts the number of times option DENYTWC prevented a subscriber from activating universal access to three-way calling.

Register UTWCDENY release history

Register UTWCDENY was introduced in GL04.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Register SWCCERR

6WC customer error (SWCCERR)

Register SWCCERR counts the times a subscriber without 6WC attempts to make a six-way call. The subscriber receives the "feature not allowed" tone.

OM group ICONF (continued)

Register SWCCERR release history

Register SWCCERR was introduced in BCS24.

Associated registers

There are no associated registers.

Associated logs

The system generates FTR138 when a caller receives a treatment tone.

Register SWCDENY

6WC denied (SWCDENY)

Register SWCDENY counts the times a subscriber cannot engage in a six-way call:

- the initial leg is not in a proper call state
- the conference has too many legs

The subscriber receives the "feature not allowed" tone.

Register SWCDENY release history

Register SWCDENY was introduced in BCS24.

Associated registers

There are no associated registers.

Associated logs

The system generates FTR138 when a caller uses or attempts to use a feature and a caller receives a treatment tone.

Register SWCOVFL

6WC overflow (SWCOVFL)

Register SWCOVFL counts the number of times a subscriber is unable to engage in a six-way call because of insufficient resources such as no feature-data blocks, no call-condense blocks or no 6-port conference circuits. The subscriber receives the "no software resources" or "no service circuit" tone depending on the condition. SWCOVFL is not incremented on the DMS-100G switch.

Register SWCOVFL release history

Register SWCOVFL was introduced in BCS24.

OM group ICONF (continued)

Associated registers

There are no associated registers.

Associated logs

The system generates FTR138 when a caller uses or attempts to use a feature and receives a treatment tone.

Register SWCUSGE

6WC usage (SWCUSGE)

Register SWCUSGE counts the number of times a subscriber sets up a six-way conference call.

Register SWCUSGE release history

Register SWCUSGE was introduced in BCS24.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Register TWCCERR

3WC customer error (TWCCERR)

Register TWCCERR counts the times a subscriber does not correctly flash and dial a party. The register also counts the times a subscriber with 6WC attempts to use 3WC. The subscriber receives the "negative acknowledgement" or "feature not allowed" tone.

Register TWCCERR release history

Register TWCCERR was introduced in BCS24.

Associated registers

There are no associated registers.

Associated logs

The system generates FTR138 when a caller uses or attempts to use a feature and receives a treatment tone.

Register TWCDENY

3WC denied (TWCDENY)

OM group ICONF (continued)

Register TWCDENY counts the times a subscriber cannot engage in a three-way call because the leg is not in a proper call state. The subscriber receives the "feature not allowed" tone.

Register TWCDENY release history

Register TWCDENY was introduced in BCS24.

Associated registers

There are no associated registers.

Associated logs

The system generates FTR138 when a caller uses or attempts to use a feature and receives a treatment tone.

Register TWCOVRFL

3WC overflow (TWCOVRFL)

Register TWCOVRFL counts the number of times a subscriber is unable to engage in a three-way call because of insufficient resources such as no feature-data blocks, no call-condense blocks or no 3-port conference circuits. The subscriber receives the "no software resources" or "no service circuit" tone depending on the condition. TWCOVRFL is not incremented on the DMS-100G switch.

Register TWCOVRFL release history

Register TWCOVRFL was introduced in BCS24.

Associated registers

There are no associated registers.

Associated logs

The system generates FTR138 when a caller uses or attempts to receives a treatment tone.

Register TWCUNIV

TWC activation universal (TWCUNIV)

Register TWCUNIV counts the number of times TWC with universal access has been activated.

Register TWCUNIV release history

Register TWCUNIV was introduced in GL04.

OM group ICONF (end)

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Register TWCUSGE

3WC usage (TWCUSGE)

Register TWCUSGE counts the times a subscriber sets up a three-way conference call.

Register TWCUSGE release history

Register TWCUSGE was introduced in BCS24.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

OM group ICT

OM description

International call transfer (ICT)

The OM group ICT provides information about the use of the International Call Transfer (ICT) feature. The information includes transferred calls and calls not transferred because of subscriber error, resource failure or denied access.

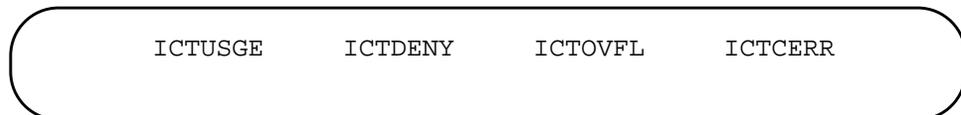
Release history

Register ICTOVFL does not increase in GL04.

The OM group ICT was introduced in BCS26.

Registers

The OM group ICT registers display on the MAP terminal as follows:



Group structure

The OM group ICT provides one tuple per office.

Key field:

There is no Key field.

Info field:

There is no Info field.

Associated OM groups

EXT

Associated functional groups

There are no associated functional groups.

OM group ICT (continued)

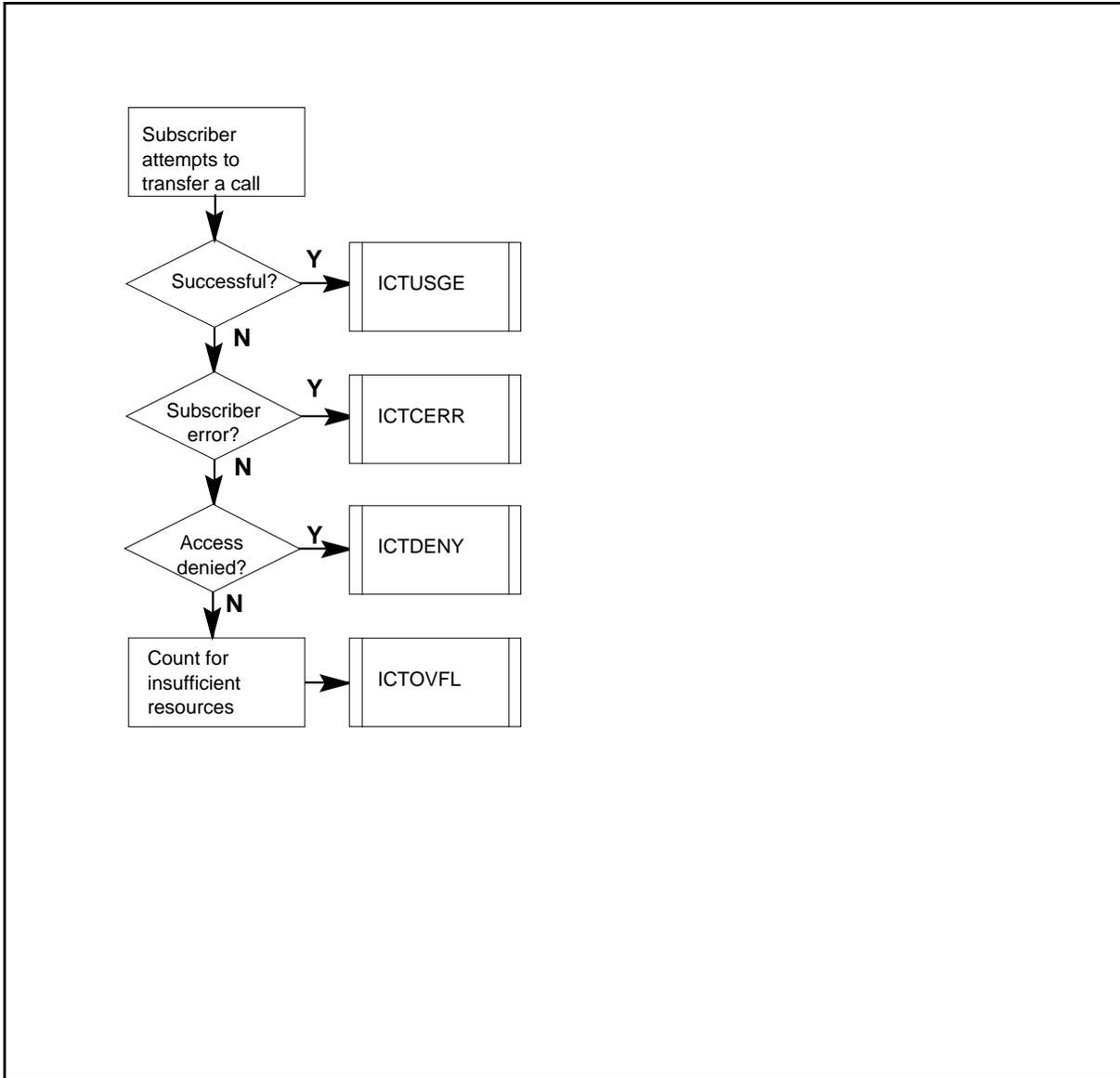
Associated functionality codes

The associated functionality codes for OM group ICT appear in the following table.

| Functionality | Code |
|----------------------|-------------|
| Cept Subscriber - I | NTX499AA |

OM group ICT (continued)

OM group ICT registers



Register ICTCERR

ICT customer error (ICTERR)

Register ICTCERR counts the number of times the system does not transfer because of subscriber error. The subscriber receives the "negative acknowledgement" tone.

OM group ICT (continued)

Register ICTCERR release history

Register ICTCERR was introduced in BCS26.

Associated registers

There are no associated registers.

Associated logs

The system generates FTR138 when a caller uses a feature card and receives a treatment tone.

Register ICTDENY

ICT denied (ICTDENY)

Register ICTDENY counts the times the system does not transfer a call is because of restricted access. The subscriber receives the "negative acknowledgement" tone.

Register ICTDENY release history

Register ICTDENY was introduced in BCS26.

Associated registers

There are no associated registers.

Associated logs

The system generates FTR138 when a caller uses or attempts to use a feature and receives a treatment tone.

Register ICTOVFL

ICT overflow (ICTOVFL)

Register ICTOVFL counts the times the system does not transfer a call because of ICT extension blocks is not sufficient. The subscriber receives the "negative acknowledgement" tone. ICTOVFL is not incremented on the DMS-100G switch.

Register ICTOVFL release history

Register ICTOVFL was introduced in BCS26.

Associated registers

There are no associated registers.

OM group ICT (end)

Associated logs

The system generates FTR138 when a caller uses or attempts to use a feature card and receives a treatment tone.

Register ICTUSGE

ICT usage (ICTUSGE)

Register ICTUSGE counts the times the system transfers a call.

Register ICTUSGE release history

Register ICTUSGE was introduced in BCS26.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

OM group ICWT

OM description

International call waiting (ICWT)

The OM group ICWT provides information about the use and performance of the international Call Waiting (CWT) feature and the Cancel Call Waiting (CCW) feature. This OM group provides counts of all attempts to use these features.

Release history

The OM group ICWT was introduced in BCS24.

Registers

The OM group ICWT registers display on the MAP terminal as follows:

| | | | |
|---------|----------|---------|---------|
| CWTUSGE | CWTABNDN | CWTDENY | CWTOVFL |
| CWTCERR | CCWACT | CCWUSGE | CCWCERR |
| CWTACT | CWTDEACT | CWTINTG | |

Group structure

The OM group ICWT provides one tuple per office.

Key field:

There is no Key field.

Info field:

There is no Info field.

Associated OM groups

There are no associated OM groups.

Associated functional groups

There are no associated functional groups.

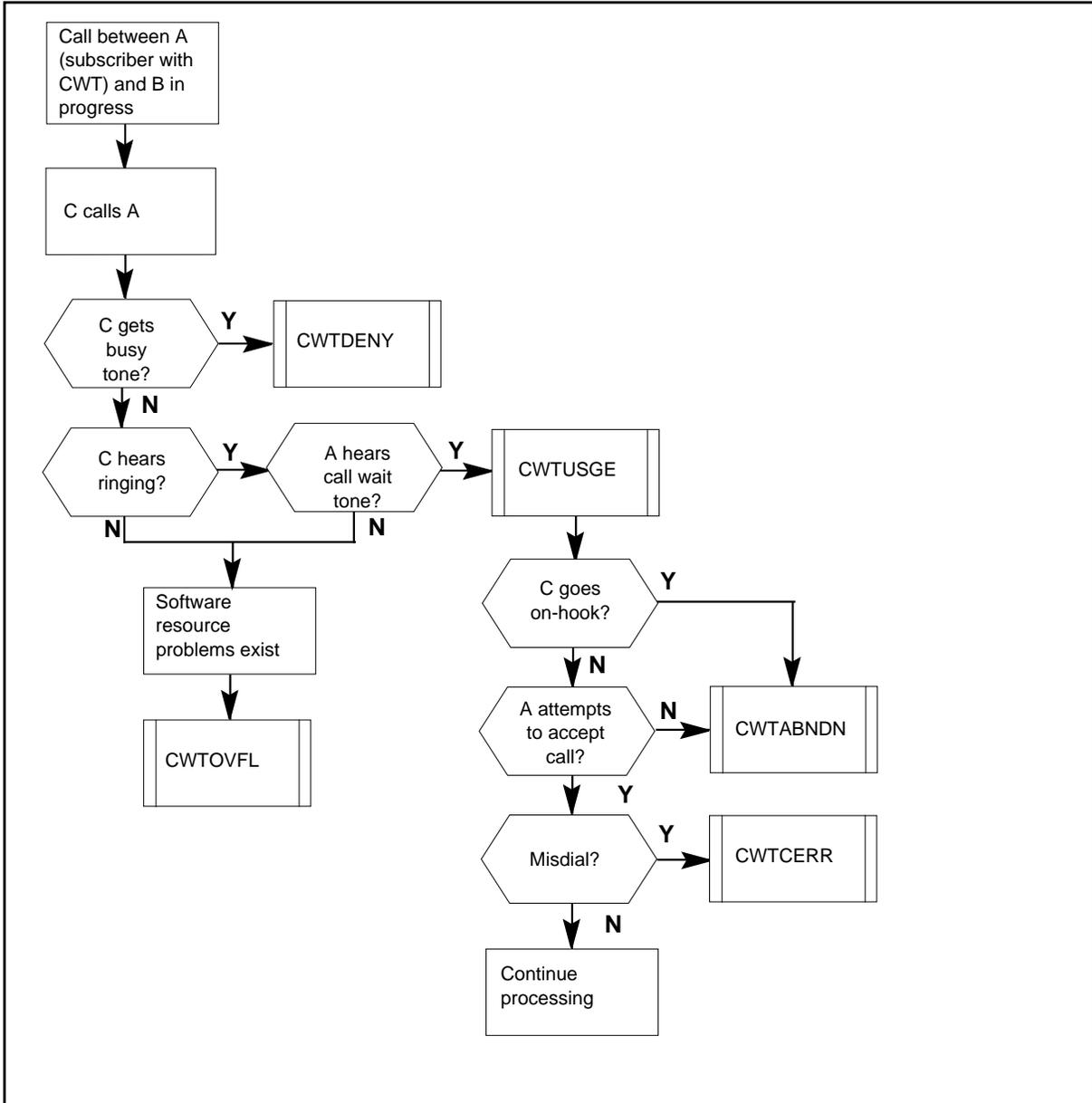
Associated functionality codes

The associated functionality codes for OM group ICWT appear in the following table.

| Functionality | Code |
|---|----------|
| International - Local Basic (UPCR NTX472AA) | NTX472AB |

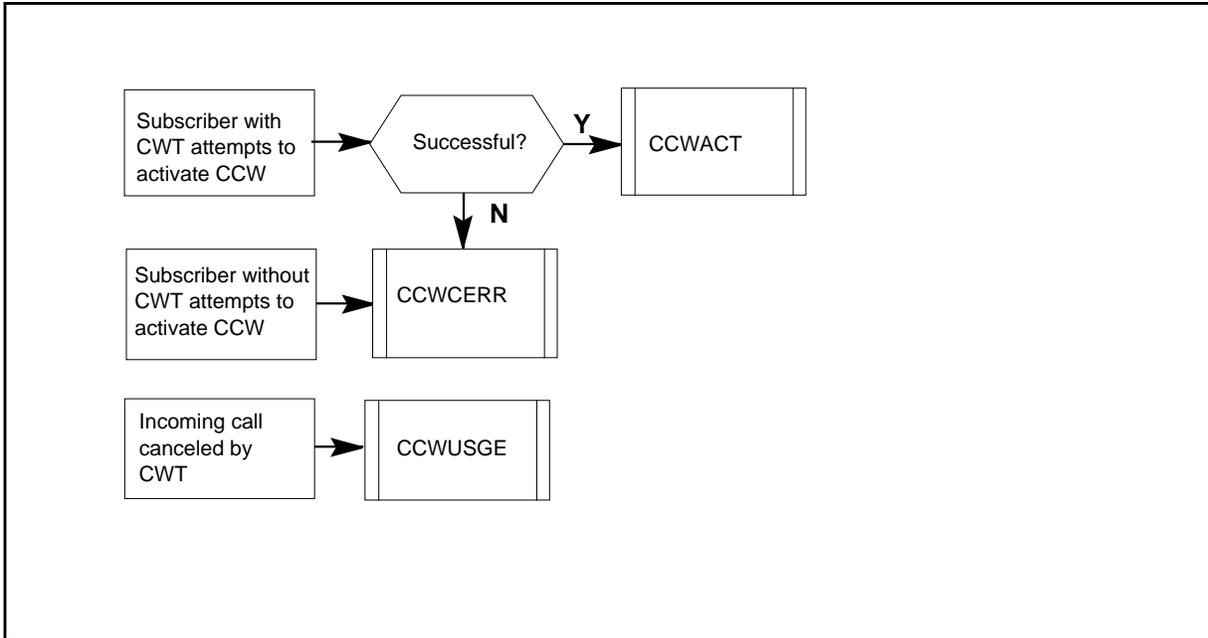
OM group ICWT (continued)

OM group ICWT registers



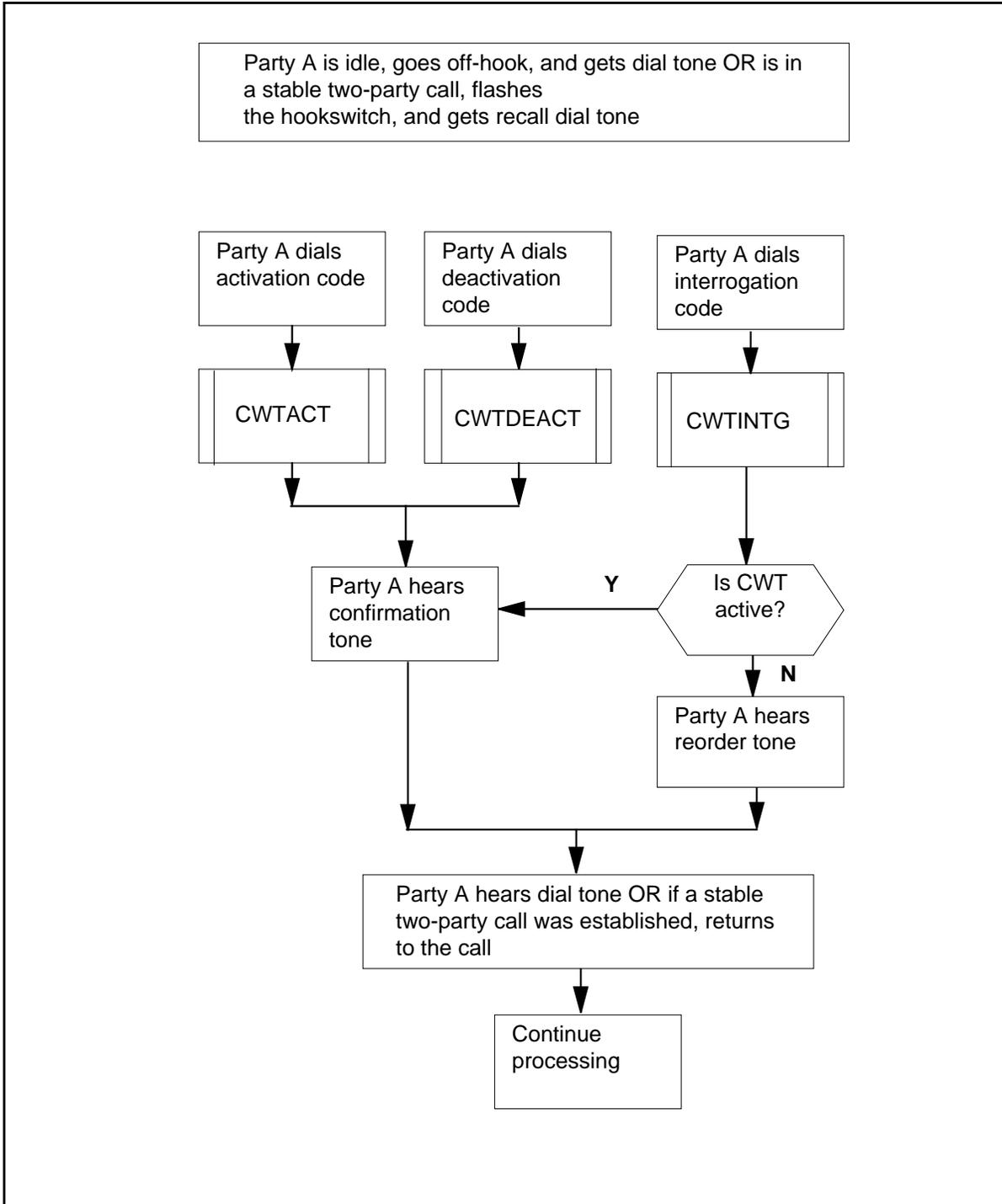
OM group ICWT (continued)

OM group ICWT registers (continued)



OM group ICWT (continued)

OM group ICWT registers (continued)



OM group ICWT (continued)

Register CCWACT

CCW activate (CCWACT)

Register CCWACT counts the times a subscriber cancels the Call Waiting feature. The subscriber receives the “confirmation” tone which indicates that the system request is accepted.

Register CCWACT release history

Register CCWACT was introduced in BCS24.

Associated registers

There are no associated registers.

Associated logs

The system generates FTR138 when a caller uses or attempts to receive a treatment tone.

Register CCWCERR

CCW customer error (CCWCERR)

Register CCWCERR counts the times the subscriber does not correctly use the CCW feature. This event occurs because of the following reasons:

- the subscriber does not dial correctly
- the system denies the feature to the subscriber
- the subscriber does not have CWT

The subscriber receives the “negative acknowledgement” or “feature not allowed” tone.

Register CCWCERR release history

The CCWCERR was introduced in BCS24.

Associated registers

There are no associated registers.

Associated logs

The system generates FTR138 when a caller uses or attempts to use a feature and receives a treatment tone.

Register CCWUSGE

CCW usage (CCWUSGE)

OM group ICWT (continued)

Register CCWUSGE counts the times the system cancels an incoming call waiting because a subscriber activates the CCW feature. The caller receives the “busy” tone.

Register CCWUSGE release history

Register CCWUSGE was introduced in BCS24.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Register CWTABNDN

CWT abandon (CWTABNON)

Register CWTABNDN counts the times a waiting call is not received for one of the following reasons:

- the subscriber does not answer
- the subscriber rejects the call
- the originator disconnects

Register CWTABNDN release history

Register CWTABNDN was introduced in BCS24.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Register CWTACT

CWT activate (CWTACT)

Register CWTACT counts the times the system activates the Call Waiting feature on a subscriber line.

Register CCWACT release history

Register CWTACT was introduced in GL03.1.

Associated registers

There are no associated registers.

OM group ICWT (continued)

Associated logs

There are no associated logs.

Register CWTCERR

CWT customer error (CWTCERR)

Register CWTCERR counts the times a subscriber receives the “call waiting” tone and dials a response code that is not correct. The subscriber receives the “feature data error” tone.

Register CWTCERR release history

Register CWTCERR was introduced in BCS24.

Associated registers

There are no associated registers.

Associated logs

The system generates FTR138 when a caller uses or attempts use a feature and receives a treatment tone.

Register CWTDEACT

CWT deactivate (CWTDEACT)

Register CWTDEACT counts the times the system deactivates the Call Waiting feature on a subscriber line.

Register CWTDEACT release history

Register CWTDEACT was introduced in GL03.1.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Register CWTDENY

CWT denied (CWTDENY)

OM group ICWT (continued)

Register CWTDENY counts the times a waiting call cannot for one of the following reasons. A is the subscriber with CWT, B is the party involved in a two-port call with A, and C is the call waiting party):

- A is in the process of dialing
- B is an operator
- C is an operator trunk, is part of a three-way or six-way call, has a subscriber premises meter (SPM), or is a coin line
- a feature is active on the A-to-B call
- the originator of the A-to-B call has an SPM or is a coin line
- the originator or terminator of the A-to-B call is not a line or trunk

The caller receives the "busy" tone.

Register CWTDENY release history

Register CWTDENY was introduced in BCS24.

Associated registers

There are no associated registers.

Associated logs

The system generates FTR138 when a caller uses or attempts to use a feature and receives a treatment tone.

Register CWTINTG

CCW interrogate (CWTINTG)

Register CWTINTG counts the times a subscriber interrogates the CCW feature. The subscriber receives the confirmation tone that indicates that the CCW feature accepts the request.

Register CWTINTG release history

Register CWTINTG was introduced in GL03.1

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Register CWTOVFL

CWT overflow (CWTOVFL)

OM group ICWT (end)

Register CWTOVFL counts the times a waiting call is not received because of the following resource problems:

- no CC metering-extension blocks, feature-data blocks or CPWAKEUPS
- field CCMTR_FAILURE_FREE_CALL in table OFCENG is set to N
- the system is not able to apply call waiting tone to the subscriber or audible ringing to the call waiting party

The caller receives the “no software resources” tone.

CWTOVFL is not incremented on the DMS-100G switch.

Register CWTOVFL release history

Register CWTOVFL was introduced in BCS24.

Associated registers

There are no associated registers.

Associated logs

The system generates FTR138 when a caller uses or attempts to use a feature and receives a treatment tone.

Register CWTUSGE

CWT usage (CWTUSGE)

Register CWTUSGE counts the times the subscriber receives a waiting call. This event means that the subscriber hears the “call waiting” tone and the call waiting party receives audible ringing.

Register CWTUSGE release history

Register CWTUSGE was introduced in BCS24.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

OM group IDND

OM Description

International do not disturb

The IDND provides information about the use and performance of the international Do Not Disturb feature. This OM group provides counts of all attempts to use, activate, deactivate, and interrogate this feature.

Release history

The OM group IDND was introduced in BCS24.

Registers DNDAUNV, DNDDUNV, UDNDDENY, DNDIUNV, and DNDUUNV were added in GL04.

Registers

The OM group IDND registers display on the MAP terminal as follows:

| | | | |
|---------|---------|----------|---------|
| DNDACT | DNDDACT | DNDAUNV | DNDDUNV |
| DNDINTG | DNDUSGE | DNDDENY | DNDOVFL |
| DNDCERR | DNDDERR | UDNDDENY | DNDIUNV |
| DNDUUNV | | | |

Group structure

The OM group IDND provides one tuple per office.

Key field:

There is no key field.

Info field:

There is no info field.

Associated OM groups

There are no associated OM groups.

Associated functional groups

There are no associated functional groups.

OM group IDND (continued)

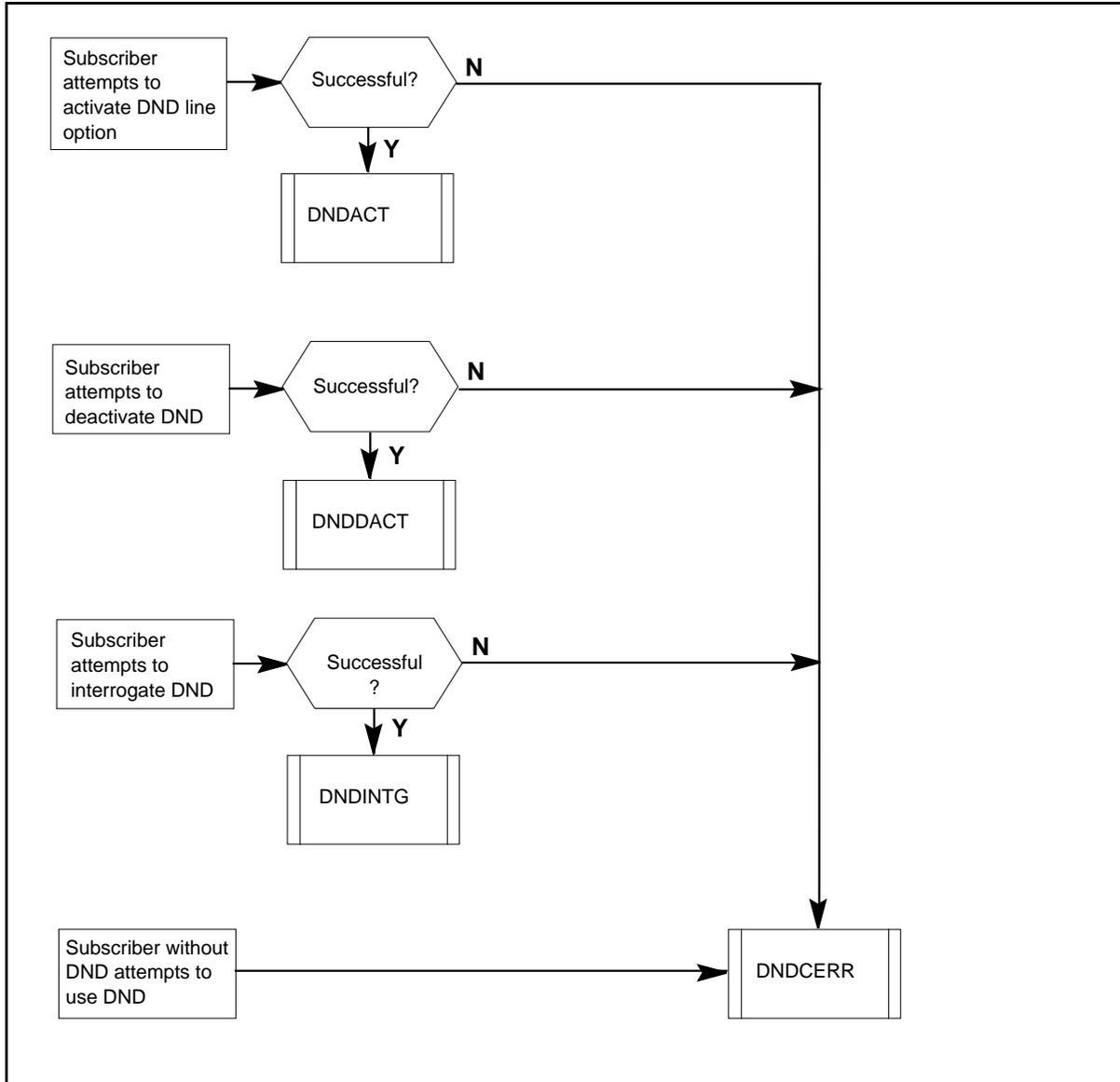
Associated functionality codes

The associated functionality codes for OM group IDND appear in the following table.

| Functionality | Code |
|---|----------|
| International - Local Basic (UPCR NTX472AA) | NTX472AB |

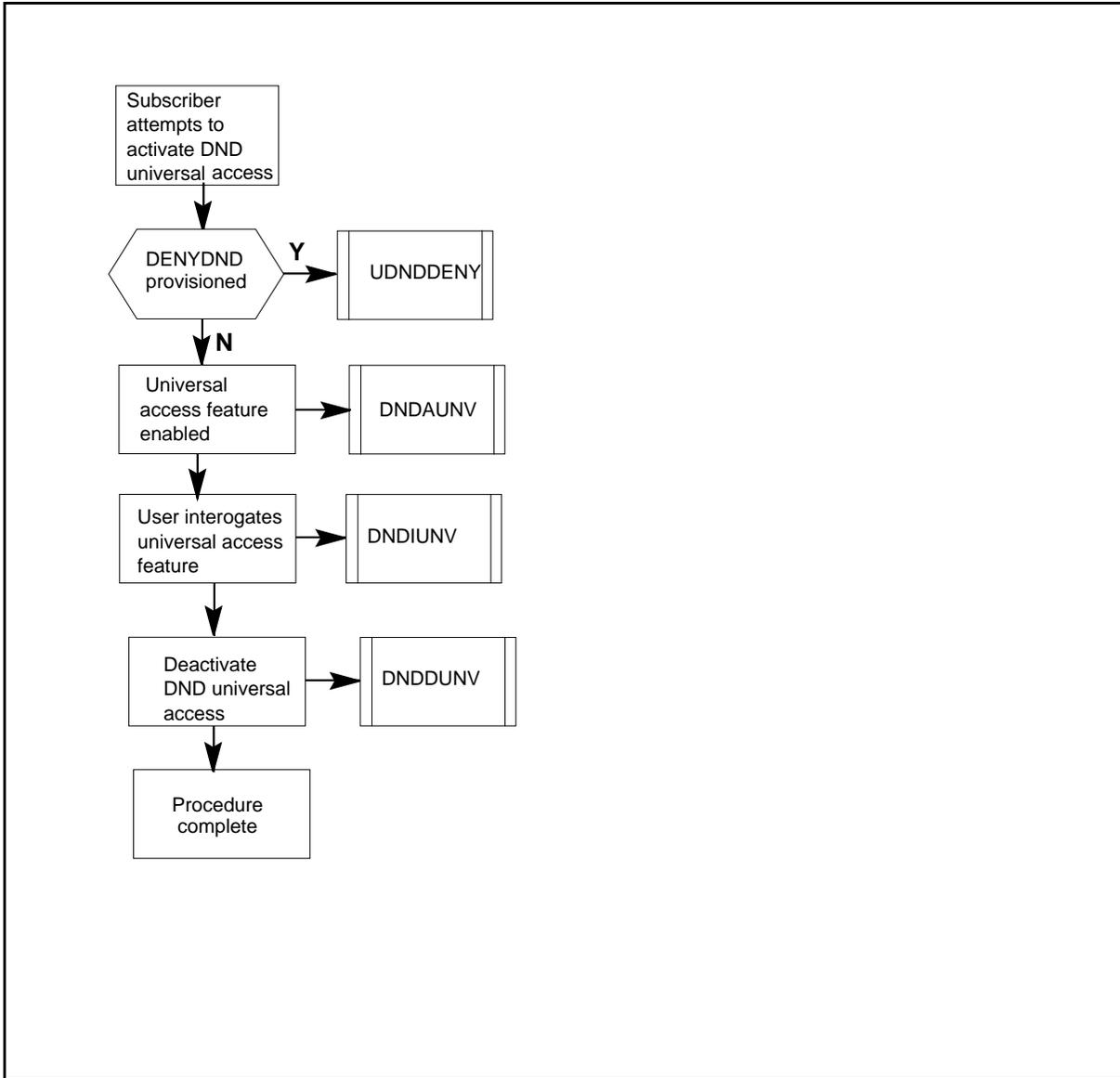
OM group IDND (continued)

OM group IDND registers



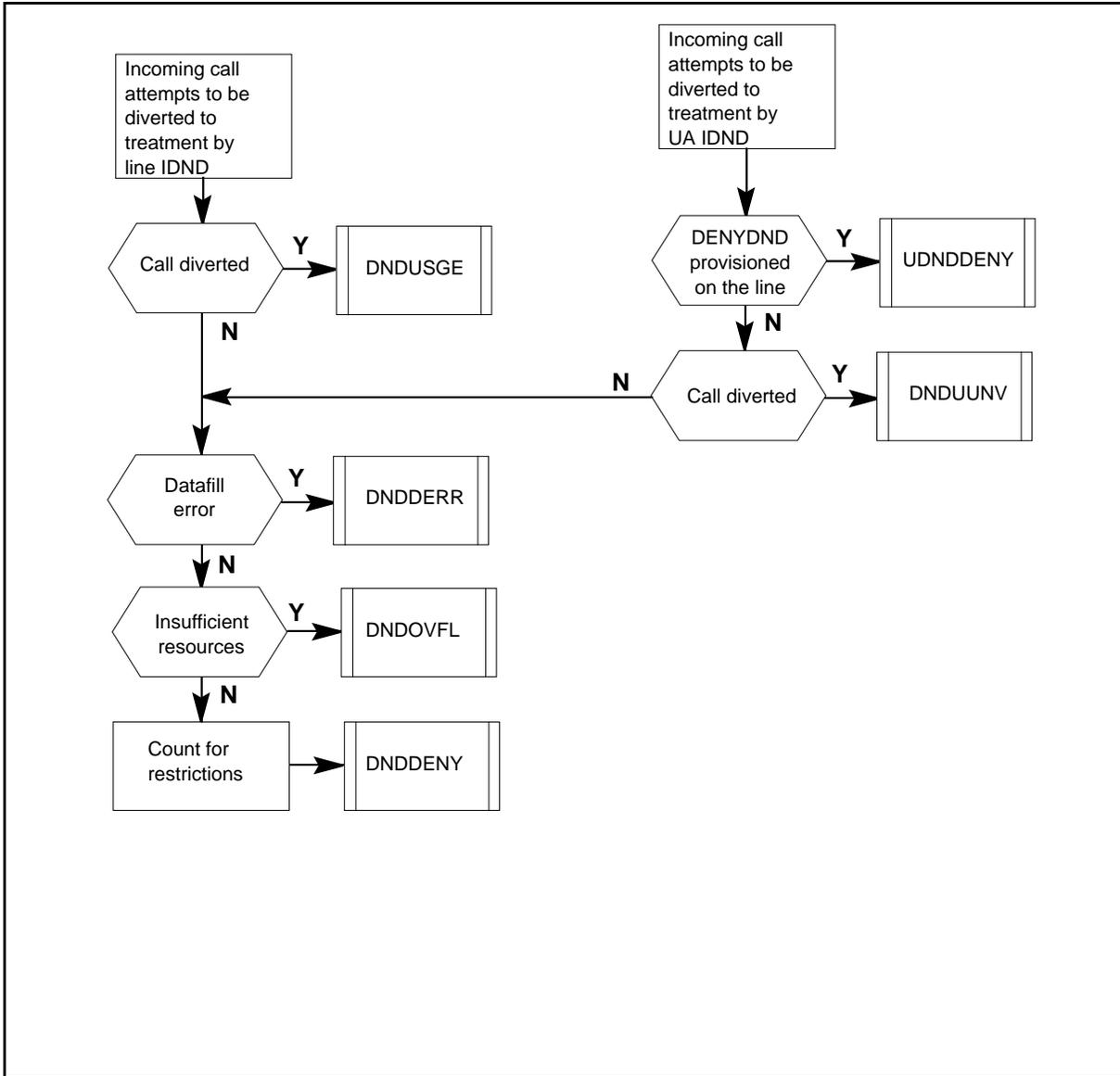
OM group IDND (continued)

OM group IDND registers (continued)



OM group IDND (continued)

OM group IDND registers (continued)



Register UDNDDENY

UDNDDENY counts the number of times option DENYDND prevented the the user from activating universal access IDND on a line.

Register UDNDDENY release history

UDNDDENY was introduced in GL04.

OM group IDND (continued)

Associated registers

There are no associated registers.

Associated logs

There are no associated registers.

Register DNDACT

DND activate (DNDACT)

Register DNDACT counts the times the system activates the Do Not Disturb feature. The subscriber receives the "confirmation" tone.

Register DNDACT release history

Register DNDACT was introduced in BCS24.

Associated registers

There are no associated registers.

Associated logs

The system generates FTR138 when a caller uses or attempts to use a feature and receives a treatment tone.

Register DNDAUNV

DND activation universal

DNDAUNV counts the number of times a user activates DND with universal access.

Register DNDAUNV release history

DNDAUNV was introduced in GL04.

Associated registers

There are no associated registers.

Associated logs

There are on associated logs.

Register DNDDUNV

DND deactivation universal

DNDDUNV counts the number of times a user deactivates DND with universal access.

OM group IDND (continued)

Register DNDDUNV release history

DNDDUNV was introduced in GL04.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Register DNDCERR

DND customer error (DNDCERR)

Register DNDCERR counts the number of times the subscriber does not activate, deactivate, or interrogate DND correctly. This event occurs when the subscriber does not dial correctly, the feature is already active, or the subscriber does not have the feature. The subscriber receives the "negative acknowledgement" or "feature not allowed" tone depending on the condition.

Register DNDCERR release history

Register DNDCERR was introduced in BCS24.

Associated registers

There are no associated registers.

Associated logs

The system generates FTR138 when a caller uses or attempts to use a feature and receives a treatment tone.

Register DNDDACT

DND deactivate (DNDDACT)

Register DNDDACT counts the times the system deactivate the Do Not Disturb feature. The subscriber receives the "confirmation" tone.

Register DNDDACT release history

Register DNDDACT was introduced in BCS24.

Associated registers

There are no associated registers.

Associated logs

The system generates FTR138 when a caller uses or attempts to use a feature and receives a treatment tone.

OM group IDND (continued)

Register DNDDENY

DND denied (DNDDENY)

The DNDDENY counts the times the system does not direct a call for one of the following reasons:

- the system diverted the call five times
- the system is directing another call

The caller receives the “busy” tone.

Register DNDDENY release history

Register DNDDENY was introduced in BCS24.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Register DNDDERR

DND entry error (DNDDERR)

Register DNDDERR counts the times the system does not direct a call for one of the following reasons:

- the destination number is not correct
- the translation number is not correct

The caller receives the “feature data error” tone.

Register DNDDERR release history

Register DNDDERR was introduced in BCS24.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Register DNDINTG

DND interrogate (DNDINTG)

OM group IDND (continued)

System DNDINTG counts the times a subscriber checks if the DND feature activates. The subscriber receives the "confirmation" or "negative acknowledgement" tone depending on the status.

Register DNDINTG release history

Register DNDINTG was introduced in BCS24.

Associated registers

There are no associated registers.

Associated logs

The system generates FTR138 when a caller uses or attempts to use a feature and receives a treatment tone.

Register DNDIUNV

DND interrogate universal access

DNDIUNV counts the number of times a caller interrogates DND with universal access.

Register DNDIUNV release history

DNDIUNV was introduced in GL04.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Register DNDOVFL

DND overflow (DNDOVFL)

Register DNDOVFL counts the times the system does not direct a call because there are no call diversion extension blocks. The caller receives the "no software resources" tone.

Register DNDOVFL release history

Register DNDOVFL was introduced in BCS24.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Register DNDUSGE

DND usage (DNDUSGE)

Register DNDUSGE counts the times the system directs to treatment an incoming call to a subscriber by the Do Not Disturb feature.

Register DNDUSGE release history

Register DNDUSGE was introduced in BCS24.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Register DNDUUNV

DND usage of universal access

DNDUUNV counts the number of times an incoming call to a subscriber is diverted to treatment by Universal Access IDND.

Register DNDUUNV release history

DNDUUNV was introduced in GL04.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

OM group IFDL

OM description

International fixed destination line (IFDL)

The OM group IFDL provides information about the use and performance of the Fixed Destination Line features Hot Line (HTL) and Warm Line (WLN). This OM group provides counts of all attempts to use, activate, deactivate, and interrogate these features.

Release history

The OM group IFDL was introduced in BCS24.

Registers

The OM group IFDL registers display on the MAP terminal as follows:

| | | | |
|---------|---------|---------|----------|
| HTLUSGE | HTLOVFL | WLNACT | WLNPROG |
| WLNDACT | WLNINTG | WLNUSGE | WLNNOVFL |
| WLNCERR | | | |

Group structure

The OM group IFDL provides one tuple per office.

Key field:

There is no Key field.

Info field:

There is no Info field.

Associated OM groups

There are no associated OM groups.

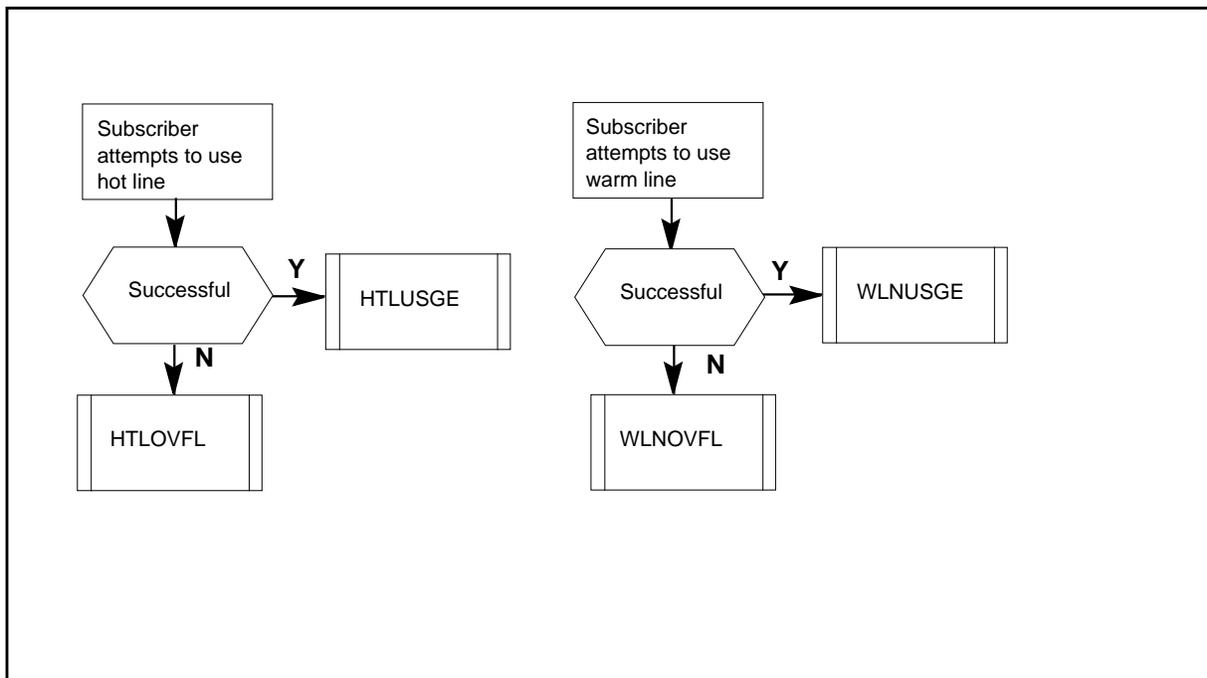
Associated functional groups

There are no associated functional groups.

OM group IFDL (continued)**Associated functionality codes**

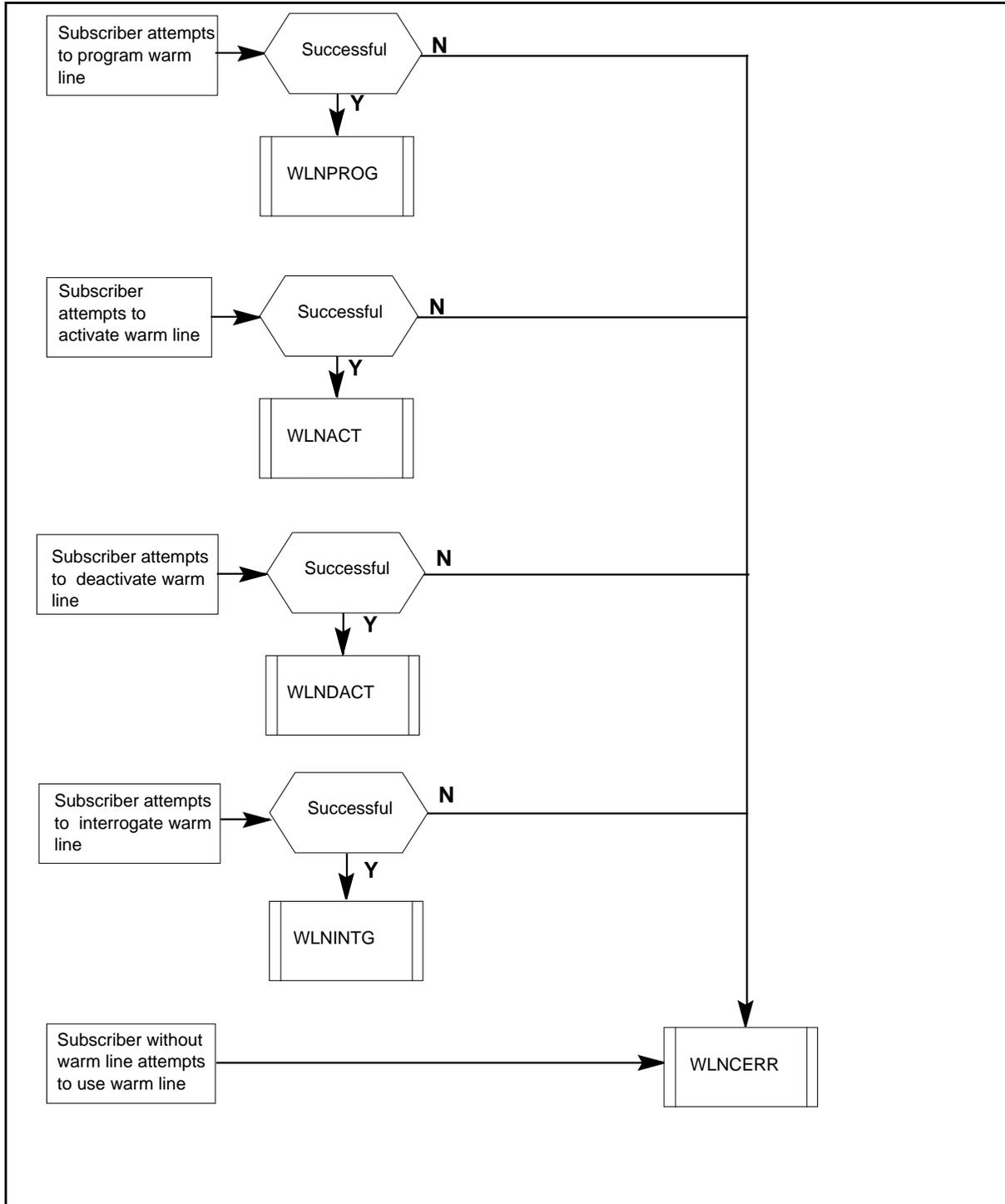
The associated functionality codes for OM group IFDL appear in the following table.

| Functionality | Code |
|---|----------|
| international - Local Basic (UPCR NTX472AA) | NTX472AB |

OM group IFDL registers

OM group IFDL (continued)

OM group IFDL registers (continued)



OM group IFDL (continued)

Register HTLOVFL

Hot line overflow (HTLOVFL)

Register HTLOVFL counts the number of times a hot line call is unsuccessful because of data corruption or software error. HTLOVFL is not incremented on the DMS-100G switch.

Register HTLOVFL release history

Register HTLOVFL was introduced in BCS24.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Register HTLUSGE

Hot line usage (HTLUSGE)

Register HTLUSGE counts the times a hot line goes off hook and the system routes the hot line to an entered number.

Register HTLUSGE release history

Register HTLUSGE was introduced in BCS24.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Register WLNACT

Warm line activate (WLNACT)

Register WLNACT counts the times a subscriber activates a warm line. The subscriber receives the "confirmation" tone.

Register WLNACT release history

Register WLNACT was introduced in BCS24.

Associated registers

There are no associated registers.

OM group IFDL (continued)

Associated logs

The system generates FTR138 when a caller uses or attempts to use a feature and receives a treatment tone.

Register WLNCERR

Warm line customer error (WLNCERR)

Register WLNCERR counts the times a subscriber does not program, activate, deactivate, or interrogate WLN correctly. This event occurs when the subscriber does not dial correctly, the feature is already active, or the subscriber does not have the feature. The subscriber receives the "negative acknowledgement" or "feature not allowed" tone.

Register WLNCERR release history

Register WLNCERR was introduced in BCS24.

Associated registers

There are no associated registers.

Associated logs

The system generates FTR138 when a caller uses or attempts to use a feature and receives a treatment tone.

Register WLNDACT

Warm line deactivate (WLNDACT)

Register WLNDACT counts the times a subscriber deactivates a warm line. The subscriber receives the "confirmation" tone.

Register WLNDACT release history

Register WLNDACT was introduced in BCS24.

Associated registers

There are no associated registers.

Associated logs

The system generates FTR138 when a caller uses or attempts to use a feature and receives a treatment tone.

Register WLNINTG

Warm line interrogate (WLNINTG)

OM group IFDL (continued)

Register WLNINTG counts the times a subscriber checks if the warm line is activated. The subscriber receives the "confirmation" or "negative acknowledgement" tone depending on the outcome of the interrogation.

Register WLNINTG release history

Register WLNINTG was introduced in BCS24.

Associated registers

There are no associated registers.

Associated logs

The system generates FTR138 when a caller uses or attempts to use a feature and receives a treatment tone.

Register WLNOVFL

Warm line overflow (WLNOVFL)

Register WLNOVFL counts the number of times a subscriber is unable to use the warm line because of insufficient system resources, database corruption or software error. WLNOVFL is not incremented on the DMS-100G switch.

Register WLNOVFL release history

Register WLNOVFL was introduced in BCS24.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Register WLNPROG

Warm line programming (WLNPROG)

Register WLNPROG counts the number of times a subscriber programs a warm line number. The subscriber receives the "confirmation" tone.

Register WLNPROG release history

Register WLNPROG was introduced in BCS24.

Associated registers

There are no associated registers.

OM group IFDL (end)

Associated logs

The system generates FTR138 when a caller uses or attempts to use a feature and receives a treatment tone.

Register WLNUSGE

Warm line usage (WLNUSGE)

Register WLNUSGE counts the times a subscriber goes off hook without dialing within a time frame. The system routes to the programmed directory number.

Register WLNUSGE release history

Register WLNUSGE was introduced in BCS24.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

OM group IHTRP

OM description

Gateway hard-to-reach peg (IHTRP)

The OM group IHTRP counts call attempts to hard-to-reach destination codes for a DMS-300.

Release history

The OM group IHTRP was introduced before BCS20.

BCS34

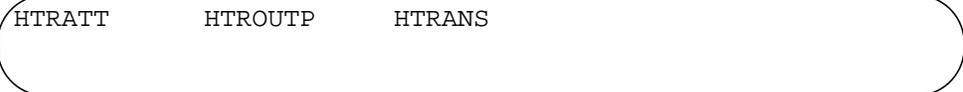
Group structure is changed to shorten the length of the info field. The Group Structure section below reflects the updated info field.

BCS31

Registers HTROUTP and HTRANS increase for call attempts on DMS-300.

Registers

The OM group IHTRP registers display on the MAP terminal as follows:



HTRATT HTROUTP HTRANS

Group structure

The OM group IHTRP provides one tuple for each hard -to-reach code.

Key field:

There is no Key field.

Info field:

INTL_PRP_OMINFO has three subfields: CBKKEY, CBKLVL, and CBKANN.

The Info field CBKKEY has the following subfields:

- The code type with value CC (country code), or NC (national code) is CT.
- The call direction with the following values is DIR: INCOM (incoming), OUTGO (outgoing), or TRNST (transit) .
- The userclass with the value OPRT (operator), or SUBS (subscriber) is USR.

OM group IHTRP (continued)

- The digit register that contains up to four digits is DR_C. The four digits represent the called number country code from which the system diverts calls.
- The digit register that contains up to 16 digits is DR_N. The 16 digits represent the called number national code from which the systems diverts calls.

The percentage of blocked calls is CBKLVL.

The CBKANN identifies the announcement to which the system routes blocked calls. The following values are correct for CBKANN:

- NCA - no circuit announcement
- EA1 - emergency announcement 1
- EA2 - emergency announcement 2

Associated OM groups

There are no associated OM groups.

Associated functional groups

The following functional groups associate with OM group IHTRP:

- All Gateway DMS offices have IHTRP.

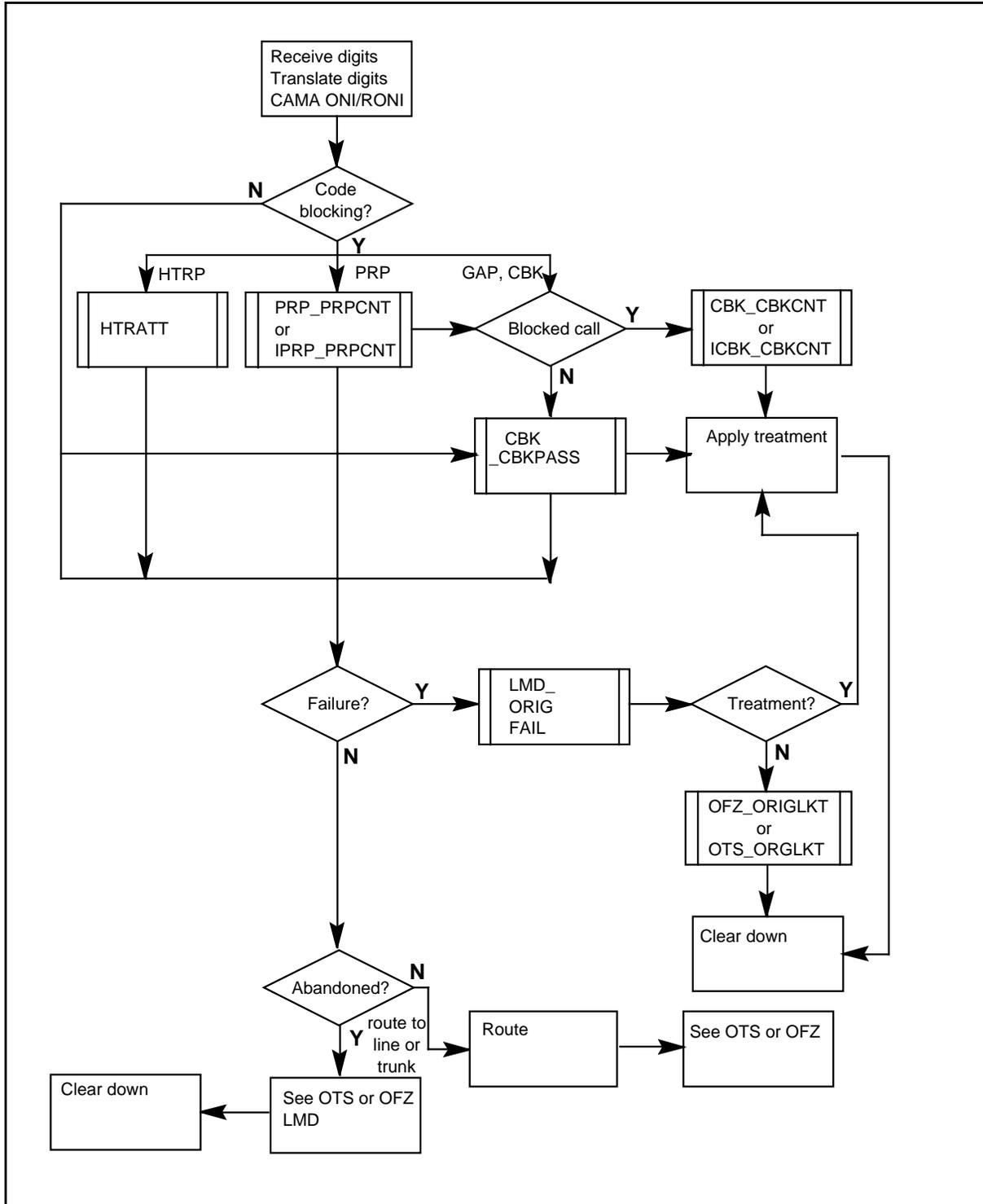
Associated functionality codes

The associated functionality codes that associate with OM group IHTRP appear in the following table.

| Functionality | Code |
|--|----------|
| International Switching Center (ISC) Basic | NTX300AA |

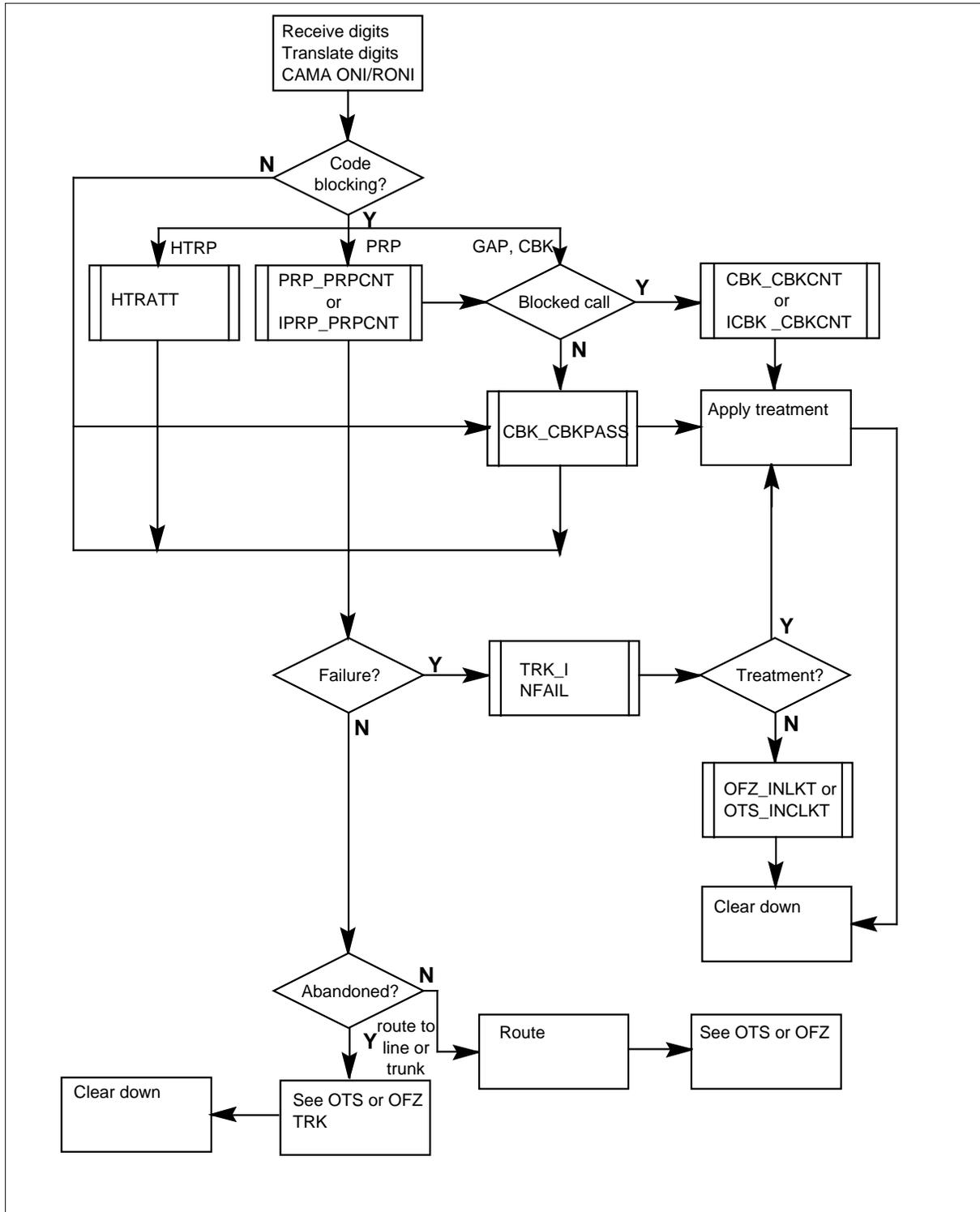
OM group IHTRP (continued)

OM group IHTRP registers: originating traffic



OM group IHTRP (continued)

OM group IHTRP registers: incoming traffic



OM group IHTRP (continued)

Register HTRANS

Forwarded answers (HTRANS)

Register HTRANS counts calls to hard-to-reach destination codes that forward to the next office and receive an answer.

Register HTRANS release history

Register HTRANS was introduced before BCS20.

BCS31

Register HTRANS increases for call attempts on DMS-300.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Register HTRATT

Hard-to-reach attempts (HTRATT)

Register HTRATT counts call attempts to the destination code to which the IHTRP control applies.

Register HTRATT release history

Register HTRATT was introduced before BCS20.

Associated registers

There are no associated registers.

Associated logs

The system generates NMW142 when IHTRP controls are activated or deactivated.

Register HTROUTP

Forwarded attempts (HTROUTP)

Register HTROUTP counts call attempts to hard-to-reach destination codes that the system forward to the next office.

Register HTROUTP release history

Register HTROUTP was introduced before BCS20.

OM group IHTRP (end)

BCS31

Register HTROUTP increments for call attempts on DMS-300.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

OM group ILDBD

OM description

Integrated services digital network (ISDN) line drawer BD channels (ILDBD)

ATTENTION

The ISDN line drawer for remotes (ILDR) is first available for remote switching center-SONET (RSC-S) in the NA007/XPM08 timeframe. ISDN is available for remote switching center (RSC) configurations in the NA007/XPM08 timeframe. The ILDR is first available for the remote line concentrating module (RLCM), outside plant module (OPM), and outside plant access cabinet (OPAC) configurations in the NA008/XPM81 timeframe.

The first release of the ILDR product in NA007 also includes no more than two Bd-channels (used for 100% low speed packet data) for each line drawer. This engineering restriction for 100% packet data usage on the ISDN Delta channel will be removed in NA008. The delivery of feature AF6811, ILDR Overload Control will remove the restriction.

This operational measurements (OM) group provides information for the ILDR Bd-channel. This information allows operating company personnel to verify normal transit of information (frames) on the links between the ILDR and the packet handler.

The OM group ILDBD contains five types of registers that count the following ILDR Bd-channel events:

- one register counts the frames that the system transmits, which the system discarded
- one register counts the frames that the system received with cyclic redundancy check (CRC) errors
- one register counts the frames that the system discards
- two registers count the frames that the system receives or transmits from or to the packet handler

Release history

The OM group ILDBD was introduced in CCM07.

Registers

The OM group ILDBD registers display on the MAP terminal as follows:

OM group ILDBD (continued)

| | | | |
|----------|--------|----------|--------|
| IBDXTDSC | IBDCRC | IBDRXDSC | IBDTPH |
| IBDRXP | | | |

Group structure

The OM group ILDBD provides one tuple for each ILDR Bd-channel defined in the switch.

Key field:

ILDBD_OMTYPE. This key field specifies the number of Bd-channels that can be defined in the switch (0 to MAX_ILD_BD_CHANNELS_ON_SWITCH). The maximum number of defined Bd-channels in the switch is MAX_ILD_BD_CHANNELS_ON_SWITCH.

Info field:

ILDBD_OMINFO. This field comprises the following subfields:

LINE_MODULE (specifies the location of the ILDR, for example, REM1 and the frame and unit numbers of the ILDR host)

LINE_DRAWER (specifies the drawer number)

BD_CHNL (specifies the Bd-channel number in the drawer [could be 1 or 2])

Associated OM groups

The OM group ILDBRA counts equal information for BRA-type D-channels.

Associated operating groups

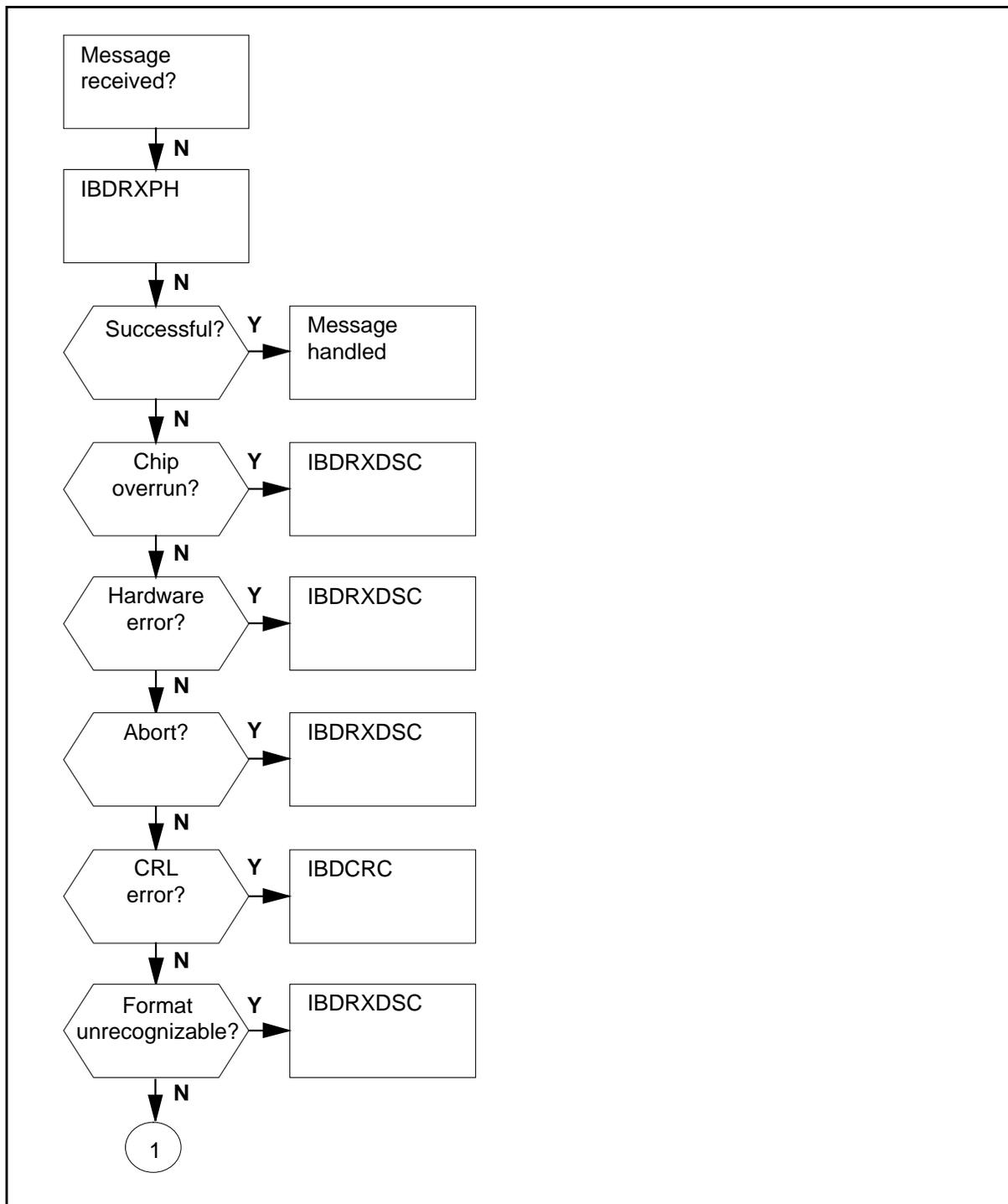
There are no associated operating groups.

Associated functionality codes

There are no associated functionality codes.

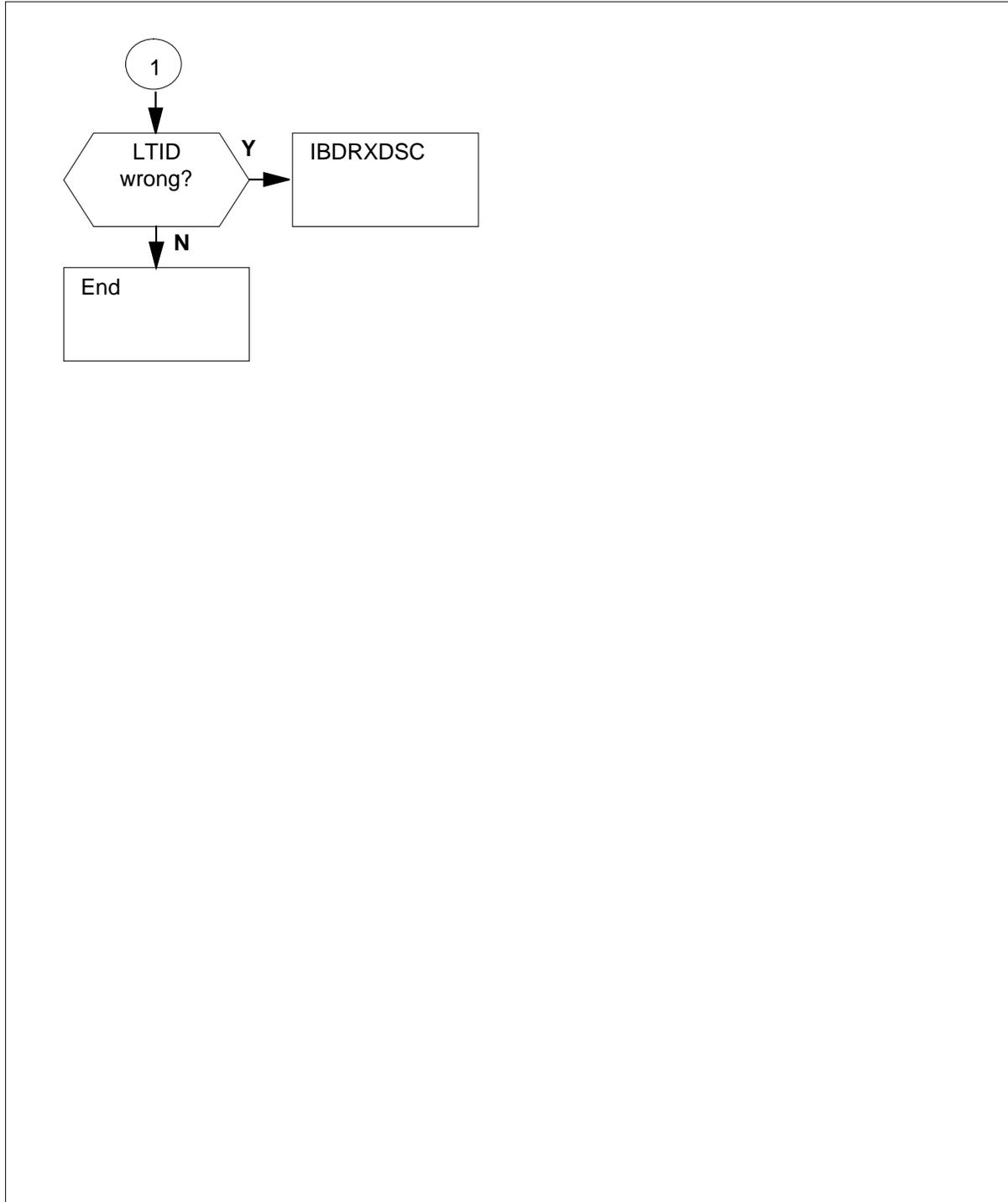
OM group ILDBD (continued)

OM group ILDBD registers, message received



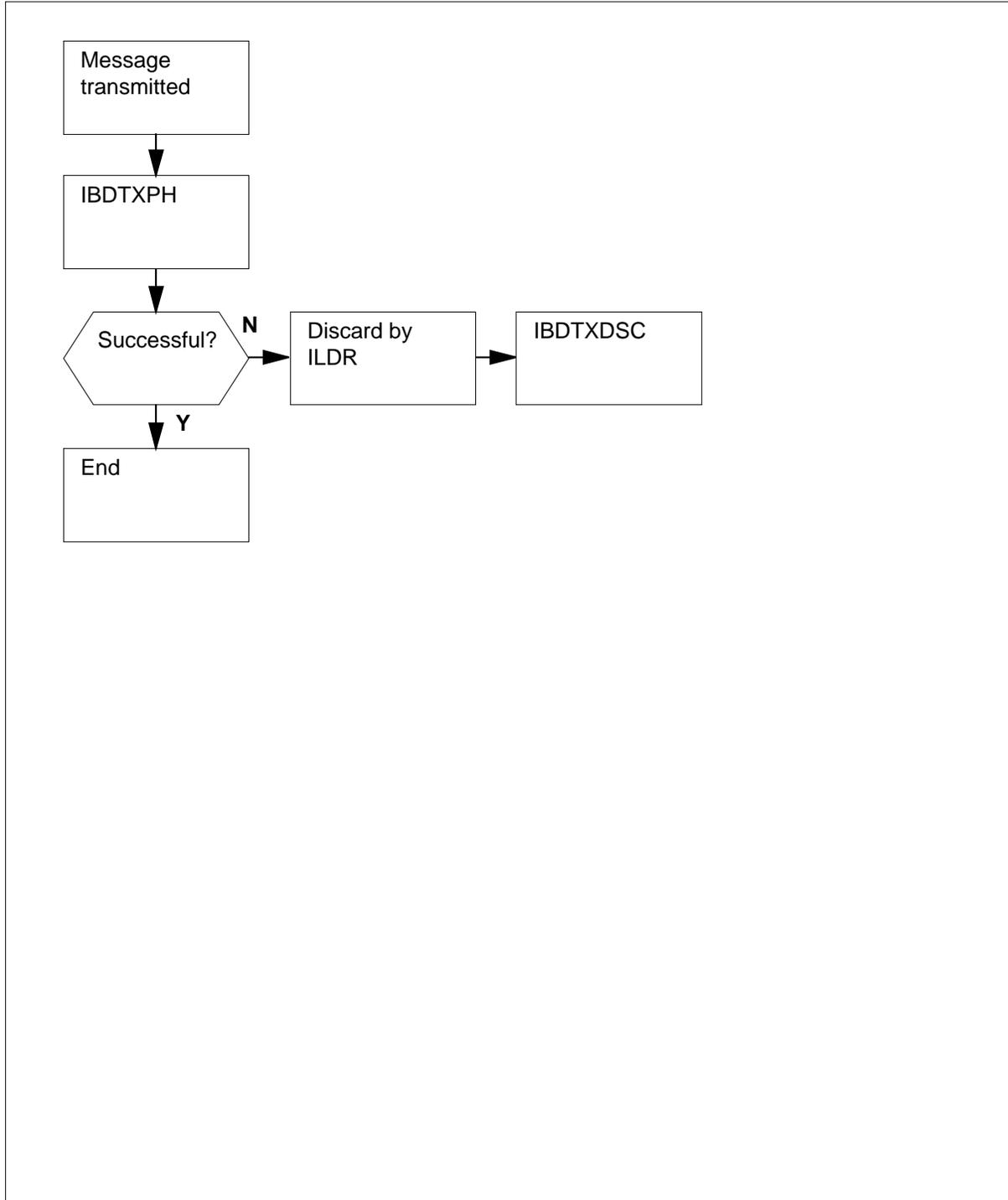
OM group ILDBD (continued)

OM group ILDBD registers, message received (continued)



OM group ILDBD (continued)

OM group ILDBD registers, message transmitted



OM group ILDBD (continued)

Register IBDTXDSC

Number of frames transmitted that were discarded (IBDTXDSC)

Register IBDTXDSC counts the Bd-channel frames destined for a packet handler that the ILDR discards because of hardware problems.

Register IBDTXDSC release history

Register IBDTXDSC was introduced in CCM07.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register IBDCRC

Number of frames received with CRC errors (IBDCRC)

Register IBDCRC counts the Bd-channel frames that a packet handles receives and the ILDR discards because of CRC errors.

Register IBDCRD release history

Register IBDCRC was introduced in CCM07.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register IBDRXDSC

Number of frames received that were discarded (IBDRXDSC)

OM group ILDBD (continued)

Register IBDRXDSC counts the Bd-channel frames that a packet handler receives and the ILDR discards. These packets are handled and discarded for the following reasons:

- invalid logical terminal identifiers (LTID)
- messages that are decoded
- flow control problems
- the system aborts
- hardware errors

Register IBDRXDSC release history

Register IBDRXDSC was introduced in CCM07.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register IBDTXPH

Number of frames transmitted to the packet handler (IBDTXPH)

Register IBDTXPH counts the Bd-channel frames that are an ILDR transmits to a packet handler. Each unit in IBDTXPH represents 100 frames.

Register IBDTXPH release history

Register IBDTXPH was introduced in CCM07.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register IBDRXPH

Number of correct frames received from the packet handler (IBDRXPH)

OM group ILDBD (end)

Register IBDRXPH counts the Bd-channel frames that an ILDR receives from a packet handler. Each unit in IBDRXPH represents 100 frames.

Register IBDRXPH release history

Register IBDRXPH was introduced in CCM07.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

OM group ILDBRA

OM description

Integrated services digital network (ISDN) line drawer basic rate access (ILDBRA)

ATTENTION

The ISDN line drawer for remotes (ILDR) is first available for remote switching center-SONET (RSC-S) in the NA007/XPM08 timeframe. The ISDN is first available for remote switching center (RSC) configurations in the NA007/XPM08 timeframe. The ILDR is first available for remote line concentrating module (RLCM), outside plant module (OPM), and outside plant access cabinet (OPAC) configurations in the NA008/XPM81 timeframe.

The OM group ILDBRA provides information related to ILDR D-channels. This information allows operating company personnel to verify normal transit of information (frames) on links between the ILDR and the NT1.

The OM group ILDBRA contains 15 types of registers that count the following basic rate access D-channel events:

- two registers count the SAPI 0 frames the system receives and transmits
- two registers count the SAPI 16 frames the system receives and transmits
- two registers count the SAPI 63 frames the system receives and transmits
- one register counts the frames with cyclic redundancy check (CRC) errors the system receives
- one register counts the frames the system discards
- one register counts the frames transmitted the system discarded
- two registers count the link resets by an ILDR/far-end device (peer)
- two registers count the reject frames the system receives and transmits
- two registers count the receiver not ready (RNR) frames the system receives and transmits

Release history

The OM group ILDBRA was introduced in CCM07.

Registers

The OM group ILDBRA registers display on the MAP terminal as follows:

OM group ILDBRA (continued)

| | | | |
|----------|----------|----------|----------|
| IBRTXDSC | IBRCRC | IBRRXDSC | IBRS0TX |
| IBRS16TX | IBRSATX | IBRS0RX | IBRS16RX |
| IBRSARX | IBRLKREI | IBRLKREP | IBRRNRP |
| IBRRNRI | IBREJTX | IBREJRX | |

Group structure

The OM group ILDBRA provides one tuple for each ILDR defined in the computing module (CM).

Key field:

ILDBRA_OMTYPE.

This key field specifies the number of ILDRs defined in the CM (0 TO MAX_ILD_NO). The maximum number of ILDRs defined in the CM is MAX_ILD_NO.

Info field:

ILDBRA_OMINFO.

This field comprises the following subfields:

- LINE_MODULE (specifies the location of the ILDR, for example, REM1 and the frame and unit numbers of the ILDR host)
- LINE_DRAWER (specifies the drawer number)

Associated OM groups

The OM group ILDBD counts the same information for Bd-channels.

Associated operating groups

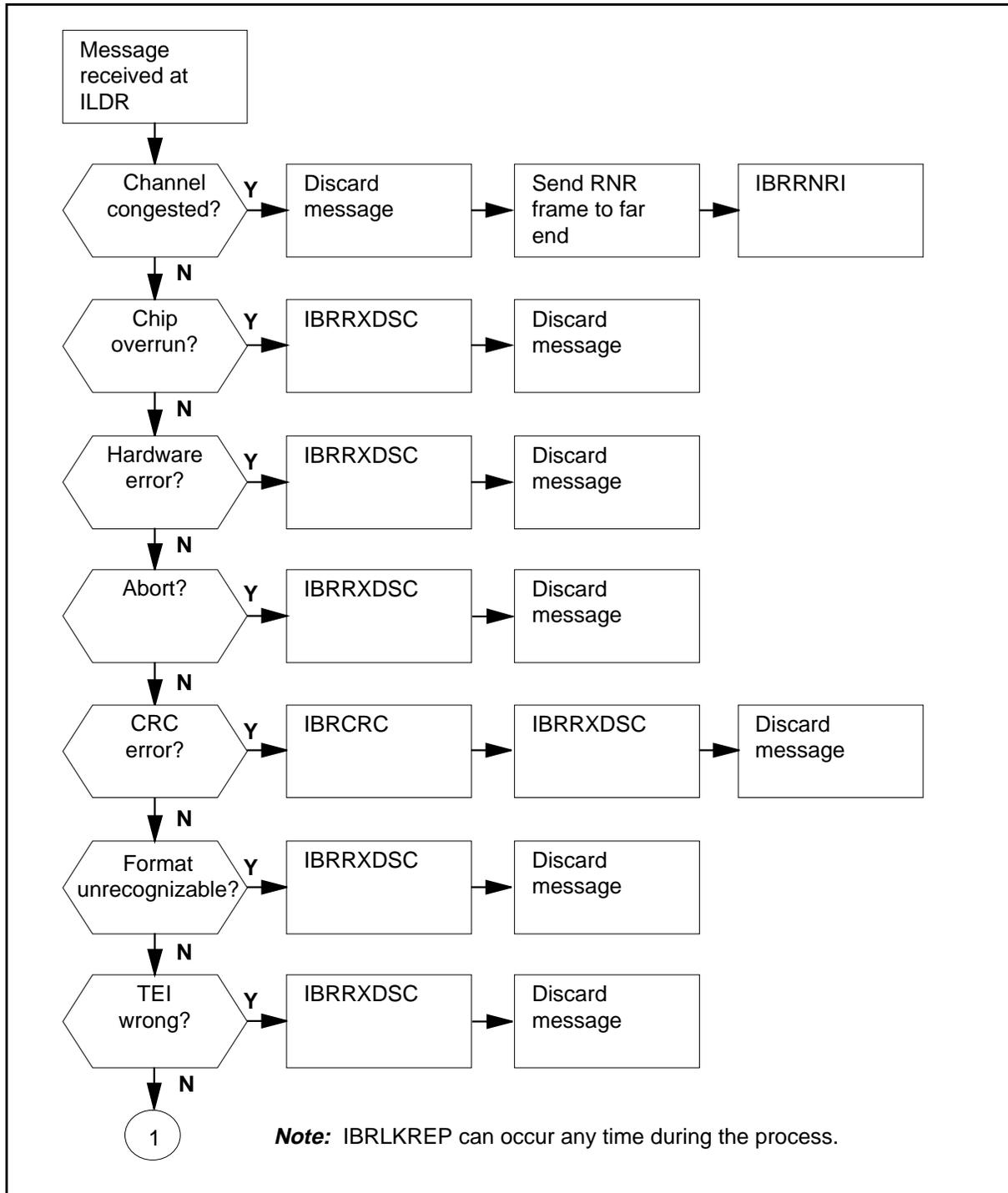
There are no associated operating groups.

Associated functionality codes

There are no associated functionality codes.

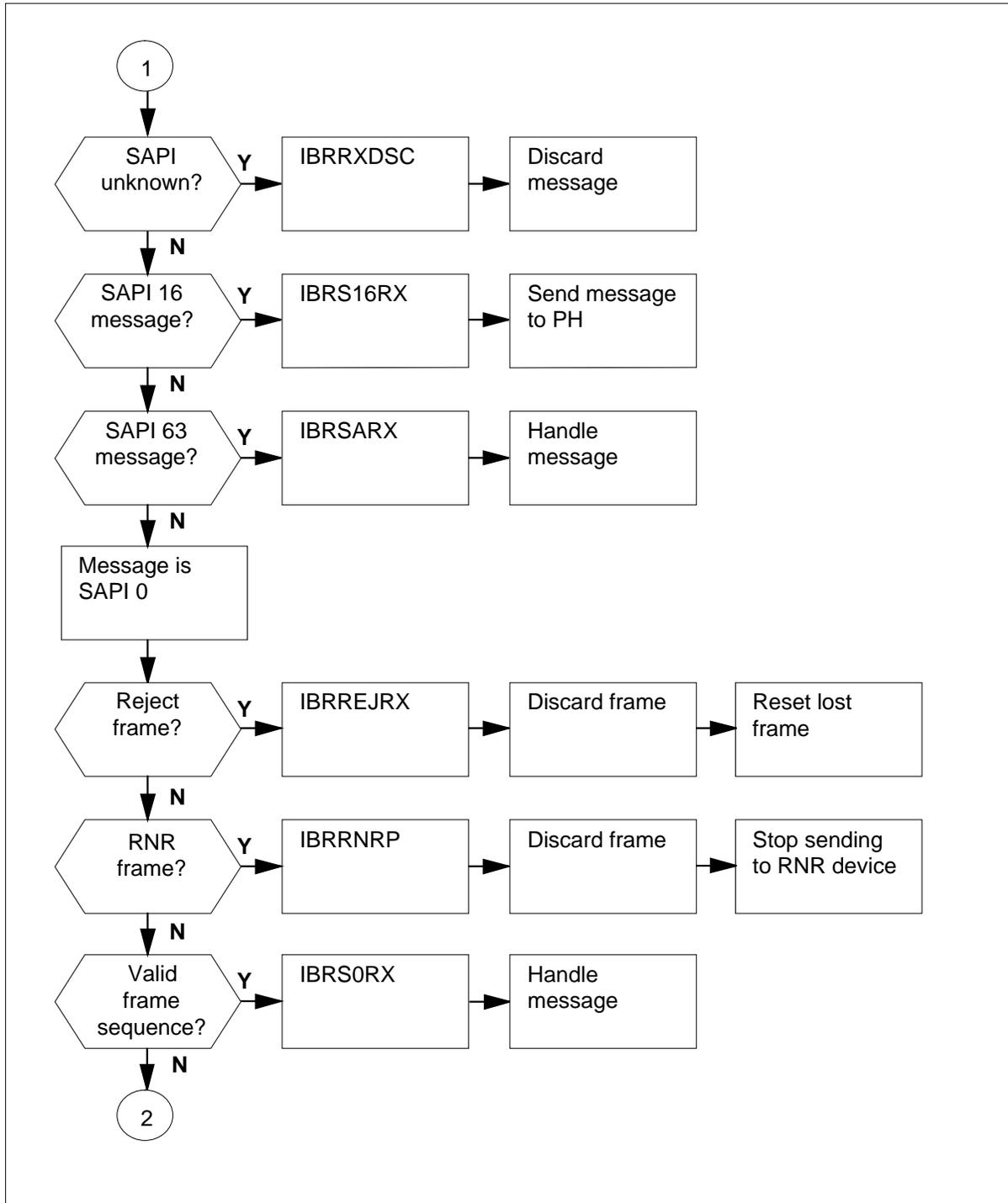
OM group ILDBRA (continued)

OM group ILDBRA registers, message received at ILDR



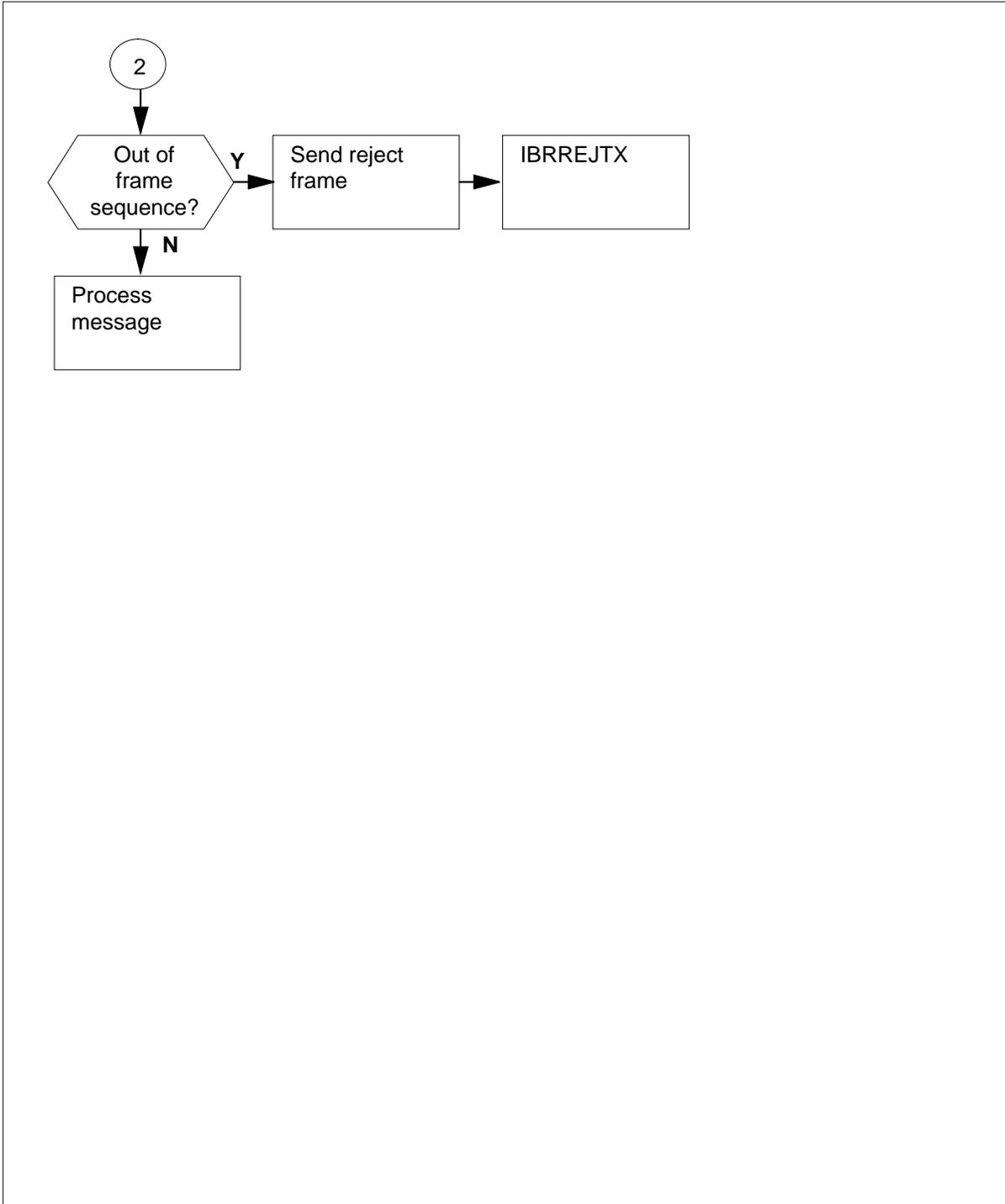
OM group ILDBRA (continued)

OM group ILDBRA registers, message received at ILDR (continued)



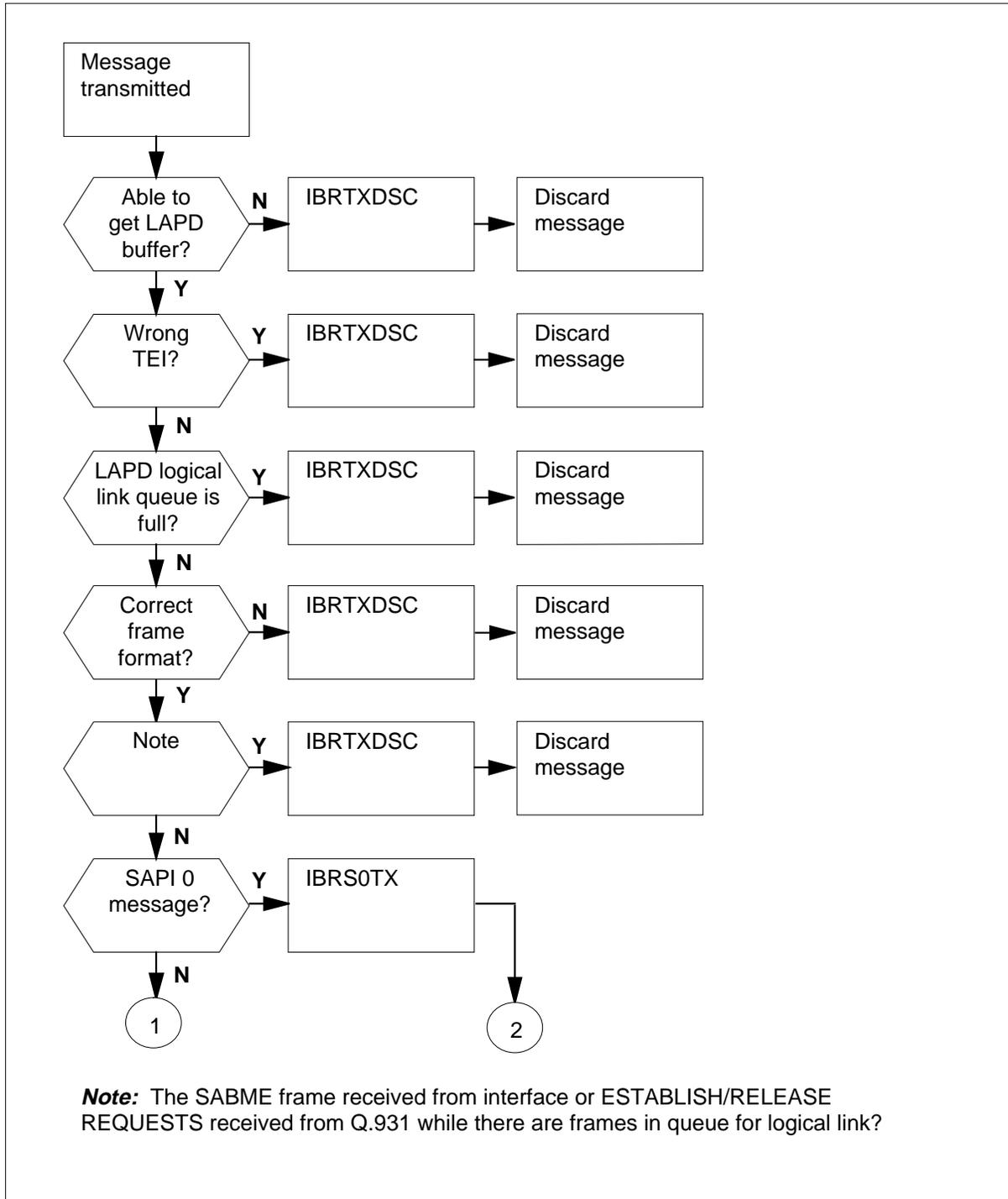
OM group ILDBRA (continued)

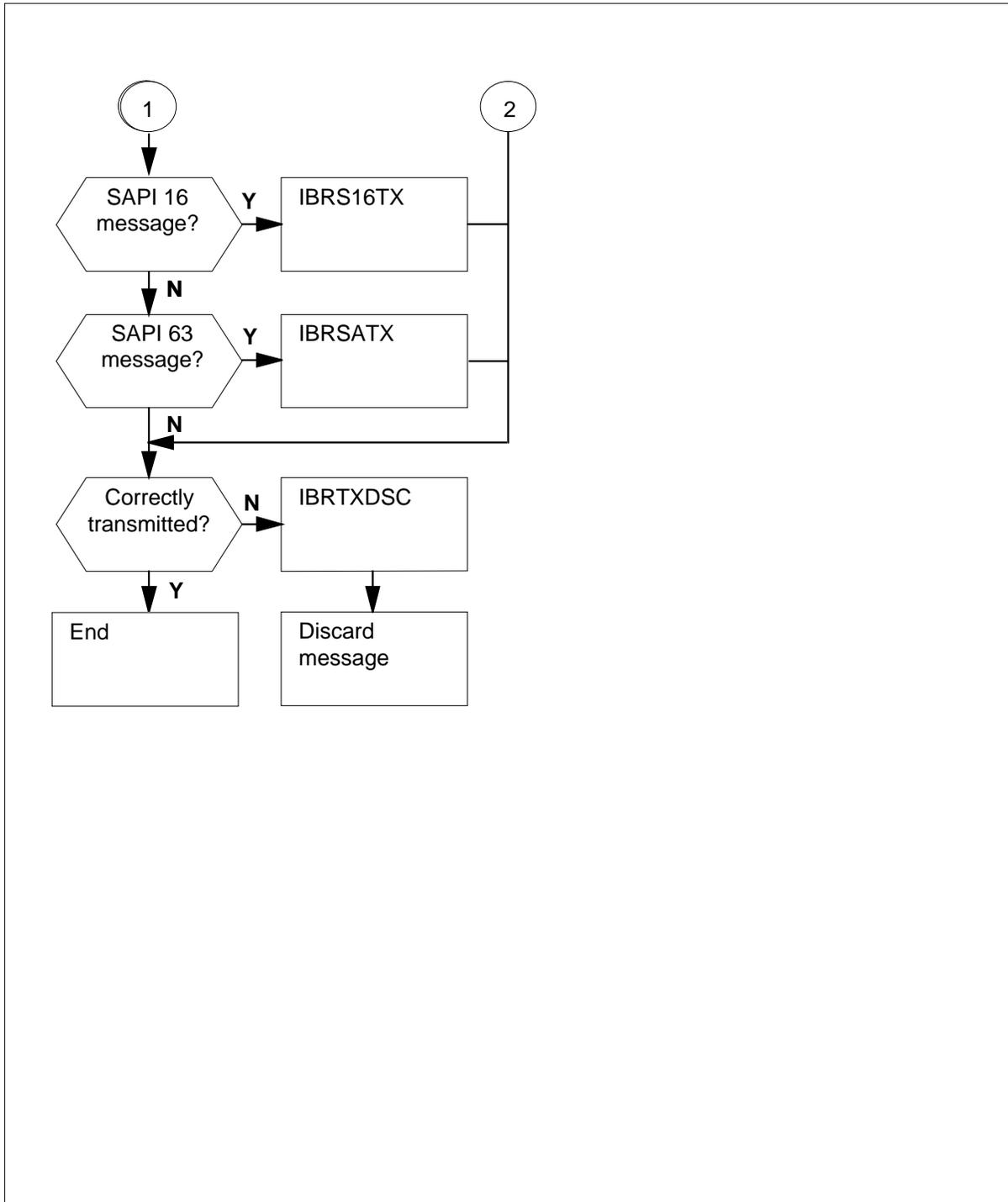
OM group ILDBRA registers, message received at ILDR (continued)



OM group ILDBRA (continued)

OM group ILDBRA registers, message transmitted



OM group ILDBRA (continued)**OM group ILDBRA registers, message transmitted (continued)**

OM group ILDBRA (continued)

Register IBRTXDSC

Number of frames transmitted that were discarded (IBRTXDSC)

Register IBRTXDSC counts the number of frames for a packet handler but the ILDR discards because of hardware problems.

Register IBRTXDSC release history

Register IBRTXDSC was introduced in CCM07.

Associated registers

There are no associated registers.

Associated logs

The following logs associate with register IBRTXDSC:

- The system generates ISDN 200 one time a day. Log ISDN 200 can display information for a maximum of ten ISDN lines for each generation. The report displays the following three occurrences:
 - the frames the system receives and transmits
 - the frames the system receives and transmits again where errors exceed the threshold value
 - the percentage of total frames represented by these errors
- The system generates ISDN 201 one time a day. Log ISDN200 shows the percentage of errors and ISDN frames the system transmits again in the switch.

Extension registers

There are no extension registers.

Register IBRCRC

Number of frames received and discarded with CRC errors (IBRCRC)

Register IBRCRC counts the ILDR BRA D-channel frames the system receives and discards because of CRC error.

Register IBRCRC release history

Register IBRCRC was introduced in CCM07.

Associated registers

There are no associated registers.

OM group ILDBRA (continued)

Associated logs

The following logs associate with register IBRCRC:

- The system generates ISDN 200 one time a day. Log ISDN 200 can display information for a maximum of ten ISDN lines for each generation. The reports display:
 - the frames the system receives and transmits
 - the frames the system receives and transmits again where errors exceed the threshold value
 - the percentage of the total frames represented by these errors.
- The system generates ISDN 201 one time a day. Log ISDN 201 shows the percentage of errors and ISDN frames the system transmits again in the switch.

Extension registers

There are no extension registers.

Register IBRRXDSC

Number of frames received that were discarded (IBRRXDSC)

Register IBRRXDSC counts the BRA D-channel frames the ILDR discards by the because of the following problems:

- a non-registered terminal endpoint identifier (TEI)
- a message that cannot be decoded
- flow control problems
- part of a message received
- sequencing errors
- an SAPI not known

Register IBRRXDSC release history

Register IBRRXDSC was introduced in CCM07.

Associated registers

There are no associated registers.

OM group ILDBRA (continued)

Associated logs

The following logs associate with register IBRRXDSC:

- The system generates ISDN 200 one time a day. Log ISDN 200 can display information for a maximum of ten ISDN lines for each generation. The reports display:
 - the frames the system receives and transmits
 - the frames the system receives and transmits again where errors exceed the threshold value
 - the percentage of the total frames represented by these errors
- The system generates ISDN 201 one time a day. Log ISDN 201 shows the percentage of errors and ISDN frames the system transmits again in the switch.

Extension registers

There are no extension registers.

Register IBRS0TX

Number of SAPI0 frames transmitted (IBRS0TX)

Register IBRS0TX counts the BRA D-channel SAPI zero frames that an ILDR transmits. The SAPI zero frames indicate a request for call control. Each unit in IBRS0TX represents 100 frames.

Register IBRS0TX release history

Register IBRS0TX was introduced in CCM07.

Associated registers

There are no associated registers.

OM group ILDBRA (continued)

Associated logs

The following logs associate with register IBRS0TX:

- The system generates ISDN 200 one time a day. Log ISDN 200 can display information for a maximum of ten ISDN lines for each generation. The reports display:
 - the frames the system receives and transmits
 - the frames the system receives and transmits again where errors exceed the threshold value
 - the percentage of the total frames represented by these errors
- The system generates ISDN 201 one time a day. Log ISDN 201 shows the percentage of errors and ISDN frames the system transmits again in the switch.

Extension registers

There are no extension registers.

Register IBRS16TX

Number of SAPI 16 frames transmitted (IBRS16TX)

Register IBRS16TX counts BRA D-channel SAPI 16 frames an ILDR transmits. The SAPI 16 frames indicate a request for packet-switched service. Each unit in IBRS16TX represents 100 frames.

Register IBRS16TX release history

Register IBRS16TX was introduced in CCM07.

Associated registers

There are no associated registers.

OM group ILDBRA (continued)

Associated logs

The following logs are associated with register IBRS16TX:

- ISDN 200 generates one time a day. It can display information for up to ten ISDN lines for each generation. The reports display:
 - the frames the system receives and transmits
 - the frames the system receives and transmits again where errors exceed the threshold value
 - the percentage of the total frames represented by these errors
- The system generates ISDN 201 one time a day. Log ISDN 201 shows the percentage of errors and ISDN frames the system transmits again in the switch.

Extension registers

There are no extension registers.

Register IBRSATX

Number of SAPI 163 frames transmitted (IBRSATX)

Register IBRSATX counts the BRA D-channel SAPI 63 frames an ILDR transmits. The SAPI 63 frames indicate a request for layer two management services, like TEI management, error reporting, or physical link control.

Register IBRSATX release history

Register IBRSATX was introduced in CCM07.

Associated registers

There are no associated registers.

Associated logs

The following logs associate with register IBRSATX:

- The system generates ISDN 200 generates one time a day. Log ISDN 200 can display information for a maximum of ten ISDN lines for each generation. The reports display:
 - the frames the system receives and transmits
 - the frames the system receives and transmits again where errors exceed the threshold value
 - the percentage of the total frames represented by these errors
- The system generates ISDN 201 one time a day. Log ISDN 201 shows the percentage of errors and ISDN frames transmitted again in the switch.

OM group ILDBRA (continued)

Extension registers

There are no extension registers.

Register IBRS0RX

Number of SAPI zero frames received (IBRS0RX)

Register IBRS0RX counts the BRA D-channel SAPI zero frames an ILDR receives. The SAPI zero frames indicate a request for call control.

Register IBRS0RX release history

Register IBRS0RX was introduced in CCM07.

Associated registers

There are no associated registers.

Associated logs

The following logs associate with register IBRS0RX:

- The system generates ISDN 200 one time a day. Log ISDN 200 can display information for a maximum of ten ISDN lines for each generation. The reports display:
 - the frames the system receives and transmits
 - the frames the system receives and transmits again where errors exceed the threshold value
 - the percentage of the total frames represented by these errors
- The system generates ISDN 201 one time a day. Log ISDN 201 shows the percentage of errors and ISDN frames the system transmits again in the switch.

Extension registers

There are no extension registers.

Register IBRS16RX

Number of SAPI 16 frames received (IBRS16RX)

Register IBRS16RX counts the BRA D-channel SAPI 16 frames an ILDR receives. The SAPI 16 frames indicate a request for packet-switched service.

Register IBRS16RX release history

Register IBRS16RX was introduced in CCM07.

OM group ILDBRA (continued)

Associated registers

There are no associated registers.

Associated logs

The following logs associate with register IBRS16RX:

- ISDN 200 generates one time a day. Log ISDN 200 can display information for a maximum of ten ISDN lines for each generation. The reports display:
 - the frames the system receives and transmits
 - the frames the system receives and transmits again where errors exceed the threshold value
 - the percentage of the total frames represented by these errors
- The system generates ISDN 201 one time a day. Log ISDN 201 shows the percentage of errors and ISDN frames the system transmits again in the switch.

Extension registers

There are no extension registers.

Register IBRSARX

Number of SAPI 63 frames received (IBRSARX)

Register IBRSARX counts the BRA D-channel SAPI 63 frames an ILDR receives. The SAPI 63 frames indicate a request for layer two management services, like TEI management, error reporting, or link control.

Register IBRSARX release history

Register IBASARX was introduced in CCM07.

Associated registers

There are no associated registers.

OM group ILDBRA (continued)

Associated logs

The following log associate with register IBRSARX:

- ISDN 200 generates one time a day. It can display information for up to ten ISDN lines for each generation. The reports display:
 - the frames the system receives and transmits
 - the frames the system receives and transmits again where errors exceed the threshold value
 - the percentage of the total frames represented by these errors
- The system generates ISDN 201 one time a day. Log ISDN 201 shows the percentage of errors and ISDN frames the system transmits again in the switch.

Extension registers

There are no extension registers.

Register IBRLKREI

Number of link resets by the ILDR (IBRLKREI)

Register IBRLKREI counts the link resets by the ILDR.

Register IBRLKREI release history

Register IBRLKREI was introduced in CCM07.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register IBRLKREP

Number of link resets by the peer (IBRLKREP)

Register IBRLKREP counts the link resets by a far-end device (peer).

Register IBRLKREP release history

Register IBRLKREP was introduced in CCM07.

OM group ILDBRA (continued)

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register IBRRNRI

Number of RNR frames sent to the peer (IBRRNRI)

Register IBRRNRI counts the RNR frames that an ILDR sent to a far-end device (peer).

Register IBRRNRI release history

Register IBRRNRI was introduced in CCM07.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register IBRRNRP

Number of RNR frames received by the ILDR (IBRRNRP)

Register IBRRNRP counts the RNR frames that an ILDR receives from a far-end device (peer).

Register IBRRNRP release history

Register IBRRNRP was introduced in CCM07.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

OM group ILDBRA (end)

Extension registers

There are no extension registers.

Register IBRREJTX

Number of reject frames transmitted (IBRREJTX)

Register IBRREJTX counts the number of reject frames an ILDR transmits. Reject frames indicate the far-end lost one of the sequenced frames.

Register IBRREJTX release history

Register IBRREJTX was introduced in CCM07.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register IBRREJRX

Number of received reject frames (IBRREJRX)

Register IBRREJRX counts the number of reject frames an ILDR receives. Reject frames indicate one of the sequenced frames is missing.

Register IBRREJRX release history

Register IBRREJRX was introduced in CCM07.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

OM group ILDMSGCT

OM description

Integrated services digital network (ISDN) line drawer message counter

ATTENTION

The ISDN line drawer for remotes (ILDR) is first available for remote switching center-SONET (RSC-S) in the NA007/XPM08 timeframe. The ISDN is first available for remote switching center (RSC) configurations in the NA007/XPM08 timeframe. The ILDR is first available for remote line concentrating module (RLCM), outside plant module (OPM), and outside plant access cabinet (OPAC) configurations in the NA008/XPM81 timeframe.

The OM group ILDMSGCT provides information related to ILDR messages to and from the XMS-based peripheral module (XPM).

This information allows operating company personnel to:

- verify normal transit of messages on the DMSX data link between the ILDR and the XPM
- verify DMSX protocol performance on the DMSX data link between the ILDR and the XPM

The OM group ILDMSGCT contains 14 types of registers that count the following data:

- wait-for-send times out on messages from the ILDR to the C-side XPM
- wait-for-acknowledgment times out on messages from the ILDR to the C-side XPM
- wait-for-link-idle messages the system receives after a negative acknowledgment on message transfer
- two registers for single and double negative acknowledgments the system receives from the C-side
- wait-for-end-of-messages times out on messages from the C-side XPM to the ILDR
- wait-for-idle messages from the C-side XPM to the ILDR after a message transfer
- messages the ILDR receives from the C-side XPM that have cyclic redundancy check (CRC) errors

OM group ILDMSGCT (continued)

- messages from the C-side XPM to the ILDR with more or fewer bytes than permitted
- null messages the system receives from the C-side XPM that are not reset messages
- spurious frame interrupts
- messages with a node number that is not correct that the ILDR receives from the C-side XPM
- two registers that count messages the ILDR correctly receives or transmits to the C-side XPM

Release history

OM group ILDMSGCT was introduced in CCM07.

Registers

The following OM group ILDMSGCT registers appear on the MAP terminal as follows:

| | | | |
|----------|----------|-------|-------|
| RCVDSUCC | XMITSUCC | WFSND | WFMSG |
| WFNX | WACK | NACK | CRC |
| OVFL | ILDSTATE | DNACK | WFNR |
| INVNODE | NULLMSG | | |

Group structure

The OM group ILDMSGCT provides one tuple for each ILDR DMSX link defined in the switch.

Key field:

ILDMSGCT_OMTYPE. This key field specifies the number of ILDR DMSX links defined in the switch (0 to MAX_ILD_DMSX_CHANNELS_ON_SWITCH). The maximum number of ILDR DMSX channels defined in the switch is MAX_ILD_DMSX_CHANNELS_ON_SWITCH.

Info field:

ILDMSGCT_OMINFO. This field comprises the following subfields:

LINE_MODULE (specifies the location of the ILDR, for example, REM1 and the frame and unit numbers of the ILDR host)

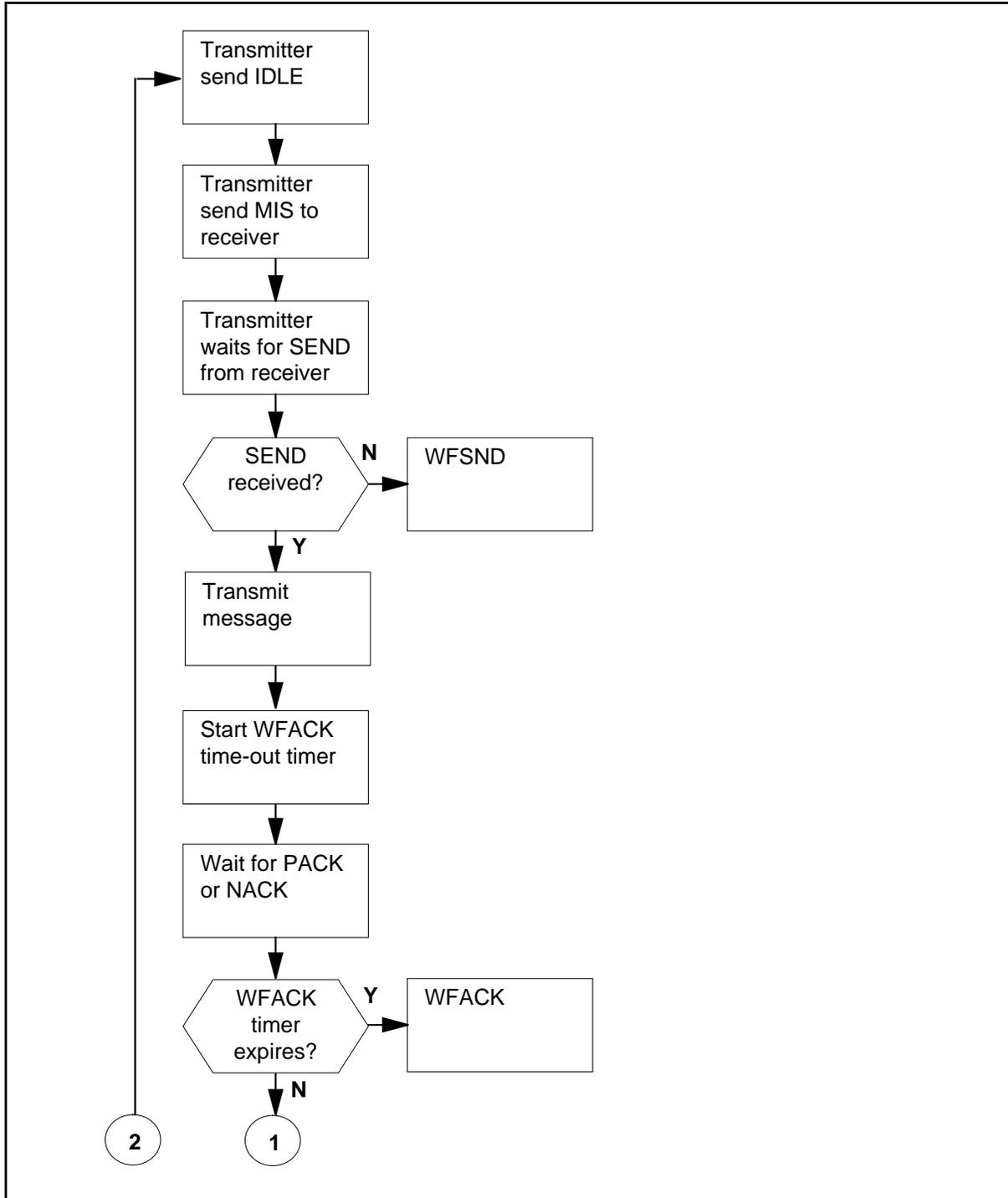
LINE_DRAWER (specifies the drawer number)

OM group ILDMSGCT (continued)

LINK_NO (specifies the DMSX link number to the XPM)

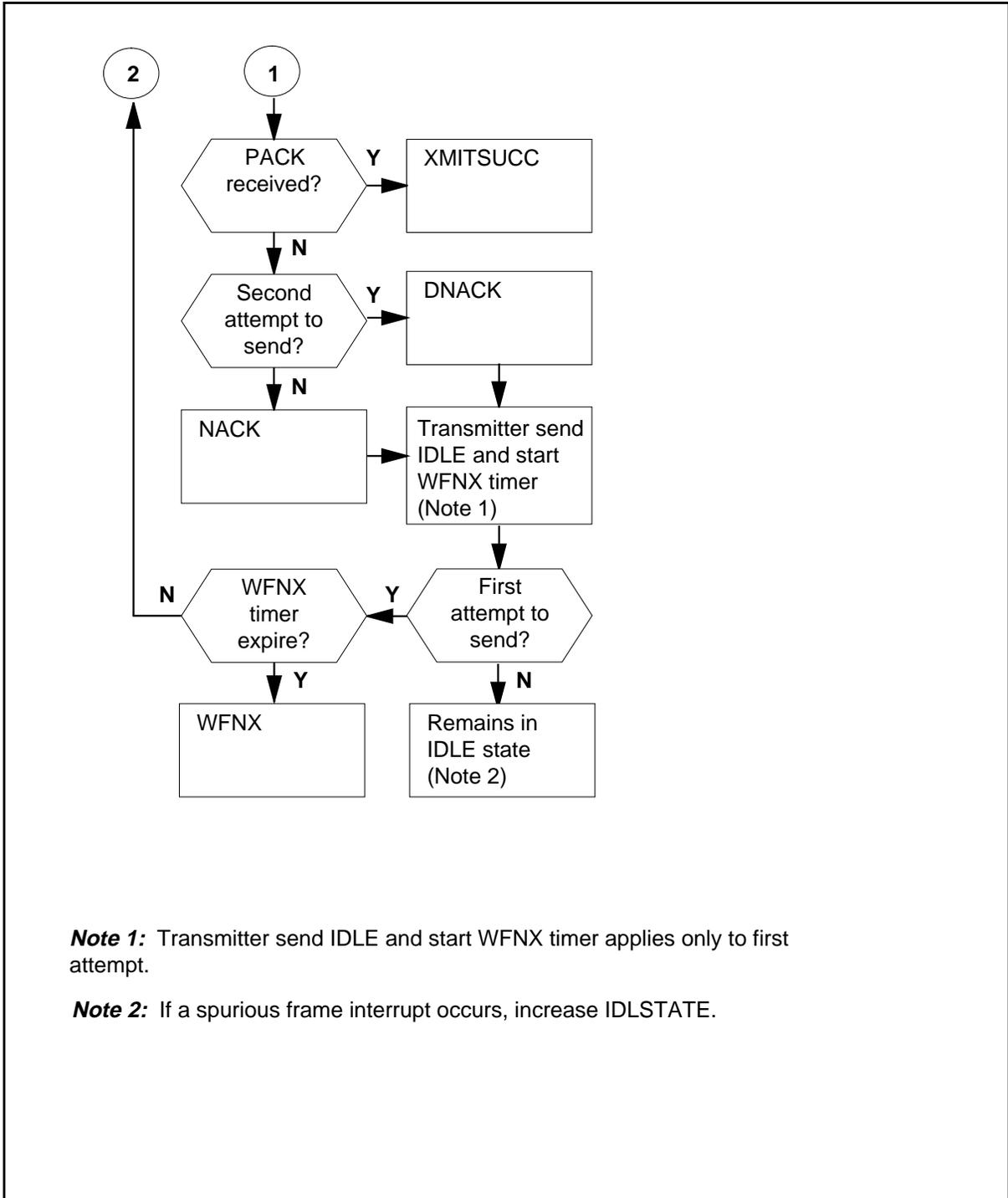
Associated OM groups

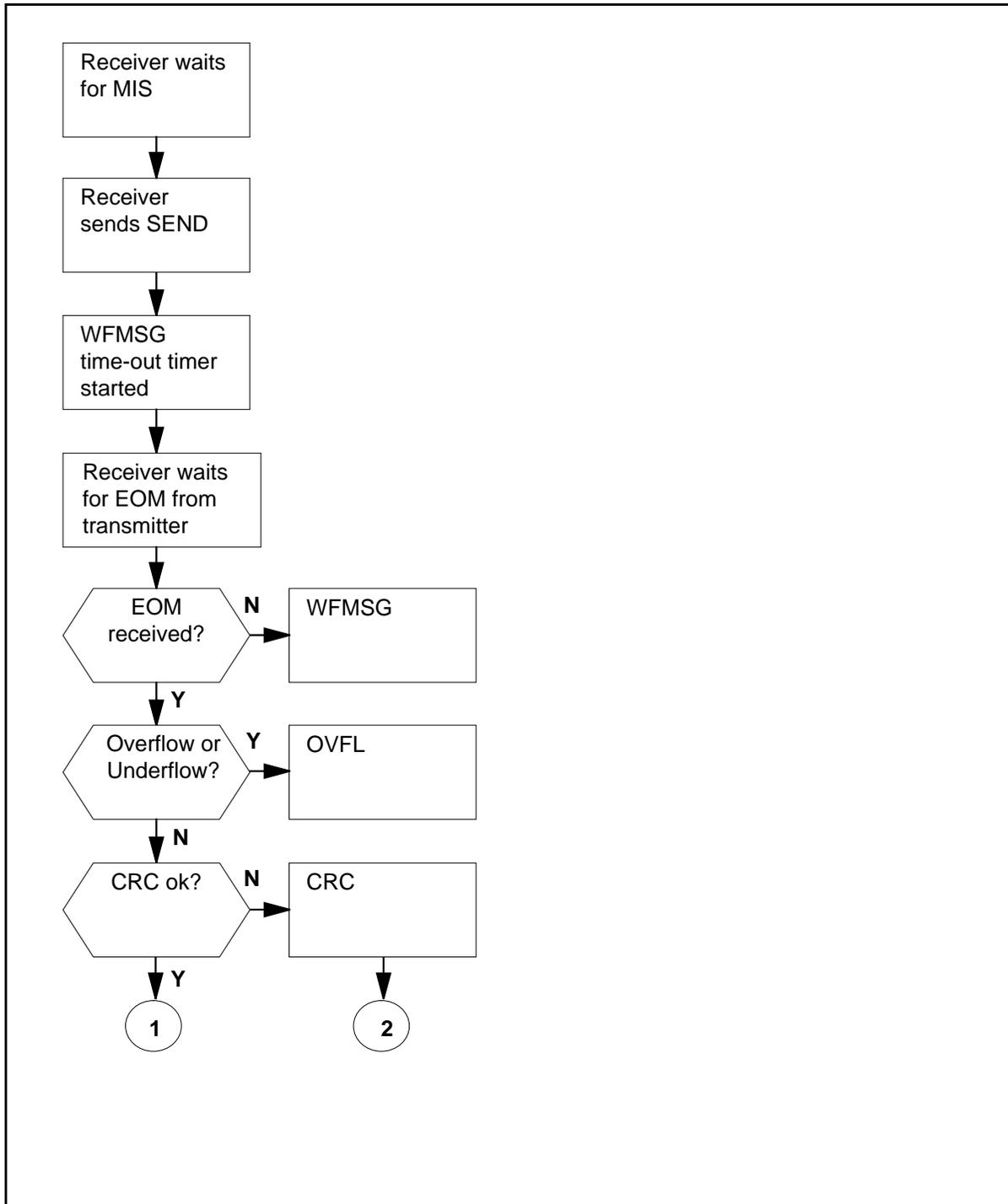
There are no associated OM groups.

OM group ILDMSGCT (continued)**OM group ILDMSGCT registers, logic flow (transmitter)**

OM group ILDMSGCT (continued)

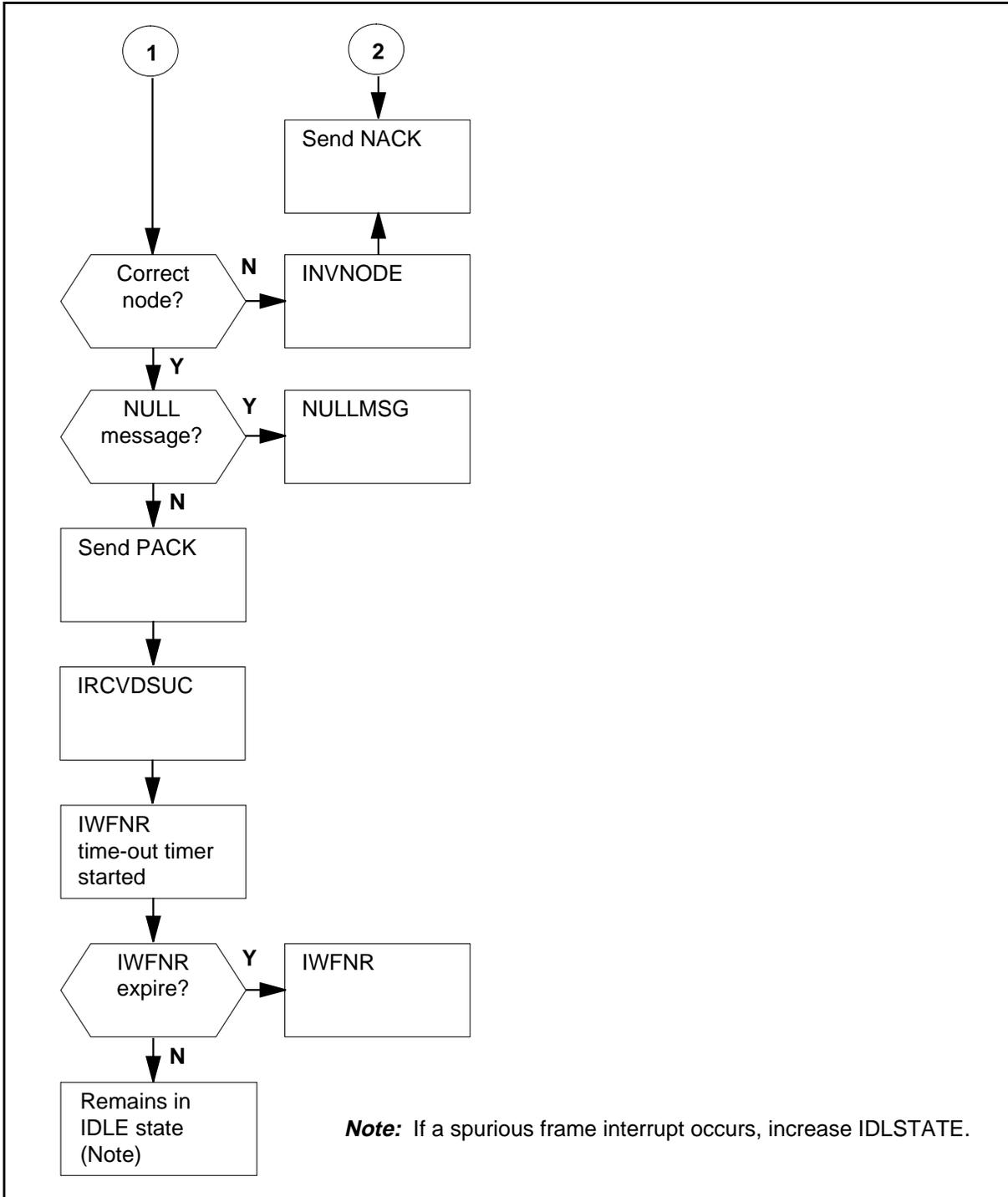
OM group ILDMSGCT registers, logic flow (transmitter) (continued)



OM group ILDMSGCT (continued)**OM group ILDMSGCT registers, logic flow (receiver)**

OM group ILDMSGCT (continued)

OM group ILDMSGCT registers, logic flow (receiver) (continued)



OM group ILDMSGCT (continued)

Register IWFSND

ISDN line drawer wait-for-send time-out (IWFSND)

Register IWFSND counts wait-for-start-of-message time-outs on messages from the C-side XPM to the ILDR.

Register IWFSND release history

Register IWFSND was introduced in CCM07.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register IWFAACK

ISDN line drawer wait-for-acknowledgement time-out (IWFAACK)

Register IWFAACK counts wait-for-acknowledgment time-outs on messages from the ILDR to the C-side XPM.

Register IWFAACK release history

Register IWFAACK was introduced in CCM07.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register IWFNX

ISDN line drawer wait-for-link-idle (IWFNX)

Register IWFNX counts wait-for-link-idle messages the system receives after a negative acknowledgment of a message transfer from the C-side XPM.

OM group ILDMSGCT (continued)

Register IWFNX release history

Register IWFNX was introduced in CCM07.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register NACK

Single negative acknowledgement (NACK)

Register NACK counts single negative acknowledgment messages an ILDR from the C-side XPM receives. The system sends single negative acknowledgement messages when an ILDR has problems receiving a message from the ILDR occurs.

Register NACK release history

Register NACK was introduced in CCM07.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register IDNACK

ISDN line drawer double negative acknowledgement (IDNACK)

Register IDNACK counts double negative acknowledgment messages an ILDR receives from the C-side XPM. The system sends double negative acknowledgment messages when a second attempt by the ILDR to send a message is not complete.

Register IDNACK release history

Register IDNACK was introduced in CCM07.

OM group ILDMSGCT (continued)

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register IWFMSG

ISDN line drawer wait-for-end-of-message time-out (IWFMSG)

Register IWFMSG counts wait-for-end-of-message time-outs on messages from the C-side XPM to the ILDR.

Register IWFMSG release history

Register IWFMSG was introduced in CCM07.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register IWFNR

ISDN line drawer wait-for-idle message (IWFNR)

Register IWFNR counts wait-for-idle messages from C-side XPM to the ILDR after a message transfer.

Register IWFNR release history

Register IWFNR was introduced in CCM07.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

OM group ILDMSGCT (continued)

Extension registers

There are no extension registers.

Register CRC

Incorrect CRC (CRC)

Register CRC counts messages with incorrect CRC the ILDR receives from the C-side XPM.

Register CRC release history

Register CRC was introduced in CCM07.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register OVFL

Message with byte overflow or underflow (OVFL)

Register OVFL counts messages with more or fewer than the permitted number of bytes the C-side XPM sends to the ILDR.

Register OVFL release history

Register OVFL was introduced in CCM07.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register INULLMSG

ISDN line drawer null messages (INULLMSG)

OM group ILDMSGCT (continued)

Register INULLMSG counts null messages the ILDR receives from the C-side XPM that are not reset messages.

Register INULLMSG release history

Register INULLMSG was introduced in CCM07.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register IILDSTATE

ISDN line drawer spurious frame interrupt (IILDSTATE)

Register IILDSTATE counts spurious frame interrupts, which can occur, for example, when noise is on the line.

Register IILDSTATE release history

Register IILDSTATE was introduced in CCM07.

Associated registers

There are no associated registers.

Associated logs

There are associated logs.

Extension registers

There are no extension registers.

Register IINVNODE

ISDN line drawer invalid node (IINVNODE)

Register IINVNODE counts messages with an invalid node number that an ILDR receives from the C-side XPM.

Register IINVNODE release history

Register IINVNODE was introduced in CCM07.

OM group ILDMSGCT (continued)

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register IRCVDSUCC

ISDN line drawer successfully received messages (IRCVDSUCC)

Register IRCVDSUCC counts messages from the C-side XPM the ILDR successfully receives.

Register IRCVDSUCC release history

Register IRCVDSUCC was introduced in CCM07.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register IXMITSUCC

ISDN line drawer successfully transmitted messages (IXMITSUCC)

Register IXMITSUCC counts messages from the ILDR successfully transmits to the C-side XPM.

Register IXMITSUCC release history

Register IXMITSUCC was introduced in CCM07.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

OM group ILDMSGCT (end)

Extension registers

There are no associated registers.

OM group ILDOVLD

OM description

Integrated services digital network (ISDN) line drawer overload (ILDOVLD)

The OM group ILDOVLD provides information that concerns the ISDN line drawer for remotes (ILDR) congestion and overload.

The OM group ILDOVLD provides the following operational measurements (OM) for each sampling time that concerns the ILDR congestion or overload state:

- Register ILDCENTR counts the number of ILDR entries to the congestion state.
- Register ILDCEXIT counts the number of ILDR exits from the congestion state.
- Register ILDCTIME counts the total time spent by ILDR in the congestion state.
- Register ILDOENTR counts the number of ILDR entries to the overload state.
- Register ILDOEXIT counts the number of ILDR exits from the overload state.
- Register ILDOTIME counts the total time spent by ILDR in the overload state.

Release history

The OM group ILDOVLD was introduced in CCM08.

Registers

The following OM group ILDOVLD registers appear on the MAP terminal as follows:

| | | | |
|----------|----------|----------|----------|
| ILDCENTR | ILDCEXIT | ILDCTIME | ILDOENTR |
| ILDOEXIT | ILDOTIME | | |

Group structure

OM group ILDOVLD provides one tuple for each ILDR defined in the computing module (CM).

OM group ILDOVLD (continued)

Key field:

ILDBRA_OMTYPE. This key field specifies the number of ILDRs defined in the CM (0 TO MAX_ILD_NO). The MAX_ILD_NO is the maximum number of ILDRs defined in the CM.

Info field:

ILDBRA_OMINFO. This field comprises the following subfields:

LINE_MODULE (specifies the location of the ILDR, for example, REM1, and the frame and unit numbers of the ILDR host)

DRWRNO_CHARS (specifies the drawer number)

Associated OM groups

There are no associated OM groups.

Associated operating groups

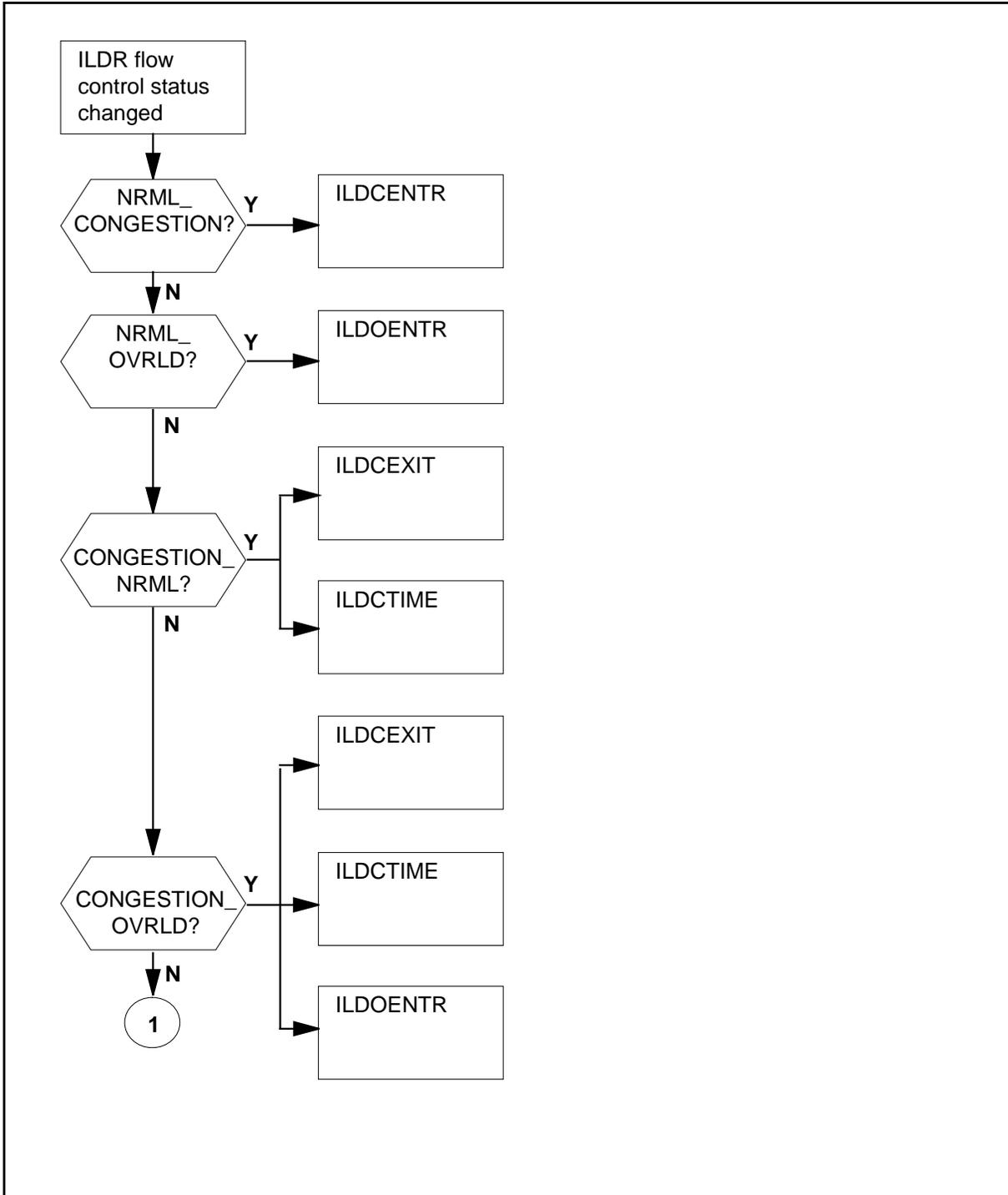
There are no associated operating groups.

Associated functionality codes

There are no associated functionality codes.

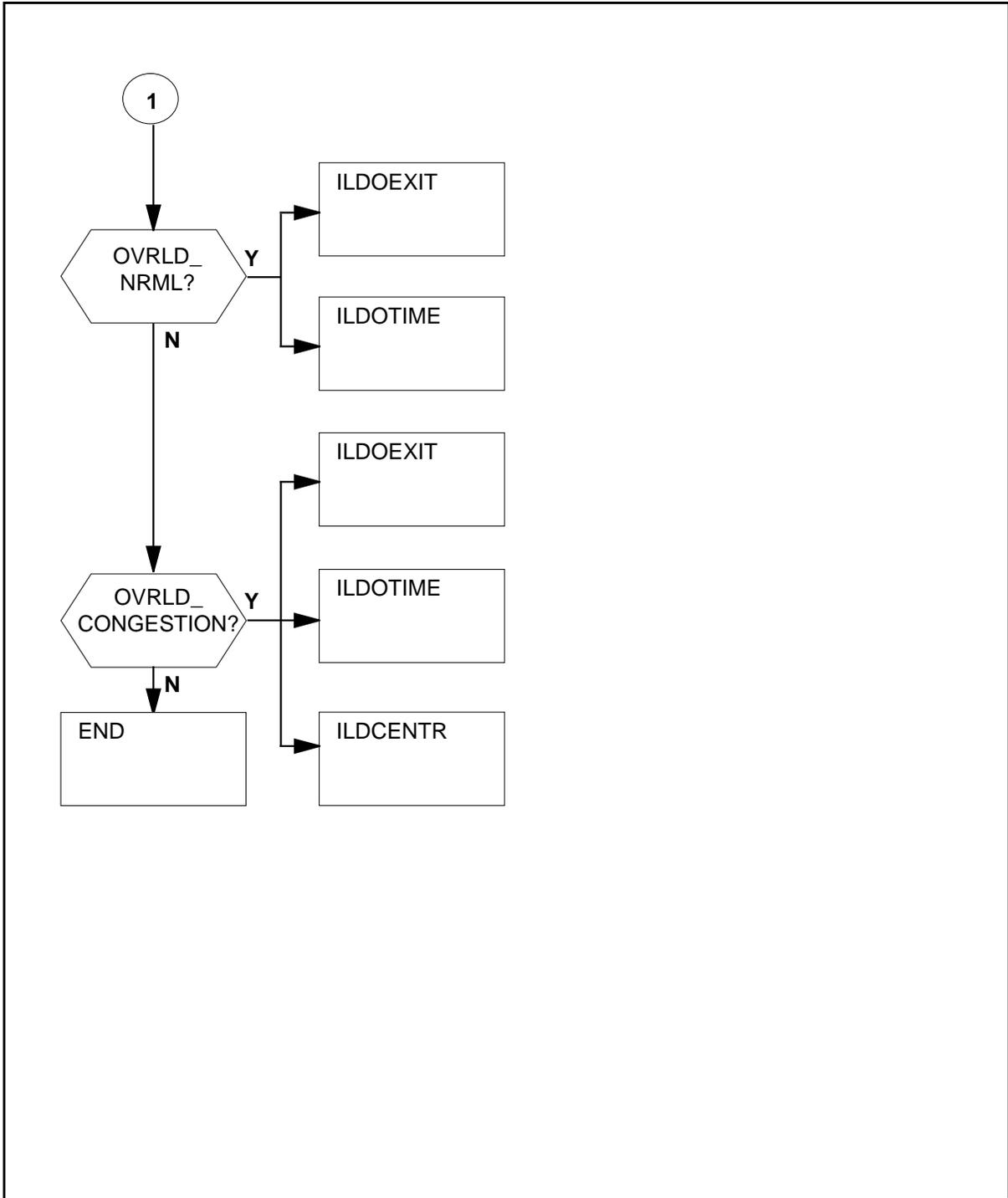
OM group ILDOVLD (continued)

OM group ILDOVLD registers



OM group ILDOVLD (continued)

OM group ILDOVLD registers (continued)



OM group ILDOVLD (continued)

Register ILDCENTR

ISDN line drawer congestion state entry

Register ILDCENTR counts the number of ILDR entries to the congestion state.

Register ILDCENTR release history

Register ILDCENTR was introduced in CCM08.

Associated registers

There are no associated registers.

Associated logs

Log PM181 associates with register ILDCENTR. The system generates PM181 when the ILDR enters the congestion state.

Extension registers

There are no extension registers.

Register ILDCEXIT

ISDN line drawer congestion state exit

Register ILDCEXIT counts the number of ILDR exits from the congestion state.

Register ILDCEXIT release history

Register ILDCEXIT was introduced in CCM08.

Associated registers

There are no associated registers.

Associated logs

Log PM181 associates with register ILDCEXIT. The system generates PM181 when the ILDR exits the congestion state and enters the normal state.

Extension registers

There are no extension registers.

Register ILDCTIME

ISDN line drawer time in congested state

Register ILDCTIME counts the total time spent by ILDR in the congestion state.

OM group ILDOVLD (continued)

Register ILDCTIME release history

Register ILDCTIME was introduced in CCM08.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register ILDOENTR

ISDN line drawer overload state entry

Register ILDOENTR counts the number of ILDR entries to the overload state.

Register ILDOENTR release history

Register ILDOENTR was introduced in CCM08.

Associated registers

There are no associated registers.

Associated logs

Log PM181 associates with register ILDOENTR. The system generates PM181 when the ILDR enters the overload state.

Extension registers

There are no extension registers.

Register ILDOEXIT

ISDN line drawer overload state exit

Register ILDOEXIT counts the number of ILDR exits from the overload state.

Register ILDOEXIT release history

Register ILDOEXIT was introduced in CCM08.

Associated registers

There are no associated registers.

OM group ILDOVLD (end)

Associated logs

Log PM181 associates with ILDOEXIT. The system generates PM181 when the ILDR exits the overload state.

Extension registers

There are no extension registers.

Register ILDOTIME

ISDN line drawer time in overload state

Register ILDOTIME counts the total time spent by ILDR in the overload state.

Register ILDOTIME release history

Register ILDOTIME was introduced in CCM08.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

OM group ILDSTAT

OM description

Integrated services digital network (ISDN) line drawer status

ISDN line drawer for remotes (ILDR) is first available for remote switching center-SONET (RSC-S). The ILDR is also available for remote switching center (RSC) configurations in the NA007/XPM08 timeframe. The ILDR is first available for remote line concentrating module (RLCM), outside plant module (OPM), and outside plant access cabinet (OPAC) configurations in the NA008/XPM81 timeframe.

ISDN line drawer status (ILDSTAT) provides information for ILDR processor occupancy. This information allows the operating company personnel to measure ILDR processor performance.

ILDSTAT contains six types of registers that count the following ILDR central processing unit (CPU) data:

- one register that provides the ILDR processor overhead (The system calculates this value every 24 h for INSV/ISTB ILDRs.)
- one register that provides the average processor occupancy value, in percent, for the collection time interval. (The system fixes collection time interval by OMXFR and OMHISTORION office parameters. The time interval can be 5, 15, or 30 min.)
- one register that provides the average processor occupancy, in percent, that call processing uses during the collection time interval
- two registers that provide the lowest and highest processor occupancy, in percent, over the last collection time interval
- one register that provides the average time, in percent, the microprocessor does not have work to do during collection time interval

Release history

The OM group ILDSTAT was introduced in CCM07.

Registers

The OM group ILDSTAT registers appears on the MAP (maintenance and administration position) terminal as follows:

OM group ILDSTAT (continued)

| | | | |
|---------|----------|----------|---------|
| ILDPKOC | ILDLOWOC | ILDAVAIL | ILDAVCP |
| ILDAVOC | ILDOVHD | | |

Group structure

The OM group ILDSTAT provides one tuple for each ILDR defined in the switch.

Key field:

ILD_BRA_STAT_OMTYPE. The system uses the key field to specify the number of ILDRs the switch (0 to MAX_ILD_NO) defines.

MAX_ILD_NO is the maximum number of ILDRs the system can define in the switch.

Info field:

ILDSTAT_OMINFO. This field comprises the following subfields:

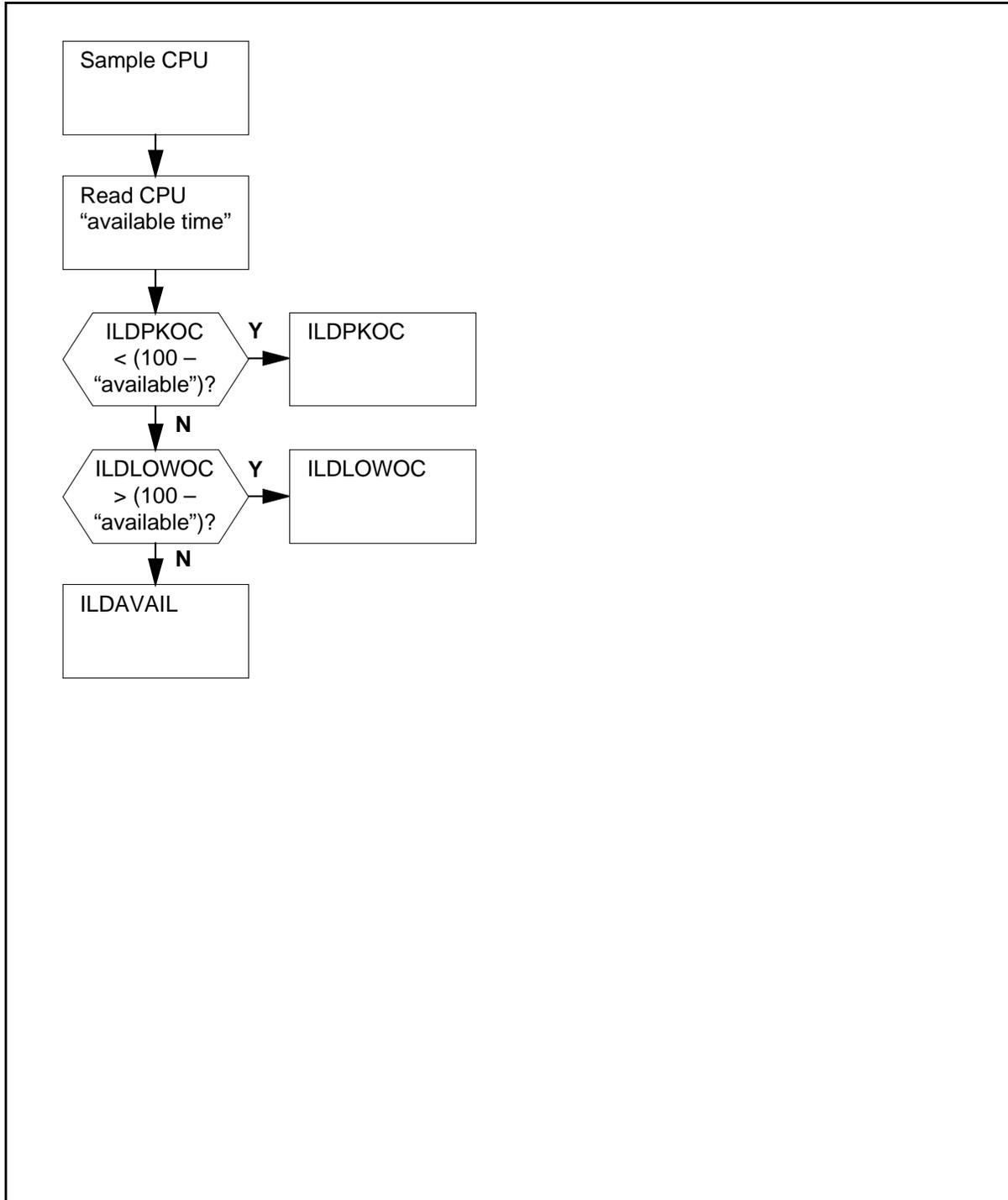
LINE_MODULE (specifies the location of the ILDR, for example,

REM1 and the frame and unit numbers of the ILDR

host)LINE_DRAWER (specifies the drawer number)

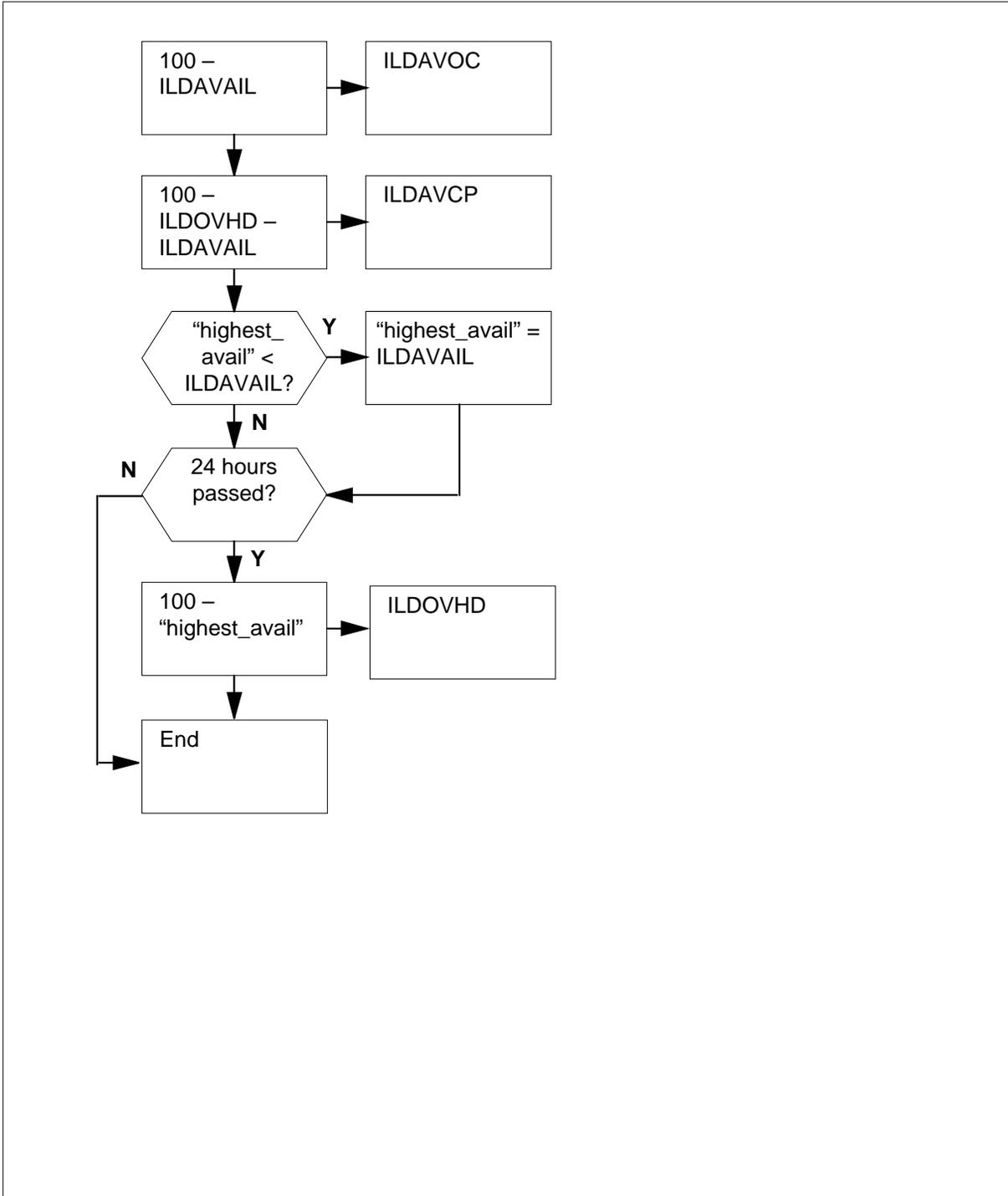
Associated OM groups

There are no associated OM groups.

OM group ILDSTAT (continued)**OM group ILDSTAT registers, ILDR**

OM group ILDSTAT (continued)

OM group ILDSTAT registers, CM



OM group ILDSTAT (continued)

Register ILDOVHD

ILDR overhead (ILDOVHD)

Register ILDOVHD records the amount of processor use dedicated to overhead in each collection time interval. The system uses the overhead value as a constant to calculate the average call processing (ILDAVCP).

The system uses the overhead constant over a 24 h period. The system checks the available time value in each collection time interval. The system checks the available time value to determine if the value is the highest recorded value.

Note: Highest availability equals lowest occupancy, that is, lowest ILDAVOC. If this value is higher than any of the previous records, the value is stored. The system uses this value to obtain the overhead constant for the following 24 hour period. To compute ILDOVHD, use the following formula:

$$\text{ILDOVHD} = 100 - \text{lowest ILDAVOC}$$

Register ILDOVHD release history

Register ILDOVHD was introduced in CCM07.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register ILDAVOC

ILDR average processor occupancy (ILDAVOC)

The system updates register ILDAVOC every 10 s. The system records the average processor occupancy, in percent, for each collection time interval.

Register ILDAVOC release history

Register ILDAVOC was introduced in CCM07.

OM group ILDSTAT (continued)

Associated registers

The system updates ILDAVAIL every 10 s. The system records the average time, in percent, the microprocessor does not have work to perform during each collection time interval.

$$\text{ILDAVOC} = 100 - \text{ILDAVAIL}$$

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register ILDAVCP

ILDR average call processing (ILDAVCP)

The system updates register ILDAVCP every ten seconds. The system records the average processor occupancy, in percent, used for call processing during each collection time interval.

Register ILDAVCP release history

Register ILDAVCP was introduced in CCM07.

Associated registers

The following registers associate with register ILDAVCP:

- The system updates ILDAVOC every 10 s. The system records the average processor occupancy, in percent, for each collection time interval.
- Register ILDOVHD records the amount of processor use dedicated to overhead in each collection time interval.

$$\text{ILDAVCP} = 100 - \text{ILDOVHD} - \text{ILDAVAIL}$$

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register ILDPKOC

ILDR peak occupancy (ILDPKOC)

OM group ILDSTAT (continued)

Register ILDPKOC records the peak processor occupancy, in percent, over each collection time interval. The system takes samples every 10 s in each collection time interval to determine the lowest available time. The system uses the following formula to derive the peak occupancy:

$$\text{ILDPKOC} = 100 - \text{lowest available time}$$

Register ILDPKOC release history

Register ILDPKOC was introduced in CCM07.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register ILDLOWOC

ILDR low occupancy (ILDLOWOC)

Register ILDLOWOC records the lowest processor occupancy value, in percent, over each collection time interval. The system takes samples every 10 s in each collection time interval to determine the highest available time. The system uses the following formula to derive the low occupancy value:

$$\text{ILDLOWOC} = 100 - \text{highest available time}$$

Register ILDLOWOC release history

Register ILDLOWOC was introduced in CCM07.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register ILDAVAIL

ILDR available time for processing (ILDAVAIL)

OM group ILDSTAT (end)

The system updates register ILDAVAIL every second. The system records the average amount of time, in percent, the microprocessor does not have work to perform during each collection time interval. The availability of the ILDR is inversely proportional to the ILDR's average processor occupancy of the ILDR (ILDAVOC) time.

Register ILDAVAIL release history

Register ILDAVAIL was introduced in CCM07.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

OM group ILNRR

OM description

International last number redial (ILNRR)

The OM group ILNRR provides information about the use and performance of the International Last Number Redialing (ILNR) feature. The registers in this group provide counts of the number of complete and not complete attempts to use the ILNR feature.

Release history

The OM group ILNRR was introduced in BCS30.

Registers

The OM group ILNRR registers appear on the MAP terminal as follows:



ILNRUSGE ILNRCERR

Group structure

The OM group ILNRR provides one tuple for each office.

Key field:

There is no key field

Info field:

There is no info field

Associated OM groups

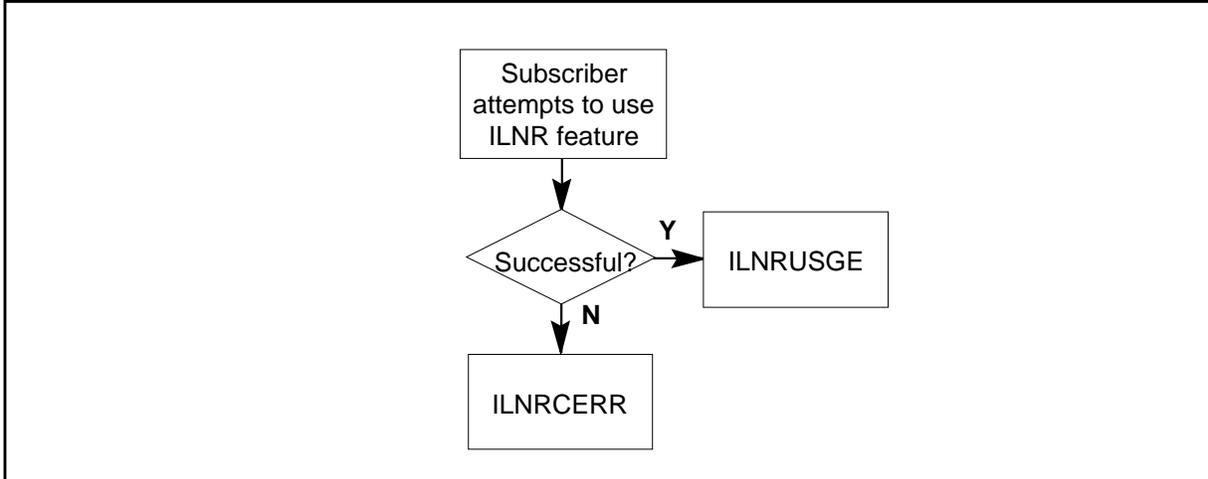
There are no associated OM groups.

Associated operating groups

There are no associated operating groups.

OM group ILNRR (continued)

OM group ILNRR registers



Register ILNRUSGE

ILNR usage (ILNRUSGE)

Register ILNRUSGE counts the number of complete attempts to use the ILNR feature.

Register ILNRUSGE release history

ILNRUSGE was introduced in BCS30.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Register ILNRCERR

ILNR count of errors (ILNRCERR)

Register ILNRCERR counts the number of not complete attempts to use the ILNR feature.

Register ILNRCERR release history

ILNRCERR was introduced in BCS30.

Associated registers

There are no associated registers.

OM group ILNRR (end)

Associated logs

There are no associated logs.

OM group ILR

OM description

International Line Restrictions (ILR)

The OM group ILR provides information about the use and performance of the International Line Restrictions feature. This OM group provides counts of successful and failed attempts to use, activate, deactivate, and interrogate the ILR features.

Each register increases for each of the following classes of restriction:

- Deny All But Emergency (DABE)
- Deny All But Local and Emergency (DABLE)
- Deny All International (DAI)
- Deny All National and International Direct Dial (DANID)
- Deny International Direct Dial (DIDD)
- Deny National and International (DNI)
- Deny National and International Direct Dial (DNID)
- Deny Special Service (DSSV)

Release history

Register ILRUSGE was added for GL04.

Registers for classes of restriction DABLE, DANID, and DSSV were introduced for GL03.1.

The OM group ILR was introduced in BCS24.

Registers

The OM group ILR registers display on the MAP terminal as follows.

```
-----  
DABEACT  DABEDACT  DABEUSGE  DNIDACT  
DNIDACT  DNIDUSGE  DIDDACT   DIDDDACT  
DIDDUSGE  DNIACT    DNIDEACT  DNIUSGE  
DAIACT    DAIDACT   DAIUSGE   DSSVACT  
DSSVDACT  DSSVUSGE  DANIDACT  DANIDDAC  
DANIDUSG  DABLEACT  DABLEDAC  DABLEUSG  
ILRINTG   ILRCERR   ILRUSGE
```

OM group ILR (continued)

Group structure

The OM group ILR provides one tuple for each office.

Key field:

There is no Key field

Info field:

There is no Info field

Associated OM groups

There are no associated OM groups.

Associated functional groups

There are no functional groups that associate with OM group ILR.

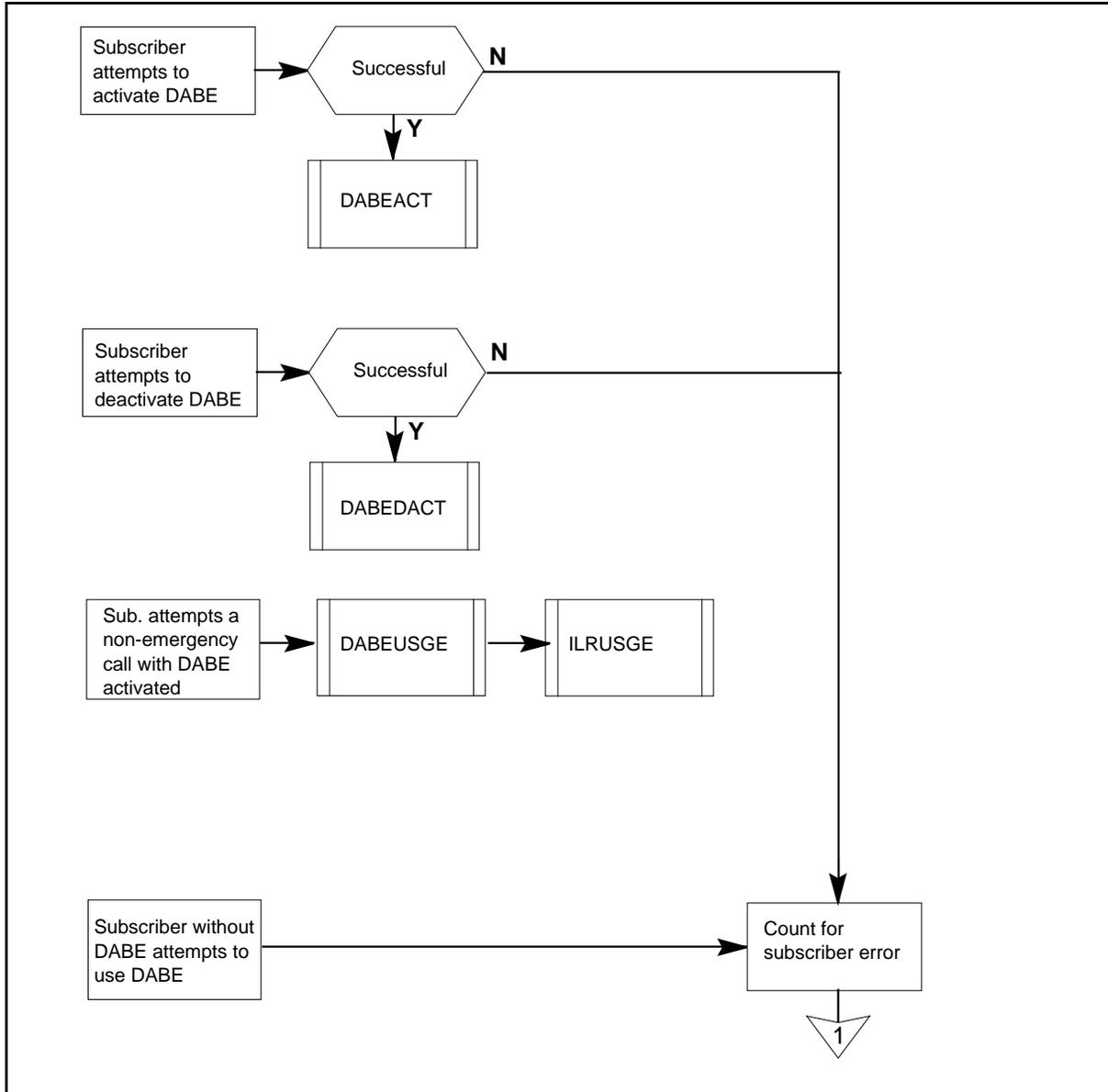
Associated functionality codes

The associated functionality codes for OM group ILR appear in the following table.

| Functionality | Code |
|---|----------|
| International - Local Basic (UPCR NTX472AA) | NTX472AB |

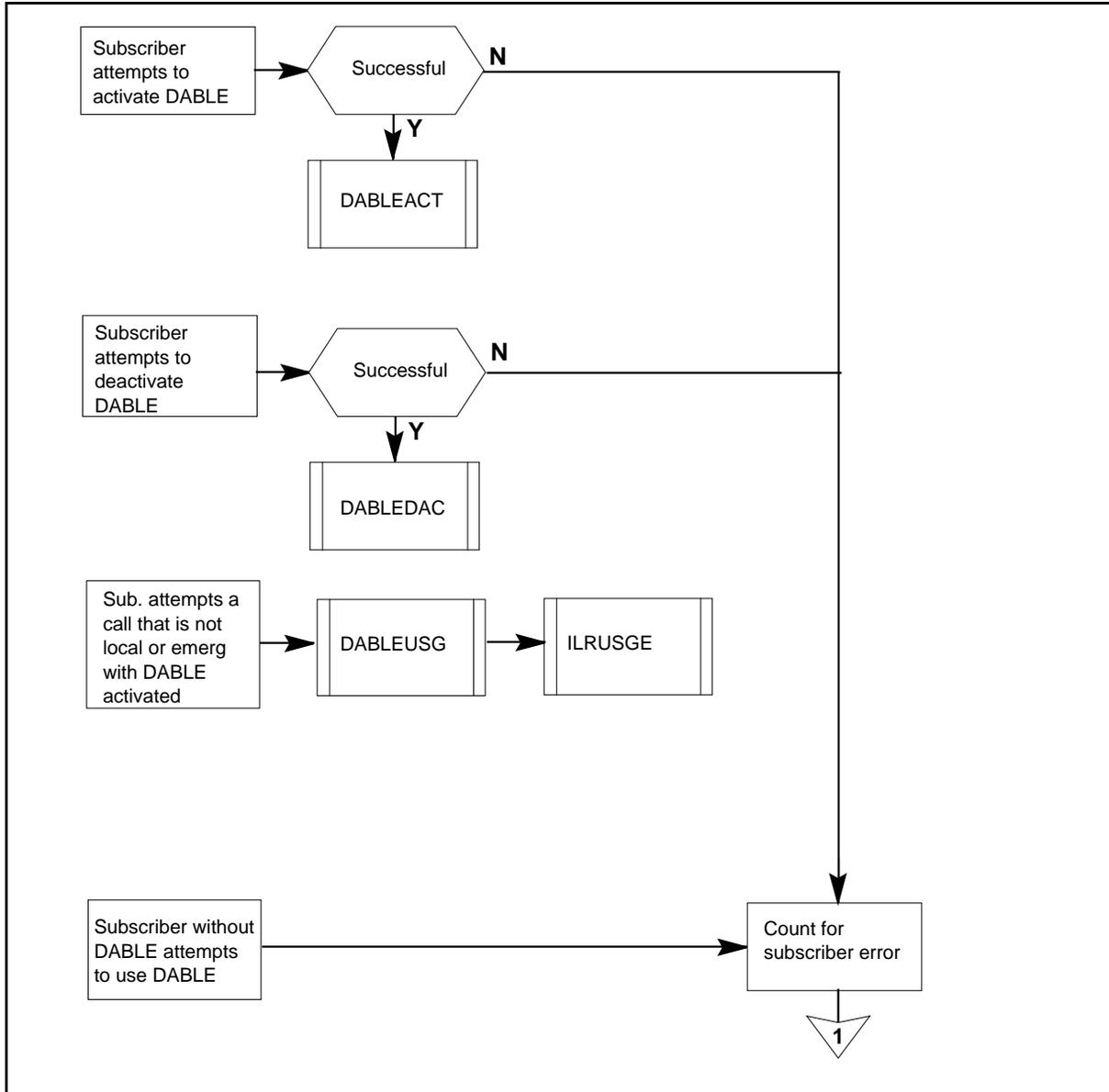
OM group ILR (continued)

OM group ILR DABE registers



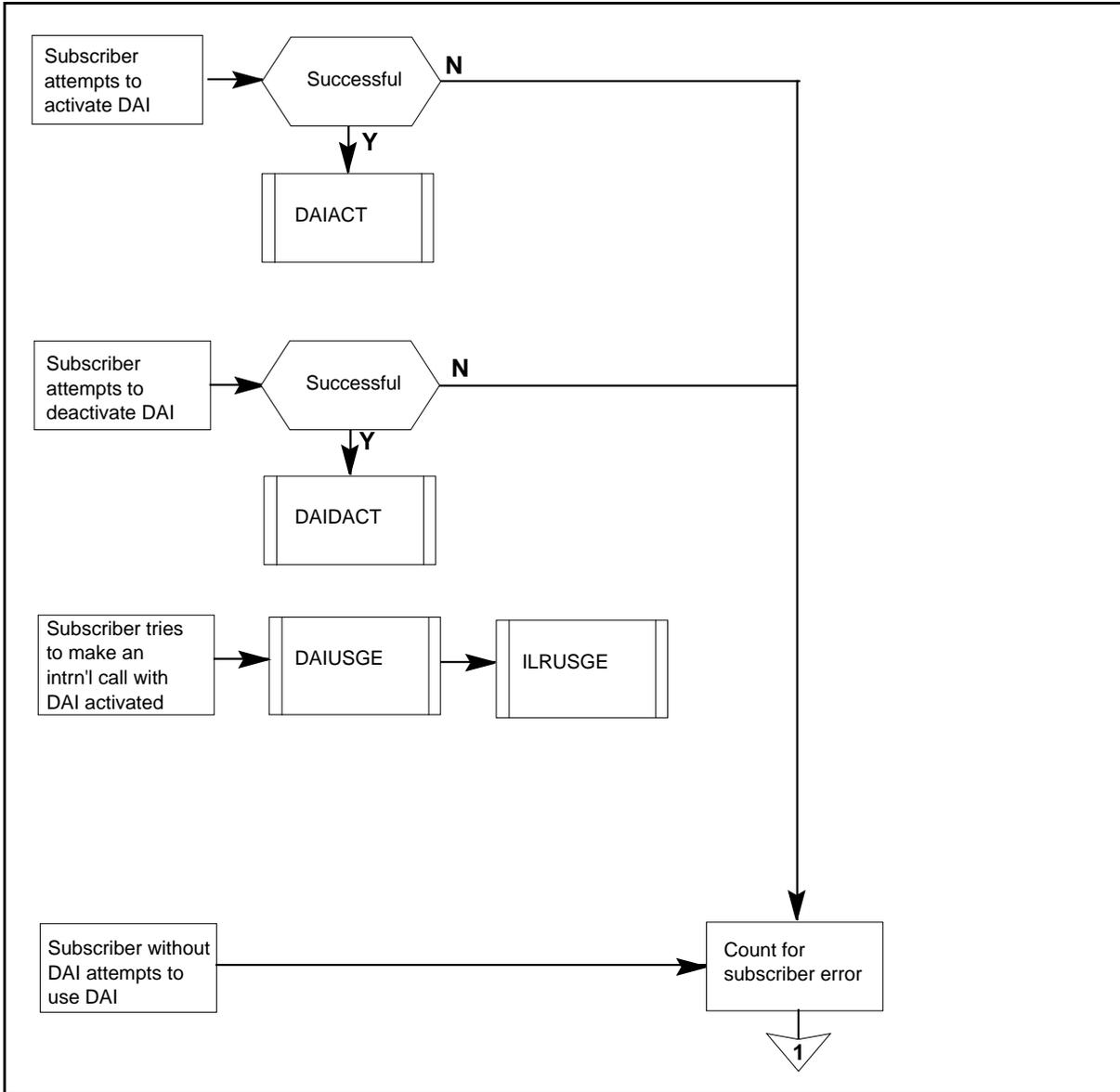
OM group ILR (continued)

OM group ILR DABLE registers



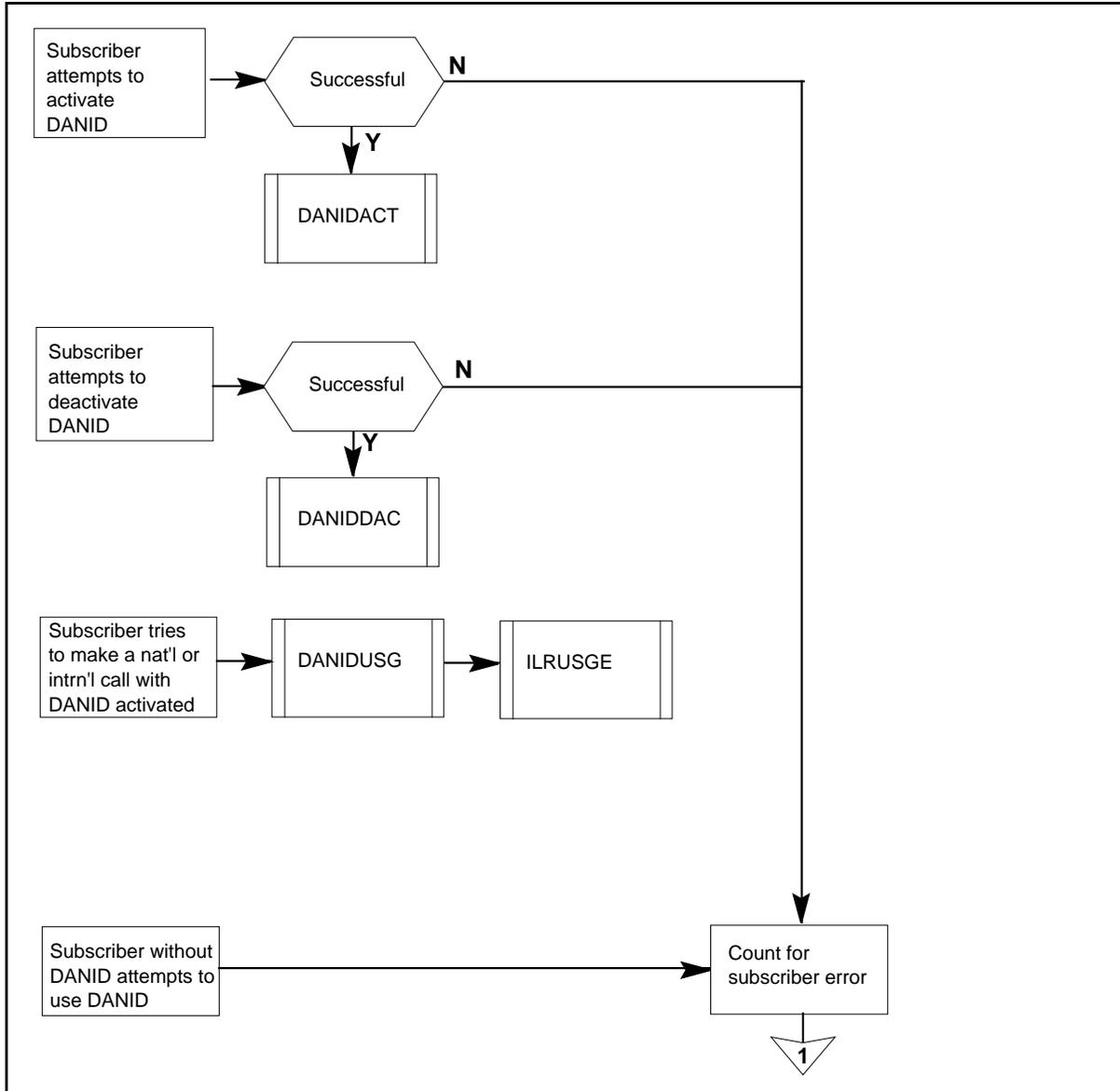
OM group ILR (continued)

OM group ILR DAI registers



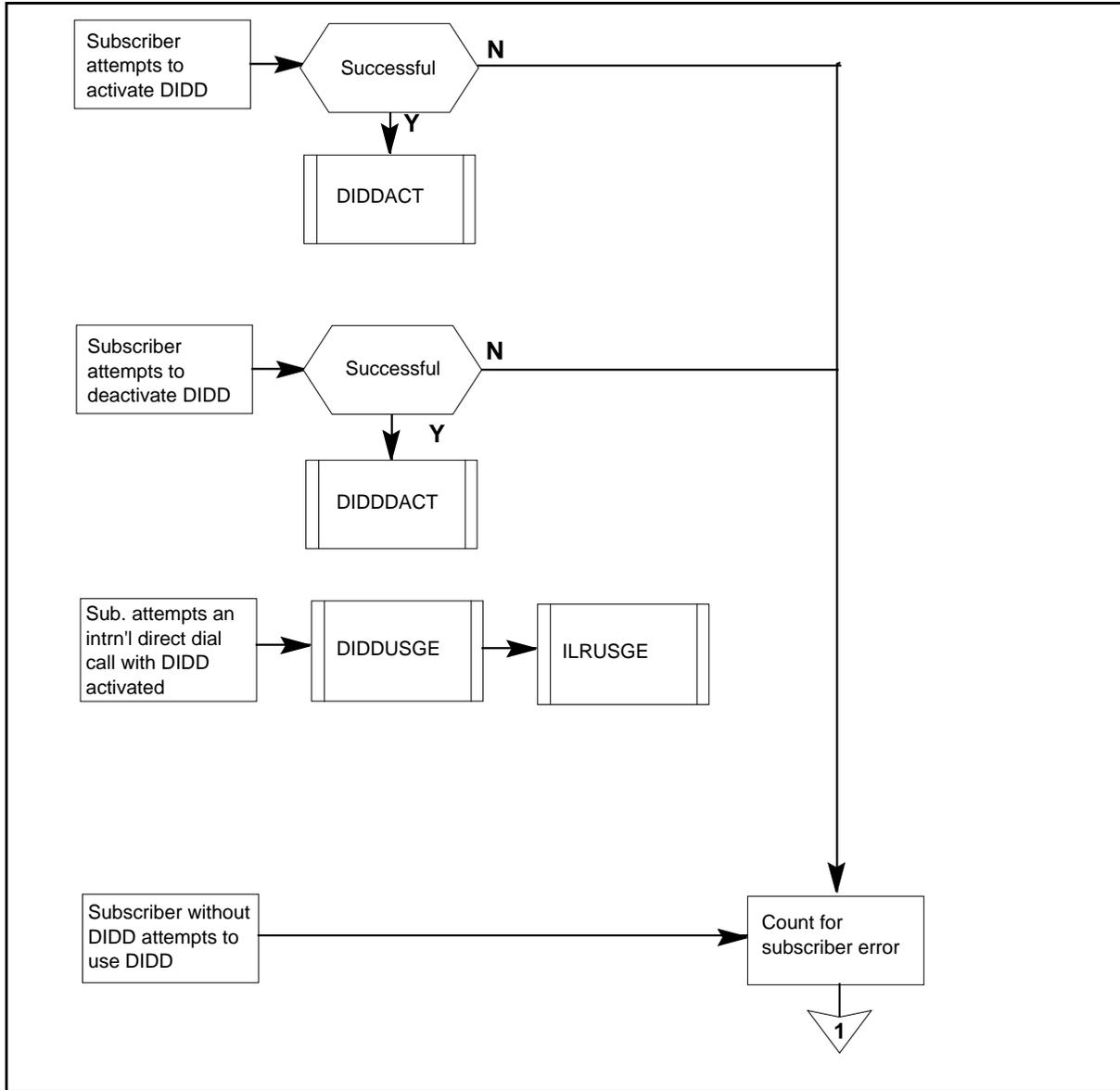
OM group ILR (continued)

OM group ILR DANID registers



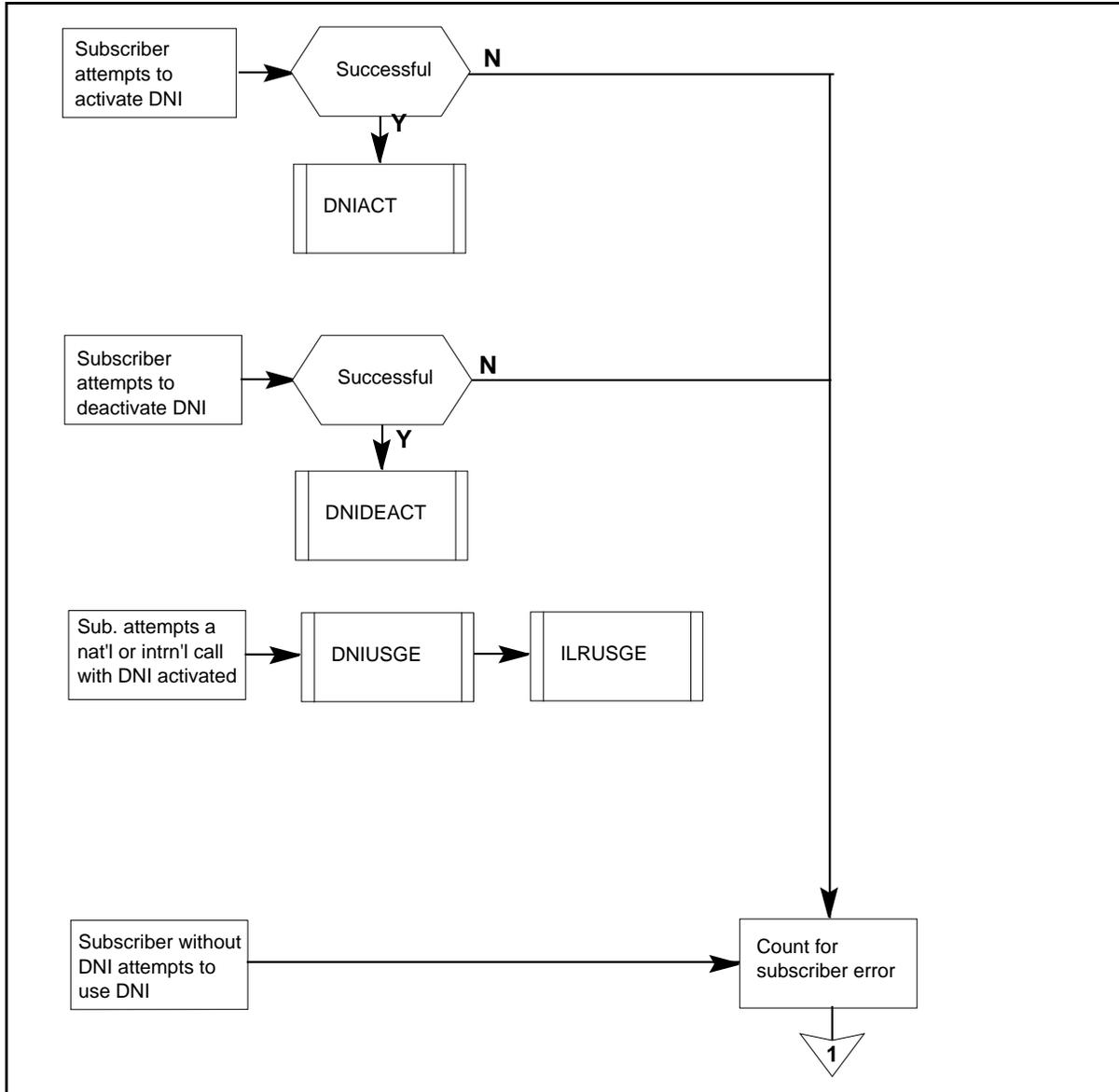
OM group ILR (continued)

OM group ILR DIDD registers



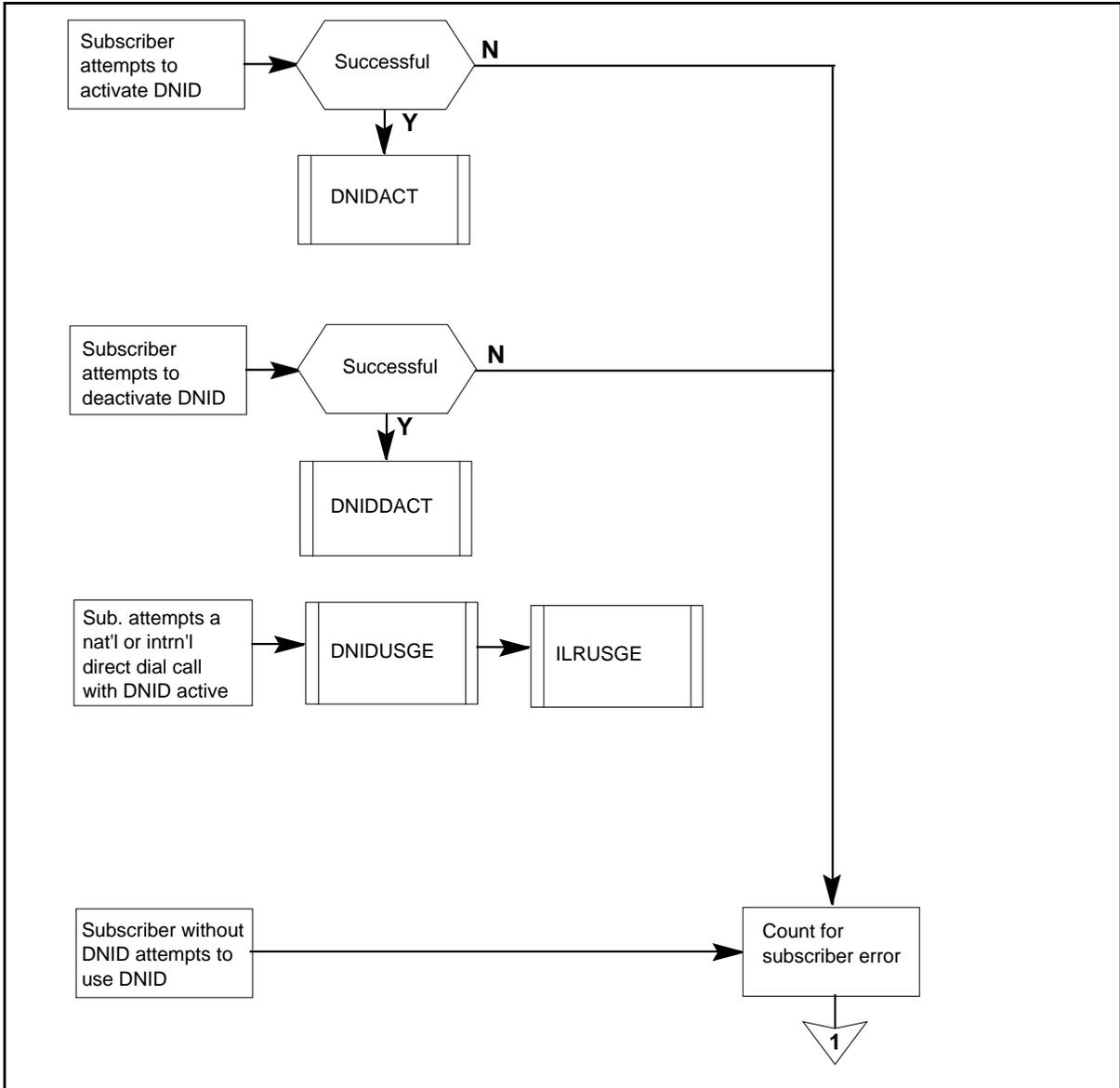
OM group ILR (continued)

OM group ILR DNI registers



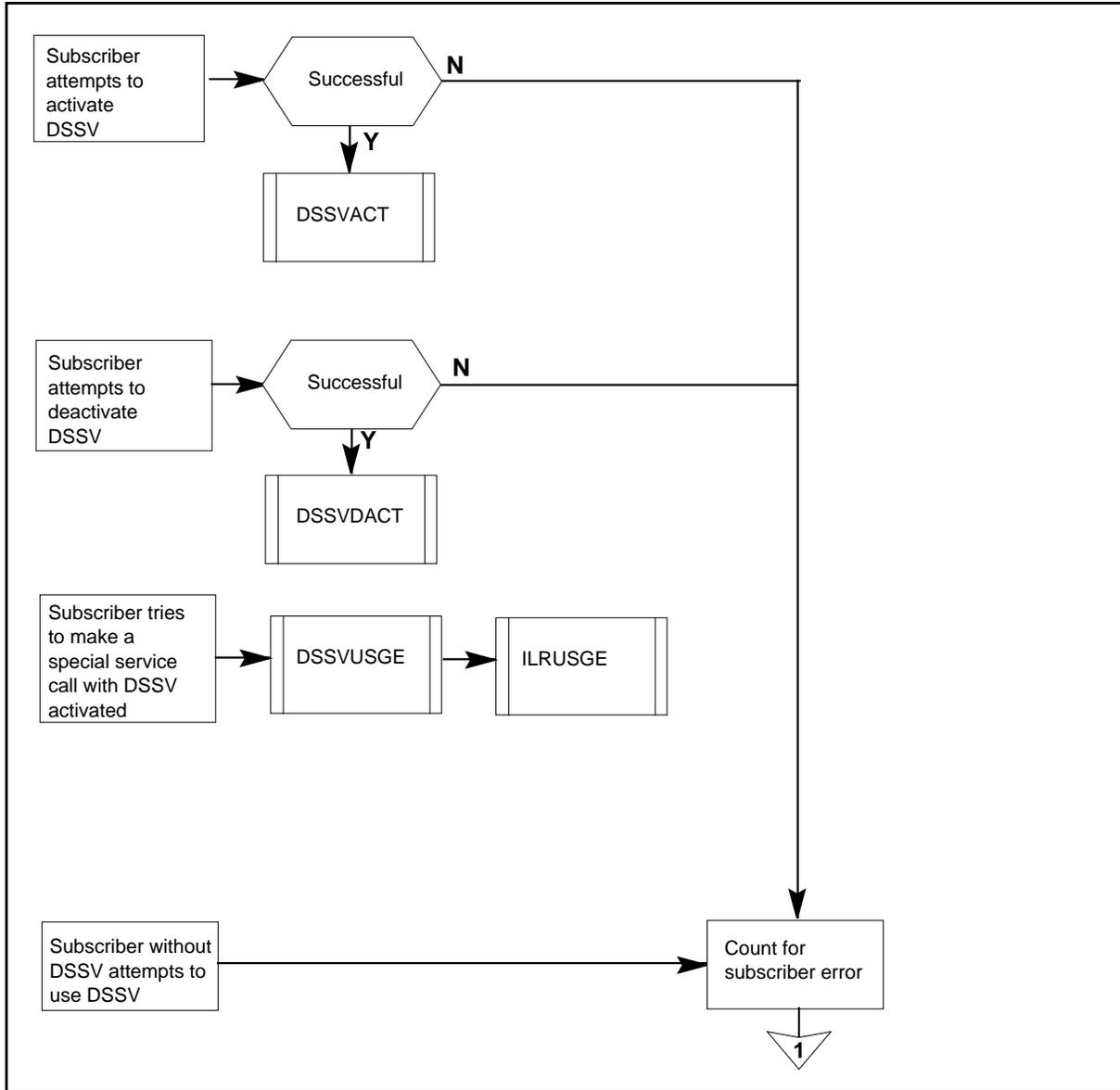
OM group ILR (continued)

OM group ILR DNID registers



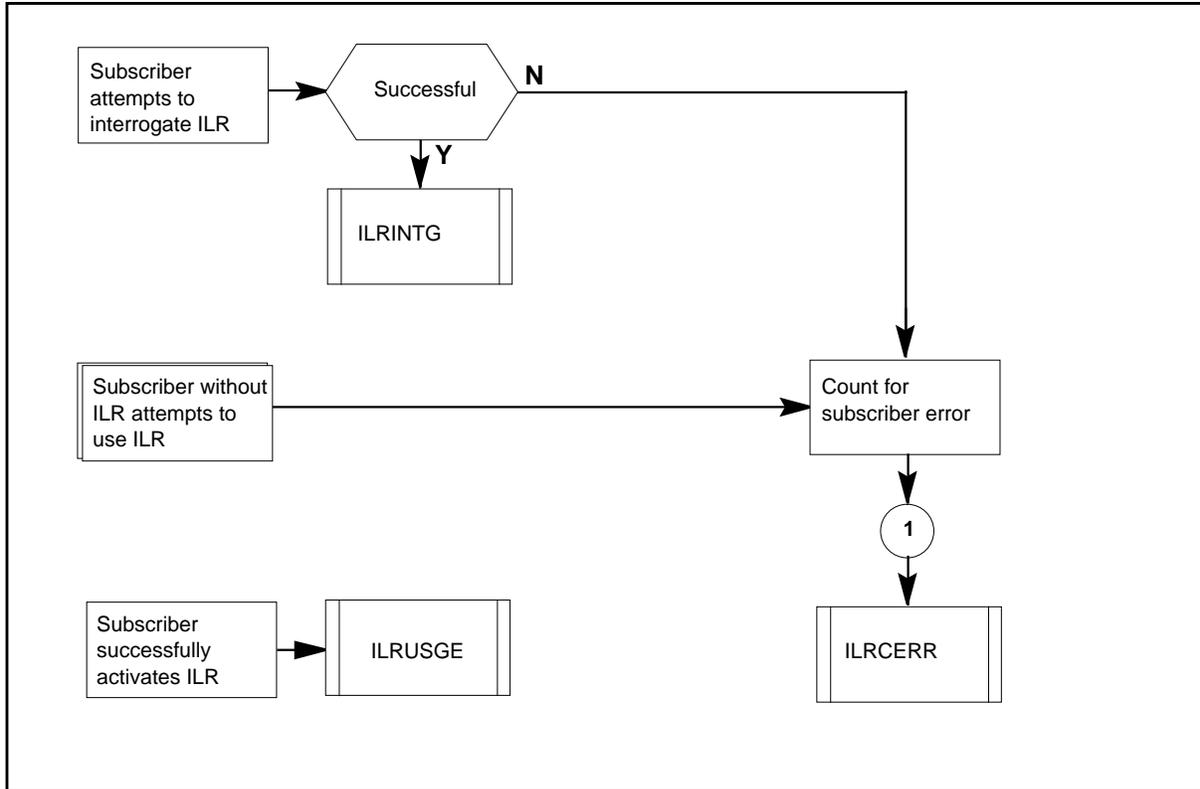
OM group ILR (continued)

OM group ILR DSSV registers



OM group ILR (continued)

OM group ILR registers



Register DABEACT

Register DABEACT counts the times a subscriber activates the deny all but emergency calls line restriction. The subscriber receives the “confirmation” tone to indicate the system accepts the request.

Register DABEACT release history

Register DABEACT was introduced in BCS24.

Associated registers

There are no associated registers.

Associated logs

The system generates FTR138 when a caller receives a treatment tone while the caller uses or attempts to use a feature.

Register DABEDACT

Deny All But Emergency deactivate (DABEDACT)

OM group ILR (continued)

Register DABEDACT counts the times a subscriber deactivates the deny all but emergency calls line restriction. The subscriber receives the "confirmation" tone to indicate the system accepts the request.

Register DABEDACT release history

Register DABEDACT was introduced in BCS24.

Associated registers

There are no associated registers.

Associated logs

The system generates FTR138 when a caller receives a treatment tone while the caller uses or attempts to use a feature.

Register DABEUSGE

Deny All But Emergency usage (DABEUSGE)

Register DABEUSGE counts the times a subscriber attempts to make a call that is not an emergency call. The system does not permit these calls. The deny all but emergency calls line restriction prevents the attempt.

Register DABEUSGE release history

Register DABEUSGE was introduced in BCS24.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Register DABLEACT

Deny All But Local and Emergency activate (DABLEACT)

Register DABLEACT counts the times a subscriber activates the all but local and emergency calls line restriction. The subscriber receives the "confirmation" tone to indicate the system accepts the request.

Register DABLEACT release history

Register DABLEACT was introduced in GL03.1.

Associated registers

There are no associated registers.

OM group ILR (continued)

Associated logs

The system generates FTR138 when a caller receives a treatment tone while the caller uses or attempts to use a feature.

Register DABLEDAC

Deny All But Local and Emergency deactivate (DABLEDAC)

Register DABLEDAC counts the times a subscriber deactivates the deny all but local and emergency calls line restriction. The subscriber receives the "confirmation" tone to indicate the system accepts the request.

Register DABLEAC release history

Register DABLEAC was introduced in GL03.1.

Associated registers

There are no associated registers.

Associated logs

The system generates FTR138 when a caller receives a treatment tone while the caller uses or attempts to use a feature.

Register DABLEUSG

Deny All But Local and Emergency usage (DABLEUSG)

Register DABLEUSG counts the times a subscriber attempts to make a call that is not a local or an emergency call. The system does not permit these calls. The deny all but local and emergency calls line restriction prevents the attempt.

Register DABLEUSG release history

Register DABLEUSG was introduced in GL03.1.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Register DAIACT

Deny All International activate (DAIACT)

Register DAIACT counts the times a subscriber activates the deny all international calls line restriction. The subscriber receives the "confirmation" tone.

OM group ILR (continued)

Register DAIACT release history

Register DAIACT was introduced in BCS24.

Associated registers

There are no associated registers.

Associated logs

The system generates FTR138 when a caller receives a treatment tone when the caller uses or attempts to use a feature.

Register DAIDACT

Deny All International deactivate (DAIDACT)

Register DAIDACT counts the times a subscriber correctly deactivates the deny all international calls line restriction. The subscriber receives the "confirmation" tone.

Register DAIDACT release history

Register DAIDACT was introduced in BCS24.

Associated registers

There are no associated registers.

Associated logs

The system generates FTR138 when a caller receives a treatment tone when the caller uses or attempts to use a feature.

Register DAIUSGE

Deny All International usage (DAIUSGE)

DAIUSGE counts the times a subscriber attempts to make an international call which the system does not permit. The system prevents the call because the deny all international calls feature is active.

Register DAIUSGE release history

Register DAIUSGE was introduced in BCS24.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

OM group ILR (continued)

Register DANIDACT

Deny All National and International Direct Dial activate (DANIDACT)

Register DANIDACT counts the times a subscriber activates the deny all national and international direct dial calls line restriction. The subscriber receives the "confirmation" tone to indicate the system accepts the request.

Register DANIDACT release history

Register DANIDACT was introduced in GL03.1.

Associated registers

There are no associated registers.

Associated logs

The system generates FTR138 when a caller receives a treatment tone while the caller uses or attempts to use a feature.

Register DANIDDAC

Deny All National and International Direct Dial deactivate (DANIDDAC)

Register DANIDDAC counts the times a subscriber deactivates the deny all national and international direct dial calls line restriction. The subscriber receives the "confirmation" tone to indicate the system accepts the request.

Register DANIDDAC release history

Register DANIDDAC was introduced in BCS24.

Associated registers

There are no associated registers.

Associated logs

The system generates FTR138 when a caller receives a treatment tone while the caller uses or attempts to use a feature.

Register DANIDUSG

Deny All National and International Direct Dial usage (DANIDUSG)

Register DANIDUSG counts the times a subscriber attempts to make a national or international direct dial call. The system does not permit these calls. The deny all national and international direct dial calls line restriction prevents the attempt.

OM group ILR (continued)

Register DANIDUSG release history

Register DANIDUSG was introduced in GL03.1.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Register DIDDACT

Deny International Direct Dial activate (DIDDACT)

Register DIDDACT counts the times a subscriber activates the deny international direct dial line restriction. The subscriber receives the "confirmation" tone.

Register DIDDACT release history

Register DIDDACT was introduced in BCS24.

Associated registers

There are no associated registers.

Associated logs

The system generates FTR138 when a caller receives a treatment tone while the caller uses or attempts to use a feature.

Register DIDDDACT

Deny International Direct Dial deactivate (DIDDDACT)

Register DIDDDACT counts the times a subscriber deactivates the deny international direct dial line restriction. The subscriber receives the "confirmation" tone.

Register DIDDDACT release history

Register DIDDDACT was introduced in BCS24.

Associated registers

There are no associated registers.

Associated logs

The system generates FTR138 when a caller receives a treatment tone while the caller uses or attempts to use a feature.

OM group ILR (continued)

Register DIDDUSGE

Deny International Direct Dial usage (DIDDUSGE)

Register DIDDUSGE counts the times a subscriber attempts to make an international direct dial call that the system does not permit. The deny international direct dial line restriction prevents the call.

Register DIDDUSGE release history

Register DIDDUSGE was introduced in BCS24.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Register DNIACT

Deny National and International activate (DNIACT)

Register DNIACT counts the times a subscriber activates the deny national and all international calls line restriction. The subscriber receives the "confirmation" tone.

Register DNIACT release history

Register DNIACT was introduced in BCS24.

Associated registers

There are no associated registers.

Associated logs

The system generates FTR138 when a caller receives a treatment tone while the caller uses or attempts to use a feature.

Register DNIDACT

Deny National and International Direct Dial activate (DNIDACT)

Register DNIDACT counts the times a subscriber activates the deny national and all international direct dial calls line restriction. The subscriber receives the "confirmation" tone.

Register DNIDACT release history

Register DNIDACT was introduced in BCS24.

OM group ILR (continued)

Associated registers

There are no associated registers.

Associated logs

The system generates FTR138 when a caller receives a treatment tone while the caller uses or attempts to use a feature.

Register DNIDDACT

Deny National and International Direct Dial deactivate (DNIDDACT)

Register DNIDDACT counts the times a subscriber deactivates the deny national and all international direct dial calls line restriction. The subscriber receives the "confirmation" tone.

Register DNIDDACT release history

Register DNIDDACT was introduced in BCS24.

Associated registers

There are no associated registers.

Associated logs

The system generates FTR138 when a caller receives a treatment tone while the caller uses or attempts to use a feature.

Register DNIDEACT

Deny National and International deactivate (DNIDEACT)

Register DNIDEACT counts the times a subscriber deactivates the deny national and all international calls line restriction. The subscriber receives the "confirmation" tone.

Register DNIDEACT release history

Register DNIDEACT was introduced in BCS24.

Associated registers

There are no associated registers.

Associated logs

The system generates FTR138 when a caller receives a treatment tone while the caller uses or attempts to use a feature.

Register DNIDUSGE

Deny National and International Direct Dial usage (DNIDUSGE)

OM group ILR (continued)

Register DNIDUSGE counts times a subscriber attempts to make a national or international direct dial call the system does not permit. The deny national and international direct dial calls line restriction prevents the restriction.

Register DNIDUSGE release history

Register DNIDUSGE was introduced in BCS24.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Register DNIUSGE

Deny National and International usage (DNIUSGE)

Register DNIUSGE counts the times a subscriber attempts to make a national or international call that the system does not permit. The deny national and international line restriction prevents the call.

Register DNIUSGE release history

Register DNIUSGE is introduced in BCS24.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Register DSSVACT

Deny Special Service activate (DSSVACT)

Register DSSVACT counts the times a subscriber activates the deny special service calls line restriction. The subscriber receives the "confirmation" tone to indicate the system accepts the request.

Register DSSVACT release history

Register DSSVACT was introduced in GL03.1.

Associated registers

There are no associated registers.

OM group ILR (continued)

Associated logs

The system generates FTR138 when a caller receives a treatment tone while the caller uses or attempts to use a feature.

Register DSSVDACT

Deny Special Service deactivate (DSSVDACT)

Register DSSVDACT counts the times a subscriber deactivates the deny special service calls line restriction. The subscriber receives the "confirmation" tone to indicate the system accepts the request.

Register DSSVDACT release history

Register DSSVDACT was introduced in GL03.1.

Associated registers

There are no associated registers.

Associated logs

The system generates FTR138 when a caller receives a treatment tone while the caller uses or attempts to use a feature.

Register DSSVUSGE

Deny Special Service use (DSSVUSGE)

Register DSSVUSGE counts the times a subscriber attempts to make a special service call the system does not permit. The deny special service calls line restriction prevents the attempt.

Register DSSVUSGE release history

Register DSSVUSGE was introduced in GL03.1.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Register ILRCERR

International line restriction customer error (ILRCERR)

Register ILRCERR counts the times a subscriber does not use the international line restriction feature correctly. The subscriber receives the "reorder" tone.

OM group ILR (continued)

The following events cause this register to increase:

- the subscriber attempts to access ILR when the feature is not assigned (FNAL treatment)
- the subscriber does not dial correctly when the subscriber activates, deactivates, interrogates or programs ILR (NACK treatment)
- the subscriber uses wrong password on deactivation (NACK treatment)
- the subscriber attempts to access ILR when the system denies the feature (NACK treatment)

Register ILRCERR release history

Register ILRCERR was introduced in BCS24.

Associated registers

There are no associated registers.

Associated logs

The system generates FTR138 when a caller receives a treatment tone while the caller uses or attempts to use a feature.

Register ILRINTG

International line restriction interrogation (ILRINTG)

Register ILRINTG counts the times a subscriber queries if the system activated the ILR feature. The status determines if the subscriber receives the "confirmation" or "negative acknowledgement" tone.

Register ILRINTG release history

Register ILRINTG was introduced in BCS24.

Associated registers

There are no associated registers.

Associated logs

The system generates FTR138 when a caller receives a treatment tone while the caller uses or attempts to use a feature.

Register ILRUSGE

International line restriction usage

ILRUSGE counts the times a subscriber activates the ILR feature.

OM group ILR (end)

Register ILRUSGE release history

ILRUSGE was introduced in GL04.

Associated registers

There are no associated registers.

Associated logs

The system generates FTR138 when a caller receives a treatment tone while the caller uses or attempts to use a feature.N

OM group INDC

OM description

International no double connect (INDC)

The OM group INDC provides information about the use and performance of the International No Double Connect (INDC) feature. This OM group provides counts of successful attempts to activate, deactivate, interrogate and use this feature. The OM group also counts attempts that are not successful which cause the feature to fail.

Release history

The OM group INDC is added to BCS24.

Registers

The OM group INDC registers appear on the MAP terminal as follows:

| | | | |
|---------|---------|---------|---------|
| NDCACT | NDCDACT | NDCINTG | NDCUSGE |
| NDCCERR | | | |

Group structure

The OM group INDC provides one tuple for each office.

Key field:

There is no Key field

Info field:

There is no Info field

Associated OM groups

There are no associated OM groups.

Associated functional groups

There are no associated functional groups.

OM group INDC (continued)

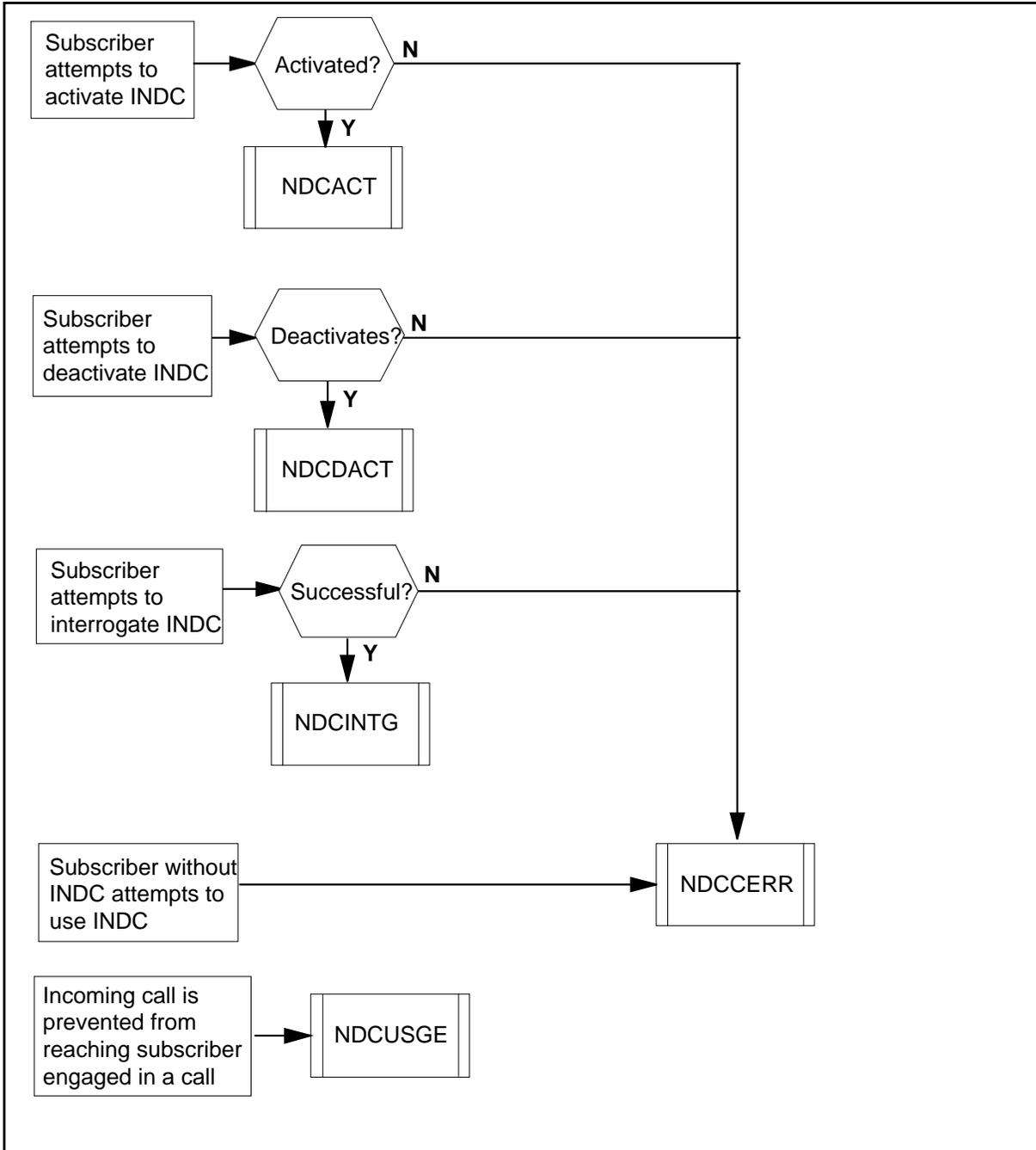
Associated functionality codes

The associated functionality codes for OM group INDC appear in the following table.

| Functionality | Code |
|---|-------------|
| International - Local Basic (UPCR NTX472AA) | NTX472AB |

OM group INDC (continued)

OM group INDC registers



Register NDCACT

No double connect activate (NDCACT)

OM group INDC (continued)

Register NDCACT counts the number of times a subscriber activates the INDC feature. The subscriber receives the "confirmation" tone.

Register NDCACT release history

Register NDCACT was introduced in BCS24.

Associated registers

There are no associated registers.

Associated logs

The system generates FTR138 when a caller receives a treatment tone while the caller uses or attempts to use a feature.

Register NDCCERR

No double connect customer error (NDCCERR)

Register NDCCERR counts the number of times a subscriber uses does not use the INDC feature correctly. Use that is not correct occurs when a subscriber attempts to activate, deactivate, or interrogate the feature and misdials. A wrong use can also occur if the feature is not assigned or is denied. The subscriber receives the "negative acknowledgement" treatment tone.

Register NDCCERR release history

Register NDCCERR was introduced in BCS24.

Associated registers

The are no associated registers.

Associated logs

The system generates FTR138 when a caller receives a treatment tone while the caller uses or attempts to use a feature.

Register NDCDACT

No double connect deactivate (NDCDACT)

Register NDCDACT counts the number of times a subscriber deactivates the INDC feature. The subscriber receives the "confirmation" tone.

Register NDCDACT release history

Register NDCDACT was introduced in BCS24.

Associated registers

There are no associated registers.

OM group INDC (end)

Associated logs

The system generates FTR138 when a caller receives a treatment tone while the caller uses or attempts to use a feature.

Register NDCINTG

No double connect interrogate (NDCINTG)

Register NDCINTG counts the number of times a subscriber checks if the system activated the INDC feature. The subscriber receives the "confirmation" or "negative acknowledgement" tone depending on the results of the interrogation.

Register NDCTING release history

Register NDCINTG was introduced in BCS24.

Associated registers

There are no associated registers.

Associated logs

The system generates FTR138 when a caller receives a treatment tone while the caller uses or attempts to use a feature.

Register NDCUSGE

No double connect usage (NDCUSGE)

Register NDCUSGE counts the number of times the system prevents a waiting or toll break-in call from reaching a subscriber. The call cannot reach the subscriber because the subscriber is in a call and INDC is active. For a waiting call, the caller receives the "busy" tone. For a toll break-in the caller receives the "feature not allowed" treatment with the "reorder" tone.

Register NDCUSGE release history

Register NDCUSGE was introduced in BCS24.

Associated registers

There are no associated registers.

Associated logs

The system generates FTR138 when a caller receives a treatment tone while the caller uses or attempts to use a feature.

OM group ININTWRK

OM description

Intelligent Network Interworking

This group pegs the number of messages sent and received for intelligent (IN) operator backup calls. A tuple is added for every trunk group datafiled in table ISUPTRK.

To test a register, generate the appropriate ISUP message to peg the OM register and use OMSHOW to display the data.

Release history

OM group ININTWRK was introduced in TOPS11 by feature AF7805 in functionality IN Fall Back, ENSV0023.

Registers

The following OM group ININTWRK registers display on the MAP terminal as follows:

```

>OMSHOW INITWRK ACTIVE
CLASS: ACTIVE
START:1998/07/09 17:00:00 THU;STOP:1995/07/09 17:20:10 WED;
SLOWSAMPLES:      10: FASTSAMPLES  97;
  KEY (COMMON_LANGUAGE_NAME)
    IAMINVK      IAMOPR      FARINVK      FACINVK
    FARRRSL      FACRRSL      FARRERR      FACRERR
    RELINC       RELOUT      RELRRSL      RELRERR
    RELREJI      RELREJO
111 ISUP2WITALT
      10          10          15          0
      5           0           0           0
      0           10          0           0
      0           0

```

Group structure

OM group ININTWRK provides a tuple for each integrated services digital network (ISDN) user part (ISUP) trunk datafiled in table ISUPTRK.

OM group ININTWRK (continued)

Key field:

Trunk group CLLI

Info field:

The number of call processing messages sent and received for IN operator backup calls on an ISUP trunk group basis.

Associated OM groups

none

Associated functional groups

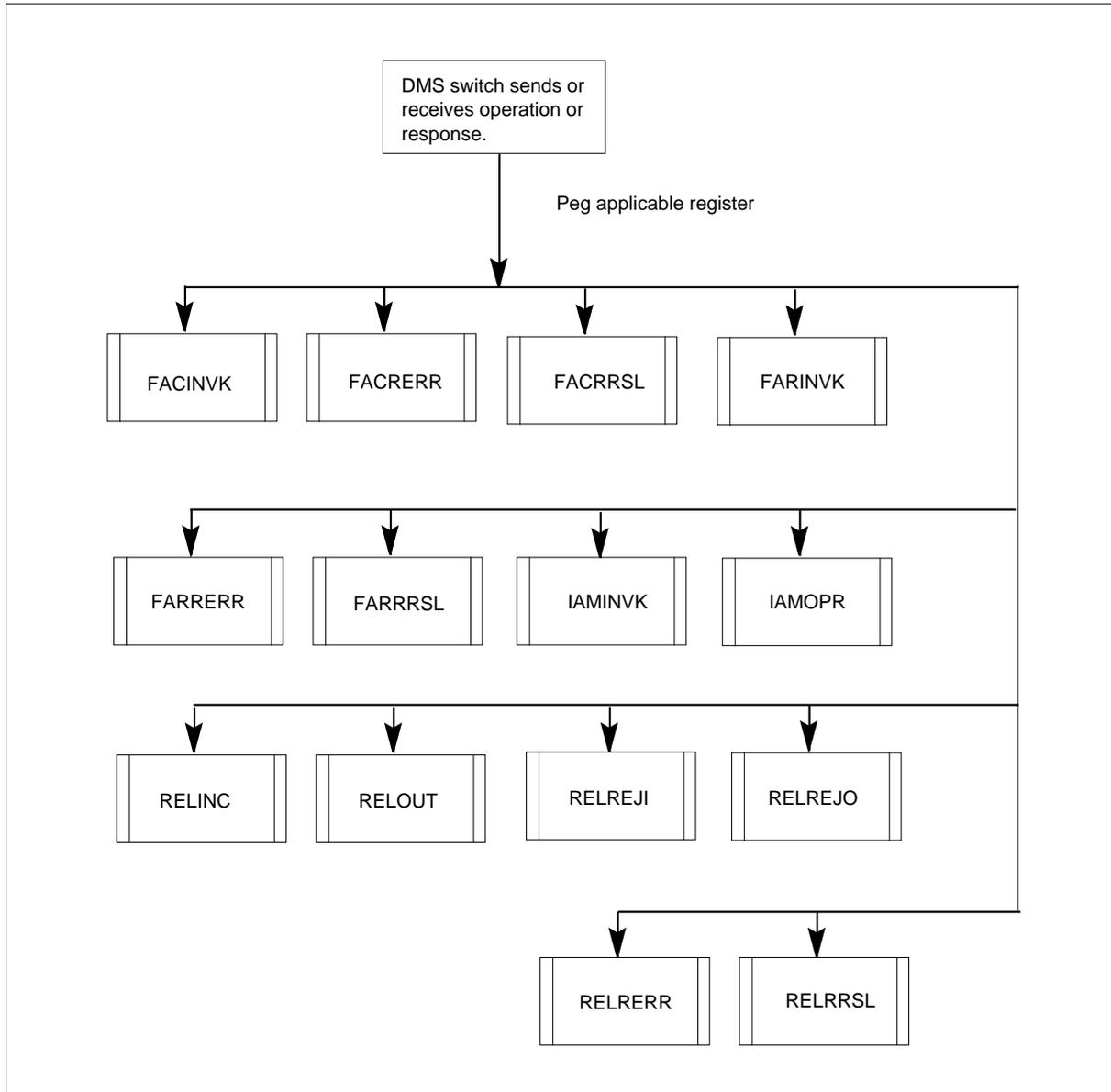
The following functional groups are associated with OM group ININTWRK:

- Enhanced Services, ENSV0001

Associated functionality codes

The functionality codes associated with OM group ININTWRK are shown in the following table.

| Functionality | Code |
|--------------------|----------|
| IN Operator Backup | ENSV0023 |

OM group ININTWRK (continued)**OM group ININTWRK registers****Register FACINVK**

Register Facility Message (FAC) Invoke

This register is pegged when an ISUP FAC with an RO Invoke component is received.

OM group ININTWRK (continued)

Register FACINVK release history

Register FACINVK was introduced in TOPS11.

Associated registers

none

Associated logs

none

Extension registers

none

Register FACRERR

Register Facility (FAC) Return Error

This register is pegged when an ISUP FAC with an RO ReturnError component is sent.

Register FACERR release history

Register FACERR was introduced in TOPS11.

Associated registers

none

Associated logs

Log TOPS 607 is generated when a ReturnError component is sent to the service switching point (SSP).

Extension registers

none

Register FACRRSL

Register Facility (FAC) Return Error

This register is pegged when an ISUP FAC with an RO ReturnResult component is sent.

Register FACRRSL release history

Register FACRRSL was introduced in TOPS11.

Associated registers

none

OM group ININTWRK (continued)

Associated logs

none

Extension registers

none

Register FARINVK

Register Facility Request (FAR) Invoke

This register is pegged when an ISUP FAR with an RO Invoke component is received.

Register FARINVK release history

Register FARINVK was introduced in TOPS11.

Associated registers

none

Associated logs

none

Extension registers

none

Register FARRERR

Register Facility Request (FAR) Return Error

This register is pegged when an ISUP FAR with an RO ReturnError component is sent.

Register FARRERR release history

Register FARRERR was introduced in TOPS11.

Associated registers

none

Associated logs

Log TOPS 607 is generated when a ReturnError component is sent to the SSP.

Extension registers

none

OM group ININTWRK (continued)

Register FARRSL

Register Facility Request (FAR) Return Result

This register is pegged when an ISUP FAR with an RO ReturnResult component is sent.

Register FARRSL release history

Register FARRSL was introduced in TOPS11.

Associated registers

none

Associated logs

none

Extension registers

none

Register IAMINVK

Register Initial Address Message (IAM) Invoke

This register is pegged each time an ISUP IAM message with a remote operation (RO) Invoke component is received.

Register IAMINVK release history

Register IAMINVK was introduced in TOPS11.

Associated registers

none

Associated logs

none

Extension registers

none

Register IAMOPR

Register Initial Address Message (IAM) call to Operator

This register is pegged when an ISUP IAM with an RO Invoke component is received and the call is sent to an operator terminal.

OM group ININTWRK (continued)

Register IAMOPR release history

Register IAMOPR was introduced in TOPS11.

Associated registers

none

Associated logs

none

Extension registers

none

Register RELINC

Register Release Message (REL) Incoming without RO

This register is pegged when an ISUP REL without an RO component is received.

Register RELINC release history

Register RELINC was introduced in TOPS11.

Associated registers

none

Associated logs

none

Extension registers

none

Register RELOUT

Register Release Message (REL) Outgoing without RO

This register is pegged when an ISUP REL without an RO component is sent.

Register RELOUT release history

Register RELOUT was introduced in TOPS11.

Associated registers

none

Associated logs

none

OM group ININTWRK (continued)

Extension registers

none

Register RELREJI

Register Release Message (REL) Reject Incoming

This register is pegged when an ISUP REL with an RO Reject component is received.

Register RELREJI release history

Register RELREJI was introduced in TOPS11.

Associated registers

none

Associated logs

Log TOPS 604 is generated when a Reject component is received for an IN operator backup call.

Extension registers

none

Register RELREJO

Register Release Message (REL) Reject Outgoing

This register is pegged when an ISUP REL with an RO Reject component is sent.

Register RELREJO release history

Register RELREJO was introduced in TOPS11.

Associated registers

none

Associated logs

Log TOPS 603 is generated when a Reject component is sent for an IN operator backup call.

Extension registers

none

Register RELRERR

Register Release Message (REL) Return Error

OM group ININTWRK (end)

This register is pegged when an ISUP REL with an RO ReturnError component is sent.

Register RELRERR release history

Register RELRERR was introduced in TOPS11.

Associated registers

none

Associated logs

Log TOPS 606 is generated when an IN operator backup call routes incorrectly.

Log TOPS 607 is generated when a ReturnError component is sent to the SSP.

Extension registers

none

Register RELRRSL

Register Release Message (REL) Return Result

This register is pegged when an REL with an RO ReturnResult component is sent.

Register RELRRSL release history

Register RELRRSL was introduced in TOPS11.

Associated registers

none

Associated logs

none

Extension registers

none

OM group IOC

OM description

Input/output controller maintenance summary (IOC)

The OM group IOC provides information about the performance of input/output controllers (IOC). Each IOC is an interface between a maximum of 36 input/output devices and the central message controller (CMC).

Three peg registers count:

- errors and faults in the IOCs
- device errors the system detects on P-side links

Four usage registers record:

- system busy links
- manually busy links
- system busy IOCs
- manually busy IOCs

The data that the IOC supplies is used to monitor the performance of the IOCs and the output devices that the IOCs support.

Release history

The OM group IOC was introduced in BCS20.

BCS33

Registers IOCLKSBU, IOCLKMBU and IOCMBU can be converted from CCS to deci-erlangs before their display. The OMSHOW command on the ACTIVE class performs the conversion.

BCS21

Software change to provide usage counts in either CCS or deci-erlangs.

Registers

The OM group IOC registers appear on the MAP terminal as follows:

| | | | |
|----------|----------|--------|----------|
| IOCERR | IOCLKERR | IOCFLT | IOCLKSBU |
| IOCLKMBU | IOCSBU | IOCMBU | |

Group structure

The OM group IOC provides one tuple for each office.

OM group IOC (continued)

Key field:

There is no key field

Info field:

There is no info field

Associated OM groups

There are no associated OM groups.

Associated functional groups

The following functional groups associate with OM group IOC:

- DMS-100 Local
- DMS-100/200 Local/Toll
- DMS-200 Toll
- DMS-100 Meridian
- DMS-MTX
- DMS-250 Toll/Tandem
- DMS-300
- Meridian SL-100 PBX
- DMS SuperNode

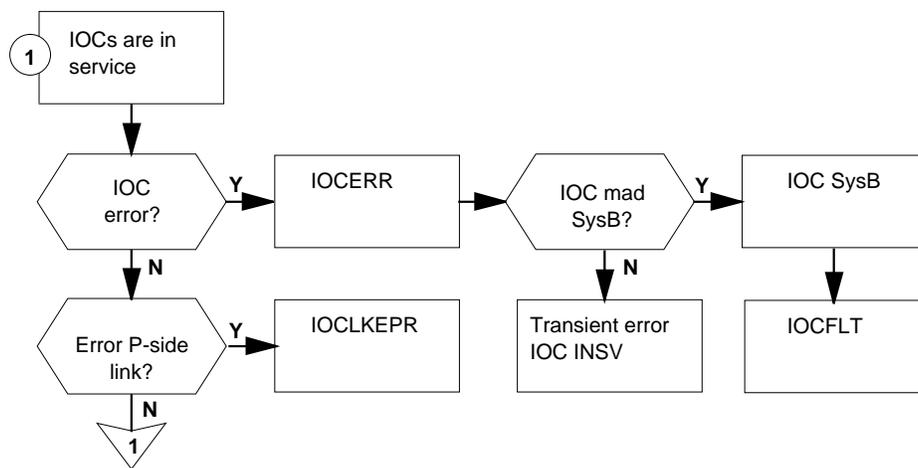
Associated functionality codes

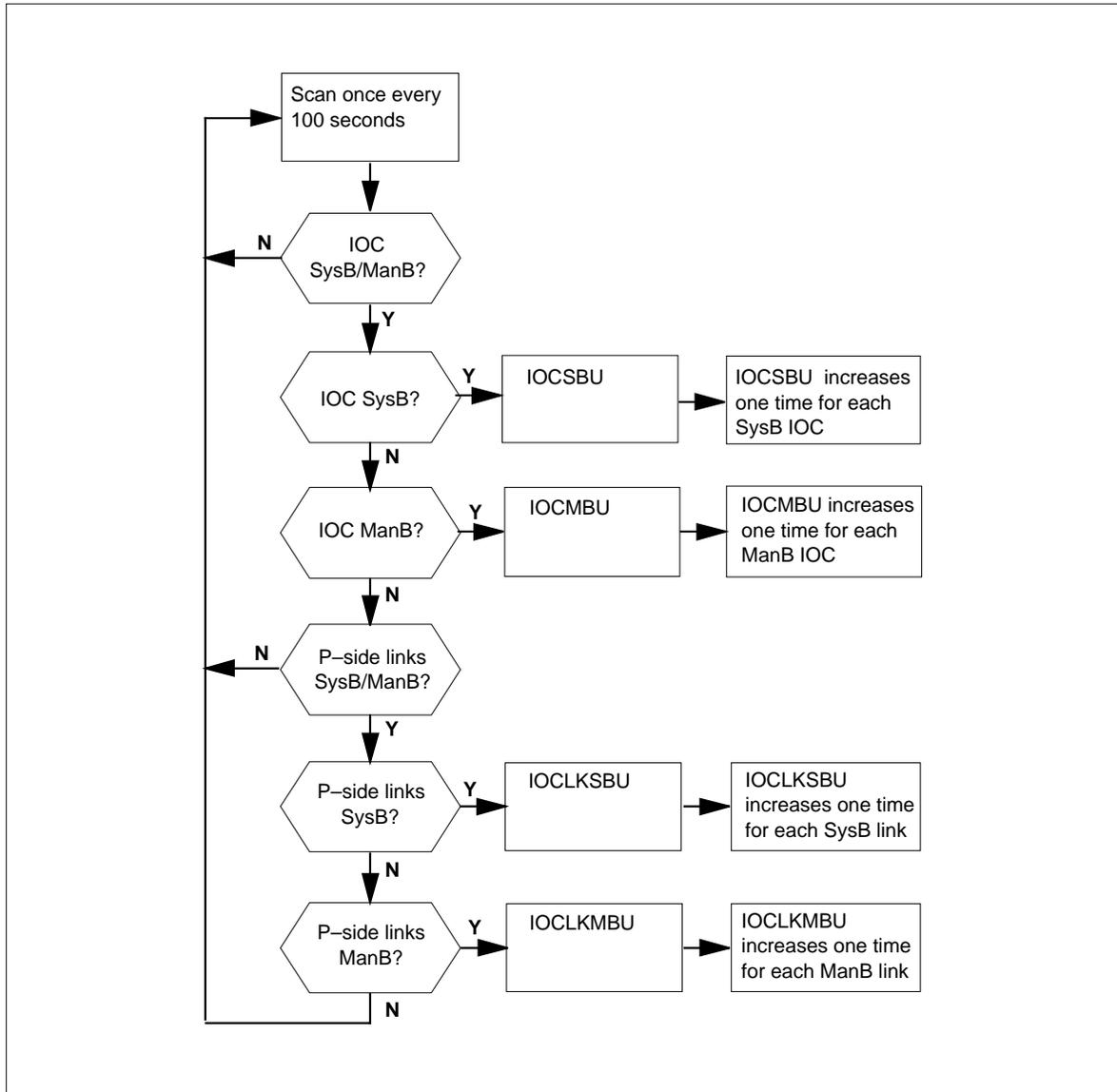
The associated functionality codes for OM group IOC appear in the following table.

| Functionality | Code |
|----------------|----------|
| OMs in Erlangs | NTX664AA |
| Common Basic | NTX001AA |

OM group IOC (continued)

OM group IOC registers



OM group IOC (continued)**OM group IOC use registers****Register IOCERR**

Input/output controller (IOC) errors (IOCERR)

Register IOCERR counts errors the system detects in in-service IOCs. Register IOCERR counts transient errors and errors that make an IOC system busy.

Register IOCERR release history

Register IOCERR was introduced before BCS20.

OM group IOC (continued)

Associated registers

Register IOCFLT counts faults that make an IOC system busy.

Associated logs

The system generates IOD104 when a fault makes an IOC system busy.

The system generates IOD115 when different IOC errors occur.

The system generates IOD118 when a fault occurs during messaging between an IOC and a device controller. The system also generates IOD118 when a fault occurs between an IOC and the CMC.

The system generates IOD119 when a fault occurs during messaging between an IOC and a console device. The system also generates IOD119 when a fault occurs between an IOC and the CMC.

The system generates IOD120 when a discrepancy is present between the value of the maximum device number and the expected value.

The system generates IOD123 when an IOC fails the maximum device number test.

The system generates IOD124 when an IOC fails the memory sequence test.

The system generates IOD125 when an IOC fails the memory pattern test.

The system generates IOD126 when an IOC fails the clock status register test.

The system generates IOD127 when an IOC fails the status register test.

Register IOCFLT

Input/output controller (IOC) faults (IOCFLT)

Register IOCFLT counts faults that make an IOC system busy.

Faults the IOCFLT counts cause an IOC to remain system busy until manual or system intervention corrects the fault. Manual or system intervention returns the IOC to service.

Register IOCFLT release history

Register IOCFLT was introduced before BCS20.

Associated registers

Register IOCERR counts errors the system detects in in-service IOCs.

OM group IOC (continued)

Associated logs

The system generates IOD104 when an error makes an IOC system busy.

The system generates IOD109 when an error makes an IOC port system busy.

The system generates IOD113 when an error makes an IOC port system busy.

The system generates IOD116 when different IOC errors occur.

The system generates IOD118 when a fault occurs during messaging between an IOC and a device controller. The system also generates IOD118 when a fault occurs between an IOC and the CMC.

The system generates IOD119 when a fault occurs during messaging between an IOC and a console device. The system also generates IOD119 when a fault occurs between an IOC and the CMC.

The system generates IOD124 when an IOC fails the memory sequence test.

The system generates IOD125 when an IOC fails the memory pattern test.

The system generates IOD126 when an IOC fails the clock status register test.

The system generates IOD127 when an IOC fails the status register test.

The system generates IOD129 when an IOC port fails a test.

Register IOCLKERR

Input/output controller (IOC) link errors (IOCLKERR)

Register IOCLKERR counts device errors the system detects on the P-side links of an IOC. Register IOCLKERR counts the following errors:

- checksum
- bus overrun
- device not ready

Register IOCLKERR release history

Register IOCLKERR was introduced before BCS20.

Associated registers

There are no associated registers.

OM group IOC (continued)

Associated logs

The system generates IOD117 when a fault occurs during messaging between an IOC and the CMC.

The system generates IOD129 when an IOC port fails a test.

Register IOCLKMBU

Input/output controller (IOC) link manually busy usage (IOCLKMBU)

Register IOCLKMBU is a usage register. The scan rate is 100 s. Register IOCLKMBU records if P-side input/output controller (IOC) links are manually busy.

Register IOCLKMBU release history

Register IOCLKMBU was introduced before BCS20.

BCS33

When office parameter OMINERLANGS is set to Y, the usage count converts from CCS to deci-erlangs before the usage count appears. The OMSHOW command on the ACTIVE class performs the conversion. The value in the active registers is not altered and remains in CCS.

BCS21

Software change to provide usage counts in either CCS or deci-erlangs.

Associated registers

There are no associated registers.

Associated logs

The system generates IOD108 when you manually busy an IOC port.

The system generates IOD112 when you manually busy an IOC port.

Register IOCLKSBU

Input/output link system busy usage (IOCLKSBU)

Register IOCLKSBU is a usage register. The scan rate is 100 s. Register IOCLKSBU records if P-side IOC links are system busy.

Register IOCLKSBU release history

Register IOCLKSBU was introduced before BCS20.

OM group IOC (continued)

BCS33

When office parameter OMINERLANGS is set to Y, the usage count converts from CCS to deci-erlangs before the usage count appears. The OMSHOW command on the ACTIVE class performs the conversion. The value in the active registers is not altered and remains in CCS.

BCS21

Software change to provide usage counts in either CCS or deci-erlangs.

Associated registers

There are no associated registers.

Associated logs

The system generates IOD109 when an error makes IOC port system busy.

The system generates IOD113 when an error makes IOC port system busy.

Register IOCMBU

Input/output controller (IOC) manually busy usage (IOCMBU)

Register IOCMBU is a usage register. The scan rate is 100 s. Register IOCMBU records if IOCs are manually busy.

Register IOCMBU release history

Register IOCMBU was introduced before BCS20.

BCS33

When office parameter OMINERLANGS is set to Y, the usage count converts from CCS to deci-erlangs before the usage count appears. The OMSHOW command on the ACTIVE class performs the conversion. The value in the active registers is not altered and remains in CCS.

BCS21

Software change to provide usage counts in either CCS or deci-erlangs.

Associated registers

There are no associated registers.

Associated logs

The system generates IOD103 when you manually busy an IOC.

Register IOCSBU

Input/output controller (IOC) system busy usage (IOCSBU)

OM group IOC (end)

Register IOCSBU is a usage register. The scan rate is 100 s. Register IOCSBU records if IOCs are system busy.

Register IOCSBU release history

Register IOCSBU was introduced before BCS20.

BCS21

Software change to provide usage counts in either CCS or deci-erlangs.

Associated registers

There are no associated registers.

Associated logs

The system generates IOD104 when an IOC is system busy.

OM group IOSYS

OM description

Input and output system (IOSYS)

The OM group IOSYS counts errors that the input/output (I/O) system detects in incoming or outgoing messages. Examples of problem conditions include errors or rebounded message interrupts that originate in the central message controller (CMC).

Diagnostics determine if the errors counted by IOSYS originate in the CMC or a network message controller (NMC). If the errors originate in the CMC or NMC, groups CMC or NMC count the errors.

Data supplied by IOSYS is used to monitor the performance of the I/O system.

Release history

The OM group IOSYS was introduced in BCS20.

Registers

The OM group IOSYS registers appear on the MAP terminal as follows:



IOSYSERR

Group structure

The OM group IOSYS provides one tuple for each office.

Key field:

There is no key field

Info field:

There is no info field

Associated OM groups

The OM group CMC records:

- errors, faults, or state changes occur in the central message controller
- errors, faults, or state changes occur in the links that associate with the central message controller

OM group IOSYS (continued)

The OM group NMC records:

- errors or state changes occur in network modules or junctors
- errors or state changes occur in in the links for network modules or junctors

Associated functional groups

The following functional group associate with OM group IOSYS:

- DMS-100 Local
- DMS-100/200 Local/Toll
- DMS-100/200 Local/Toll with TOPS
- DMS-200 Toll
- DMS-200 with TOPS
- DMS-100 Meridian
- DMS-MTX Mobile Telephone Exchange
- DMS-250 Toll/Tandem
- DMS-300 Gateway
- Meridian SL-100 PBX

Associated functionality codes

The associated functionality codes for OM group IOSYS appear in the following table.

| Functionality | Code |
|---------------|----------|
| Common Basic | NTX001AA |

Register IOSYSERR

Input and output system error (IOSYSERR)

Register IOSYSERR counts errors that the input/output (I/O) system detects on incoming or outgoing messages. Examples of problem conditions include errors or rebounded message interrupts that originate in the CMC.

Register IOSYSERR release history

Register IOSYSERR was introduced before BCS20.

OM group IOSYS (end)

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

OM group IPRP

OM description

Gateway preroute peg (IPRP)

The OM group IPRP counts call attempts to specified codes.

The OM group IPRP is a network management control that is used for traffic analysis. The IPRP indicates when code block controls must be implemented.

Release history

The OM group IPRP was introduced before BCS20.

BCS34

Group structure is changed to shorten the length of the info field. The Group Structure section below reflects the updated info field.

Registers

The OM group IPRP registers appear on the MAP terminal as follows:



PRPCNT

Group structure

The OM group IPRP provides one tuple for each active preroute control.

Key field:

There is no key field

Info field:

INTL_PRP_OMINFO has three subfields: CBKKEY, CBKLVL, and CBKANN.

CBKKEY has the following subfields:

- The code type with value CC (country code), or NC (national code)
- The call direction with the following values: INCOM (incoming), OUTGO (outgoing), or TRNST (transit)
- The user class with the value OPRT (operator), or SUBS (subscriber)
- The digit register that has up to four digits. The digits represent the called number country code from which the system diverts the calls.
- DR_N is the digit register that has up to 16 digits. The digits represent the called number national code from which the system diverts the calls.

OM group IPRP (continued)

The percentage of blocked calls is CBKLVL.

The CBKANN identifies the announcement to which the system routes blocked calls. The following values are correct for CBKANN:

- NCA - no circuit announcement
- EA1 - emergency announcement 1
- EA2 - emergency announcement 2

Associated OM groups

The OM group ICBK increases when the code block control blocks a call.

Associated functional groups

The following functional groups associate with OM group IPRP:

- Functional group IPRP is provided for all Gateway DMS offices.

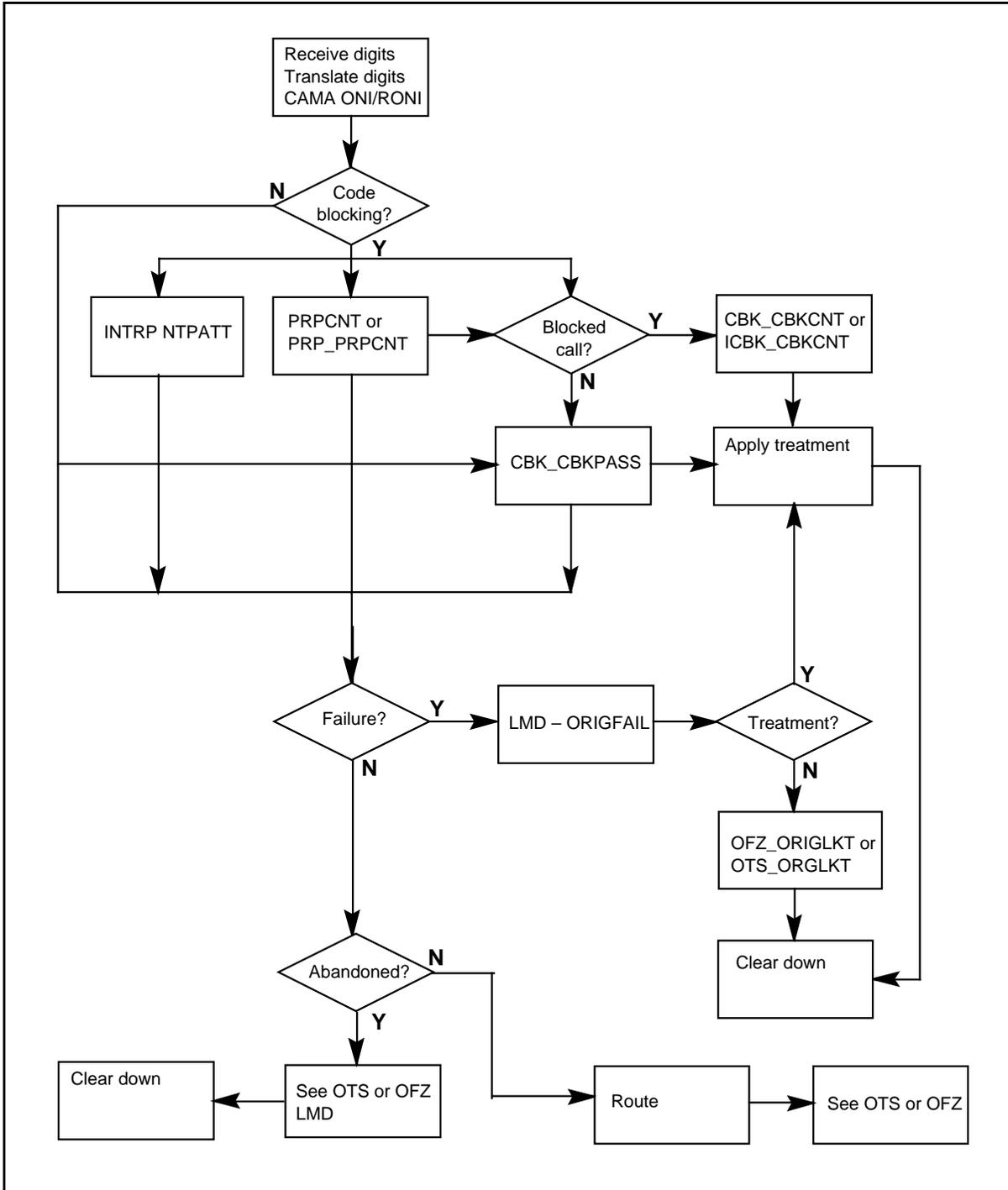
Associated functionality codes

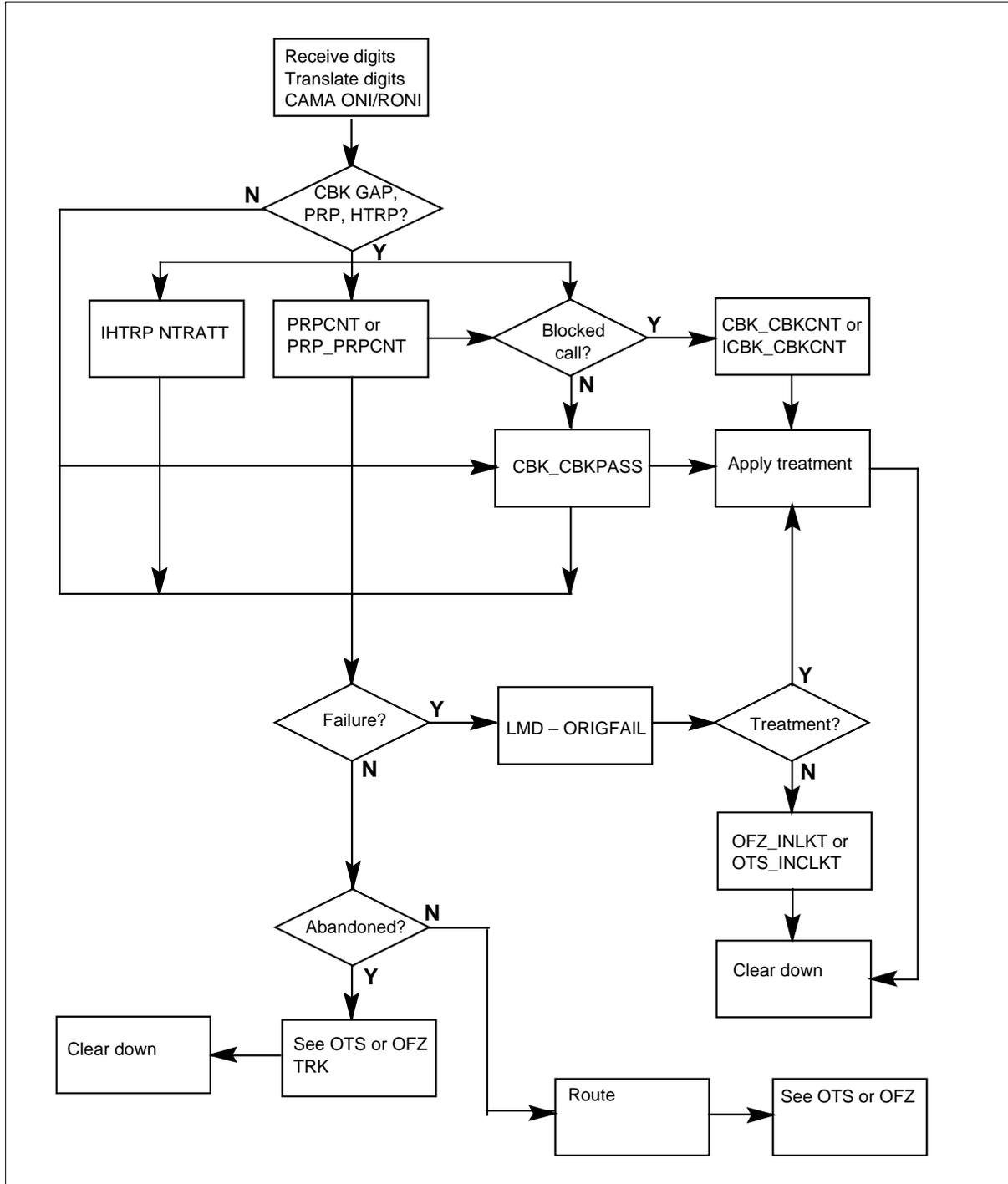
The functionality codes for OM group IPRP appear in the following table.

| Functionality | Code |
|--------------------------------|----------|
| International Switching Center | NTX300AA |

OM group IPRP (continued)

OM group IPRP registers: originating traffic



OM group IPRP (continued)**OM group IPRP registers: incoming traffic**

OM group IPRP (end)

Register PRPCNT

Preroute peg count (PRPCNT)

Register PRPCNT counts calls that the system directs to the destination code to which IPRP control applies.

Register PRPCNT release history

Register PRPCNT was introduced before BCS20.

Associated registers

There are no associated registers.

Associated logs

The system generates NWM141 when IPRP controls are activated or deactivated.

OM group IRAG

OM description

International ring again (IRAG)

The OM group IRAG provides information about the use and performance of the international Ring Again (RAG) feature. If the subscriber encounters a busy line on an intraoffice call when the line is free, the RAG feature notifies the subscriber. The system places the call automatically. Five registers record the number of times a subscriber:

- activates, deactivates or interrogates the RAG feature
- uses or attempts to use the RAG feature

Registers also record instances when not enough resources are present to use the RAG feature. Registers also record instances when the subscriber abandons the RAG request.

Release history

The OM group IRAG was introduced in BCS25.

Registers

The OM group IRAG registers appear on the MAP terminal as follows:

| | | | |
|---------|---------|---------|---------|
| RAGACT | RAGDACT | RAGINTG | RAGUSGE |
| RAGABDN | RAGOVFL | RAGCERR | |

Group structure

The OM group IRAG provides one tuple for each office.

Key field:

There is no key field

Info field:

There is no info field

Associated OM groups

There are no associated OM groups.

Associated functional groups

There are no associated functional groups.

OM group IRAG (continued)

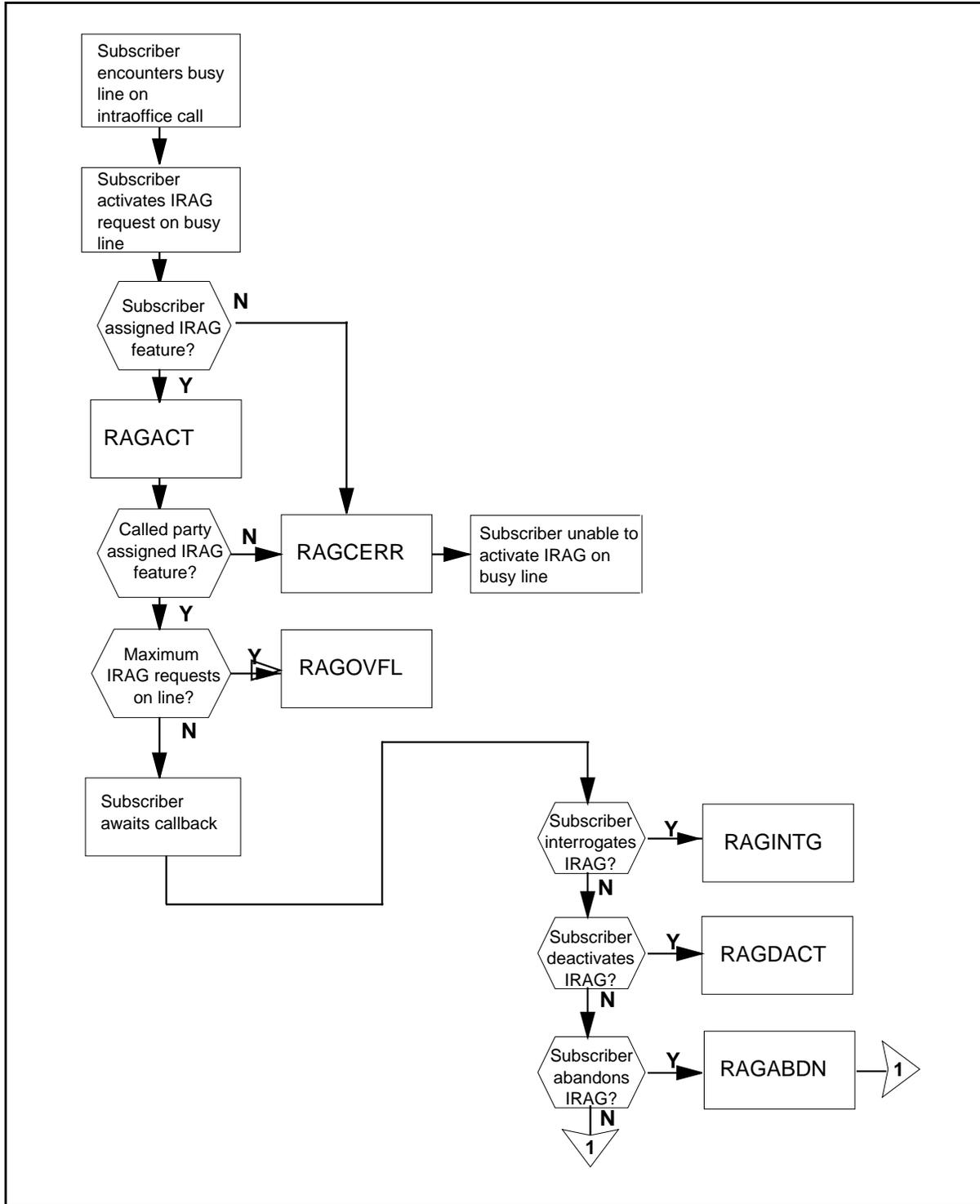
Associated functionality codes

The associated functionality codes for OM group IRAG appear in the following table.

| Functionality | Code |
|----------------------|-------------|
| Cept Subscriber - I | NTX499AA |

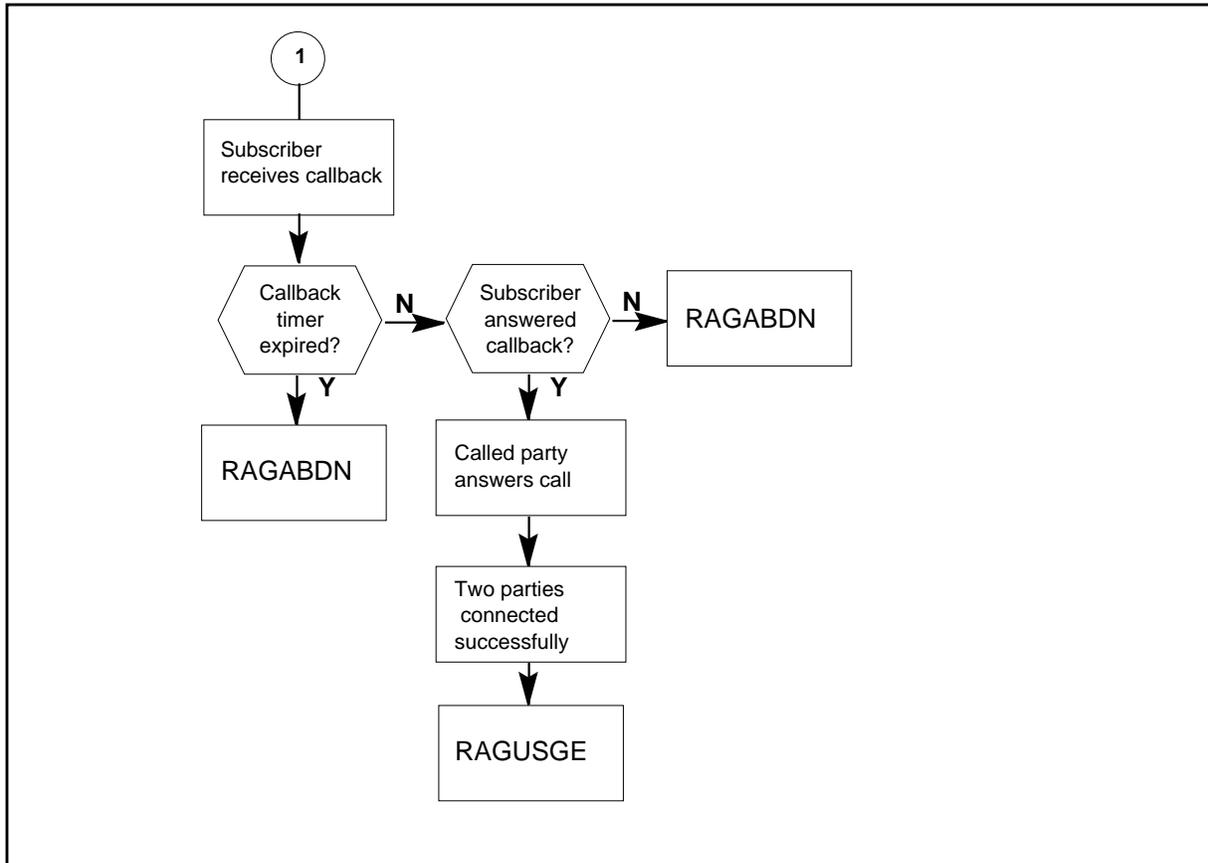
OM group IRAG (continued)

OM group IRAG registers



OM group IRAG (continued)

OM group IRAG registers (continued)



Register RAGABDN

RAG abandoned (RAGABDN)

Register RAGABDN counts each time the subscriber abandons an IRAG request after the subscriber receives recall ringing. Register RAGABDN also counts each time the subscriber fails to respond to the recall ringing before the specified timeout period.

Register RAGABDN release history

Register RAGABDN was introduced in BCS25.

Associated registers

There are no associated registers.

OM group IRAG (continued)

Associated logs

There are no associated logs.

Register RAGACT

RAG activation (RAGACT)

Register RAGACT counts each time a subscriber activates the IRAG feature. The subscriber receives the "confirmation" tone.

Register RAGACT release history

Register RAGACT was introduced in BCS25.

Associated registers

There are no associated registers.

Associated logs

The system generates FTR138 when a caller uses or attempts to use a feature and receives a treatment tone.

Register RAGCERR

RAG customer error (RAGCERR)

Register RAGCERR counts each time a subscriber not assigned the IRAG feature attempts to activate, deactivate or interrogate IRAG. This register increases each time a subscriber attempts to activate the IRAG feature on a line where IRAG is not available. The subscriber receives the "negative acknowledgement" tone.

Register RAGCERR release history

Register RAGCERR was introduced in BCS25.

Associated registers

There are no associated registers.

Associated logs

The system generates FTR138 when a caller uses or attempts to use a feature and receives a treatment tone.

Register RAGDACT

RAG deactivation (RAGDACT)

Register RAGDACT counts each time a subscriber deactivates the IRAG feature. The subscriber receives the "confirmation" tone.

OM group IRAG (continued)

Register RAGDACT release history

Register RAGDACT was introduced in BCS25.

Associated registers

There are no associated registers.

Associated logs

The system generates FTR138 when a caller uses or attempts to use a feature and receives a treatment tone.

Register RAGINTG

RAG interrogation (RAGINTG)

Register RAGINTG counts each time a subscriber checks to determine if IRAG is active on the line. The subscriber receives the "confirmation" or "negative acknowledgement" tone depending on the outcome of the interrogation.

Register RAGINTG release history

Register RAGINTG was introduced in BCS25.

Associated registers

There are no associated registers.

Associated logs

The system generates FTR138 when a caller uses or attempts to use a feature and receives a treatment tone.

Register RAGOVFL

RAG overflow (RAGOVFL)

Register RAGOVFL counts each time an IRAG request is not honored because sufficient resources are not available. This event occurs when a subscriber requests RAG on a line on which the prespecified maximum of eight RAG requests are already queued. The subscriber receives the "negative acknowledgement" tone. RAGOVFL is not incremented on the DMS-100G switch.

Register RAGOVFL release history

RAGOVFL was introduced in BCS25.

Associated registers

There are no associated registers.

OM group IRAG (end)

Associated logs

The system generates FTR138 when a caller uses or attempts to use a feature and receives a treatment tone.

Register RAGUSGE

RAG usage (RAGUSGE)

Register RAGUSGE counts each time a subscriber successfully uses the IRAG feature. The subscriber answers the ringback call from the called line on which the subscriber first placed the IRAG request.

Register RAGUSGE release history

RAGUSGE was introduced in BCS25.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

OM group IREC

OM description

International call recording (IREC)

The OM group IREC provides information about:

- the performance of International Call Recording (ICR) feature
- the Selective Charge Recording (SCR) and Printed Meter Check (PMC)

Service orders (SO) assign ICR features to subscriber lines.

The SCR feature allows subscribers to have call charges quoted back to them through an SCR log. At the same time, the PMC measures the number of meter pulses the system gathers during call recording. The system includes this information in the SCR or PMC log report generated on completion of the recorded call.

Release history

OM group IREC was introduced in BCS26.

Registers

The OM group IREC registers appears on the MAP terminal as follows:

| | | | |
|---------|---------|---------|---------|
| RECACT | RECUSGE | RECABDN | RECOVFL |
| RECCERR | | | |

Group structure

The OM group IREC provides one tuple for each ICR feature assigned.

Key field:

RECORDING_RANGE

Info field:

There is no info field

Associated OM groups

There are no associated OM groups.

Associated functional groups

There are no associated functional groups.

OM group IREC (continued)

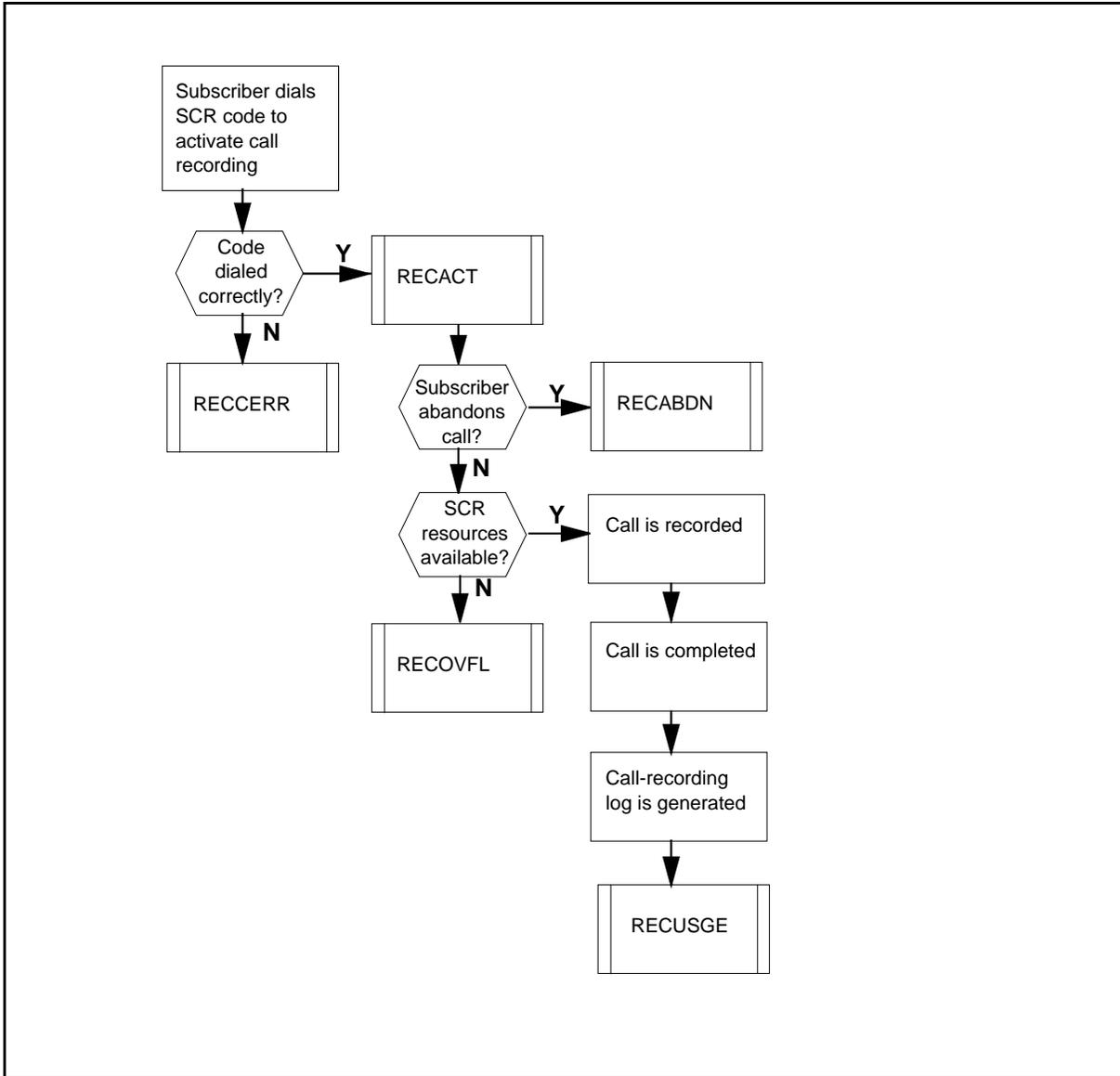
Associated functionality codes

The associated functionality codes for OM group IREC appear in the following table.

| Functionality | Code |
|-----------------------------|-------------|
| CEPT Subscriber Services--I | NTX499AA |

OM group IREC (continued)

OM group IREC registers



Register RECABDN

Call recording abandoned (RECABDN)

Register RECABDN increases each time the calling party abandons a call before someone answers a call after the system activates recording.

Register RECABDN release history

RECABDN was introduced in BCS35.

OM group IREC (continued)

Associated registers

There are no associated registers.

Associated logs

There are no associated registers.

Register RECACT

Call recording activated (RECACT)

The system increases RECACT for each attempt to activate a call recording feature on a call.

Register RECACT release history

Register RECACT was introduced in BCS26.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Register RECCERR

Call recording customer error (RECCERR)

Register RECCERR increases for each failed attempt to activate Selective Charge Recording (SCR) on a call. The following errors can cause an attempt to fail:

- SCR is not assigned to the line of the subscriber.
- a subscriber dials a wrong SCR activation code

Register RECCERR release history

RECCERR was introduced in BCS26.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Register RECOVFL

Call recording overflow (RECOVFL)

OM group IREC (end)

Register RECOVFL increases each time a call recording fails because not enough resources are available.

Register RECOVFL release history

Register RECOVFL is not increased in GL04.

Register RECOVFL was introduced in BCS26.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Register RECUSGE

Call recording usage (RECUSGE)

Register RECUSGE increases each time the system generates a log or tape entry at the completion of a recorded call.

This information is required to calculate the following:

- call charges (with SCR activation) for a recorded call
- meter pulses [in the Printed Meter Check (PMC) activation] for a registered call

Register RECUSGE release history

RECUSGE was introduced in BCS26.

Associated registers

There are no associated registers.

Associated logs

The system generates SCR100 at the completion of a call on which the subscriber activates the Selective Charge Recording (SCR) feature.

OM group ISA

OM description

In-Session Activation (ISA)

The OM group ISA measures the number of offers, acceptances, and failures of the ISA service.

Release history

The OM group ISA was introduced in NA006.

Registers

The OM group ISA registers appear on the MAP terminal as follows:

| | | | |
|-------------------|----------|----------|----------|
| INFO (OMIBNGINFO) | | | |
| BSYOFFER | RNAOFFER | ISAINTER | BSYACCPY |
| RNAACCPY | ISAABDN | RSCSHORT | RCVRFALL |
| ANNFAIL | XLAFALL | BSYKEY1 | BSYKEY2 |
| BSYKEY3 | RNAKEY1 | RNAKEY2 | RNAKEY3 |

Group structure

OM group ISA

Key field:

There is no key field

Info field:

OMIBNGINFO

This field is the customer group as defined in field CUSTNAME in table CUSTENG. This field allows only one customer name for each customer group (maximum 4095).

Associated OM groups

There are no associated OM groups.

Associated functional groups

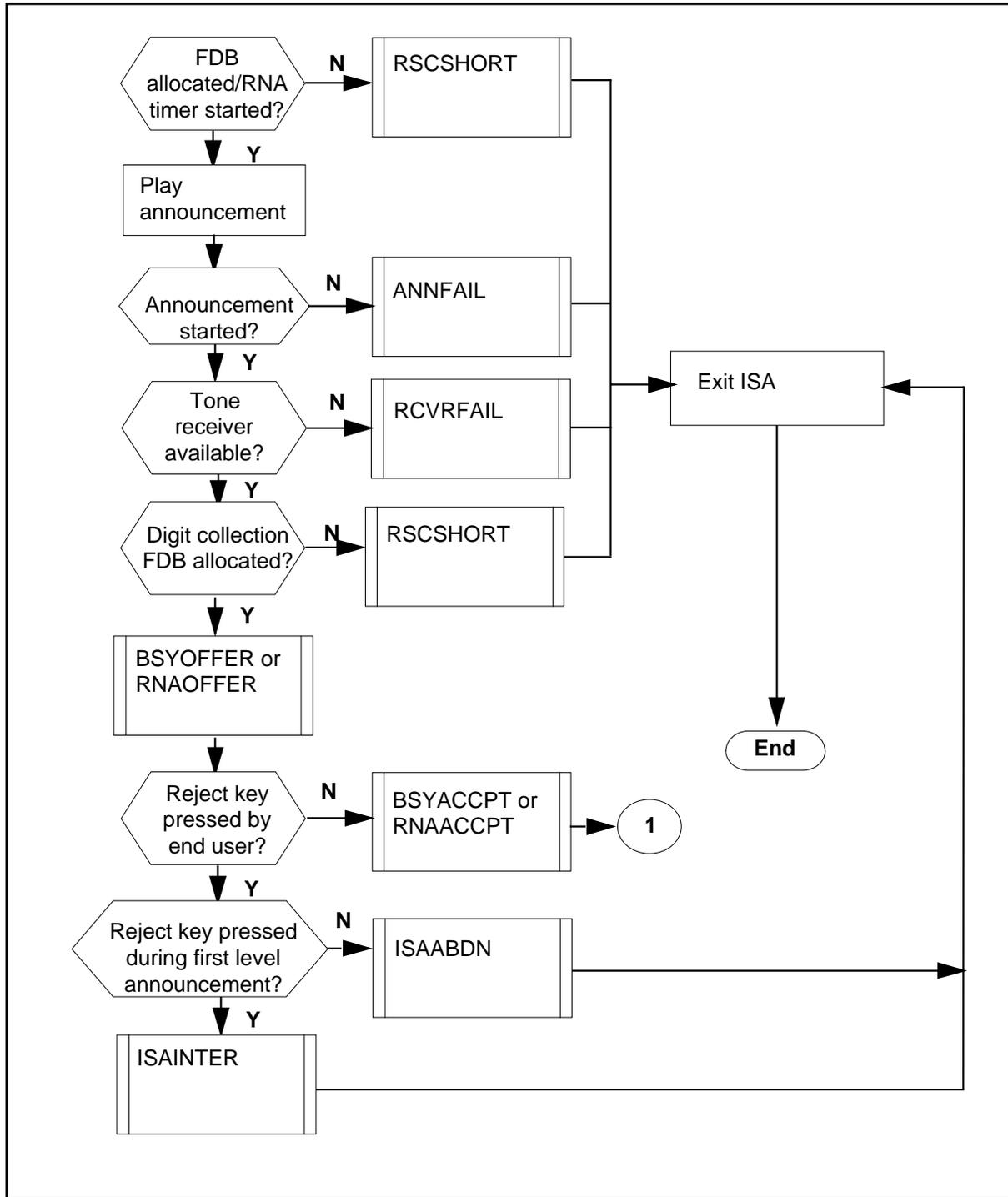
There are no associated functional groups.

Associated functionality codes

There are no associated functionality codes.

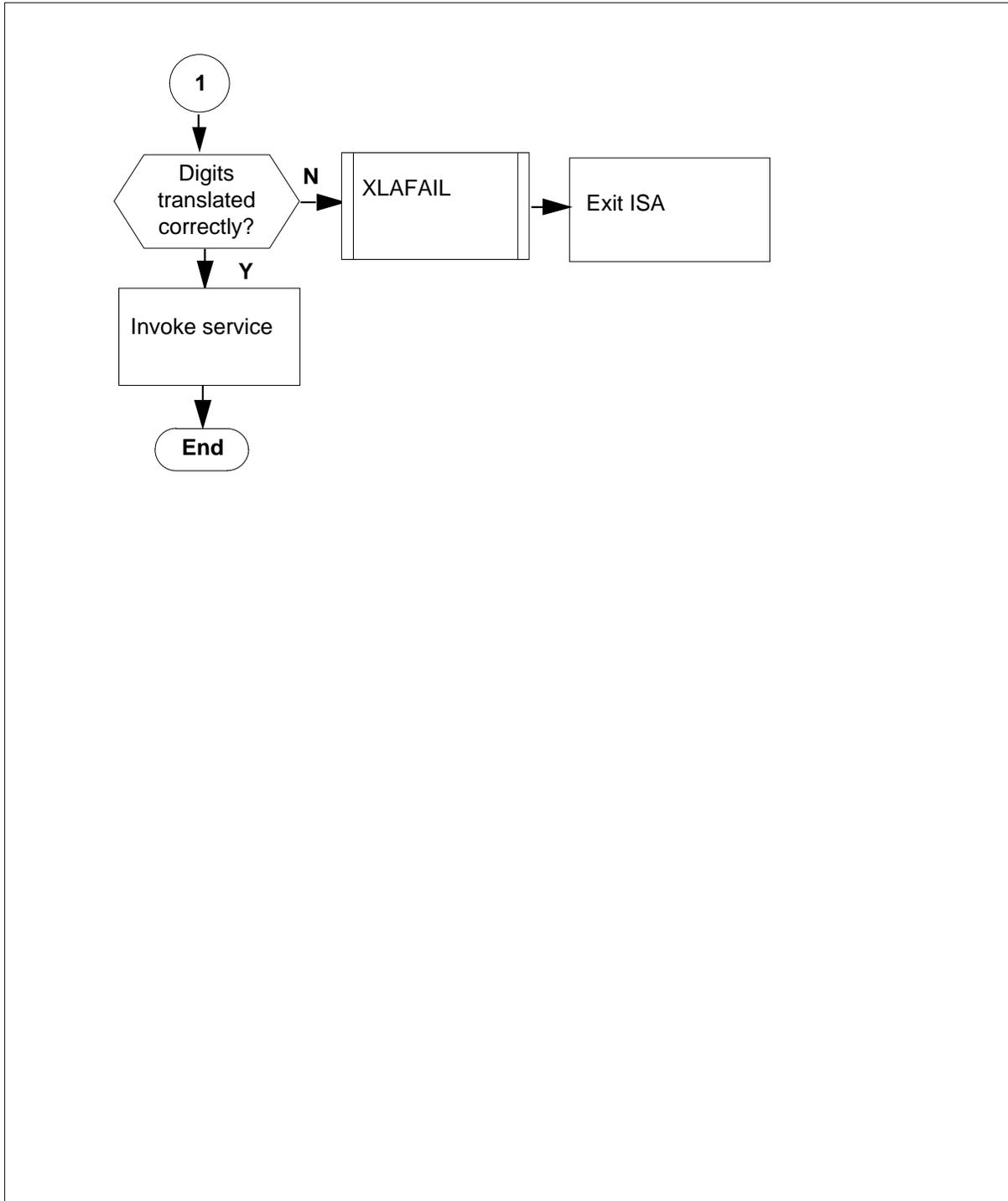
OM group ISA (continued)

OM group ISA registers



OM group ISA (continued)

OM group ISA registers (continued)



OM group ISA (continued)

Register ANNFAIL

Register ANNFAIL counts the times the system cannot provide an ISA announcement.

Register ANNFAIL release history

Register ANNFAIL was introduced in NA006.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register BSYACCPT

Register BSYACCPT counts the times the caller accepts ISA on a busy condition.

Register BSYACCPT release history

Register BSYACCPT was introduced in NA006.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register BSYKEY1

Register BSYKEY1 counts the times a call completion service activates when the caller that uses key 1 encounters a busy condition.

Register BSYKEY1 release history

Register BSYKEY1 was introduced in NA006.

Associated registers

There are no associated registers.

OM group ISA (continued)

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register BSYKEY2

Register BSYKEY2 counts the times a call completion service activates when the caller that uses key 2 encounters a busy condition.

Register BSYKEY2 release history

Register BSYKEY2 was introduced in NA006.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register BSYKEY3

Register BSYKEY3 counts the times a call completion service activates when the caller that uses key 3 encounters a busy condition.

Register BSYKEY3 release history

Register BSYKEY3 was introduced in NA006.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register BSYOFFER

Register BSYOFFER counts the times the system offers ISA to the caller that encounters a busy condition.

OM group ISA (continued)

Register BSYOFFER release history

Register BSYOFFER was introduced in NA006.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register ISAABDN

Register ISAABDN counts the times the caller accepts ISA and disconnects before a call completion service activates.

Register ISAABDN release history

Register ISAABDN was introduced in NA006.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register ISAINTER

Register ISAINTER counts the times the caller uses a reject key to interrupt the ISA offer of service. Register ISAINTER counts interruptions that occur during the first level announcement. The Telco defines the first level of announcement, in a ring/no answer (RNA) condition.

Register ISAINTER release history

Register ISAINTER was introduced in NA006.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

OM group ISA (continued)

Extension registers

There are no extension registers.

Register RCVRFAIL

Register RCVRFAIL counts the times the system does not offer ISA because not enough or no tone receivers are available.

Register RCVRFAIL release history

Register RCVRFAIL was introduced in NA006.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register RNAACCPT

Register RNAACCPT counts the times the caller accepts ISA on an RNA condition.

Register RNAACCPT release history

Register RNAACCPT was introduced in NA006.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register RNAOFFER

Register RNAOFFER counts the times the system offers ISA to a caller that encounters an RNA condition.

Register RNAOFFER release history

Register RNAOFFER was created for the NA003, NA004, and NA005 patches.

OM group ISA (continued)

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register RNAKEY1

Register RNAKEY1 counts the times a caller that uses key 1 encounters an RNA condition and activates a call completion service.

Register RNAKEY1 release history

Register RNAKEY1 was created for the NA003, NA004, and NA005 patches.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register RNAKEY2

Register RNAKEY2 counts the times a caller that uses key 2 encounters an RNA condition and activates a call completion service.

Register RNAKEY2 release history

Register RNAKEY2 was introduced in NA006.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

OM group ISA (continued)

Register RNAKEY3

Register RNAKEY3 counts the times a caller that uses key 3 encounters an RNA condition and activates a call completion service.

Register RNAKEY3 release history

Register RNAKEY3 was introduced in NA006.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register RSCSHORT

Register RSCSHORT counts the times the system does not offer ISA because not enough software resources are available. Extension blocks and FDBs are examples of software resources.

Register RSCSHORT release history

Register RSCSHORT was introduced in NA006.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register XLAFail

Register XLAFail counts the times a caller selects a call completion service the system cannot perform because of a translation failure.

A caller selects a call completion service if the following conditions are met:

- a caller presses a key during the digit collection period for an ISA announcement
- the key the caller presses corresponds to a feature or a DN to which the system routes the call

OM group ISA (end)

When the access code of the feature is used or the DN to which the system routes the call cannot be translated, translation failure occurs.

Register XLAFail release history

Register XLAFail was introduced in NA006.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

OM group ISDD

OM description

Incoming start-to-dial delay (ISDD)

The OM group ISDD provides information on the grade of service given to incoming trunk calls to a DMS switch. The incoming trunk calls to a DMS switch go through three types of XMS-based peripheral modules (XPM). When the length of time required to complete a call exceeds a defined threshold, the register for each XPM increases.

The system collects ISDD measurements separately for each of the following XPMs:

- digital trunk controllers (DTC)
- line trunk controllers (LTC)
- remote cluster controllers (RCC)

The system collects the information in a DTC, LTC and RCC. The system transmits data to the central control (CC) every 5 or 15 mins.

The system collects a set of four measurements for three different signaling types (pulse types). The system also collects a grouping of all other signaling types. The four measurements are:

- trunk seizures (SEIZ) the system counts when an XPM detects an off-hook condition on an idle incoming trunk
- call attempts (ATMPT) the system counts when the XPM accepts a SEIZ for further processing. This action indicates that the XPM services the call
- trunk delays (TDLY) the system counts when the ISDD exceeds a preset threshold (the default is 3 s). The system also counts the elapsed time between call SEIZ and call abandon (ABDN) exceeds the same threshold
- abandons (ABDN) the system counts when an XPM detects an on-hook condition before the XPM returns the start-to-dial signal. The system counts if the number of abandons exceeds the threshold.

The signaling types are:

- dial pulse (DP), excluding DP immediate type trunks
- digitone (DT)
- multi-frequency (MF)
- all other (OTH) types combined, including DP immediate type trunks

OM group ISDD (continued)

Release history

The OM group ISDD was introduced in BCS26.

Registers

The OM group ISDD registers appear on the MAP terminal as follows:

| | | | |
|---------|----------|---------|---------|
| DPSEIZ | DPATMPT | DPTDLY | DPABDN |
| DTSEIZ | DTATMPT | DTTDLY | DTABDN |
| MFSEIZ | MFATMPT | MFTDLY | MFABDN |
| OTHSEIZ | OTHATMPT | OTHTDLY | OTHABDN |
| ISDDMSG | | | |

Group structure

The OM group ISDD provides one tuple for each XPM.

Key field:

There is no key field

Info field:

PM_NAME has three parts

where

site

HOST or site_index number

pm_type

DTC, LTC, or RCC

external XPM number

integer

The XPMs are entered in table LTCINV for DTCs and LTCs, and in table RCCINV for RCCs.

Office parameter ISDD_OM_THRESHOLD in table OFCSTD defines the ISDD threshold. The default value is 3 s. The default value can be set to 1 or 0.5 s.

Associated OM groups

The OM group RADR provides information on the results of receiver attachment delay recorder tests. Receiver attachment time is part of the incoming start-to-dial time interval.

OM group ISDD (continued)

Associated functional groups

The following functional groups associate with OM group ISDD:

- LTC
- DTC
- RCC

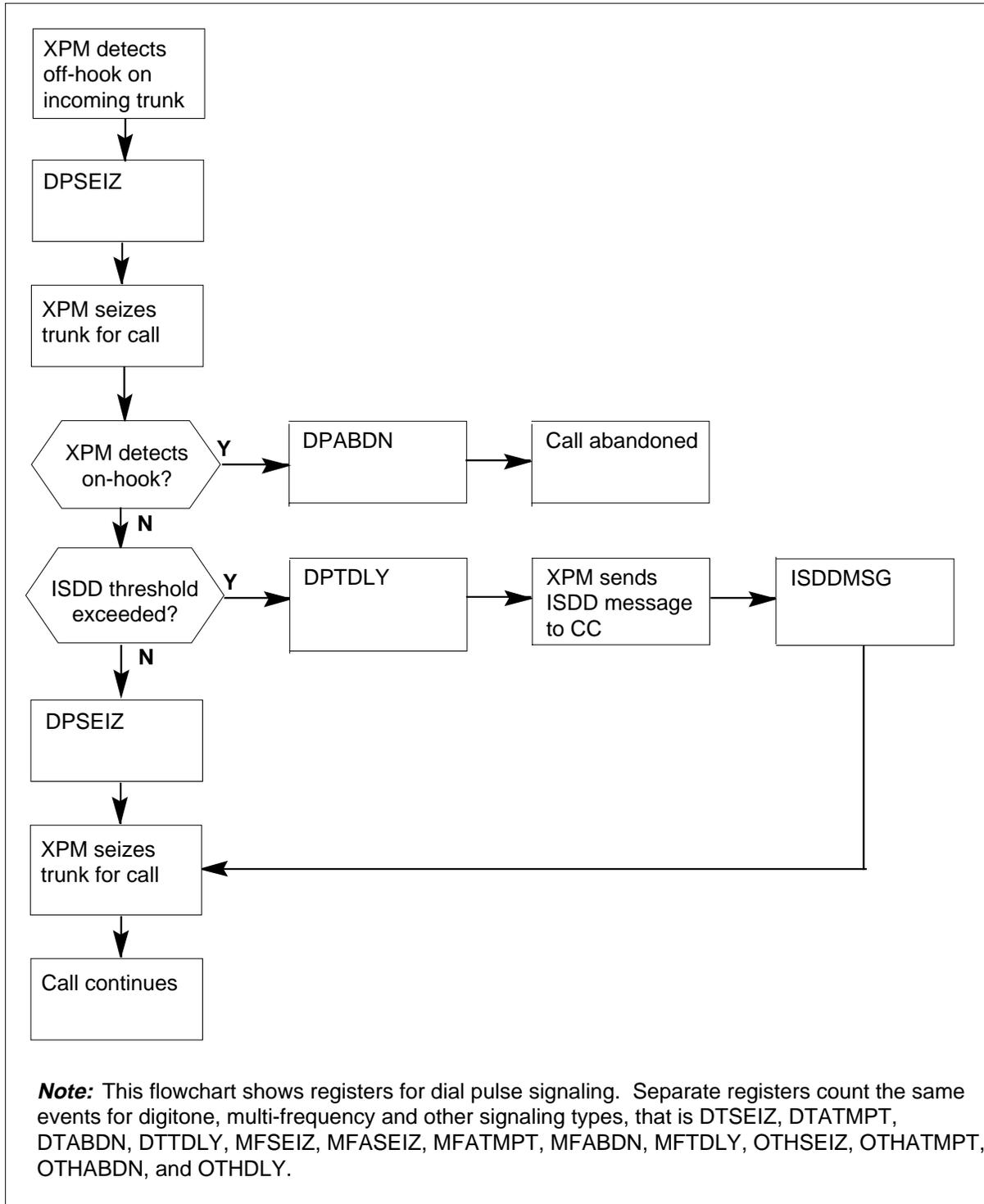
Associated functionality codes

The associated functionality codes for the OM group ISDD appear in the following table.

| Functionality | Code |
|------------------------------------|----------|
| New Peripheral Maintenance Package | NTX270AA |

OM group ISDD (continued)

OM group ISDD registers



OM group ISDD (continued)

Register DPABDN

Dial pulse (DP) abandon (DPABDN)

Register DPABDN increases when an XPM detects an on-hook condition on an incoming DP trunk. The XPM detects the condition before the XPM returns a start-to-dial signal. The system abandons the call.

Register DPABDN does not count DP immediate call ABDNs.

Register DPABDN release history

Register DPABDN was introduced in BCS26.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register DPATMPT

Dial pulse (DP) attempt (DPATMPT)

Register DPATMPT increases when the XPM accepts a SEIZ of the DP trunk of an XPM for further processing.

Register DPATMPT does not call DP immediate call ATMPTs .

Register DPATMPT release history

Register DPATMPT was introduced in BCS26.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register DPSEIZ

Dial pulse (DP) seizure (DPSEIZ)

OM group ISDD (continued)

Register DPSEIZ increases when the system seizes a DP trunk of an XPM for an incoming call. The system detects a SEIZ when an XPM detects an off-hook condition. The off-hook condition lasts 6 to 9 ms on an idle incoming trunk.

Register DPSEIZ does not count DP immediate trunk SEIZs.

Register DPSEIZ release history

Register DPSEIZ was introduced in BCS26.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register DPTDLY

Dial pulse (DP) trunk delay (DPTDLY)

Register DPTDLY increases when one of the following intervals exceeds a preset TDLY threshold:

the interval between the SEIZ of an incoming DP call and the return of the start-to-dial signal

the interval between call SEIZ and call ABDN

The default TDLY threshold is 3 s.

Register DPTDLY does not count DP immediate calls.

Register DPTDLY release history

Register DPTDLY was introduced in BCS26.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

OM group ISDD (continued)

Extension registers

There are no extension registers.

Register DTABDN

Digitone (DT) abandon (DTABDN)

Register DTABDN increases when an XPM detects an on-hook condition on an incoming DT trunk. The XPM detects the on-hook condition before the XPM returns a start-to-dial signal. The system abandons the call.

Register DTABDN release history

Register DTABDN was introduced in BCS26.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register DTATMPT

Digitone (DT) attempt (DTATMPT)

Register DTATMPT increases when the XPM accepts an SEIZ of an incoming DT trunk of an XPM for further processing.

Register DTATMPT release history

Register DTATMPT was introduced in BCS26.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register DTSEIZ

Digitone (DT) seizure (DTSEIZ)

OM group ISDD (continued)

Register DTSEIZ increases when the system seizes a DT trunk of an XPM for an incoming call. The system detects a SEIZ when an XPM detects an off-hook condition. The off-hook condition that for 6 to 9 ms on an idle incoming trunk.

Register DTSEIZ release history

Register DTSEIZ was introduced in BCS26.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register DTTDLY

Digitone (DT) trunk delay (DTTDLY)

Register DTTDLY increases when one of the following intervals exceeds a preset TDLY threshold: The default TDLY threshold is 3 s.

the interval between the SEIZ of an incoming DT call and the return of a start-to-dial signal

the interval between call SEIZ and call ABDN, exceeds a preset TDLY threshold

The default TDLY threshold is 3 s.

Register DTTDLY release history

Register DTTDLY was introduced in BCS26.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

OM group ISDD (continued)

Register ISDDMSG

Incoming start-to-dial delay (ISDD) message (ISDDMSG)

Register ISDDMSG increases when the CC receives an ISDD message from an XPM.

Register ISDDMSG determines if the system loses any ISDD data messages during transmission from the XPM to the CC. The number of messages that the CC should receive depends on the reporting interval. If the reporting interval is 15 min and OMXFR is 30 min, there should be a count of 2 in ISDDMSG. If the reporting interval is 5 min and OMXFR is 30 min, there should be a count of 6 in ISDDMSG.

Register ISDDMSG release history

Register ISDDMSG was introduced in BCS26.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register MFABDN

Multi-frequency (MF) abandon (MFABDN)

Register MFABDN increases when an XPM detects an on-hook condition on an incoming MF trunk. The XPM detects the on-hook condition before the XPM returns a start-to-dial signal. The system abandons the call.

Register MFABDN release history

Register MFABDN was introduced in BCS26.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

OM group ISDD (continued)

Register MFATMPT

Multi-frequency (MF) attempt (MFAMPT)

Register MFATMPT increases when the XPM accepts a SEIZ of an incoming MF trunk of an XPM for further processing.

Register MFATMPT release history

Register MFATMPT was introduced in BCS26.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register MFSEIZ

Multi-frequency (MF) seizure (MFSEIZ)

Register MFSEIZ increases when the system seizes an MF trunk of an XPM for an incoming call. The system detects a SEIZ when an XPM detects an off-hook condition lasting for 6 to 9 ms on an idle incoming trunk.

Register MFSEIZ release history

Register MFSEIZ was introduced in BCS26.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register MFTDLY

Multi-frequency (MF) trunk delay (MFTDLY)

Register MFTDLY increases when one of the following intervals exceeds a preset TDLY threshold:

OM group ISDD (continued)

the interval between the SEIZ of an incoming MF call and the return of a start-to-dial signal

the interval between call SEIZ and call ABDN, exceeds a preset TDLY threshold

The default TDLY threshold is 3 s.

Register MFTDLY release history

Register MFTDLY was introduced in BCS26.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register OTHABDN

Other (OTH) abandon (OTHABDN)

Register OTHABDN increases when an XPM detects an on-hook condition on an incoming OTH trunk. The XPM detects the on-hook condition before the XPM returns a start-to-dial signal. The system abandons the call.

All trunk types are OTH trunks except for the following:

DP

DT

MF

Integrated Services Digital Network (ISDN)

Common Channel Signaling No. 7 (CCS7)

nailed up

foreign exchange (FX)

maintenance trunks

OM group ISDD (continued)

Register OTHABDN includes DP immediate ABDNs.

Register OTHABDN release history

Register OTHABDN was introduced in BCS26.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register OTHATMPT

Other (OTH) attempt

OTHATMPT increases when the XPM accepts a SEIZ of an incoming OTH trunk of an XPM for further processing. OTH trunks include all trunk types except DP, DT, MF, ISDN, CCS7, nailed up, FX, and maintenance trunks.

This register counts DP immediate call ATMPTs.

Register OTHATMPT release history

Register OTHATMPT was introduced in BCS26.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register OTHSEIZ

Other (OTH) seizure (OTHSEIZ)

Register OTHSEIZ increases when the system seizes an OTH trunk of an XPM for an incoming call. All trunk types except DP, DT, MF, ISDN, CCS7, nailed up, FX, and maintenance trunks. The system detects a SEIZ when an XPM detects an off-hook condition. The off-hook condition lasts 6 to 9 ms on an idle incoming trunk.

OM group ISDD (end)

Register OTHSEIZ counts DP immediate trunk SEIZs.

Register OTHSEIZ release history

Register OTHSEIZ was introduced in BCS26.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register OTHTDLY

Other (OTH) trunk delay (OTHTDLY)

Register OTHTDLY increases when one of the following intervals exceeds a preset TDLY threshold:

the interval between the SEIZ of an incoming OTH call and the return of a start-to-dial signal

the interval between call SEIZ and call ABDN, exceeds a preset TDLY threshold

The default TDLY threshold is 3 s.

Register OTHTDLY release history

Register OTHTDLY was introduced in BCS26.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

OM group ISDNBD

OM description

ISDNBD channel performance summary (ISDNBD)

The OM group ISDNBD monitors the performance of multiplexed D-channels on the DS-1 link (Bd channel). The ISDNBD monitors the performance of multiplexed D-levels that provide the connection between the DMS switch and the packet handler. These registers count the following:

- frames that the system transmits and receives
- cyclic redundancy check (CRC) errors
- frames that the system discards in the packet handler interfaces (PHI)

The system collects the information from the peripheral. These registers can increase in jumps instead of in a sequence.

Release history

The OM group ISDNBD was introduced in BCS23.

BCS32

Registers increase that the PCM30 remote cluster controller (PRCC) increase.

Registers

The OM group ISDNBD registers appear on the MAP terminal as follows:

| | | | |
|----------|----------|--------|---------|
| IBDTXDSC | IBDRXDSC | IBDCRC | IBDTXPH |
| IBDRXPH | | | |

Group structure

The OM group ISDNBD provides one tuple for each PHI.

Key field:

The ISDN access controller (IAC) number and the PHI number internal to the IAC determine the BD_OMTYPE. The maximum number of IACs multiplied by the maximum number of PHIs per IAC determines the maximum number of keys.

Info field:

Info field BD_OMINFO indicates the IAC number and the PHI number for the counts.

OM group ISDNBD (continued)**Associated OM groups**

There are no associated OM groups.

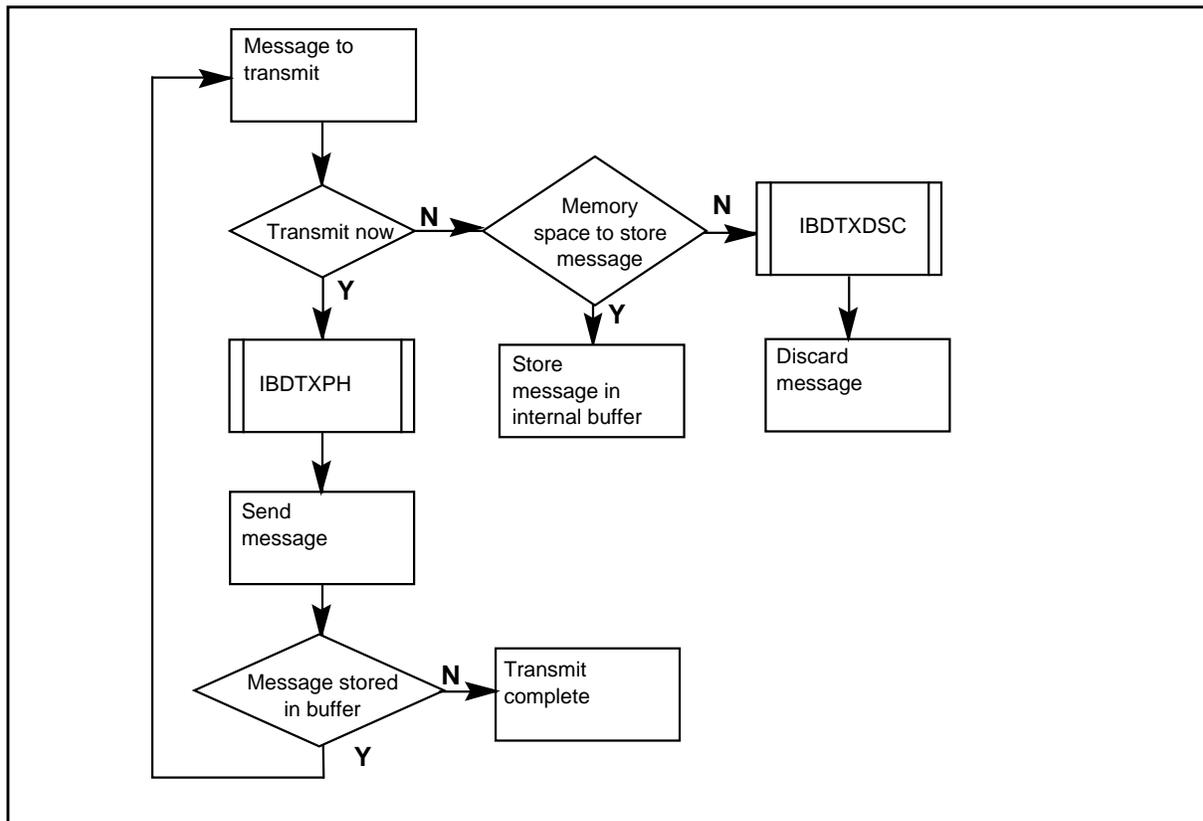
Associated functional groups

The ISDN functional group associates with OM group ISDNBD.

Associated functionality codes

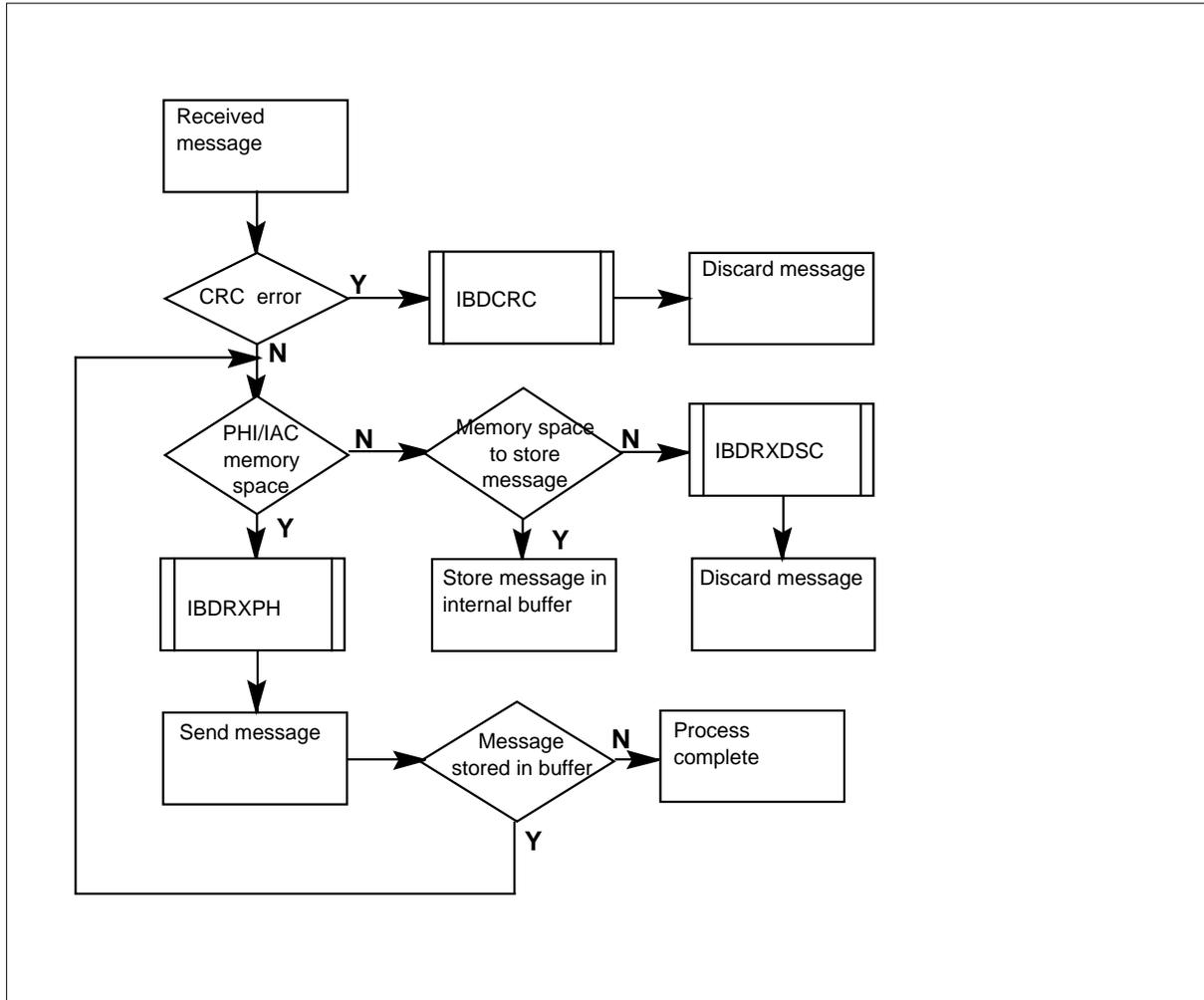
The associated functionality codes for OM group ISDNBD appear in the following table.

| Functionality | Code |
|-------------------|----------|
| ISDN--Base Access | NTX750AB |

OM group ISDNBD registers - transmitting messages

OM group ISDNBD (continued)

OM group ISDNBD registers - receiving messages



Register IBDCRC

ISDN Bd channel frames failing the cyclic redundancy check (CRC) (IBDCRC)

Register IBDCRC counts frames for which the PHI detects a CRC error. The system discards the frame.

Register IBDCRC release history

Register IBDCRC was introduced in BCS23.

OM group ISDNBD (continued)

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register IBDRXDSC

ISDN Bd channel frames received and discarded (IBDRXDSC)

Register IBDRXDSC counts frames that the system receives from the packet handler that the PHI discards.

Register IBDRXDSC release history

Register IBDRXDSC was introduced in BCS23.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register IBDRXPH

ISDN Bd channel frames received from the packet handler (IBDRXPH)

Register IBDRXPH counts frames that the system receives from the packet handler.

Register IBDRXPH release history

Register IBDRXPH was introduced in BCS23.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

OM group ISDNBD (end)

Extension registers

There are no extension registers.

Register IBDTXDSC

ISDN Bd channel frames transmitted and discarded (IBDTXDSC)

Register IBDTXDSC counts frames intended for the packet handler that the PHI discards.

Register IBDTXDSC release history

Register IBDTXDSC was introduced in BCS23.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register IBDTXPH

ISDN Bd channel frames transmitted to the packet handler (IBDTXPH)

Register IBDTXPH counts frames that the system transmits to the packet handler.

Register IBDTXPH release history

Register IBDTXPH was introduced in BCS23.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

OM group ISDNLL

OM description

ISDN logical loop performance summary (ISDNLL)

The OM group ISDNLL monitors the performance of the logical loops that provide the connections between terminals and the switch. These registers count the following:

- frames that the system transmits and receives
- cyclic redundancy check (CRC) errors
- frames that the system discards
- a transition to a remote busy or a receiver not ready state
- link resets by the terminal in the D-channel handlers (DCH)

The system collects information from a peripheral module. These registers can increase in jumps instead of in a sequence.

Release history

The OM group ISDNLL was introduced in BCS23.

BCS32

The PCM30 remote cluster controller (PRCC) increases the following registers: ILLS16TX, ILLS16RX, ILLS0TX, ILLS0RX, ILLREJTX, ILLREJRX, ILLDISC, ILLLORNR, ILLRMBSY, ILLPRSBM, ILLINVTE, and ILLCRC.

Registers

The OM group ISDNLL registers appear on the MAP terminal as follows:

| | | | |
|----------|----------|----------|----------|
| ILLS16TX | ILLS16RX | ILLS0TX | ILLS0RX |
| ILLREJTX | ILLREJRX | ILLDISC | ILLLORNR |
| ILLRMBSY | ILLPRSBM | ILLINVTE | ILLCRC |

Group structure

The OM group ISDNLL provides one tuple for each signaling terminal controller module (STCM) group with DCH cards.

Key field:

The Integrated Services Digital Network (ISDN) access controller (IAC) identification number and the STCM groups that contain DCH cards determine LL_OMTYPE. The maximum number of IACs

OM group ISDNLL (continued)

multiplied by the maximum number of STCM groups per IAC determines the number of keys.

Info field:

Info field LL_OMINFO indicates the IAC identification number and the STCM group number to which the measurements apply.

Associated OM groups

There are no associated OM groups.

Associated functional groups

The ISDN functional group associates with OM group ISDNLL.

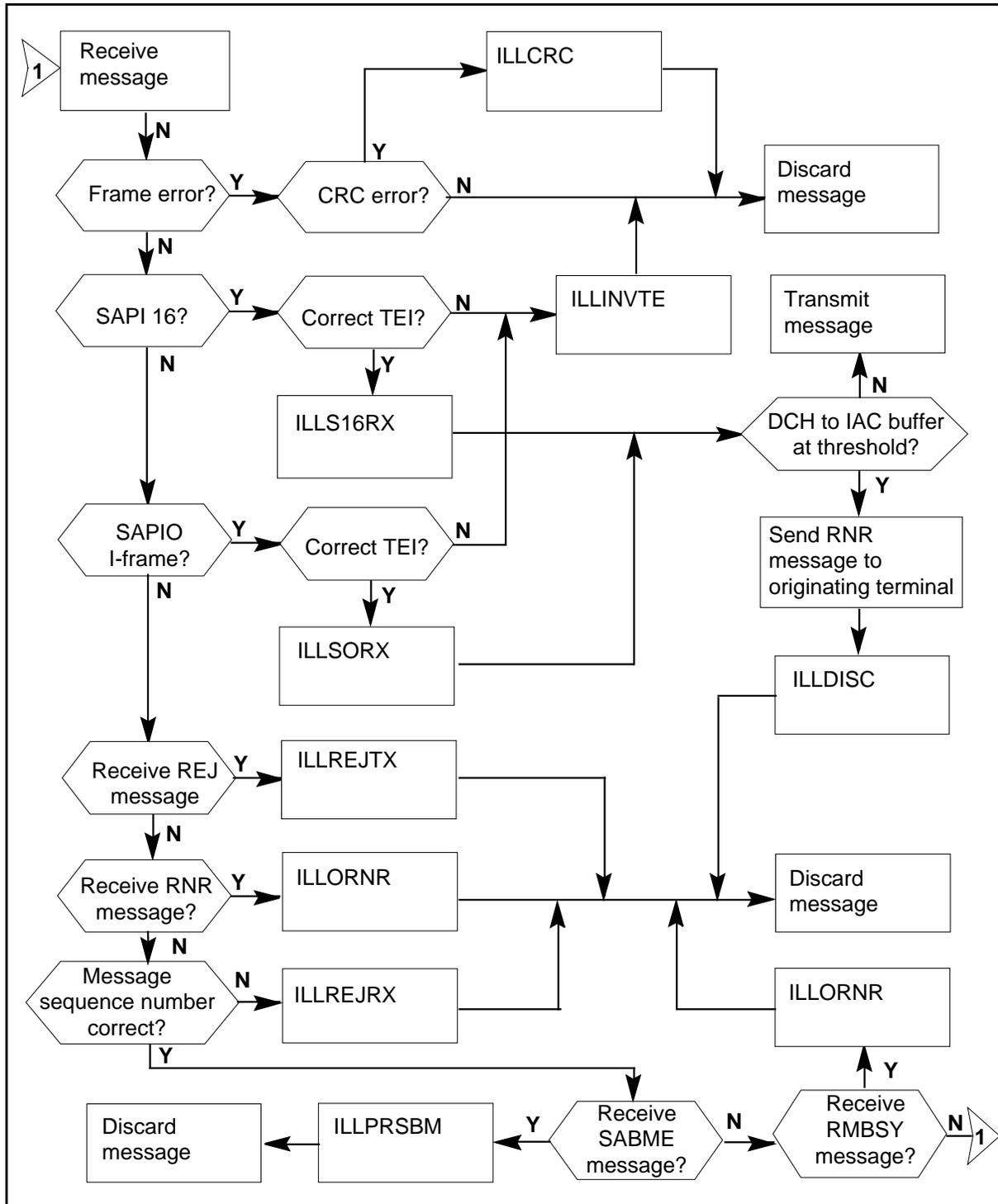
Associated functionality codes

The associated functionality codes for OM group ISDNLL appear in the following table.

| Functionality | Code |
|------------------|----------|
| ISDN Base Access | NTX750AA |

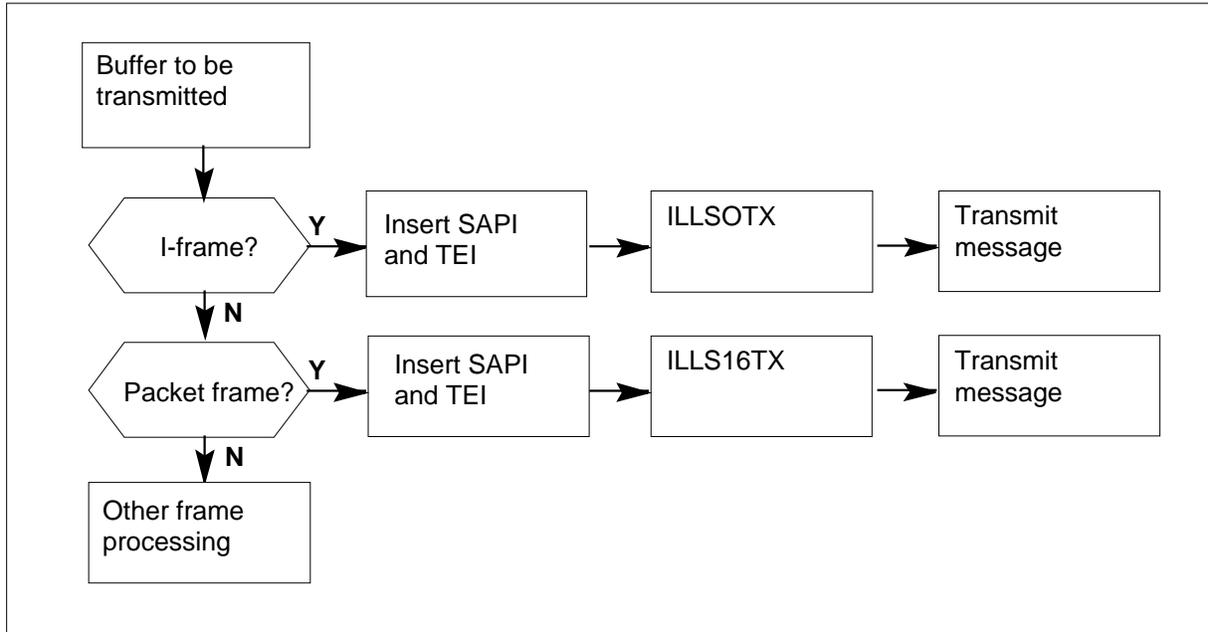
OM group ISDNLL (continued)

OM group ISDNLL registers - receiving message



OM group ISDNLL (continued)

OM group ISDNLL registers - transmitting message



Register ILLCRC

ISDN logical loop frames failing cyclic redundancy check (CRC) (ILLCRC)

Register ILLCRC counts frames that the system discards because of an error it detects during a CRC.

Register ILLCRC release history

Register ILLCRC was introduced in BCS23.

BCS32

The PCM30 remote cluster controller (PRCC) increases the register.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

OM group ISDNLL (continued)

Register ILLDISC

ISDN logical loop frames discarded (ILLDISC)

Register ILLDISC counts incoming frames that the system discards because of IAC congestion.

Register ILLDISC release history

Register ILLDISC was introduced in BCS23.

BCS32

The PCM30 remote cluster controller (PRCC) increases the register.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register ILLINVTE

ISDN logical loop frames with invalid terminal endpoint identifier (TEI) (ILLINVTE)

Register ILLINVTE counts frames that the system receives which contain an invalid TEI.

Register ILLINVTE release history

Register ILLINVTE was introduced in BCS23.

BCS32

The PCM30 remote cluster controller (PRCC) increases the register.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

OM group ISDNLL (continued)

ILLLORNR

ISDN logical loop transitions to receiver not ready state (ILLLORNR)

Register ILLLORNR counts transitions to a receiver not ready state. This condition is a layer 2 protocol error that indicates that the receiver is not ready to handle the message.

Register does not count messages that the system loses as a result of being in a receiver not ready state.

Register ILLLORNR release history

Register ILLLORNR was introduced in BCS23.

BCS32

The PCM30 remote cluster controller (PRCC) increases the register.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register ILLPRSBM

ISDN logical loop autonomous link resets by terminal (ILLPRSBM)

Register ILLPRSBM counts autonomous link resets by the terminal.

Register ILLPRSBM release history

Register ILLPRSBM was introduced in BCS23.

BCS32

The PCM30 remote cluster controller (PRCC) increases the register.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

OM group ISDNLL (continued)

Extension registers

There are no extension registers.

Register ILLREJRX

ISDN logical loop received frames rejected (ILLREJRX)

Register ILLREJRX counts received frames that the DCH rejects.

Register ILLREJRX release history

Register ILLREJRX was introduced in BCS23.

BCS32

The PCM30 remote cluster controller (PRCC) increases the register.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register ILLREJTX

ISDN logical loop transmitted frames rejected (ILLREJTX)

Register ILLREJTX counts transmitted frames the terminal rejects.

Register ILLREJTX release history

Register ILLREJTX was introduced in BCS23.

BCS32

The PCM30 remote cluster controller (PRCC) increases the register.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

OM group ISDNLL (continued)

Register ILLRMBSY

ISDN logical loop transitions to remote busy state (ILLRMBSY)

Register ILLRMBSY counts terminal transitions to a remote busy state.

Register ILLRMBSY release history

Register ILLRMBSY was introduced in BCS23.

BCS32

The PCM30 remote cluster controller (PRCC) increases the register.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

There are no associated extension registers.

Register ILLSORX

ISDN logical loop service access point identifier (SAPI) 0 frames received (ILLSORX)

Register ILLSORX counts the SAPI 0 frames that the system receives.

Register ILLSORX release history

Register ILLSORX was introduced in BCS23.

BCS32

The PCM30 remote cluster controller (PRCC) increases the register.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

OM group ISDNLL (continued)

Register ILLSOTX

ISDN logical loop service access point identifier (SAPI) 0 frames transmitted (ILLSOTX)

Register ILLSOTX counts the SAPI 0 frames that the system transmits.

Register ILLSOTX release history

Register ILLSOTX was introduced in BCS23.

BCS32

The PCM30 remote cluster controller (PRCC) increases the register.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register ILLS16RX

ISDN logical loop service access point identifier (SAPI) 16 frames received (ILLS16RX)

Register ILLS16RX counts the SAPI 16 frames that the system receives.

Register ILLS16RX release history

Register ILLS16RX was introduced in BCS23.

BCS32

The PCM30 remote cluster controller (PRCC) increases the register.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

OM group ISDNLL (end)

Register ILLS16TX

ISDN logical loop service access point identifier (SAPI) 16 frames transmitted (ILLS16TX)

Register ILLS16TX counts the SAPI 16 frames that the system transmits.

Register ILLS16TX release history

Register ILLS16TX was introduced in BCS23.

BCS32

The PCM30 remote cluster controller (PRCC) increases the register.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

OM group ISDNPDOM

OM description

ISDN parameter download

The register ISDNPDOM counts the number of download attempts, download failures, and download completions that occur on each switch. You can find these OMs in the PDATTMPT, PDFAILRE, and PDCOMPLT registers of the ISDNPDOM OM group.

Release history

The OM group ISDNPDOM was introduced in NA008.

Registers

The OM group ISDNPDOM registers appear on the MAP terminal as follows:

```

SLOWSAMPLES:      1 ;      FASTSAMPLES:      9 ;
      PDATTMPT      PDFAILRE      PDCOMPLT
0              0              0              0

```

Group structure

The OM group ISDNPDOM is a single tuple OM group.

Key field:

There is no key field

Info field:

There is no info field

Associated OM groups

There are no associated OM groups.

Associated functional groups

The ISDN functional group associates with OM group ISDNPDOM.

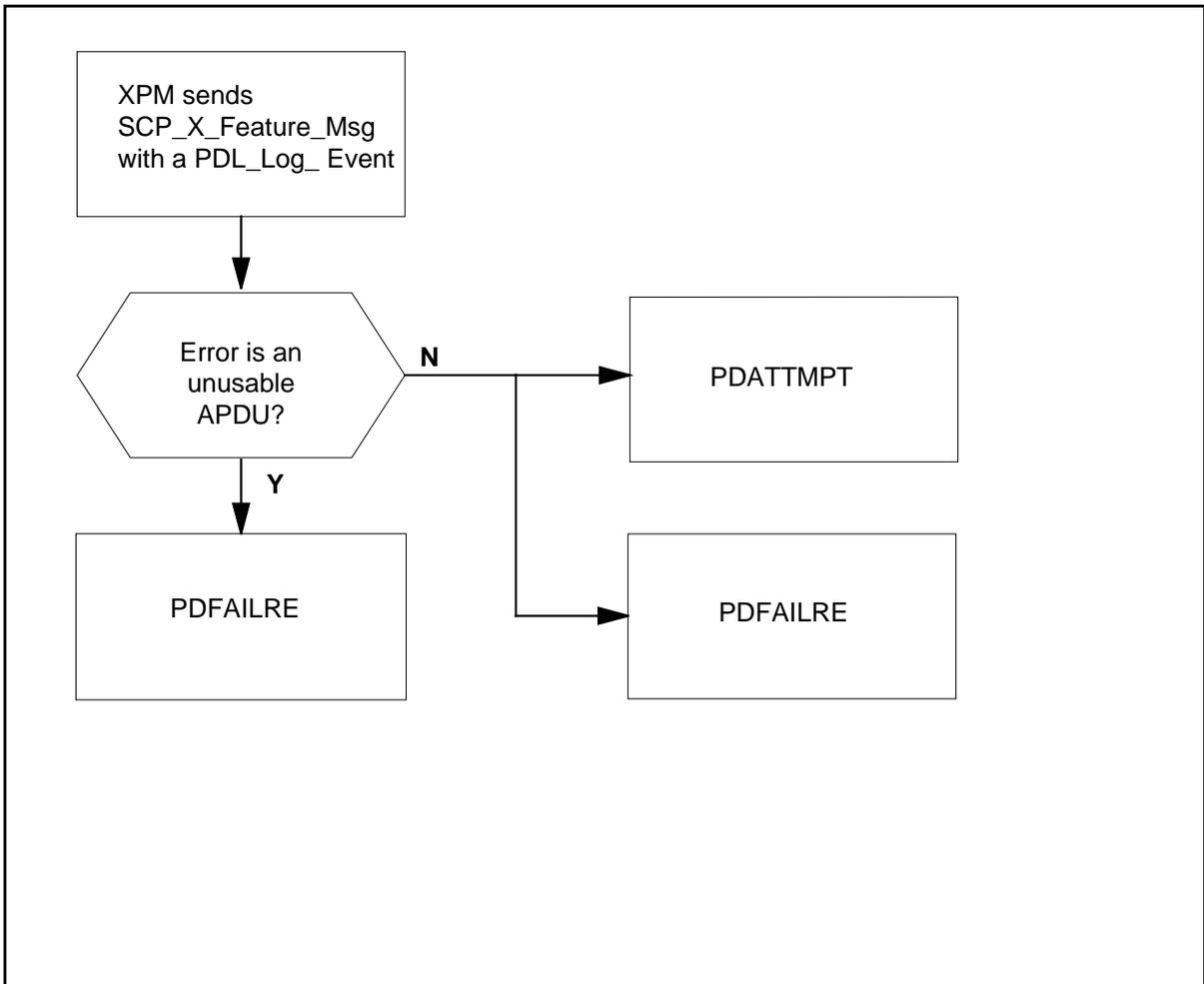
OM group ISDNPDOM (continued)

Associated functionality codes

The functionality codes that associate with OM group ISDNPDOM appear in the following table.

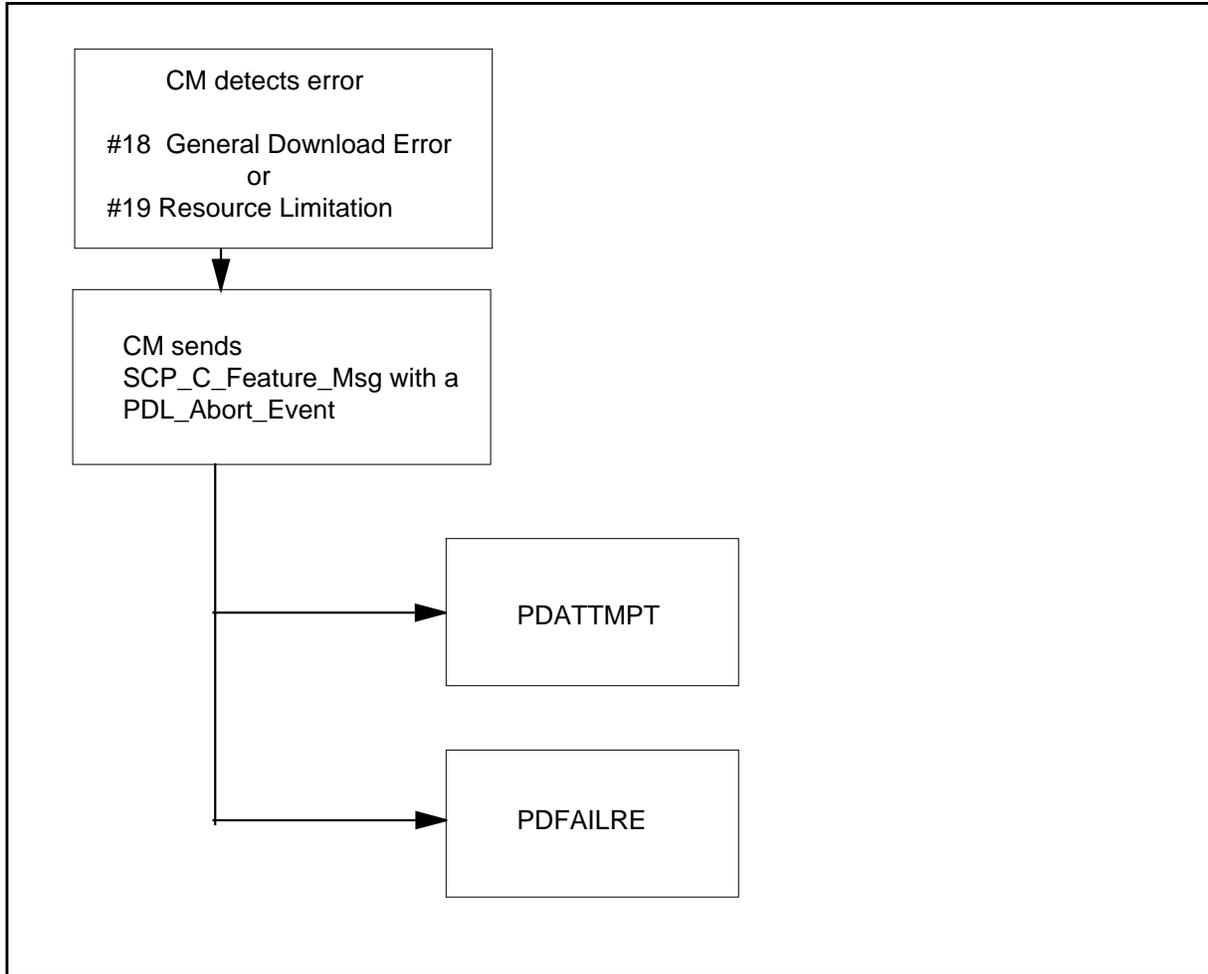
| Functionality | Code |
|------------------|----------|
| ISDN Base Access | NTX75QAB |

OM group ISDNPDOM parameter downloads OMs that increased with log event



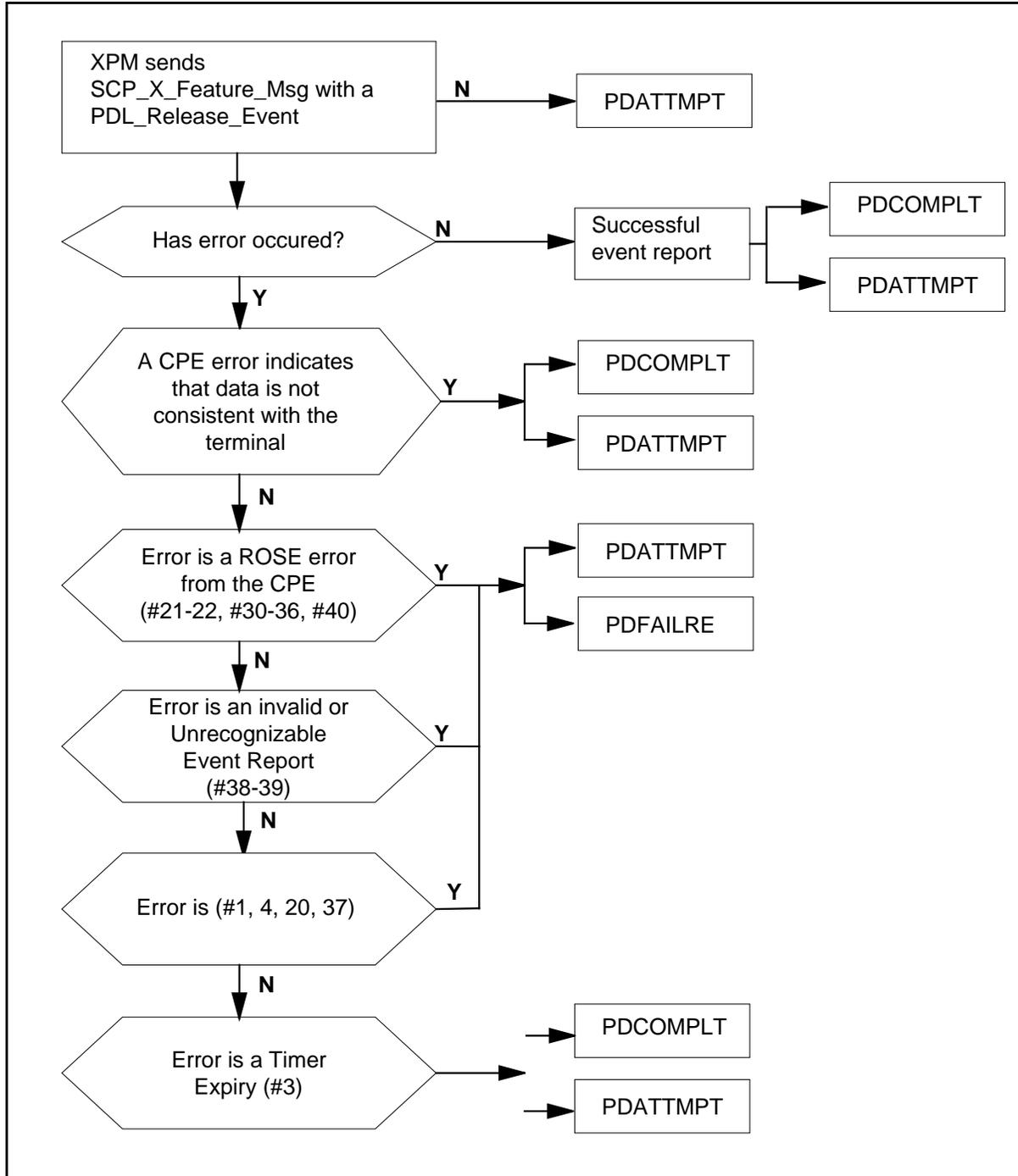
OM group ISDNPDOM (continued)

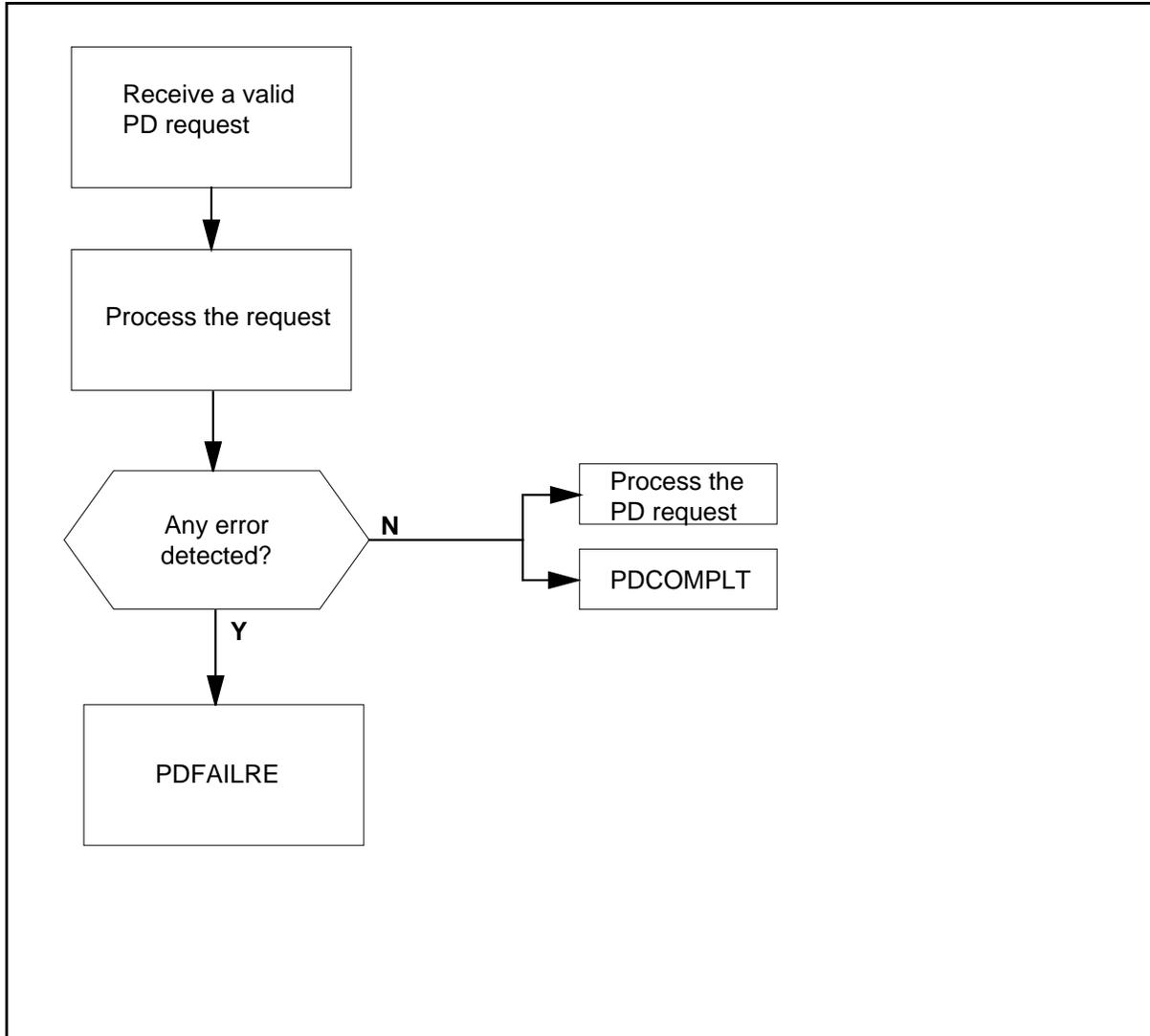
OM group ISDNPDOM parameter downloads OMs that increased with abort event



OM group ISDNPDOM (continued)

OM group ISDNPDOM parameter downloads OMs that increased with release event



OM group ISDNPDOM (continued)**OM group ISDNPDOM PD failure or completion OMs****Register PDATTMPT**

ISDN Download Attempt Register (PDATTMPT)

The ISDN Download Attempt Register measures the number of parameter download attempts on each switch. A PD Attempt occurs when the system receives a REGISTER message for which the system can decode the APDU. The system decodes the APDU to identify a request to download.

$$PDATTMPT = PDFAILRE + PDCOMPLT$$

OM group ISDNPDOM (continued)

Register PDATTMPT release history

Register PDATTMPT was introduced in NA008.

Associated registers

Register PDFAILRE: Parameter Download Failures and register PDCOMPLT: Parameter Download Completions are associated registers.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register PDFAILRE

ISDN Download Failure Register (PDFAILRE)

The ISDN Download Failure Register measures the number of failures of parameter download requests for each switch. A PD Failure occurs when the system receives an error that does not appear in the error event report. The system receives the error report from the XPM or the terminal.

$PDFAILRE = PDATTMPT - PDCOMPLT$

Register PDFAILRE release history

Register PDFAILRE was introduced in NA008.

Associated registers

Register PDATTMPT: Parameter Download Attempts and register PDCOMPLT: Parameter Download Completions are associated registers.

Associated logs

Log ISDN302 is an associated log.

The system generates the ISDN302 log to communicate an error when the PDFAILRE OM increases.

Extension registers

There are no extension registers.

Register PDCOMPLT

ISDN Download Completion Register (PDCOMPLT)

OM group ISDNPDOM (end)

The ISDN Download Completion Register measures the number of parameter download completions on each switch. A PD Completion occurs when the system encounters the following conditions:

- the switch receives the end of a data indication (RELease COMplete)
- the switch receives a completion or error event report from the terminal

Register PDCPMPLT release history

Register PDCOMPLT was introduced in NA008.

Associated registers

Register PDATTMPT: Parameter Download Attempts and register PDFAILRE: Parameter Download Failures are associated registers.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

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North American DMS-100
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OM Groups CNAB-ISDNPDOM

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