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, AINOGSB2, 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 1 of 6

OM Groups AABS-CMSGGEN

LET0015 and up Standard 14.02 May 2001

NORTEL NETWORKS™

DMS-100 Family

North American DMS-100

Operational Measurements Reference Manual Volume 1 of 6

OM Groups AABS-CMSGGEN

Publication number: 297-8021-814
Product release: LET0015 and up
Document release: Standard 14.02
Date: May 2001

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About this document

How to check the version and issue of this document

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

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

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

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

References in this document

The following documents are referred to in this document:

- *Alarm Clearing and Performance Monitoring Procedures*
- *Card Replacement Procedures*
- *Customer Data Schema Reference Manual*
- *Disk Maintenance Subsystem Reference Manual,* 297-1001-526
- *Lines Maintenance Guide*
- *Magnetic Tape Reference Manual,* 297-1001-118
- *Office Parameters Reference Manual*
- *Recovery Procedures*
- *Trouble Locating and Clearing Procedures*

As of NA0011 (LEC and LET) and EUR010 (EUR) releases, any references to the data schema section of the *Translations Guide* will be mapped to the *Customer Data Schema Reference Manual*.

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

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

What precautionary messages mean

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

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

Examples of the precautionary messages follow.

ATTENTION - Information needed to perform a task

ATTENTION

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

DANGER - Possibility of personal injury

DANGER

Risk of electrocution

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

WARNING - Possibility of equipment damage

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

CAUTION - Possibility of service interruption or degradation

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

How commands, parameters, and responses are represented

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

Input prompt (>)

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

```
>BSY
```

Commands and fixed parameters

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

```
>BSY CTRL
```

Variables

Variables are shown in lowercase letters:

```
>BSY  CTRL  ctrl_no
```

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

Responses

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

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

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

1 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 AABS

OM description

Automated Alternate Billing Service

AABS records Automated Alternate Billing Service (AABS) call attempts and dispositions for 0+ TOPS calls in a DMS-200 TOPS office. Feature AABS provides automated handling of 0+ dialed collect, third-number billed, and calling card calls through communication between the DMS switch and a voice services node (VSN). The VSN plays a role similar to that of an operator for 0+ calls by requesting the DMS switch to perform operator-type actions.

The VSN and DMS systems use data links and an application protocol to exchange messages related to billing, network connections, call dispositions, maintenance notifications, and audits.

AABS contains 20 registers that count

- AABS calling card calls, third-number calls, and collect calls that are successfully handled by a VSN
- AABS calls that are routed to mechanized calling card service (MCCS)
- VSN requests to the DMS switch to attach a dual-tone multifrequency (DTMF) receiver
- successful outcomes of VSN requests to the DMS switch to attach a DTMF receiver
- failed outcomes of VSN requests to the DMS switch to attach a DTMF receiver

Release history

OM group AABS was introduced in BCS28.

TOPS11

Registers AABSATT, AABSIDFL, AABSNOVL, AABSIVFL, AABSOPRF, AABSOPRB, AABSVABN, AABSVABA, AABSDABT, and AABSVABT are deleted. These registers are moved to OM group VSNCOM where ADAS as well as AABS can peg these registers. This change is by SR 50111339.

TOPS03

Register AABSSTPD was added.

BCS36

AABSRCVR, ARCVRFL, and ARCVRSUC were added.

BCS33

AABSACBS and AABSACBF were added. Registers AABSATT, AABSIDFL, AABSNOVL, AABSIVFL, AABSOPRF, AABSOPRB, AABSVABA, AABSVABN, AABSDABT, and AABSVABT are zeroed and no longer incremented.

Registers

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

```
>omshow aabs active

AABS

CLASS:  ACTIVE
START:1999/01/20 18:00:00 WED; STOP: 1999/01/20 18:03:29 WED
SLOWSAMPLES:      3 ; FASTSAMPLES:     21 ;

        AABSCCSC    AABSTHSC    AABSCOSC    ATOMCCSI
        ATOMCCSS    AABSACBS    AABSACBF    AABSRCVR
        ARCVRSUC     ARCVRFL    AABSSTPD

  0             0           0           0           0
                0           0           0           0
                0           0           0
```

Group structure

OM group AABS provides one tuple per office:

Key field:
None

Info field:
None

OM group AABS (continued)

Associated OM groups

The following OM groups are associated with OM group AABS:

- ARAN
- AABSFILT
- VSNCOM

Associated functional groups

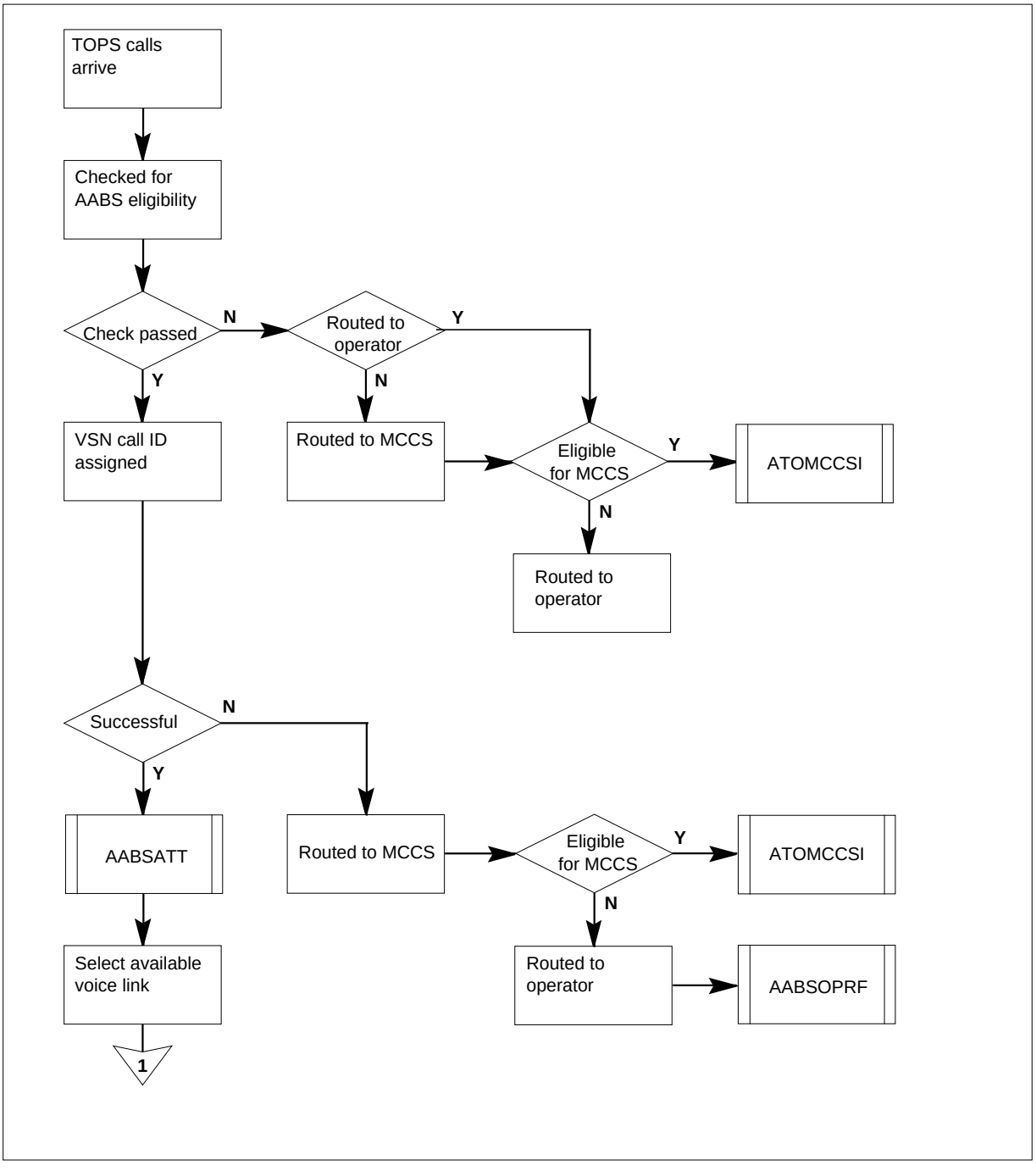
Functional group Alternate Billing Services (ABS0001) is associated with OM group AABS.

Associated functionality codes

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

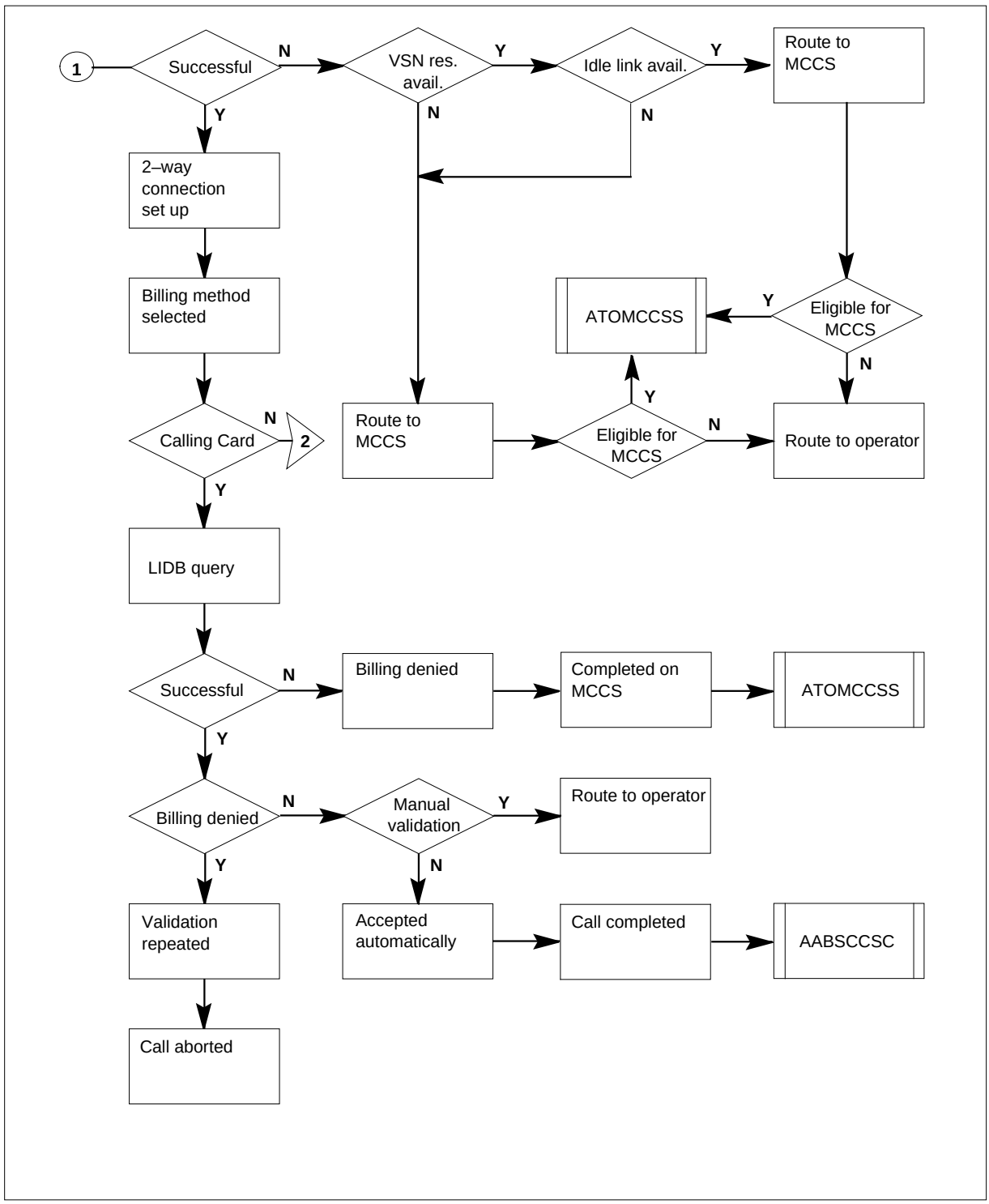
Functionality	Order code
Automated Alternate Billing Service	NTXA17AA/ABS00002Y
Auto Room and Auth Number	ABS00009

OM group AABS registers



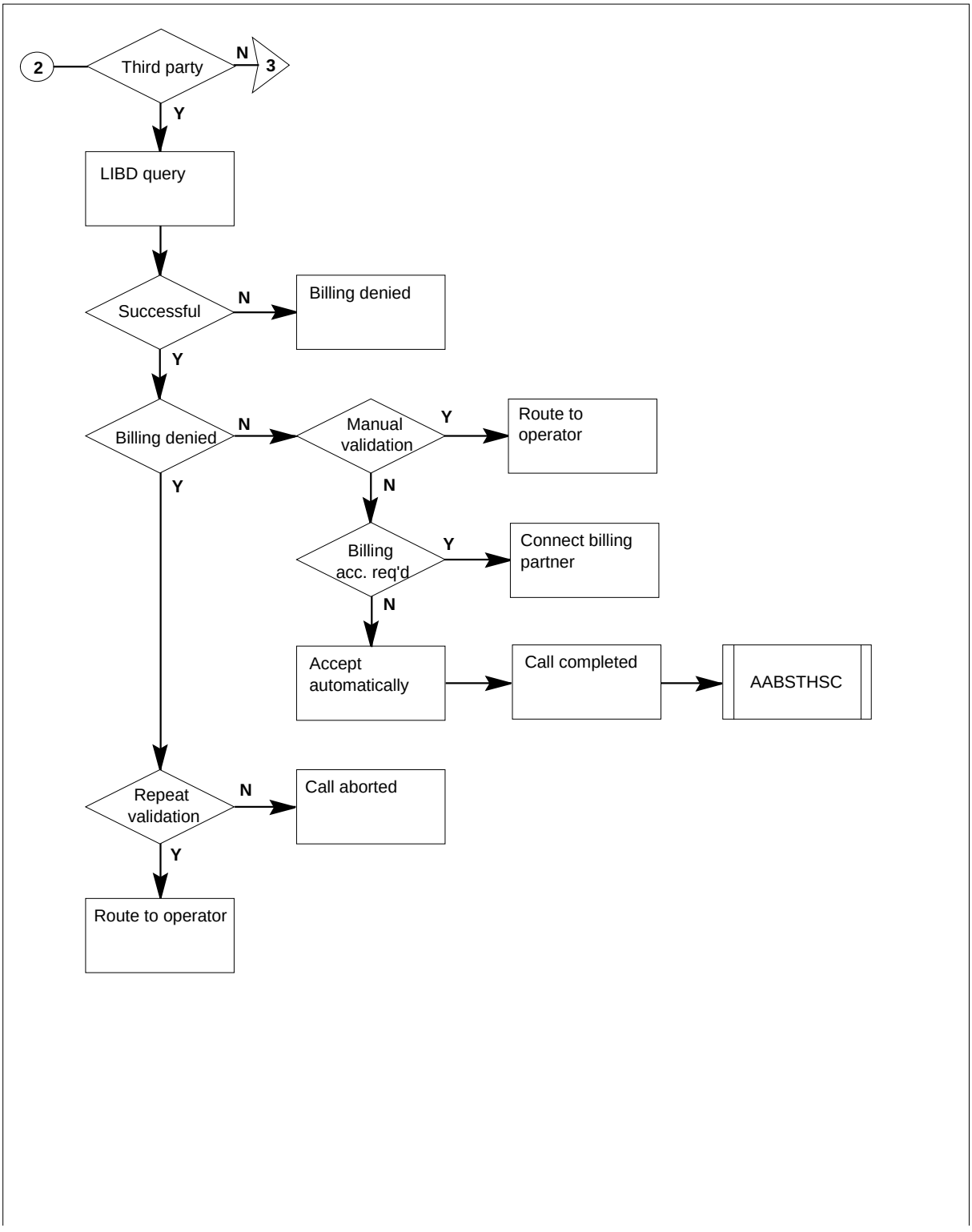
OM group AABS (continued)

OM group AABS registers (continued)



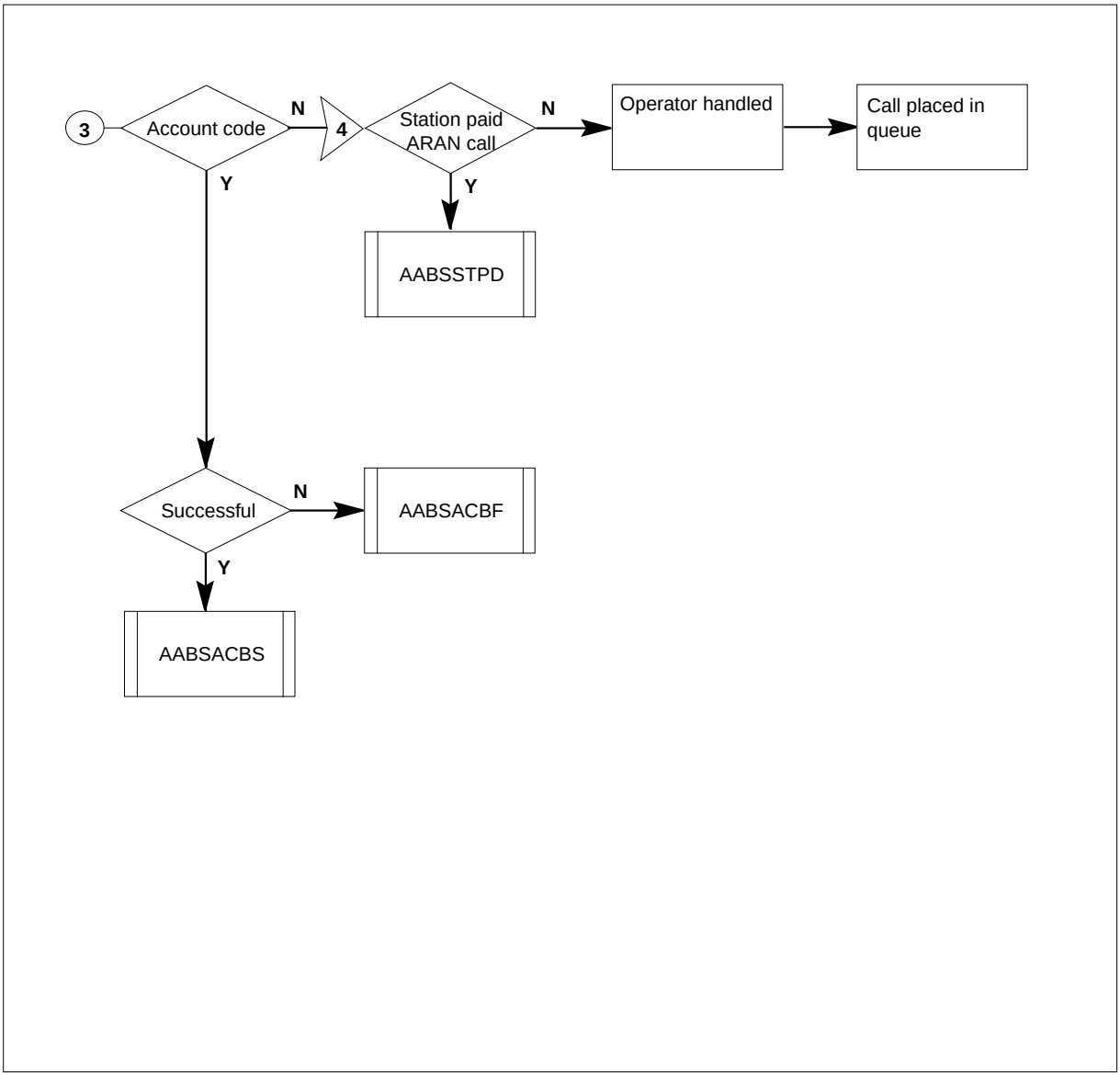
OM group AABS (continued)

OM group AABS registers (continued)



OM group AABS (continued)

OM group AABS registers (continued)



Register AABSACBF

Account code billing call failures

AABSACBF is incremented when AABS is unable to complete an account code billing call request from the VSN due to a bad request or an error detected by the DMS switch.

Register AABSACBF release history

AABSACBF was introduced in BCS33.

Associated registers

None

Associated logs

None

Extension registers

None

Register AABSACBS

Account code billing calls

AABSACBS is incremented when AABS successfully completes an account code billing call after being handled by the VSN.

Register AABSACBS release history

AABSACBS was introduced in BCS33.

Associated registers

None

Associated logs

None

Extension registers

None

Register AABSCCSC

AABS successful calling card calls

AABSCCSC counts AABS calls that are billed to a calling card and successfully handled by a VSN.

Register AABSCCSC release history

AABSCCSC was introduced in BCS28.

Associated registers

None

OM group AABS (continued)

Associated logs

None

Extension registers

None

Register AABSCOSC

AABS successful collect calls

AABSCOSC counts AABS collect calls that are successfully handled by a VSN.

Register AABSCOSC release history

AABSCOSC was introduced in BCS28.

Associated registers

None

Associated logs

None

Extension registers

None

Register AABSSTPD

AABS Station Paid

AABSSTRD counts the number of automated calls that had a billing class of station paid and were not billed to an account code.

Register AABSSTPD release history

AABSSTPD was introduced in TOPS03.

Associated registers

The following registers are associated with OM group AABS:

- AABSACBS: The number of AABS calls billed to an account code.
- AABSCCSC: The number of AABS calls billed to a calling card.
- AABSCOSC: The number of AABS calls billed collect.
- AABSTHSC: The number of AABS calls billed to a third number.

Associated logs

None

Extension registers

None

Register ARCVRFL

AABS receiver fail

ARCVRFL is incremented when the DMS switch fails to attach a receiver to the calling port in response to a request by the VSN.

ARCVRFL release history

ARCVRFL was introduced in BCS36.

Associated registers

When the VSN requests that a receiver be attached to the calling port, AABSRCVR is incremented. (If a receiver cannot be attached, then ARCVRFL is incremented.)

Associated logs

None

Extension registers

None

Register ARCVRSUC

AABS receiver success

ARCVRSUC is incremented when the DMS switch, in response to a request by the VSN, attaches a dual-tone multifrequency receiver; the register is also incremented to indicate that a receiver is already attached.

Register ARCVRSUC release history

ARCVRSUC was introduced in BCS36.

Associated registers

When the VSN requests that the DMS switch attach a receiver to the calling port, ABBSRCVR is incremented. If a receiver is successfully attached, then ARCVRSUC is also incremented. If the attempt to attach a receiver fails, then ARCVRFL is incremented.

OM group AABS (continued)

Associated logs

None

Extension registers

None

Register ATOMCCSI

AABS mechanized calling card service (MCCS) calls

ATOMCCSI counts AABS calls that are routed to MCCS before connection to a VSN.

Register ATOMCCSI release history

ATOMCCSI was introduced in BCS28.

Associated registers

None

Associated logs

None

Extension registers

None

Register ATOMCCSS

AABS mechanized calling card service (MCCS) call sequencing

ATOMCCSS counts AABS calls that are routed to MCCS to provide sequence calling capability after the DMS switch connects to a VSN.

Register ATOMCCSS release history

ATOMCCSS was introduced in BCS28.

Associated registers

None

Associated logs

None

Extension registers

None

Register AABSRCVR

AABS receiver

ABBSRCVR is incremented each time the VSN requests that the DMS switch attach a dual-tone multifrequency receiver.

Register AABSRCVR release history

AABSRCVR was introduced in BCS36.

Associated registers

When AABSRCVR is incremented, either ARCVRSUC or ARCVRFL are also incremented. These registers indicate if the request to attach a receiver succeeds or fails.

Associated logs

None

Extension registers

None

Register AABSTHSC

AABS successful third-number billed calls

AABSTHSC counts AABS calls that are billed to a third number and successfully handled by a VSN.

Register AABSTHSC release history

AABSTHSC was introduced in BCS28.

Associated registers

None

Associated logs

None

Extension registers

None

OM group AABSFILT

OM description

AABS filtering (AABSFILT) measures the overall usage of Automated Alternate Billing Service (AABS) filtering based on the billed number and the reasons for the filtering, such as fraud or bad voice.

Release history

OM group AABSFILT was introduced in BCS33.

Registers

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

```
FLTAUTO         FLTHAND         FLTFRAUD        FLTVOICE
FLTBOTH
```

Group structure

OM group AABSFILT provides one tuple per office.

Key field:
None

Info field:
None

The SCRNFOR field in table AABSFILT indicates the reason for filtering the corresponding billed number. The field can be datafilled to PFRAUD, BADVOICE, BOTH, or NONE.

Associated OM groups

None

Associated functional groups

None

OM group AABSFILT (continued)

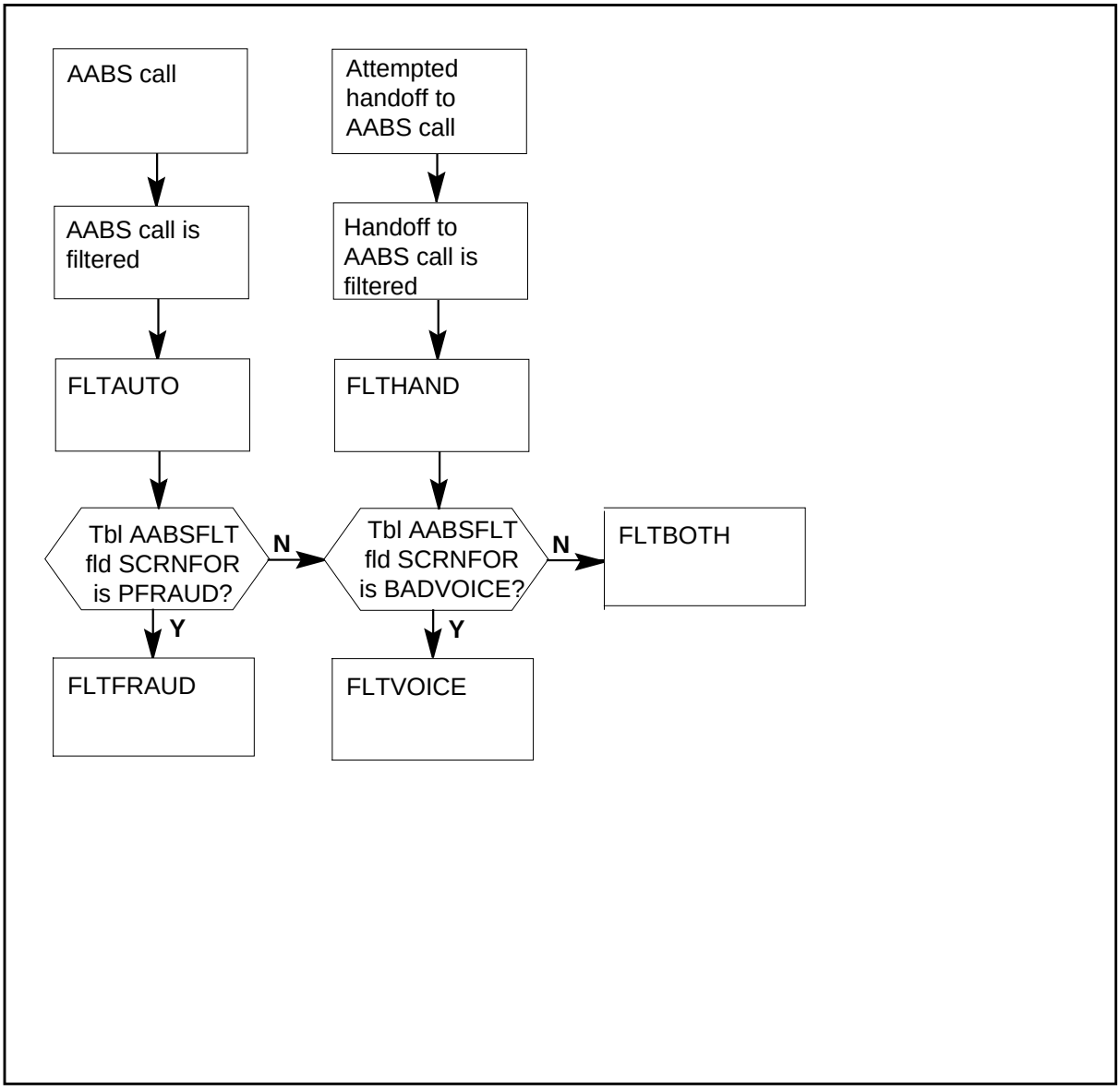
Associated functionality codes

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

Functionality	Code
TOPS French/English AABS	NTXP79AA

OM group AABSFILT (continued)

OM group AABSFILT registers



Register FLTAUTO

AABS filtered automated calls (FLTAUTO) counts the number of AABS calls that are filtered based on their billed number.

Register FLTAUTO release history

FLTAUTO was introduced in BCS33.

Associated registers

FLTHAND, FLTFRAUD, FLTBOTH, and FLTVOICE

Associated logs

None

Extension registers

None

Register FLTBOTH

AABS filtered call for both (FLTBOTH) counts the number of times calls are screened for both fraud and inappropriate automation of calls.

Register FLTBOTH release history

FLTBOTH was introduced in BCS33.

Associated registers

FLTHAND, FLTFRAUD, FLTAUTO, and FLTVOICE

Associated logs

None

Extension registers

None

Register FLTFRAUD

AABS filtered calls for possible fraud (FLTFRAUD) counts the number of times that calls are filtered through AABS to prevent fraudulent billing.

Register FLTFRAUD release history

FLTFRAUD was introduced in BCS33.

Associated registers

FLTHAND, FLTBOTH, FLTAUTO, and FLTVOICE

Associated logs

None

Extension registers

None

OM group AABSFILT (end)

Register FLTHAND

AABS attempted handoff filtered automated calls (FLTHAND) counts the number of AABS handoff attempts that are filtered based on their billed number.

Register FLTHAND release history

FLTHAND was introduced in BCS33.

Associated registers

FLTAUTO, FLTBOTH, FLTFRAUD, and FLTVOICE

Associated logs

None

Extension registers

None

Register FLTVOICE

AABS filtered calls for bad voice (FLTVOICE) counts the number of times that calls are filtered to prevent inappropriate calls from being automated.

Register FLTVOICE release history

FLTVOICE was introduced in BCS33.

FLTVOICE counts the number of times that calls are filtered to prevent inappropriate calls from being automated.

Associated registers

FLTAUTO, FLTBOTH, FLTFRAUD, and FLTHAND

Associated logs

None

Extension registers

None

OM group AABSHAND

OM description

Automated Alternate Billing Service Handoff (AABSHAND) monitors attempts by TOPS operators to hand off calls to the Automated Alternate Billing Service (AABS) in a DMS-200 TOPS office. TOPS operators can use the AABS to hand off calls that must obtain third-number billing acceptance or station-collect billing acceptance.

Release history

OM group AABSHAND was introduced in BCS30.

TOPS07

Twelve new registers added: SHATZMIN, SHATANIF, SHATONI, SHATMISC, SHANCOSC, SHANTHSC, SHANCOFL, SHANTHFL, OHNDZMIN, OHNDANIF, OHNDONI, and OHNDMISC.

Registers

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

```
>OMSHOW AABSHAND ACTIVE

CLASS:ACTIVE
START:1991/05/19 16:30:00 WED;STOP:1995/05/19 16:33:00 WED;
SLOWSAMPLES:        2:FASTSAMPLES:  18;

   HATTZMIN      HATTANIF      HATTONI       HATTMISC
   HANDTHSC      HANDCOSC      HANDTHFL      HANDCOFL
   SHATZMIN      SHATANIF      SHATONI       SHATMISC
   SHANTHSC      SHANCOSC      SHANTHFL      SHANCOFL
   OHNDZMIN      OHNDANIF      OHNDONI       OHNDMISC

    0             0             0             0
    0             0             0             0
    30            3             1             0
    25            5             2             1
    4             1             0             0
```

Group structure

OM group AABSHAND provides one tuple per office.

Key field:

None

OM group AABSHAND (continued)

Info field:
None

Associated OM groups

AABS counts automatic alternate billing service call attempts and dispositions for 0+ TOPS calls in a DMS-200 TOPS office.

Associated functional groups

Functional group Enhanced Services (ENSV0001) is associated with OM group AABSHAND.

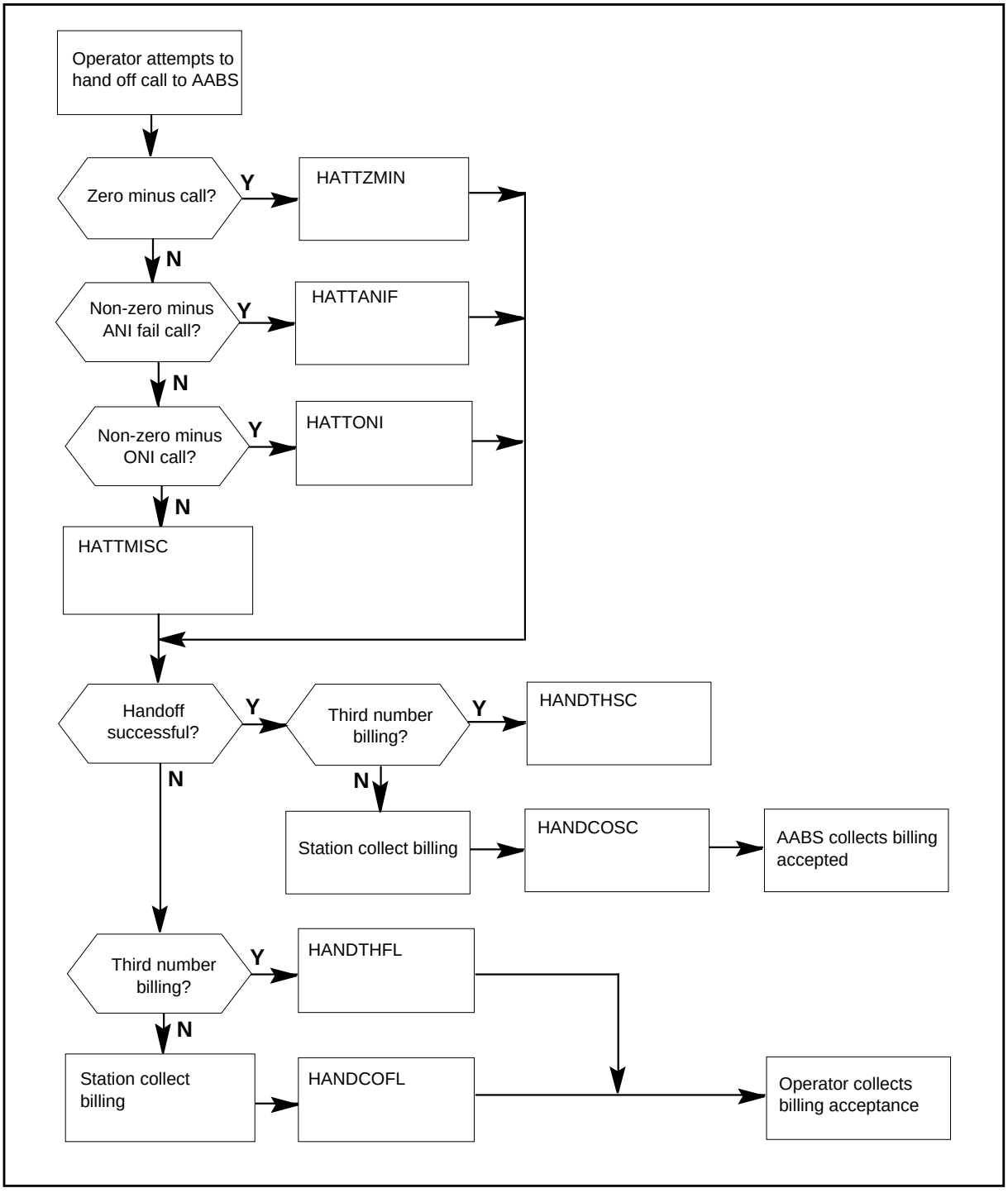
Associated functionality codes

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

Functionality	Code
Operator Handoff to AABS	NTXJ10AA
OSSAIN Enhancements	ENSV0020

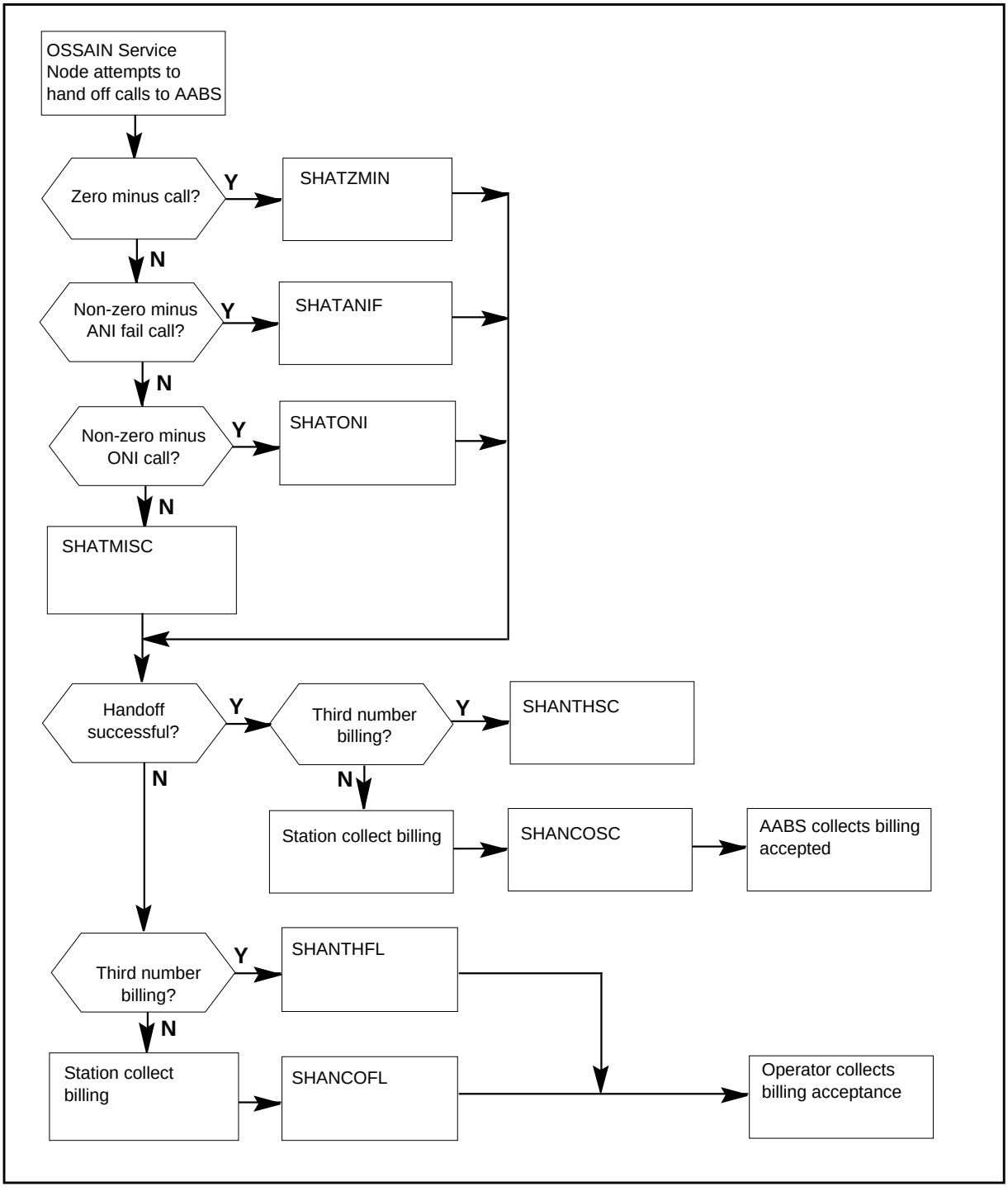
OM group AABSHAND (continued)

OM group AABSHAND registers



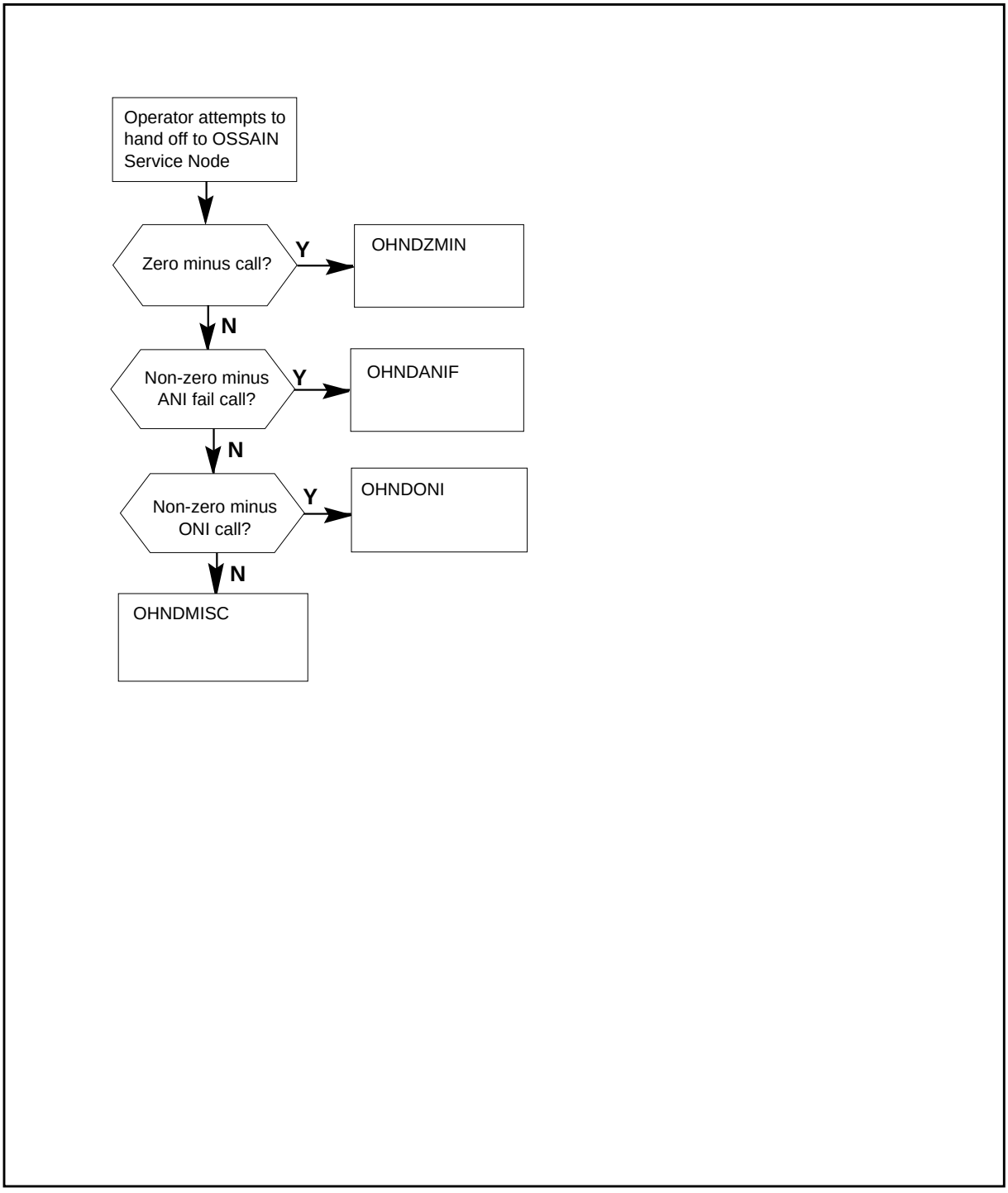
OM group AABSHAND (continued)

OM group AABSHAND registers (continued)



OM group AABSHAND (continued)

OM group AABSHAND registers (continued)



OM group AABSHAND (continued)

Register HANDCOFL

Collect handoff failure (HANDCOFL) counts attempts to hand off to the AABS for station-collect billing acceptance that are unsuccessful because of resource unavailability. Resource unavailability includes absence of a voice link to the voice service node (VSN), and failure of the datalink between DMS central control and the VSN.

Register HANDCOFL release history

HANDCOFL was introduced in BCS30.

Associated registers

HATTZMIN counts attempts by an operator to hand off a zero minus (0-) call to the AABS.

HATTANIF counts attempts by an operator to hand off a non-zero-minus automatic number identification (ANI) failure call to the AABS.

HATTONI counts attempts by an operator to hand off a non-zero-minus operator number identification (ONI) call to the AABS.

HATTMISC counts attempts by an operator to hand off a call to AABS at position release that does not fall into one of the attempt categories covered by registers HATTZMIN, HATTANIF, or HATTONI.

HANDTHSC counts successful attempts to hand off to the AABS for third-number billing acceptance.

HANDCOSC counts successful attempts to hand off to the AABS for station-collect billing acceptance.

HANDTHFL counts unsuccessful attempts to hand off to the AABS for third-number billing acceptance.

Validation Formula: HATTZMIN + HATTANIF + HATTONI + HATTMISC = HANDTHSC + HANDCOSC + HANDTHFL + HANDCOFL

Associated logs

None

Extension registers

None

Register HANDCOSC

Collect handoff success (HANDCOSC) counts successful attempts to hand off a call to the AABS for station-collect billing acceptance.

Register HANDCOSC release history

HANDCOSC was introduced in BCS30.

Associated registers

HATTZMIN, HATTANIF, HATTONI, HATTMISC, HANDTHSC, HANDTHFL, HANDCOFL.

Validation Formula: HATTZMIN + HATTANIF + HATTONI + HATTMISC = HANDTHSC + HANDCOSC + HANDTHFL + HANDCOFL

Associated logs

None

Extension registers

None

Register HANDTHFL

Third-number handoff failure (HANDTHFL) counts attempts to hand off a call to the AABS for third-number billing acceptance that are unsuccessful because of resource unavailability. Resource unavailability includes absence of a voice link to voice service node (VSN), and failure of the datalink between the DMS central control and the VSN.

Register HANDTHFL release history

HANDTHFL was introduced in BCS30.

Associated registers

HATTANIF, HATTONI, HATTMISC, HANDTHSC, HANDCOSC, HANDCOFL.

Validation Formula: HATTZMIN + HATTANIF + HATTONI + HATTMISC = HANDTHSC + HANDCOSC + HANDTHFL + HANDCOFL

Associated logs

None

Extension registers

None

OM group AABSHAND (continued)

Register HANDTHSC

Third-number handoff success (HANDTHSC) counts successful attempts to hand off a call to the AABS for third-number billing acceptance.

Register HANDTHSC release history

HANDTHSC was introduced in BCS30.

Associated registers

HATTZMIN, HATTANIF, HATTONI, HATTMISC, HANDCOSC, HANDTHFL, HANDCOFL.

Validation Formula: HATTZMIN + HATTANIF + HATTONI + HATTMISC = HANDTHSC + HANDCOSC + HANDTHFL + HANDCOFL

Associated logs

None

Extension registers

None

Register HATTANIF

Handoff to AABS attempts—non-zero-minus ANI failure calls (HATTANIF) counts attempts by an operator to hand off a non-zero-minus automatic number identification (ANI) failure call to the AABS at position release. The call must first have been successfully marked for handoff. Successful marking for handoff is indicated by displaying “HANDOFF" in the AMA STATUS display area of the TOPS 4 screen.

Register HATTANIF release history

HATTANIF was introduced in BCS30.

Associated registers

HATTZMIN, HATTONI, HATTMISC, HANDTHSC, HANDCOSC, HANDTHFL, HANDCOFL.

Validation Formula: HATTZMIN + HATTANIF + HATTONI + HATTMISC = HANDTHSC + HANDCOSC + HANDTHFL + HANDCOFL

Associated logs

None

Extension registers

None

Register HATTMISC

Handoff to AABS attempts—other (HATTMISC) counts attempts by an operator to hand off a call to the AABS at position release that does not fall into one of the attempt categories covered by registers HATTZMIN, HATTANIF, or HATTONI. The call must first have been successfully marked for handoff. Successful marking for handoff is indicated by displaying “HANDOFF" in the AMA STATUS display area of the TOPS 4 screen.

Register HATTMISC release history

HATTMISC was introduced in BCS30.

Associated registers

HATTZMIN, HATTANIF, HATTONI, HANDTHSC, HANDCOSC, HANDTHFL, HANDCOFL.

Validation Formula: HATTZMIN + HATTANIF + HATTONI + HATTMISC = HANDTHSC + HANDCOSC + HANDTHFL + HANDCOFL

Associated logs

None

Extension registers

None

Register HATTONI

Handoff to AABS attempts—non-zero-minus ONI calls (HATTONI) counts attempts by an operator to hand off a non-zero-minus operator number identification (ONI) call to the AABS at position release. The call must first have been successfully marked for handoff. Successful marking for handoff is indicated by displaying “HANDOFF" in the AMA STATUS display area of the TOPS 4 screen.

Register HATTONI release history

HATTONI was introduced in BCS30.

Associated registers

HATTZMIN, HATTANIF, HATTMISC, HANDTHSC, HANDCOSC, HANDTHFL, HANDCOFL.

Validation Formula: HATTZMIN + HATTANIF + HATTONI + HATTMISC = HANDTHSC + HANDCOSC + HANDTHFL + HANDCOFL

OM group AABSHAND (continued)

Associated logs

None

Extension registers

None

Register HATTZMIN

Handoff to AABS attempts—zero-minus calls (HATTZMIN) counts attempts by an operator to hand off a zero-minus (0-)call to the AABS at position release. The call must first have been successfully marked for hand off. Successful marking for handoff is indicated by displaying “HANDOFF" in the AMA STATUS display area of the TOPS 4 screen.

Register HATTZMIN release history

HATTZMIN was introduced in BCS30.

Associated registers

HATTANIF, HATTONI, HATTMISC, HANDTHSC, HANDCOSC, HANDTHFL, HANDCOFL.

Validation Formula: HATTZMIN + HATTANIF + HATTONI + HATTMISC = HANDTHSC + HANDCOSC + HANDTHFL + HANDCOFL

Associated logs

None

Extension registers

None

Register OHNDANIF

Register Operator handoff to an OSSAIN service node for an ANI failure call

Register OHNDANIF is pegged each time an operator attempts a handoff to an OSSAIN service node for an ANI failure call.

Register OHNDANIF release history

Register OHNDANIF was introduced in TOPS07.

Associated registers

None

Associated logs

None

Extension registers

None

Register OHNDMISC

Register Operator handoff to an OSSAIN service node for a call type other than zero minus, ANI failure, or ONI

Register OHNDMISC is pegged each time an operator attempts a handoff to an OSSAIN service node for call types other than 0 minus, ANI failure, or ONI.

Register OHNDMISC release history

Register OHNDMISC was introduced in TOPS07.

Associated registers

None

Associated logs

None

Extension registers

None

Register OHNDONI

Register Operator handoff to an OSSAIN service node for a non-zero minus ONI call

Register OHNDONI is pegged each time an operator attempts a handoff to an OSSAIN service node for a non-zero-minus ONI call.

Register OHNDONI release history

Register OHNDONI was introduced in TOPS07.

Associated registers

None

Associated logs

None

Extension registers

None

OM group AABSHAND (continued)

Register OHNDZMIN

Register Operator handoff to an OSSAIN service node for a zero minus call

Register OHNDZMIN is pegged each time an operator attempts a handoff to an OSSAIN service node for a 0 minus call.

Register OHNDZMIN release history

Register OHNDZMIN was introduced in TOPS07.

Associated registers

None

Associated logs

None

Extension registers

None

Register SHANCOFL

Register OSSAIN service node handoff failure for a collect call

Register SHANCOFL is pegged each time a call cannot be handed off to AABS for Collect Billing Acceptance because of resource unavailability, including no voice link to the VSN and DMS CC to VSN datalink failure conditions.

Register SHANCOFL release history

Register SHANCOFL was introduced in TOPS07.

Associated registers

None

Associated logs

None

Extension registers

None

Register SHANCOSC

Register OSSAIN service node handoff success for a collect call

Register SHANCOSC is pegged each time a voice link to a VSN is obtained and a call is successfully handed off to AABS for Station Collect Billing Acceptance.

Register SHANCOSC release history

Register SHANCOSC was introduced in TOPS07.

Associated registers

None

Associated logs

None

Extension registers

None

Register SHANTHFL

Register OSSAIN service node handoff failure for a bill to third call

Register SHANTHFL is pegged each time a call cannot be handed off to AABS for Third Number Billing Acceptance because of resource unavailability; including no voice link to the VSN and DMS CC to VSN datalink failure conditions.

Register SHANTHFL release history

Register SHANTHFL was introduced in TOPS07.

Associated registers

None

Associated logs

None

Extension registers

None

Register SHANTHSC

Register OSSAIN service node handoff success for a bill to third call

Register SHANTHSC is pegged each time a voice link to a VSN is obtained and a call is successfully handed off to AABS for third-number billing acceptance.

OM group AABSHAND (continued)

Register SHANTHSC release history

Register SHANTHSC was introduced in TOPS07.

Associated registers

None

Associated logs

None

Extension registers

None

Register SHATANIF

Register OSSAIN service node handoff attempt for an ANI fail call

Register SHATANIF is pegged each time an SN attempts a handoff to AABS for an ANI failure call.

Register SHATANIF release history

Register SHATANIF was introduced in TOPS07.

Associated registers

None

Associated logs

None

Extension registers

None

Register SHATMISC

Register OSSAIN service node handoff attempt for a call type other than 0 minus, ANI fail, or ONI

Register SHATMISC is pegged each time an SN attempts a handoff to AABS for call types other than 0 minus, ANI failure, or ONI.

Register SHATMISC release history

Register SHATMISC was introduced in TOPS07.

Associated registers

None

Associated logs

None

Extension registers

None

Register SHATONI

Register OSSAIN service node handoff attempt for an ONI call

Register SHATONI is pegged each time an SN attempts a handoff to AABS for a non-zero-minus ONI call.

Register SHATONI release history

Register SHATONI was introduced in TOPS07.

Associated registers

None

Associated logs

None

Extension registers

None

Register SHATZMIN

Register OSSAIN service node handoff attempt for a 0 minus call

Register SHATZMIN is pegged each time an SN attempts a handoff to AABS for a 0 minus call.

Register SHATZMIN release history

Register SHATZMIN was introduced in TOPS07.

Associated registers

None

Associated logs

None

Extension registers

None

OM group AASV

OM description

Application processor unit-based advanced services

OM group AASV measures the call processing engine (CPE) channel usage for advanced services that use CPEs based on an application processor unit (APU). An example of such a service is Automated Directory Assistance Service (ADAS).

For each APU providing CPE channels, the group measures the following activities:

- total number of channel allocations
- an allocation high water mark
- channel traffic usage
- unavailable channel usage
- idle channel usage
- channel failures
- failed service data synchronization attempts

Release history

OM group AASV was introduced in BCS36.

Registers

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

AASVALOC	AASVHWM	AASVTRAF	AASVIDLE
AASVUNAV	AASVFL	AASVSFL	

Group structure

OM group AASV provides one tuple for each possible APU node on the DMS switch, for a total of 1000 tuples.

Key field:

This field contains the APU node name, in the format APUnnnX, where NNN is a zero-padded number indicating its node number in tables LIUINV, SNIXINFO, and SNIXAPPL. Examples of key fields are APU001X, APU923X, and APU000X.

Info field:

This field contains the name of the service provided by the APU (the only permitted value is ADAS), and the channel capacity as reflected in table ESRVCAP, which is a decimal number from 1 to 100.

Associated OM groups

None

Associated functional groups

The following functional groups are associated with OM group AASV:

- Traffic Operator Position System (TOPS)
- Automated Directory Assistance Service (ADAS)

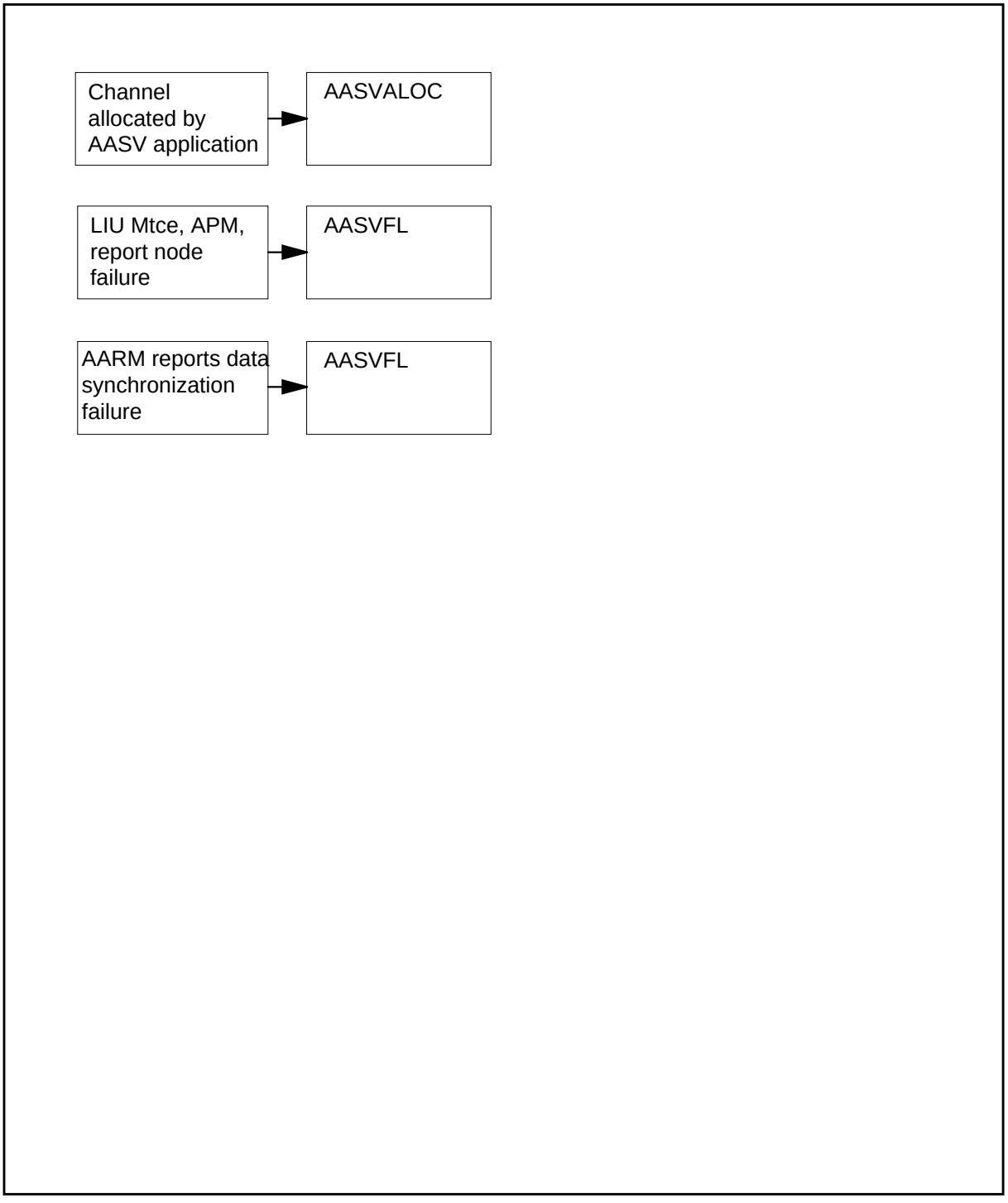
Associated functionality codes

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

Functionality	Code
Enhanced Service Resource Management	NTXS31AA

OM group AASV (continued)

OM group AASV registers



Register AASVALOC

AASV allocation

AASVALOC counts the number of allocations for an APU during the collection period. The register is used to determine the number of calls processed.

Register AASVALOC release history

AASVALOC was introduced in BCS36.

Associated registers

None

Associated logs

None

Extension registers

None

Register ASSVFL

AASV faults

AASVALOC counts the number of service circuit failures that are caused by the APU or the service process on it transitioning to an unavailable state. This register is used to measure service failure rates.

Register ASSVFL release history

ASSVFL was introduced in BCS36.

Associated registers

None

Associated logs

None

Extension registers

None

Register AASVHWM

AASV high water mark

Register AASVHWM release history

AASVHWM was introduced in BCS36.

OM group AASV (continued)

AASVALOC counts the largest number of calls handled simultaneously by an APU during the collection period. It is used to measure service load balancing.

Associated registers

None

Associated logs

None

Extension registers

None

Register AASVIDLE

AASV idle

AASVALOC counts the number of APU channels that are available but unused during the 10 s scan period. It is used to measure service availability.

Register AASVIDLE release history

AASVIDLE was introduced in BCS36.

Associated registers

AASVTRAF counts the number of allocations during the 10-s scan period. It is used to measure service traffic.

AASVUNAV counts the number of datafilled circuits that are unavailable for use due to system-busy or manual-busy conditions, or other failure conditions. It is used to measure service availability, and is updated every 10 s.

Associated logs

None

Extension registers

None

Register AASVSFL

AASVSFL

AASVALOC counts the number of failed data synchronization attempts during the 10 s collection period.

Register AASVSFL release history

AASVSFL was introduced in BCS36.

Associated registers

None

Associated logs

None

Extension registers

None

Register AASVTRAF

AASV traffic

Register AASVTRAF release history

AASVTRAF was introduced in BCS36.

AASVALOC counts the number of allocations during the 10-s scan period. It is used to measure service traffic.

Associated registers

AASVIDLE counts the number of available but unused APU channels during the 10 s scan period. It is used to measure service availability.

AASVUNAV counts the number of datafilled circuits that are unavailable for use due to system- or manual-busy conditions, or other failure conditions. It is used to measure service availability, and is updated every 10 s.

Associated logs

None

Extension registers

None

Register AASVUNAV

AASV unavailable

AASVALOC counts the number of datafilled circuits that are unavailable for use due to system- or manual-busy conditions, or other failure conditions. It is used to measure service availability, and it is updated every 10 s.

Register AASVUNAV release history

AASVUNAV was introduced in BCS36.

OM group AASV (end)

Associated registers

AASVIDLE counts the number of available but unused APU channels during the scan period (10 s). It is used to measure service availability.

AASVTRAF counts the number of allocations during the scan period. It is used to measure service traffic. It is updated every 10 s.

Associated logs

None

Extension registers

None

OM group ACB

OM description

Automatic Call Back (ACB) provides information on the use of the ACB feature for an office. You can obtain this feature alone or as part of the common access group of features.

Activities that ABC counts include:

- universal access attempts and denials
- feature activations, denials, and reactivation
- software resource shortages
- denial announcement and tones
- immediate and delayed processing
- timeouts
- originate, terminate, and resume scanning
- selective call rejections
- subscriber-terminated requests
- terminations that are not normal

Release history

The OM group ABC was introduced in BCS27.

BCS35

Registers ACBDENY and ACBUNIV added for universal access.

BCS29

Registers ACBACBN and ACBNIMED added.

Registers

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

```
ACBATT      ACBFDEN     ACBOVFL     ACBLTDA
ACBSTDA     ACBSTDT     ACBIMED     ACBDLAY
ACBTIME     ACBRSCN     ACBSCR      ACBDATT
ACBABT      ACBRACT     ACBSTR      ACBTSCN
ACBOSCN     ACBACBN     ACBNIMED    ACBUNIV
ACBDENY
```

OM group ACB (continued)

Group structure

The OM group ACB provides one tuple for each office.

Key field:
There is no key field.

Info field:
There is no info field.

You must enter ACB start and stop codes in table IBNXLA for Residential Enhanced Services (RES) customer groups. The ACB OM registers increase after you enter these codes.

Associated OM groups

The OTS_ORGFSET increases when the system starts or stops ACB.

The OTS_ORGFSET appears only in DMS-100 offices without TOPS.

Associated operating groups

The CLASS/CMS functional group associates with OM group ACB.

Associated functionality codes

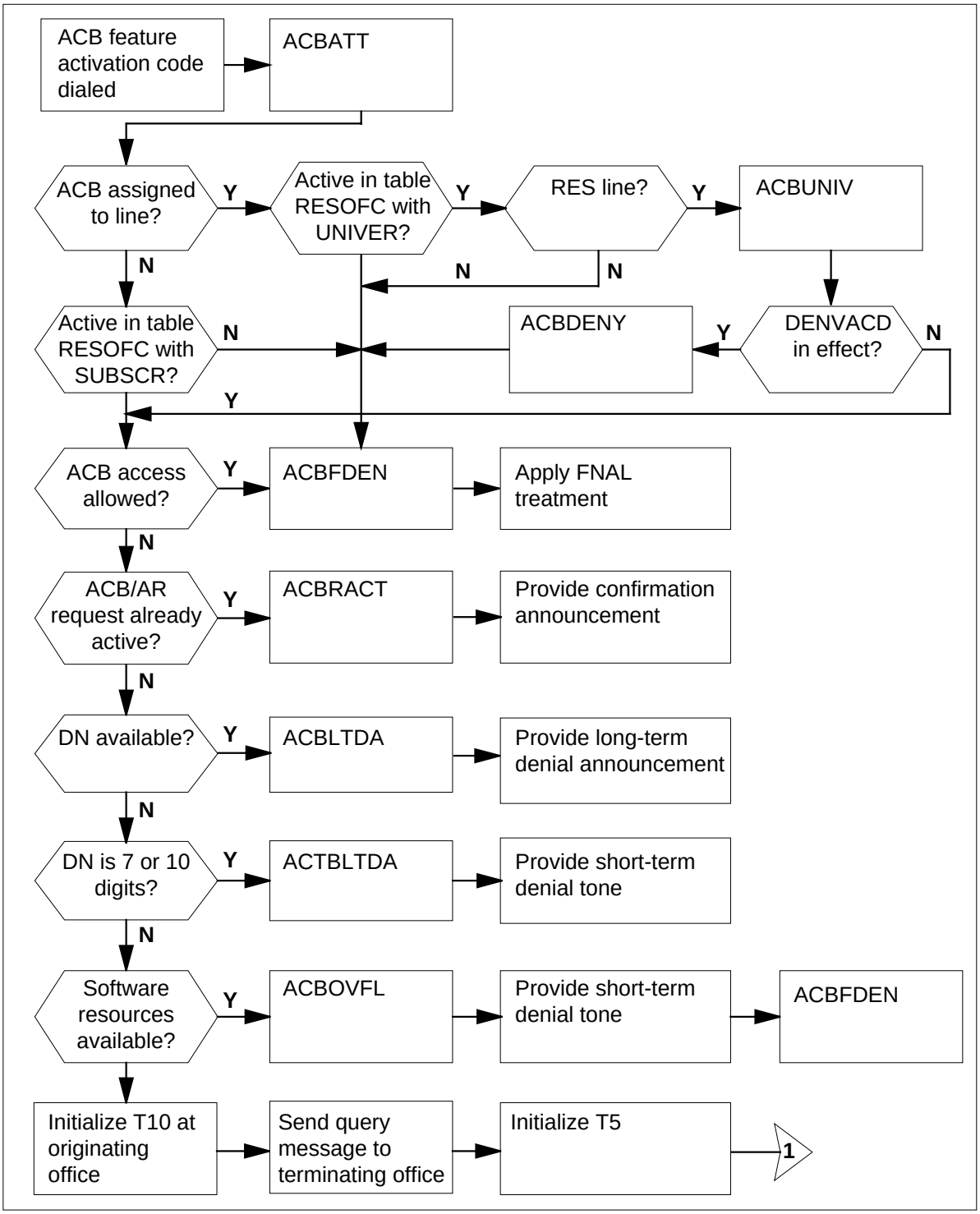
The functionality codes for OM group ACB appear in the following table.

Functionality	Code
CLASS-Call Setup	NTXA00AA

The following flowchart describes the OM group registers to activate ACB.

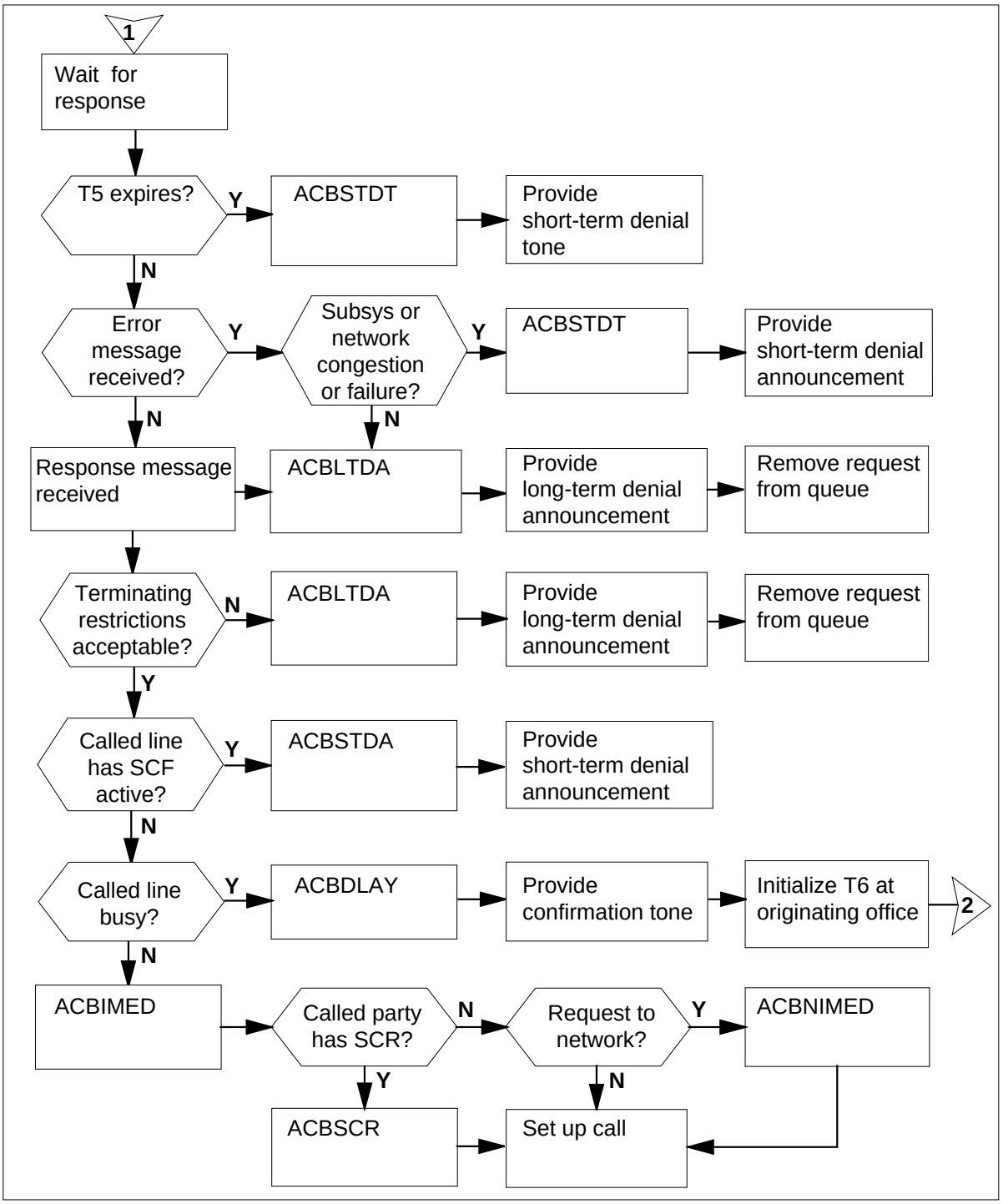
OM group ACB (continued)

OM group ACB registers to activate ACB

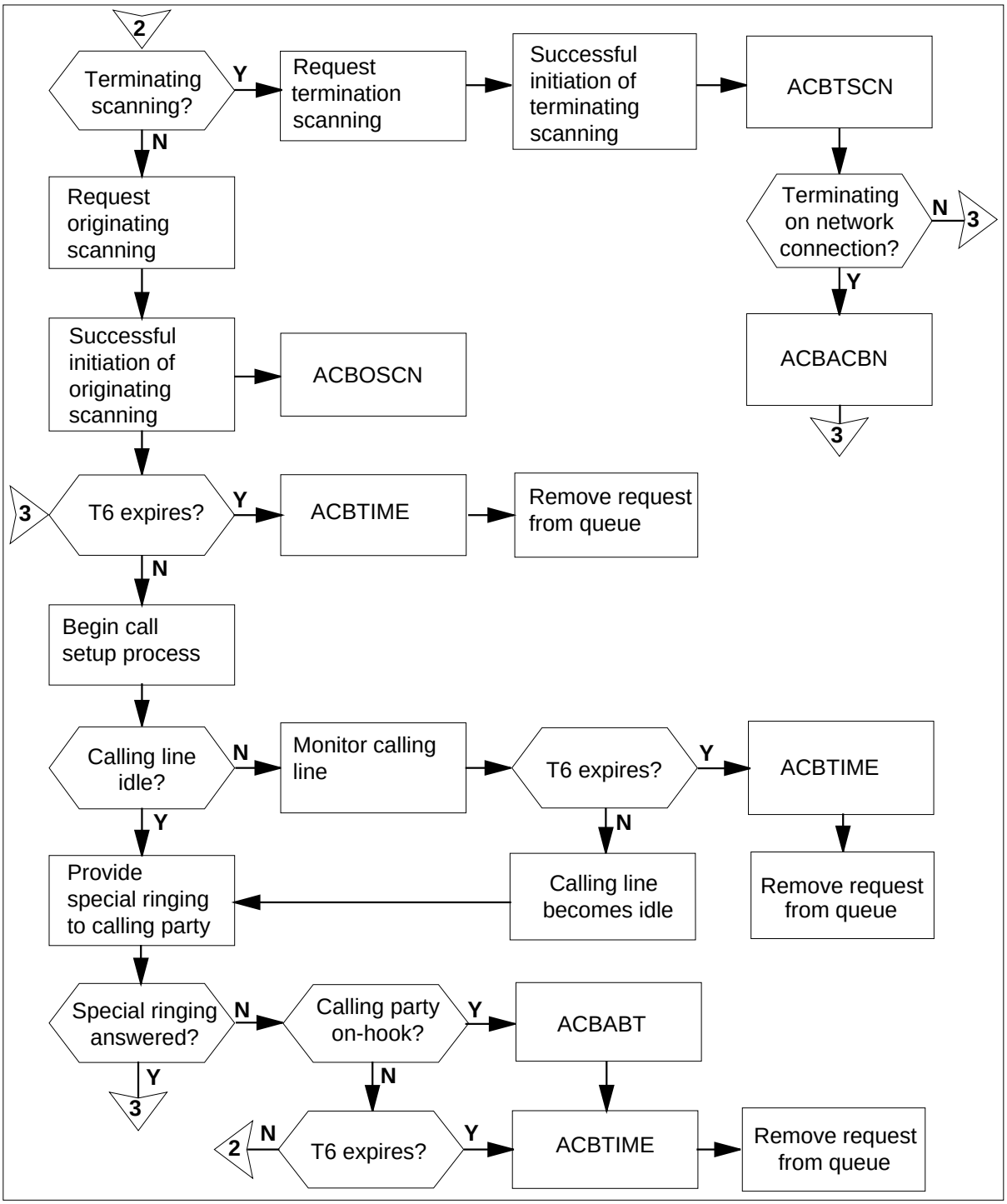


OM group ACB (continued)

OM group ACB registers to activate ACB (continued)

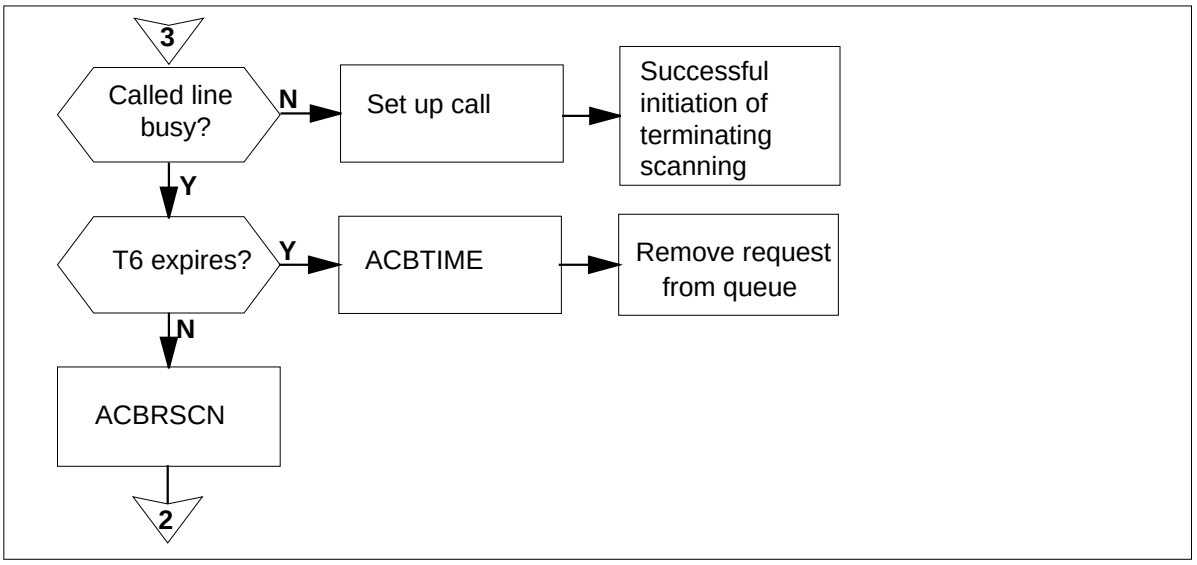


OM group ACB registers to activate ACB (continued)



OM group ACB (continued)

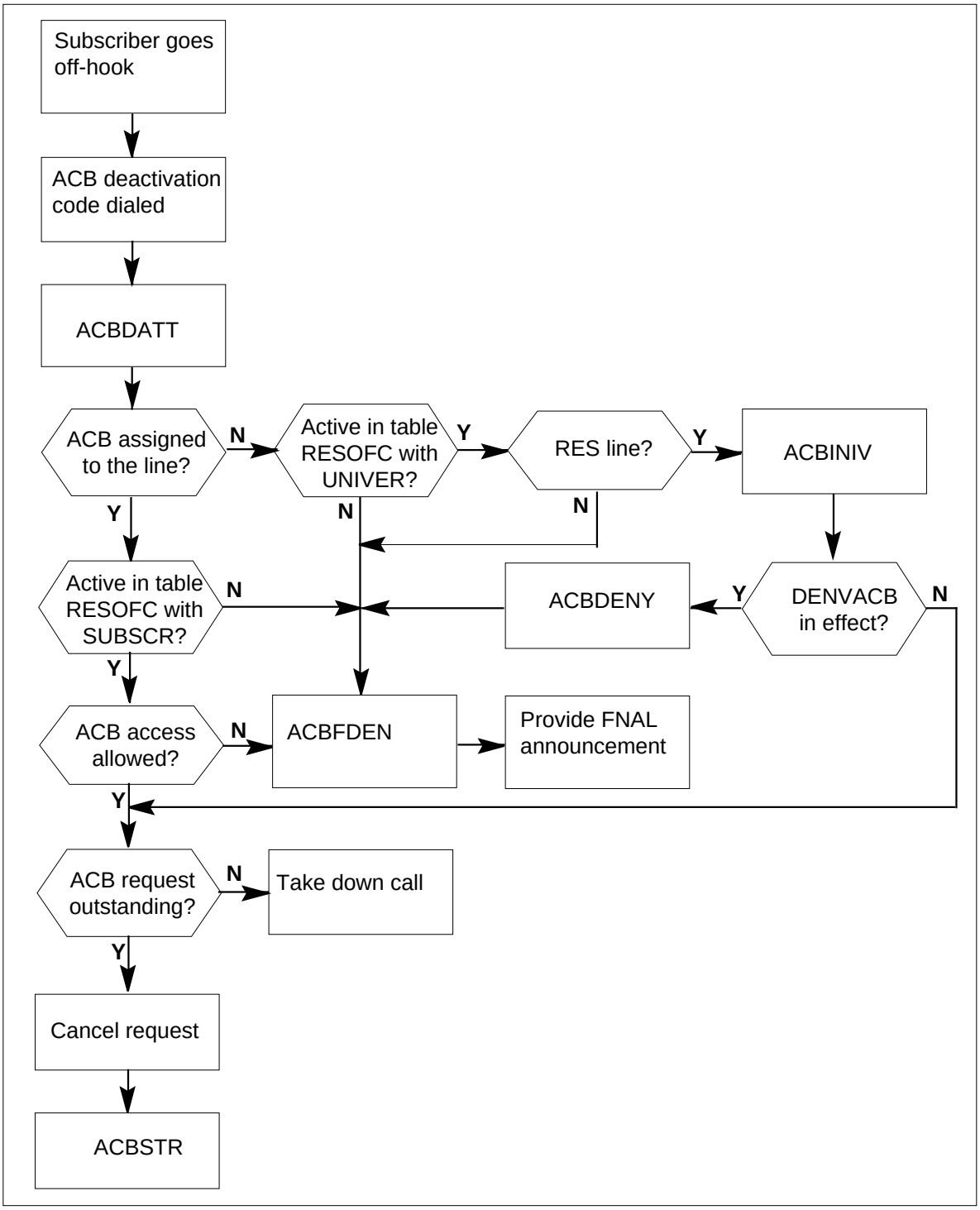
OM group ACB registers to activate ACB (continued)



The following flowchart describes the OM group registers to deactivate ACB.

OM group ACB (continued)

OM group registers to deactivate ACB



OM group ACB (continued)

Register ACBABT

The ACB abnormal termination (ACBABT) counts ACB requests that terminate during delayed processing. Requests terminate during delayed processing because of interswitch problems like network congestion, or system errors. System errors result in SYFL treatment.

Register ACBABT release history

Register ACBABT was introduced in BSC25.

Associated registers

Register ACBATT increases when ACBABT increases.

Associated logs

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

Extension registers

There are no extension registers.

Register ACBACBN

Register ACB attempts terminate on a network (ACBACBN). These attempts count call attempts made on a line with the ACB feature that terminate on a network.

Register ACBACBN release history

Register ACBACBN was introduced in BCS29.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

There are no associated logs.

Register ACBATT

Register ACB attempts (ACBATT) increases when a user dials the ACB feature activation code.

Register ACBATT release history

Register ACBATT was introduced in BCS27.

Associated registers

Register ACBATT increases when ACBRACT increases.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register ACBDATT

Register ACB deactivation attempts (ACBDATT) increases when a user dials the ACB feature deactivation code.

Register ACBDATT release history

Register ACBDATT 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 ACBDENY

Register ACB denial (ACBDENY) counts the number of ACB universal access attempts denied because the DENYACB option is in effect.

Register ACBDENY release history

Register ACBDENY was introduced in BCS35.

Associated registers

Register ACBFDEN increases when ACBDENY increases.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

OM group ACB (continued)

Register ACBDLAY

Register ACB delay (ACBDLAY) counts delays in processing that occur when the subscriber dials the ACB feature activation code. This condition occurs if the called line is busy.

Register ACBDLAY release history

Register ACBDLAY was introduced in BCS27.

Associated registers

Register ACBATT increases when ACBDLAY increases.

Associated logs

If the line has subscriber usage-sensitive pricing (SUSP) and the system creates an automatic message accounting (AMA) record, the system generates AMAB117 when ACBDLAY increases.

Extension registers

There are no extension registers.

Register ACBFDEN

Register ACB feature denied (ACBFDEN) increases when a user cannot activate ACB. The user cannot activate ACB because the feature is not available on the line or in the office. The ACB feature denied (ACBFDEN) increases when other features in use prevent the use of ACB. For example, the system cannot cause ACB on the second leg of a three-way call.

The system routes the call to NACK (negative acknowledgement) or FNAL (feature not allowed) treatment when register ACBFDEN increases.

Register ACBFDEN release history

Register ACBFDEN was introduced in BCS27.

Associated registers

Register ACBATT increases when ACBFDEN increases.

Associated logs

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

Extension registers

There are no extension registers.

Register ACBIMED

Register ACB immediate (ACBIMED) increases when a subscriber dials the ACB feature activation code and ACB occurs immediately.

Register ACBIMED release history

Register ACBIMED was introduced in BCS27.

Associated registers

Register ACBATT increases when ACBIMED increases.

Register ACBIMED increases when ACBSCR increases.

Associated logs

If the line has subscriber usage-sensitive pricing (SUSP) and the system creates an automatic message accounting (AMA) record, the system generates AMAB117 when ACBIMED increases.

Extension registers

There are no extension registers.

Register ACBLTDA

Register ACB long-term denial announcement (ACBLTDA) increases when a caller receives a long-term denial announcement after an attempt to activate ACB.

Register ACBLTDA release history

Register ACBLTDA was introduced in BCS27.

Associated registers

Register ACBATT increases when ACBLTDA increases.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register ACBNIMED

Register Immediately processed internodal ACB requests (ACBNIMED) counts when the system immediately processes an internodal ACB request.

OM group ACB (continued)

Register TCAPUSAG_TCRTERR increases because the response to the queue call component of the first query is a return error component. A return error component indicates that the system did not queue the call.

Register ACBNIMED release history

Register ACBNIMED was introduced in BCS29.

Associated registers

Register TCAPUSAG_TCRTERR counts return error components sent or received.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register ACBOSCN

Register ACB originating scanning (ACBOSCN) increases when an ACB request results in originating scanning.

This register increases one time for each ACB request. The ACB requests do not include requests that the system increases in ACBTSCN (terminating scanning). Register ACBTSCN resumes as originating scanning.

Register ACBOSCN release history

Register ACBOSCN 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 ACBOVFL

Register ACB software resource overflow (ACBOVFL) increases when a call receives short-term denial tone. A call receives short-term denial tone because software resources are not available to activate ACB.

The system routes the call to NOSR, NOSC, or NBLH treatment when register ACBOVFL increases.

Register ACBOVFL release history

Register ACBOVFL was introduced in BCS27.

Associated registers

Register ACBATT increases when ACBOVFL increases.

Associated logs

The system generates LINE138 when the system routes a call to NOSR, NOSC, or NBLH treatment.

Extension registers

There are no extension registers.

Register ACBRACT

Register ACB reactivation (ACBRACT) increases when the subscriber dials an ACB activation code for a call that already has an ACB or automatic recall request.

Register ACBRACT release history

Register ACBRACT was introduced in BCS27.

Associated registers

Regsiter ACBATT increases each time ACBRACT increases.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register ACBRSCN

Register ACB resume scanning (ACBRSCN) increases when scanning resumes for ACB. The scanning resumes for ACB after the originating office receives an indication that the called line is busy.

Register ACBRSCN release history

Register ACBRSCN was introduced in BCS27.

Associated registers

There are no associated registers.

OM group ACB (continued)

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register ACBSCR

Register ACB selective call rejection (ACBSCR) increases when the system uses the ACB against a line with the SCR option.

Register ACBSCR release history

Register ACBSCR was introduced in BCS27.

Associated registers

Register ACBIMED increases when ACBSCR increases.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register ACBSTDA

Register ACB short-term denial announcement (ACBSTDA) increases when the system routes a call to a short-term denial announcement that follows an attempt to activate ACB. The system does not process the ACB request because the called line has a call forwarding service activated.

Register ACBSTDA release history

Register ACBSTDA was introduced in BCS27.

Associated registers

Register ACBATT increases when ACBSTDA increases.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register ACBSTDT

Register ACB short-term denial tone (ACBSTDT) increases when a call receives short-term denial tone that follows an attempt to ACB.

When ACBSTDT increases, the system routes the call to one of the following treatments:

- NACK (negative acknowledgement)
- NOSR (no software resource)
- NOSC (no service circuit)
- NBLH (network blockage heavy traffic)
- FNAL (feature not allowed)
- SYFL (system failure)

Register ACBSTDT release history

Register ACBSTDT was introduced in BCS27.

Associated registers

Register ACBATT increases when ACBSTDT increases.

Associated logs

The system generates LINE138 when a subscriber receives NACK, NOSR, NOSC, NBLH, FNAL, or SYFL treatment.

Extension registers

There are no extension registers.

Register ACBSTR

Register ACB subscriber terminated requests (ACBSTR) increases when a subscriber deactivates an ACB request.

Register ACBSTR release history

Register ACBSTR 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 ACB (continued)

Register ACBTIME

Register ACB timeout (ACBTIME) counts ACB requests that exceed the time out period during delayed processing. This condition occurs when T10 or T6 expires, or when the number of ringbacks not answered reaches the maximum count.

The T6 is a duration time for ACB/AR at the originating switch that the system causes if the called party is busy.

The T10 is a timer at the originating and the terminating switches. The system uses T10 to control the total time a caller can stay in the queue for ACB/AR calls.

The system enters T6 and T10 in table RESOFC.

Register ACBTIME release history

Register ACBTIME was introduced in BCS27.

Associated registers

There are no associated registers.

Associated logs

If the line has subscriber usage-sensitive pricing (SUSP) and the system creates an automatic message accounting (AMA) record, the system generates AMAB117 when ACBTIME increases.

Extension registers

There are no extension registers.

Register ACBTSCN

Register ACB terminating scanning (ACBTSCN) increases when an ACB request receives confirmation of terminating scanning. This register increases for each ACB request.

Register ACBTSCN release history

Register ACBTSCN 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 ACBUNIV

Register ACB common access attempts (ACBUNIV) counts each time a universal user dials an ACB access code.

Register ACBUNIV release history

Register ACBUNIV was introduced in BCS35.

Associated registers

One of ACBATT or ACBDATT increases each time register ACBUNIV increases.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

OM group ACCSBNS

OM description

Automatic calling card services billed number screening (ACCSBNS)

The OM group ACCSBNS provides information on billed number screening (BNS) database queries and responses. When the subscriber or operator requests a calling card validation, third number billing, or collect call, the switching office launches a database query. The switching office launches a database query to obtain the correct validation information. The registers count query messages returned to the operator. The messages indicate if the system must verify, accept, or reject the call. The calls are for collect calls, third number billing, and public or semi-public telephones. The system returns messages to the operator that indicate that the query was not correctly answered. The query was not correctly answered because of software failures or services that are not available. The registers also count these messages.

Release history

The OM group ACCSBSNS was introduced in BCS23.

The system zeroes registers BNSDATA, BNSNETRE, BNSNOREC, BNSUNAVA, BNSTIOUT, and BNSMISCF. The system does not increase these registers. Associated registers increase in OM group ACCSBNSE.

Registers BNSSUBCG and BNSSUBFL in OM group ACCSBNSE replace register BNSDBFC.

Registers BNSNOXLA and BNSNOXLS in OM group ACCSBNSE replace register BNSSPTRA.

The system sets register BNSCOMP to zero. The system does not increase this register.

Registers BNSVCOOP and BNSVTHOP were introduced.

Register BNSNOACG was introduced.

Register BNSMISCF was introduced.

Registers

The OM group ACCSBNS register appears in the MAP terminal as follows:

BNSTOTAL	BNSVERCO	BNSNOCOL	BNSALLCO
BNSVERTH	BNSNOTH	BNSALLTH	BNSUNOWN
BNSPUBCN	BNSSEMIC	BNSPCNLS	BNSCOMP
BNSDATA	BNSNETRE	BNSNOREC	BNSUNAVA
BNSTIOUT	BNSCANQY	BNSRAFTT	BNSDBFC
BNSSPTRA	BNSACGBL	BNSMISCF	BNSNOACG
BNSVCOOP	BNSVTHOP		

Group structure

The OM group ACCSBSNS provides one tuple for each office.

Key field:
There is no key field.

Info field:
There is no info field.

Associated OM groups

ACCSBNSE
Automatic Calling Card Service (ACCS) billed number screening errors

ACCSCCV
ACCS calling card validation

ACCSCCVE
ACCS calling card validation errors

Register BNSTOTAL in OM group ACCSBNS = sum of all other registers in ACCSBNS and ACCSBNSE

Associated functional groups

The following operating groups associate with OM group ACCSBSNS ACCSBNS:

- CCS7 Common Channel Signaling 7
- TCAP Transaction Capability Application Part
- SDB Network Service Database System (for Canadian application)
- LIDB Line Information Database

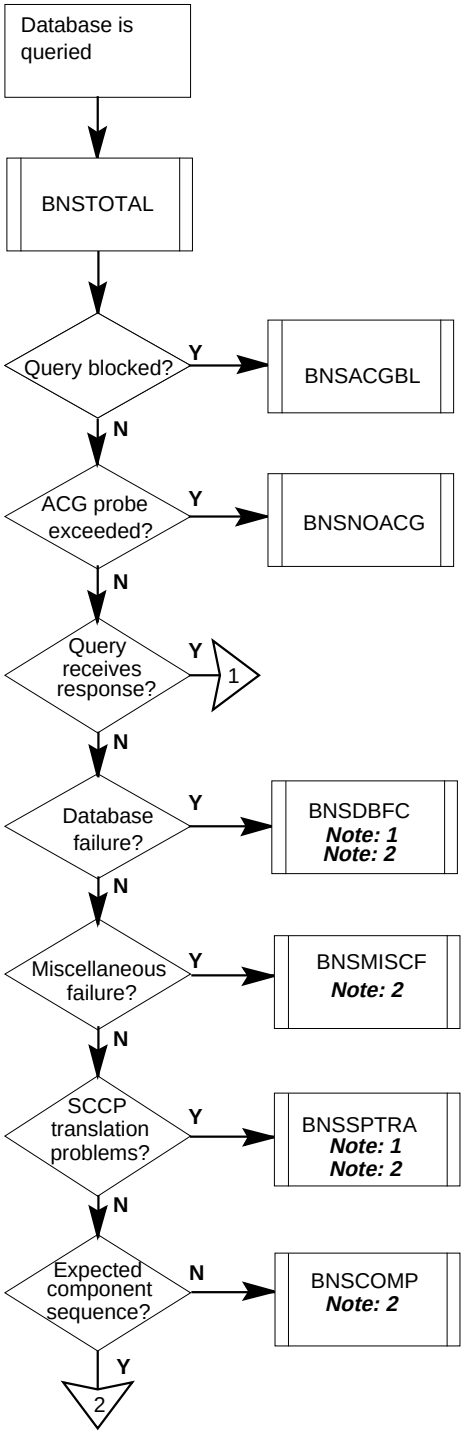
OM group ACCSBNS (continued)

Associated functionality codes

The associated functionality codes for the OM group ACCSBNS appear in the following table:

Functionality	Code
Exchange Alternate Billing Service	NTX825AA
Custom Charge Calling	NTX552AB

OM group ACCSBSNS registers

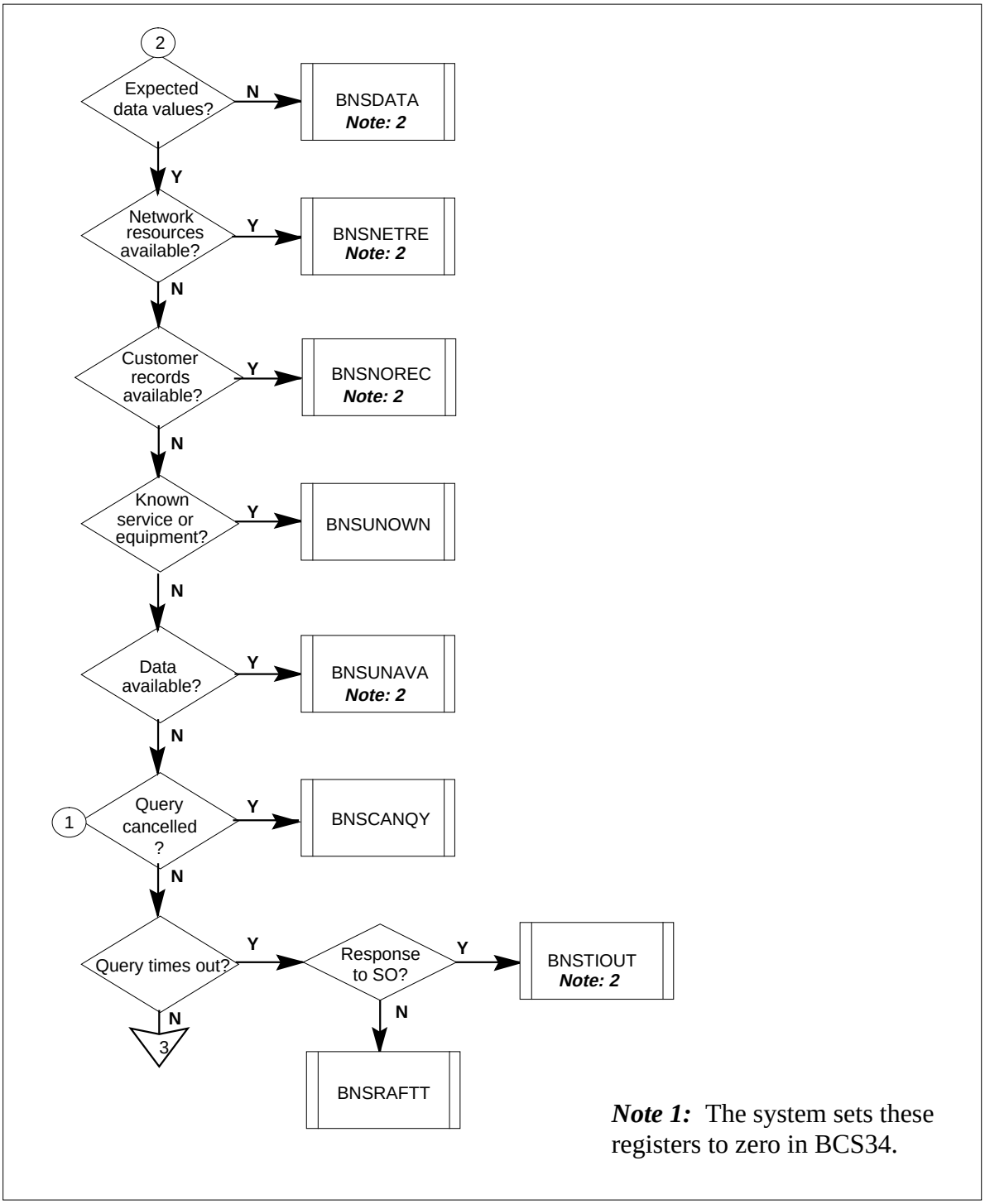


Note 1: These registers count when NT feature package NTX552AB is loaded. The system sets these registers to zero when NTX825AA is loaded.

Note 2: The system sets these registers to zero in BCS34.

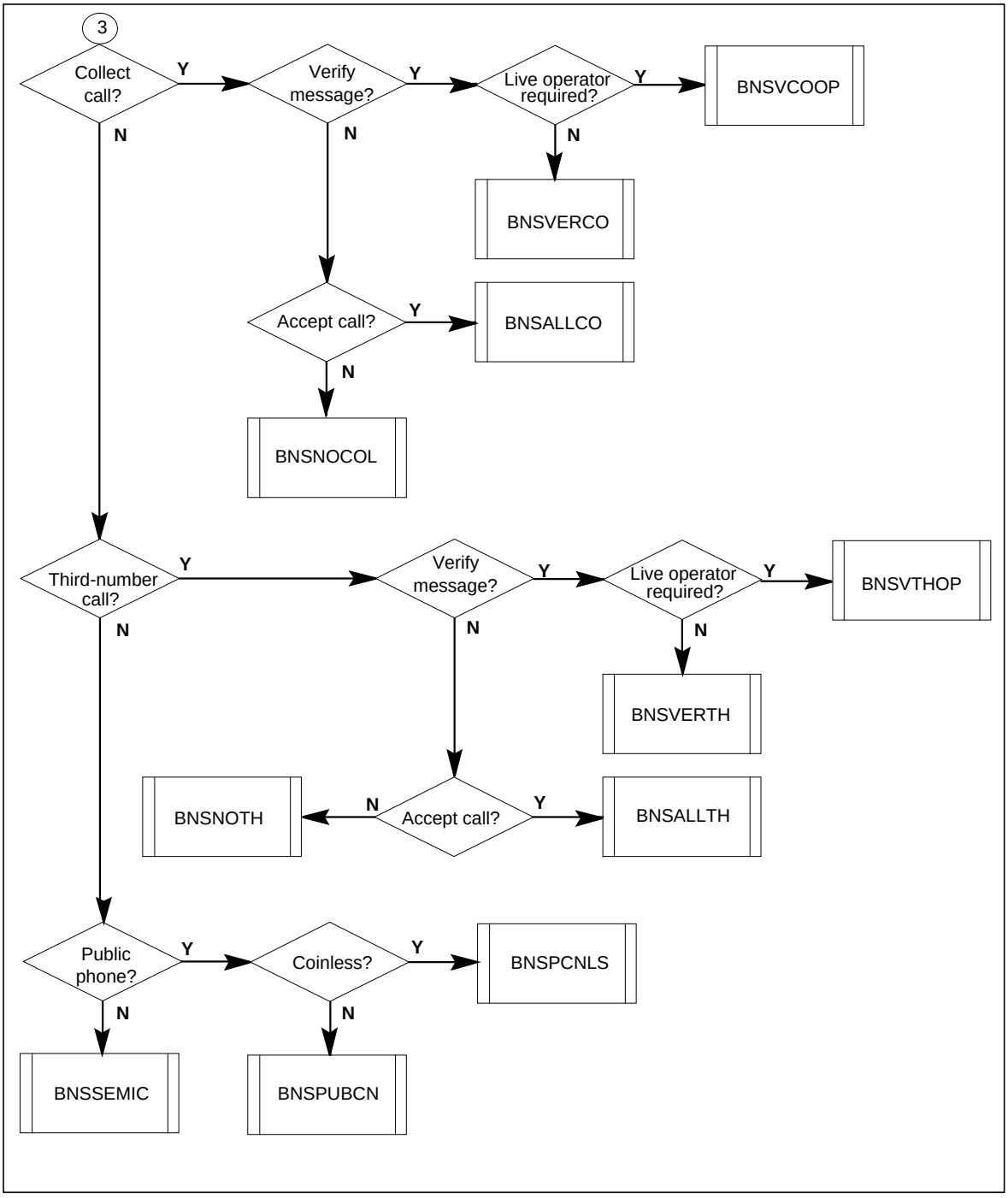
OM group ACCSBNS (continued)

OM group ACCSBSNS registers (continued)



Note 1: The system sets these registers to zero in BCS34.

OM group ACCSBSNS registers (continued)



OM group ACCSBNS (continued)

Register BNSACGBL

BNS automatic call gapping blockage (BNSACGBL)

Register BNSACGBL counts BNS database queries that the system blocks because of automatic call gapping (ACG). The ACG controls the flow of queries to a service control point (SCP) for an overload condition.

Register BNSACGBL release history

Register BNSACGBL was introduced in BCS23.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Register BNSALLCO

BNS allows collect calls (BNSALLCO)

Register BNSALLCO counts BNS database queries that the system answers with a message. This message indicates that the system allows collect calls.

Register BNSALLCO release history

Register BNSALLCO was introduced in BCS23.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Register BNSALLTH

BNS allow third number billing calls (BNSALLTH)

Register BNSALLTH counts BNS database queries that the system answers with a message. This message indicates that third-number billing calls are allowed.

Register BNSALLTH release history

Register BCS23 was introduced in BNSALLTH.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Register BNSCANQY

BNS canceled query (BNSCANQY)

Register BNSCANQY counts BNS database queries the system cancels when the subscriber abandons the call. Register BNSCANQY also counts BNS database queries when the operator cancels the query before the the system receives the database answer.

Register BNSCANQY release history

Register BNSCANQY was introduced in BCS23.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Register BNSCOMP

BNS unexpected component sequence (BNSCOMP)

Register BNSCOMP counts BNS database queries that the system returns when the system cannot answer the queries. The system cannot answer the queries because of a wrong sequence of message components.

Register BNSCOMP release history

Register BNSCOMP was introduced in BCS23.

BCS34

The system sets the register to zero. The system does not increase the register.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Register BNSDATA

BNS unexpected data value (BNSDATA)

OM group ACCSBNS (continued)

Register BNSDATA counts BNS database queries the system returns when the system cannot respond to the queries. The system cannot respond to the queries because a wrong data value is present in the query message.

Register BNSDATA release history

Register BNSDATA was introduced in BCS23.

BCS34

The system sets the register to zero. Register BNSUNEXD in OM group ACCSBNSE replaces register BNSDATA.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Register BNSDBFC

BNS database failure or congestion (BNSDBFC)

Register BNSDBFC counts BNS database queries that return when the system cannot answer the queries. The system cannot answer the queries because of database failure or database congestion.

The diagnostic field of a unit data service (UDTS) message indicates database failure or congestion. The signaling connection control point (SCCP) returns the message to the ACCS application. Diagnostic subsystem congestion indicates database congestion. Diagnostic subsystem failure indicates database failure.

Register BNSDBFC release history

Register BNSDBFC was introduced in BCS23.

BCS34

The system sets the register to zero. Registers BNSSUBFL and BNSSUBCG in OM group ACCSBNSE replace register BNSDBFC.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Register BNSMISCF

BNS miscellaneous failure conditions (BNSMISCF)

Register BNSMISCF release history

Register BNSMISCF was introduced in BCS24.

BCS34

The system sets the register to zero. Register BNSMISCE in OM group ACCSBNSE replaces register BNSMISCF.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Register BNSNETRE

BNS unavailable network resource (BNSNETRE)

Register BNSNETRE counts BNS database queries that return when the system cannot answer the queries. The system cannot answer the queries because network resources (like announcement services) are not available.

Register BNSNETRE release history

Register BNSNETRE was introduced in BCS23.

BCS34

The system sets the register to zero. Register BNSUNNET in OM group ACCSBNSE replaces register BNSNETRE.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Register BNSNOACG

BNS not blocked for automatic call gapping (BNSNOACG)

Register BNSNOACG counts BNS database queries that the system must block but did not block. The system did not block the queries because the system exceeded the maximum number of automatic call gapping probes.

OM group ACCSBNS (continued)

The ACG probes search for the messages involved when the system duplicates an ACG code.

When BNSNOACG increases, the system changes office parameter TOPS_ACCS_ACG_SIZE in table OFCENG to a higher value. Changes to the table require a cold restart.

Register BNSNOACG release history

Register BNSNOACG was introduced in BCS26.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Register BNSNOCOL

BNS no collect calls (BNSNOCOL)

Register BNSNOCOL counts BNS database queries that the system answers with a message. This message indicates that the system must not accept collect calls.

Register BNSNOCOL release history

Register BNSNOCOL was introduced in BCS23.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Register BNSNOREC

BNS no records (BNSNOREC)

Register BNSNOREC counts BNS database queries that return when the system cannot answer the queries. The system cannot answer because the system cannot find the record of the operating company.

Register BNSNOREC release history

Register BNSNOREC was introduced in BCS23.

BCS34

The system sets the register to zero. Register BNSMISSR in OM group ACCSBNSE replaces register BNSNOREC.

Associated registers

There are no associated registers.

Associated logs

There are no associated registers.

Register BNSNOTH

BNS no third-number billing calls (BNSNOTH)

Register BNSNOTH counts BNS database queries that the system answers with a message. This message indicates that the system must not accept third-number billing calls.

Register BNSNOTH release history

Register BNSNOTH was introduced in BCS23.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Register BNSPCNLS

BNS public coinless (BNSPCNLS)

Register BNSPCNLS counts BNS database queries that the system answers with a message. The message indicates that a call was from a coinless public telephone.

Register BNSPCNLS release history

Register BNSPCNLS was introduced in BCS23.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

OM group ACCSBNS (continued)

Register BNSPUBCN

BNS public coin (BNSPUBCN)

Register BNSPUBCN counts BNS database queries that the system answers with a message. The message indicates that a call was from a public coin telephone.

Register BNSPUBCN release history

Register BNSPUBCN was introduced in BCS23.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Register BNSRAFTT

BNS returned after time out (BNSRAFTT)

Register BNSRAFTT counts BNS database answers that the system receives for queries that exceed the timed off period. The system cannot distinguish these replies from unsolicited messages from the database to the switching office.

Register BNSRAFTT release history

Register BNSRAFTT was introduced in BCS23.

Associated registers

Register BNSRAFTT increases when register BNSTIOUT increases.

Associated logs

There are no associated logs.

Register BNSSEMIC

BNS semi-public coinless (BNSSEMIC)

Register BNSSEMIC counts BNS database queries the system answers with a message. The message indicates that a call was from a coinless semi-public phone.

Register BNSSEMIC release history

Register BNSSEMIC was introduced in BCS23.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Register BNSSPTRA

BNS signaling connection control point translation problem (BNSSPTRA)

Register BNSSPTRA counts BNS database queries that return when the system cannot answer the queries. The system cannot answer the queries because of connection control point (SCCP) translation problems.

The diagnostic field of a unit data service (UDTS) message indicates SCCP translation problems. The SCCP returns the UDTS message to the ACCS application. The diagnostic field reads no translation for an address of this type. The diagnostic field reads no translation for this specific address to indicate SCCP translation problems.

Register BNSSPTRA release history

Register BNSSPTRA was introduced in BCS23.

BCS34

The system sets the register to zero. Registers BNSNOXLA and BNSNOXLS in OM group ACCSBNSE replace register BNSSPTA.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Register BNSTIOUT

BNS timed out (BNSTIOUT)

Register BNSTIOUT counts BNS database queries that exceed the time out period before the queries receive a database response.

Register BNSTIOUT release history

Register BNSTIOUT was introduced in BCS23.

OM group ACCSBNS (continued)

BCS34

The system sets the register to zero. Register BNSTMOUT in OM group ACCSBNSE replaces register BNSTIOUT.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Register BNSTOTAL

BNS Total number of billed number screening queries (BNSTOTAL)

Register BNSTOTAL counts BNS database queries.

Register BNSTOTAL release history

Register BNSTOTAL was introduced in BCS23.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Register BNSUNAVA

BNS data unavailable (BNSUNAVA)

Register BNSUNAVA counts BNS database queries that return because the requested operation is not available in the database.

Register BNSUNAVA release history

Register BNSUNAVA was introduced in BCS23.

BCS34

The system sets the register to zero. Register BNSDATUN in OM group ACCSBNSE replaces register BNSUNAVA.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Register BNSUNOWN

BNS service or equipment not known (BNSUNOWN)

Register BNSUNOWN counts BNS database queries that return when the system cannot answer the queries. The system cannot answer the system does not know the service or equipment.

Register BNSUNOWN release history

Register BNSUNOWN was introduced in BCS23.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Register BNSVCOOP

BNS verify collect calls with live operator (BNSVCOOP)

Register BNSVCOOP counts BNS database queries that the system answers with a message. The message indicates that the collect call requires live operator validation.

Register BNSVCOOP release history

Register BNCVCOOP was introduced in BCS34.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Register BNSVERCO

BNS verify collect call (BNSVERCO)

Register BNSVERCO counts BNS database queries that the system answers with a message. The message indicates that the system must verify a collect call.

BNSVERCO release history

Register BNSVERCO was introduced in BCS23.

OM group ACCSBNS (end)

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Register BNSVERTH

BNS verify third-number billing calls (BNSVERTH)

Register BNSVERTH counts BNS database queries that the system answers with a message. The message indicates that the system must verify the third number billing call.

Register BNSVERTH release history

Register BNSVERTH was introduced in BCS23.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Register BNSVTHOP

BNS verify third-number billing calls with live operator (BNSVTHOP)

Register BNSVTHOP counts BNS database queries that the system answers with a message. This message indicates that third-number billing calls require live operator validation.

Register BNSVTHOP release history

Register BNSVTHOP was introduced in BCS34.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

OM group ACCSBNSE

OM description

Automatic Calling Card Service (ACCS) billed number screening errors (ACCSBNSE)

The OM group ACCSBNSE counts different network errors that occur with queries to the billed number screening (BNS) line information database (LIDB). The BNS consists of collect and third number billing LIDB queries.

Some registers in ACCSBNSE replace registers in OM group ACCSBNS because group ACCSBNS does not count error responses.

Errors that occur when the system launches an LIDB query are in the following categories:

- signaling connection control part (SCCP)
- transaction capability application part (TCAP)
- miscellaneous errors

The SCCP errors occur during routing. The system stores the reason for failure in the diagnostic field of the SCCP part of the message. The TCAP layer errors occur at or near the LIDB. The system stores the reason for failure (if caused by protocol problems) in the problem code field of the TCAP part of the message. Other LIDB errors can cause the failure. The system stores these reasons in the error-code field of the TCAP part of the message. The system also stores both reasons for failure in the error code field of the TCAP part of the message.

Release history

The OM group ACCSBNSE was introduced in BCS34.

Registers

The OM group ACCSBNSE registers appear at the MAP terminal as follows:

```
BNSNOXLS    BNSUNEQU    BNSNETFL    BNSNETCG
BNSSUBFL    BNSSUBCG    BNSNOXLA    BNSPROTP
BNSUNEXD    BNSUNNET    BNSMISSR    BNSDATUN
BNSSCRND    BNSMISRT    BNSMISGR    BNSVACGR
BNSNONGR    BNSTMOUT    BNSMISCE
```

OM group ACCSBNSE (continued)

Group structure

The OM group ACCSBNSE provides one tuple for each office.

Key field:
There is no key field.

Info field:
There is no info field.

Associated OM groups

The following are associated OM groups: ACCSBNS ACCS billed number screening.

The following are associated OM groups:

- ACCSBNS ACCS billed number screening.
- ACCSCCV ACCS calling card validation.
- ACCSCCVE ACCS calling card validation errors.

The count in register BNSTOTAL in OM group ACCSBNS equals the total of other register counts in OM groups ACCSBNS and ACCSBNSE.

Associated functional groups

The TOPS offices have exchange alternate billing service (EABS). These offices perform LIDB queries for the following:

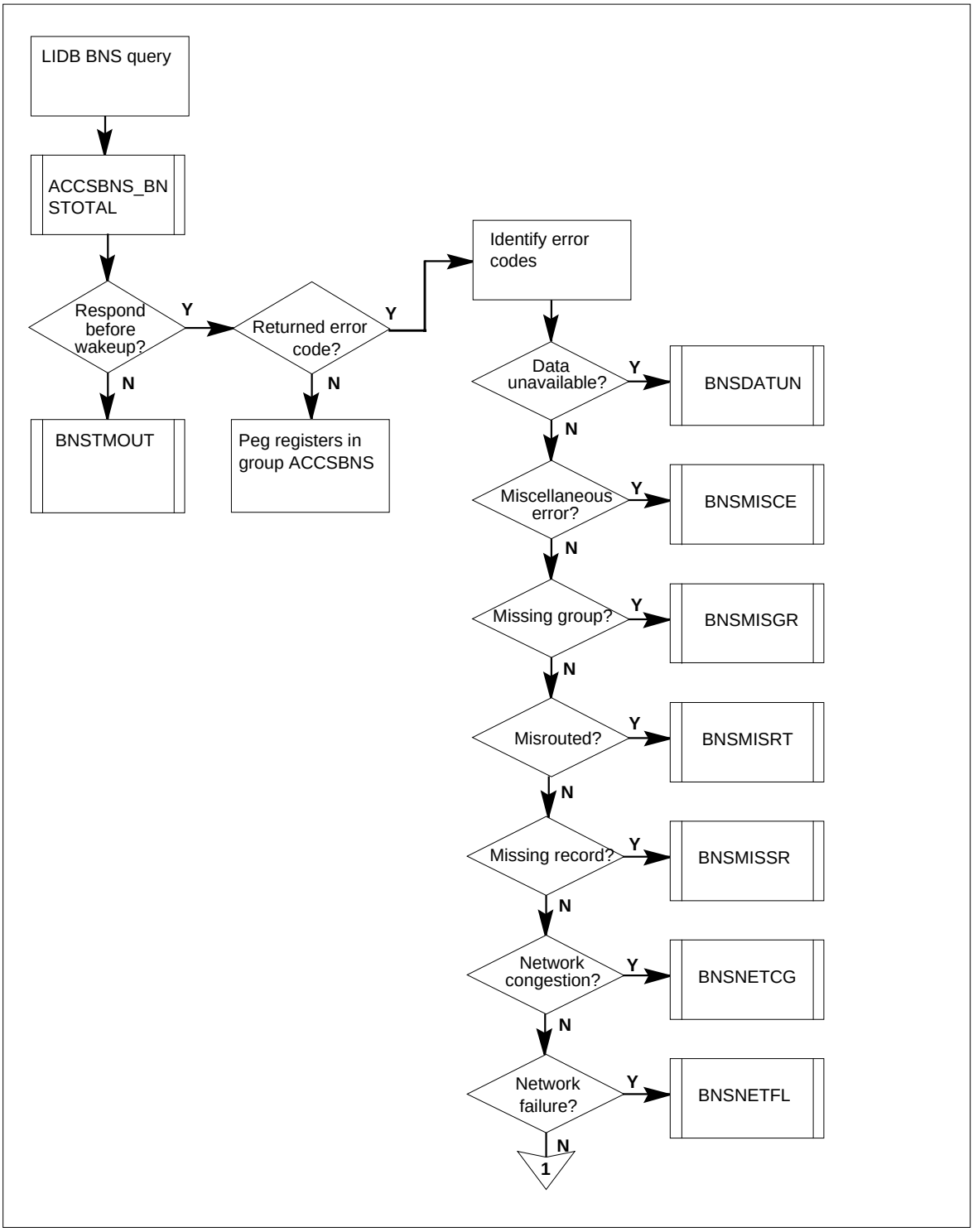
- CCITT calling cards
- domestic calling cards
- third-number billing
- collect billing

Associated functionality codes

The associated functionality codes for the OM group ACCSBNSE appear in the following table:

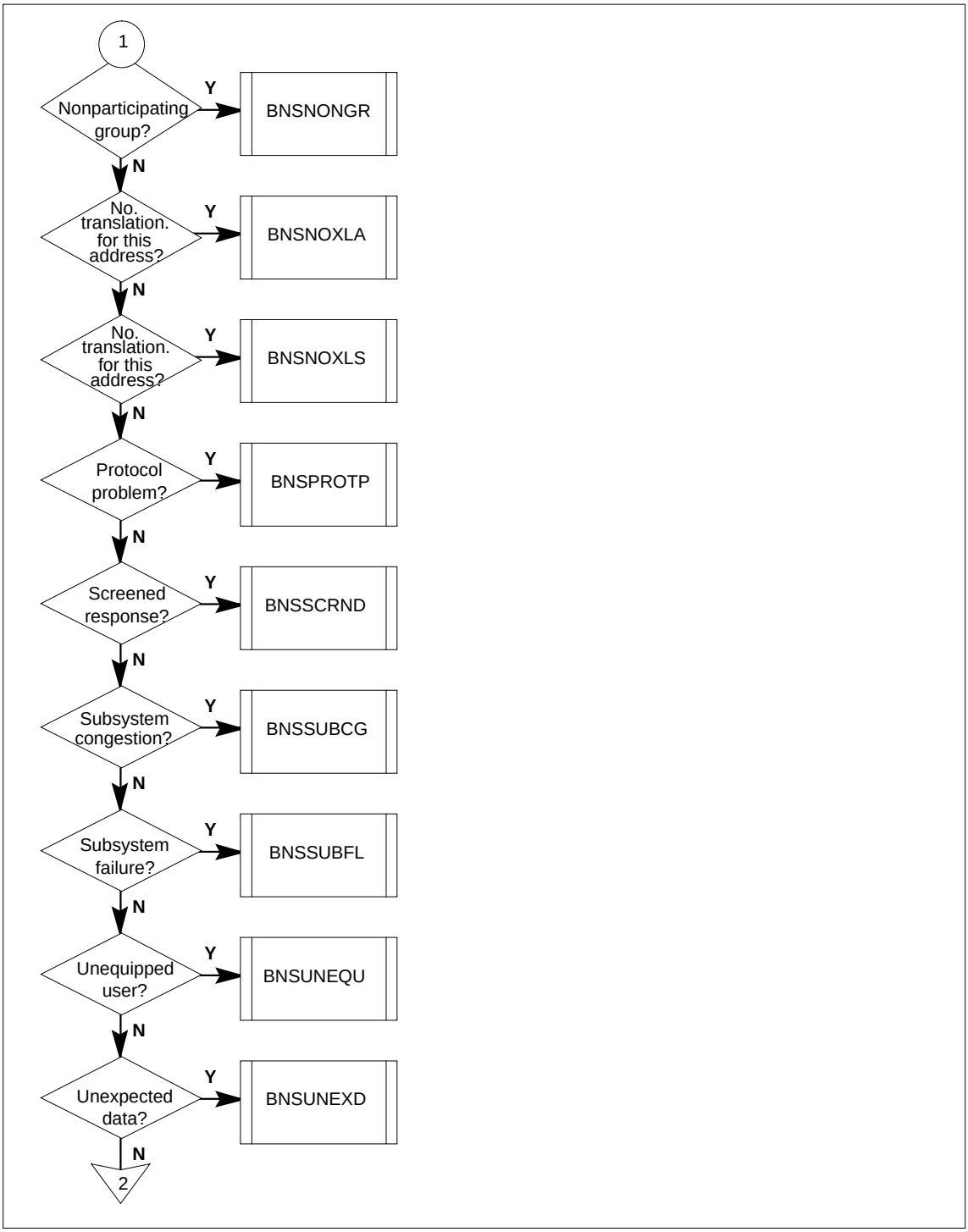
Functionality	Code
Exchange Alternate Billing Service	NTX825AB

OM group ACCSBNSE registers

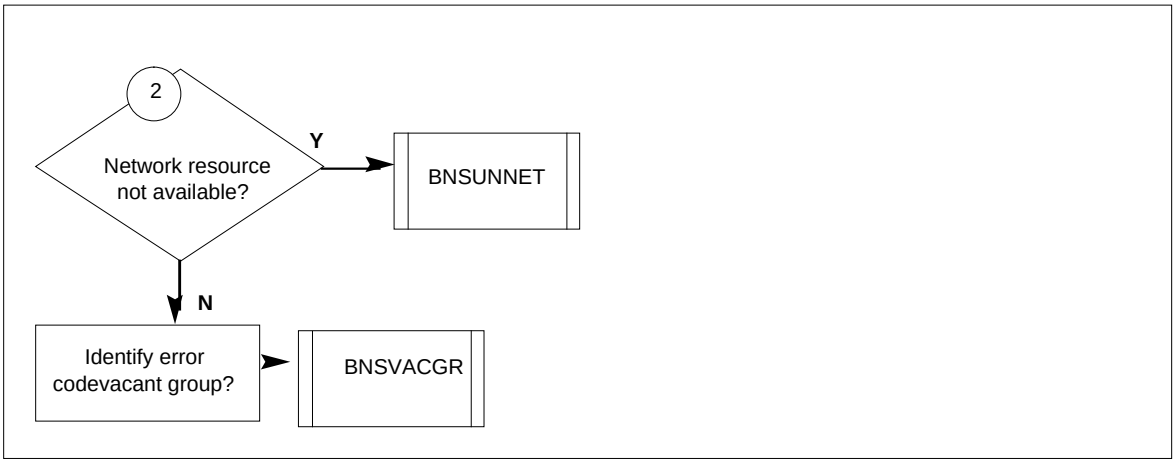


OM group ACCSBNSE (continued)

OM group ACCSBNSE registers (continued)



OM group ACCSBNSE registers (continued)



Register BNSDATUN

BNS data unavailable (BNSDATUN)

Register BNSDATUN increases when an LIDB query validates a billing number and receives the data unavailable error code. An empty or non-participating group can cause this error.

Register BNSDATUN release history

Register BNSDATUN was introduced in BCS34 .

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Register BNSMISCE

BNS miscellaneous error (BNSMISCE)

Register BNSMISCE increases when an LIDB query validates a billing number and receives the miscellaneous error error code. The response message contains the error code. The system generates this error if the call gapping feature is on. The system also generates this error if the activity at the LIDB exceeds the maximum set by the call gapping parameters.

Register BNSMISCE release history

Register BNSMISCE was introduced in BCS34.

OM group ACCSBNSE (continued)

Associated registers

Register BNSMISCE replaces register BNSMISCF in OM group ACCSBNS.

Associated logs

There are no associated logs.

Register BNSMISGR

BNS missing group (BNSMISGR)

Register BNSMISGR increases when an LIDB query validates a billing number and receives the missing group error code. The response message contains the error code. This error occurs when the LIDB receives a request for information from outside the supported domain.

Register BNSMISGR release history

Register BNSMISGR was introduced in BSC34.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Register BNSMISRT

BNS misrouted (BNSMISRT)

Register BNSMISRT increases when an LIDB query to validate a billing number results in a response message with the misrouted error code. This error occurs when the LIDB receives a request for information from outside the supported domain.

Register BNSMISRT release history

Register BNSMISRT was introduced in BCS34.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Register BNSMISSR

BNS misrouted (BNSMISSR)

Register BNSMISSR increases when an LIDB query to validate a billing number receives the missing record error code. The response message contains the error code. This error occurs when the line number or special billing number required to process this query is missing in the LIDB.

Register BNSMISSR release history

Register BNSMISSR was introduced in BCS34.

Associated registers

Register BNSMISSR replaces register BNSNOREC in OM group ACCSBNS.

Associated logs

There are no associated logs.

BNSNETCG

BNS network congestion (BNSNETCG)

Register BNSNETCG increases when an LIDB query to validate a billing number receives the network congestion error code. The response messages contains the error code. This error occurs when the CCS7 network is congested.

Register BNSNETCG release history

Register BNSNETCG was introduced in BCS34.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

BNSNETFL

BNS network failure (BNSNETFL)

Register BNSNETFL increases when an LIDB query to validate a billing number receives the network failure error code. The response message contains the error code. This error occurs when the CCS7 network fails.

Register BNSNETFL release history

Register BNSNETFL was introduced in BCS34.

Associated registers

There are no associated registers.

OM group ACCSBNSE (continued)

Associated logs

There are no associated logs.

Register BNSNONGR

BNS nonparticipating group (BNSNONGR)

Register BNSNONGR increases each time an LIDB query to validate a billing number receives the error code Nonparticipating Group. The response message contains the error code. This error occurs when the number belongs to the domain of an exchange carrier that does not participate in LIDB-based services.

Register BNSNONGR release history

Register BNSNONGR was introduced to BCS34.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Register BNSNOXLA

BNS no translation for any such address (BNSNOXLA)

Register BNSNOXLA increases each time an LIDB query to validate a billing number receives an error code. The error code is No Translation for Any Such Address. The response message contains the error code. This error indicates an important signaling connection control part (SCCP) operational problem. This operational problem is in the operator services system (OSS) or in the signaling transfer point (STP).

Register BNSNOXLA release history

Register BNSNOXLA was introduced to BCS34.

Associated registers

Register BNSDBFC in OM group ACCSBNS counts BNSNOXLA and BNSNOXLS count errors at an earlier time.

Associated logs

There are no associated logs.

Register BNSNOXLS

BNS no translation for this exact address (BNSNOXLS)

Register BNSNOXLS increases each time an LIDB query to validate a billing number receives an error code. The error code is No Translation for This Exact Address. The response message contains the error code. This error occurs when the STP does not have an entry in its translation table for this global title.

Register BNSNOXLS release history

Register BNSNOXLS was introduced to BCS34.

Associated registers

Register BNSDBFC in OM group ACCSBNS counts BNSNOXLS and BNSNOXLA count errors at an earlier time.

Associated logs

There are no associated logs.

Register BNSPROTP

BNS protocol problem (BNSPROTP)

Register BNSPROTP increases each time an LIDB query to validate a billing number receives the protocol problem error code. The response message contains the error code. This error occurs when the LIDB query is not formatted according to protocol.

Register BNSPROTP release history

Register BNSPROTP was introduced to BCS34.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Register BNSSCRND

BNS screened response (BNSSCRND)

Register BNSSCRND increases each time an LIDB query to validate a billing number receives the screened response error code. The response message contains the error code. This error occurs when the operator services system (OSS) is not authorized to access the requested data.

Register BNSSCRND release history

Register BNSSCRND was introduced to BCS34.

OM group ACCSBNSE (continued)

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Register BNSSUBCG

BNS subsystem congestion (BNSSUBCG)

Register BNSSUBCG increases each time an LIDB query to validate a billing number receives the error code Subsystem Congestion. The response message contains the error code. This error occurs when the LIDB node is congested.

Register BNSSUBCG release history

Register BNSSUBCG was introduced to BCS34.

Associated registers

Register BNSSUBCG counts subsystem congestion errors that BNSDBFC in OM group ACCSBNSE counted earlier.

Associated logs

There are no associated logs.

Register BNSSUBFL

BNS subsystem failure (BNSSUBFL)

Register BNSSUBFL increases each time an LIDB query to validate a billing number receives the error code Subsystem Failure. The response message contains the error code. This error occurs when the LIDB node fails.

Register BNSSUBFL release history

Register BNSSUBFL was introduced to BCS34.

Associated registers

Register BNSSUBFL counts subsystem failures that BNSDBFC in OM group ACCSBNS counts at an earlier time.

Associated logs

There are no associated logs.

Register BNSTMOUT

BNS timeout (BNSTMOUT)

Register BNSTMOUT increases when an LIDB query to validate a billing number does not receive a response message in the time limit. This miscellaneous error occurs because of a failure or an excessive delay in the signaling network. This type of an error is an SCCP error. This miscellaneous error also occurs because of a failure in the target LIDB. This type of error is a TCAP error.

Register BNSTMOUT release history

Register BNSTMOUT was introduced to BCS34.

Associated registers

Register BNSTMOUT replaces BNSTIOUT in OM group ACCSBNS.

Associated logs

There are no associated logs.

Register BNSUNEQU

BNS equipped user (BNSUNEQU)

Register BNSUNEQU increases each time an LIDB query to validate a billing number receives the unequipped user error code. The response message contains the error code. This error occurs as a result of corrupt addressing information in the called party address parameter of the query message.

Register BNSUNEQU release history

Register BNSUNEQU was introduced to BCS34.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Register BNSUNEXD

BNS unexpected data (BNSUNEXD)

Register BNSUNEXD increases each time an LIDB query to validate a billing number receives the unexpected data error code. The response message contains the error code. This error occurs when a matching personal identification number (PIN) is not found.

Register BNSUNEXD release history

Register BNSUNEXD was introduced to BCS34.

OM group ACCSBNSE (end)

Associated registers

Register BNSUNEXD replaces BNSDATA in OM group ACCSBNS.

Associated logs

There are no associated logs.

Register BNSUNNET

BNS unavailable network resource (BNSUNNET)

Register BNSUNNET increases each time an LIDB query to validate a billing number receives the unavailable network resource error code. The response message contains the error code. This error occurs if the LIDB is not equipped to process a type of query.

Register BNSUNNET release history

Register BNSUNNET was introduced to BCS34.

Associated registers

Register BNSUNNET replaces BNSNETRE in OM group ACCSBNS.

Associated logs

There are no associated logs.

Register BNSVACGR

BNS vacant group (BNSVACGR)

Register BNSVACGR increases each time an LIDB query to validate a billing number receives the error code Vacant Group. The response message contains the error code. This error occurs when a segment of the number does not have any associated correct individual account numbers.

Register BNSVACGR release history

Register BNSVACGR was introduced to BCS34.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

OM group ACCSCCV

OM description

Automatic Calling Card Service calling card validation

ACCSCCV provides information on calling card validation (CCV) database queries and responses. When a subscriber or operator requests a CCV, third number billing, or a collect call, the switching office launches a database query. Use the database query to obtain the correct validation information. CCV numbers consist of a ten-digit calling card account number (CCAN) and a four-digit personal identification number (PIN).

ACCSCCV counts messages that return to the operator that indicate that the query was answered without success. The queries were answered without success because of software failure, services that are not available, or invalid calling card numbers.

Registers CCVRAFTT, CCVDBFC, and CCVSPTRA are set to zero when feature package NTX825AA is loaded.

Release history

OM group ACCSCCV is added to BCS23.

BCS34

Registers CCVDATA, CCVNETRE, CCVNOREC, CCVUNAVA, CCVTIOUT, and CCVMISCF are set to zero and no longer increase. Corresponding registers are increase in operational measurements (OM) group ACCSCCVE.

Registers CCVSUBCG and CCVSUBFL in OM group ACCSCCVE replace register CCVDBFC.

Registers CCVNOXLA and CCVNOXLS in OM group ACCSCCVE replace register CCVSPTRA.

Register CCVCOMP is set to zero and is no longer increased.

BCS31

Register CCVSVRES is added. Registers increase by ACCS for the Australian market.

BCS26

Register CCVNOACG is added.

OM group ACCSCCV (continued)

BCS24

Register CCVMISCF is added.

Registers

The MAP terminal displays OM group ACCSCCV as follows:

```
CCVTOTAL    CCVNOPIN    CCVCCDEN    CCVPINHT
CCVPINUN    CCVPINRE    CCVTHREX    CCVNOPAY
CCVCOMP     CCVDATA     CCVNETRE    CCVNOREC
CCVUNAVA    CCVTIOUT    CCVCANQY    CCVRAFTT
CCVDBFC     CCVSPTRA    CCVACGBL    CCVMISCF
CCVNOACG    CCVSVRES
```

Group structure

OM group ACCSCCV provides one tuple per office.

Key field:

There are no associated key fields

Info field:

There are no associated info fields

Associated OM groups

ACCSBNS

Automatic calling card service (ACCS) billed number screening

ACCSBNSE

ACCS billed number screening errors

ACCSCCVE

ACCS calling card validation errors

Register CCVTOTAL in OM group ACCSCCV records the sum of all other registers in groups ACCSCCV and ACCSCCVE.

Associated operating groups

The following are operating groups that associate with OM group ACCSCCV:

CCS7

Common Channel Signaling 7

TCAP
Transaction Capability Application Part

SDB
Network Service Database System (for Canadian application)

LIDB
Line Information Database

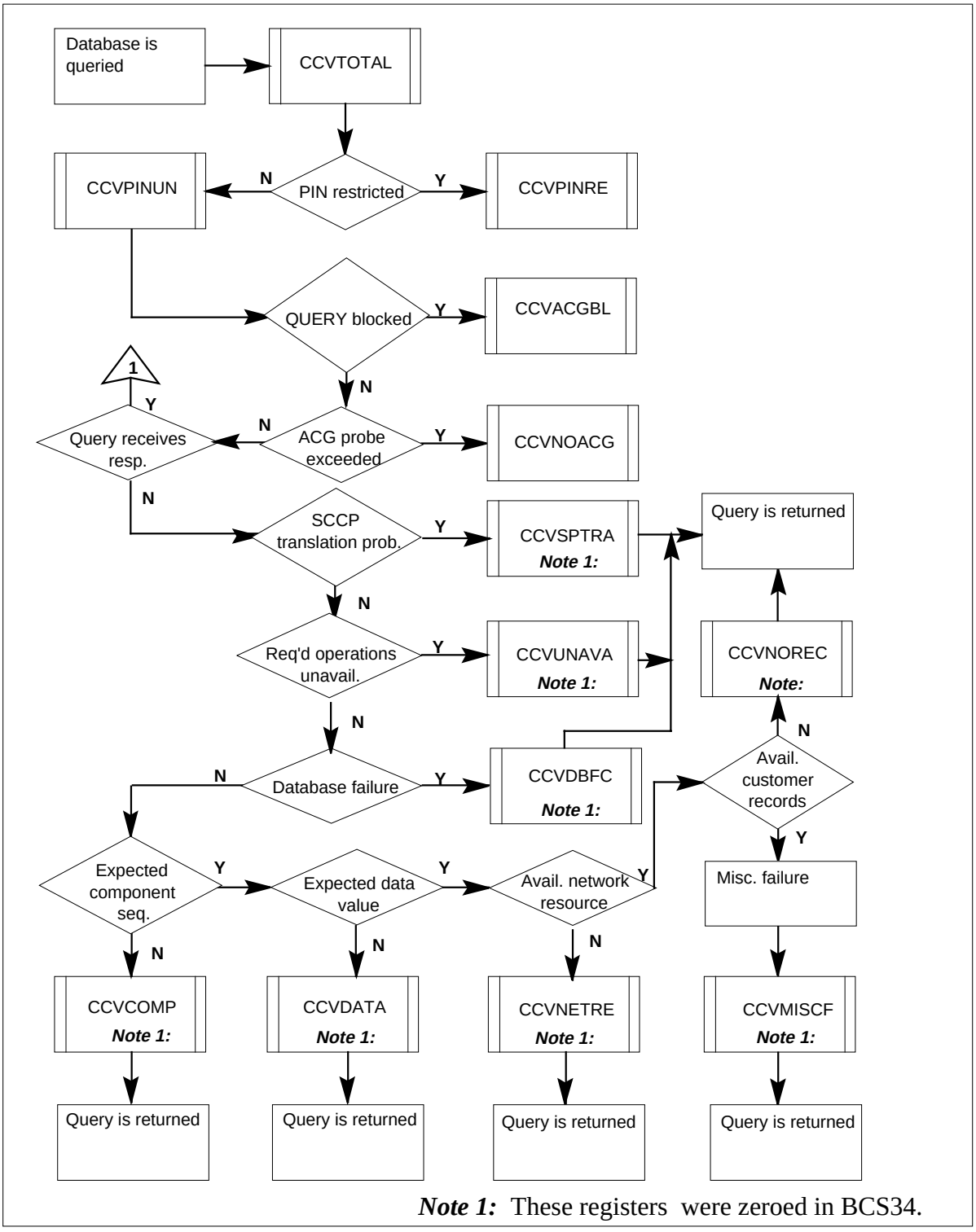
Associated functionality codes

The following table shows the functionality codes associated with OM group ACCSCCV.

Functionality	Code
Australian ACCS Support	NTXH48AA
Exchange Alternate Billing Service	NTX825AA
Custom Charge Calling	NTX552AB

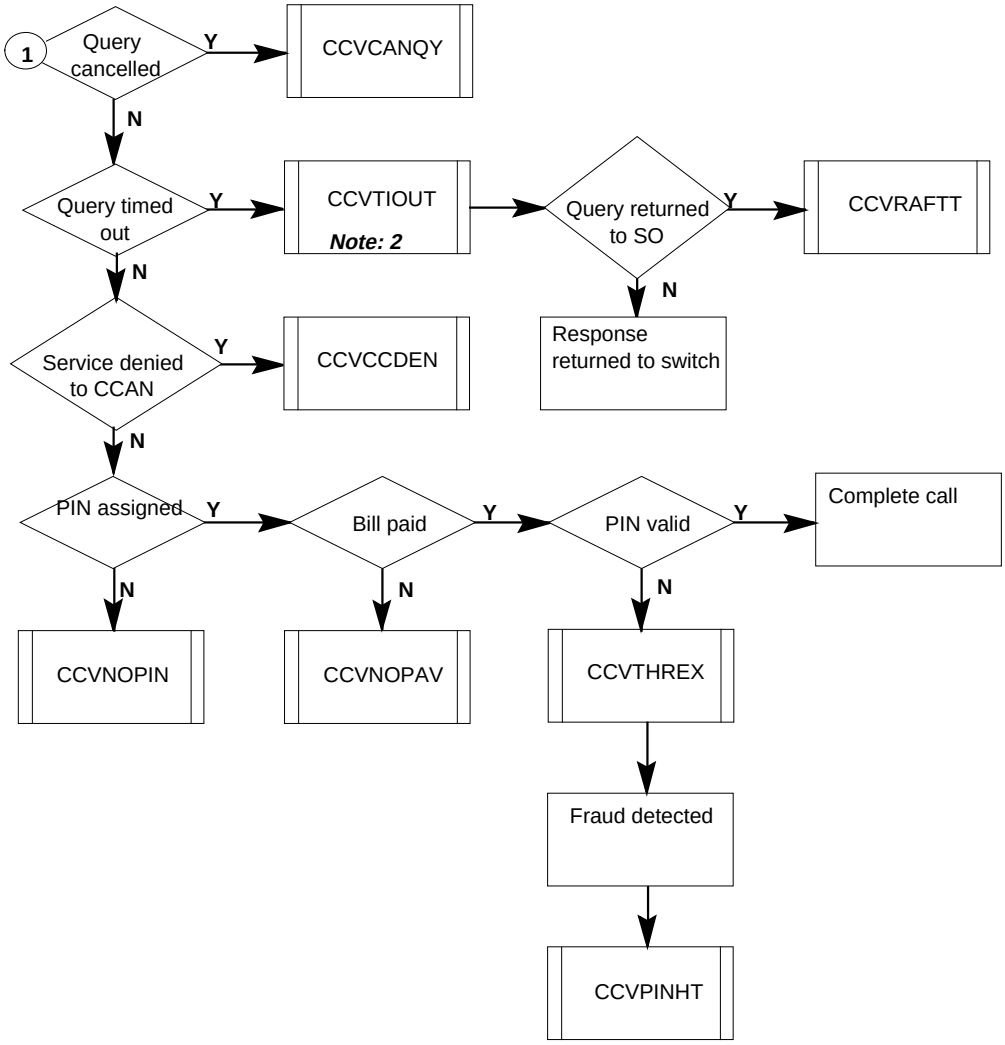
OM group ACCSCCV (continued)

OM group ACCSCCV registers



Note 1: These registers were zeroed in BCS34.

OM group ACCSCCV registers (continued)



Note 1: This register was zeroed in BCS34.

Register CCVACGBL

CCV automatic call gapping blockage.

CCVACGBL counts CCV database queries that the system blocks because of automatic call gapping (ACG). ACG controls the flow of queries to a service control point (SCP) during an overload condition.

Register CCVACGBL release history

CCVACGBL is added to BCS23.

OM group ACCSCCV (continued)

BCS31

CCVACGBL increases for the Australian market.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Register CCVCANQY

CCV canceled queries.

CCVCANQY counts CCV database queries that the system cancels when the subscriber abandons the call. CCVCANQY also counts CCV database queries when the operator cancels the query before the database answer is received.

Register CCVCANQY release history

CCVCANQY is added to BCS23.

BCS31

CCVCANQY increases for the Australian market.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Register CCVCCDEN

CCV calling card account number denied.

CCVCCDEN counts CCV database queries that return because the system denies service on the calling card account number (CCAN).

Register CCVCCDEN release history

CCVCCDEN is added to BCS23.

BCS31

CCVCCDEN increases for the Australian market.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Register CCVCOMP

CCV unexpected component sequence.

CCVCOMP counts CCV database queries that return because of a wrong sequence of message components.

Register CCVCOMP release history

CCVCOMP is added to BCS23.

BCS34

Register is set to zero and no longer incremented.

BCS31

CCVCOMP increases for the Australian market.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Register CCVDATA

CCV incorrect data value.

CCVDATA counts CCV database queries that return because of a wrong data value in the query message.

Register CCVDATA release history

BCS23 introduces CCVDATA.

BCS34

Register is set to zero zeroed and register CCVUNEXD in OM group ACCSCCVE replaces the register.

BCS31

CCVDATA increases for the Australian market.

Associated registers

There are no associated registers.

OM group ACCSCCV (continued)

Associated logs

There are no associated logs.

Register CCVDBFC

CCV database failure or congestion.

CCVDBFC counts CCV database queries that return because of database failure or database congestion.

The diagnostic field of a unit data service (UDTS) message indicates database failure or congestion. The signaling connection control part (SCCP) returns the message to the automatic calling card service (ACCS) application. Diagnostic subsystem congestion indicates database congestion. Diagnostic subsystem failure indicates database failure.

Register CCVDBFC release history

CCVDBFC is added to BCS23.

BCS34

Register is set to zero and registers CCVSUBFL and CCVSUBCG in OM group ACCSCCVE replace the register.

BCS31

CCVDBFC increases for the Australian market.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Register CCVMISCF

CCV miscellaneous failures.

CCVMISCF counts CCV database queries that return for reasons other than those that other registers count.

Register CCVMISCF release history

CCVMISCF is added to BCS24.

BCS34

Register is set to zero and register CCVMISCE in OM group ACCSCCVE replaces the register.

BCS31

CCVMISCF increases for the Australian market.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Register CCVNETRE

CCV unavailable network resource.

CCVNETRE counts CCV database queries that return when they are unanswered because network resources (like announcement services) are not available.

Register CCVNETRE release history

BCS23 introduces CCVNETRE.

BCS34

Register is zeroed and register CCVUNNET in OM group ACCSCCVE replaces the register.

BCS31

CCVNETRE increases for the Australian market.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Register CCVNOACG

CCV not blocked for automatic call gapping.

CCVNOACG counts CCV database queries that the system should block but does not because the maximum number of automatic call gapping (ACG) probes is exceeded.

ACG probes search for messages that are affected when an ACG code is duplicated.

OM group ACCSCCV (continued)

When CCVNOACG is counted, the system should change office parameter TOPS_ACCS_ACG_SIZE in table OFCENG to a higher value. The table change requires a cold restart.

Register CCVNOACG release history

CCVNOACG is added to BSC26.

BCS31

CCVNOACG increases for the Australian market.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Register CCVNOPAY

CCV nonpayment.

CCVNOPAY counts CCV database queries that return to the system when service is denied to a personal identification number (PIN) because of a bill that is not paid.

Register CCVNOPAY release history

CCVNOPAY is added to BCS23.

BCS31

CCVNOPAY increases for the Australian market.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Register CCVNOPIN

CCV no personal identification number.

CCVNOPIN counts CCV database queries that return to the system because the calling card account number (CCAN) is not assigned a personal identification number (PIN).

Register CCVNOPIN release history

CCVNOPIN is added to BCS23.

BCS31

CCVNOPIN increases for the Australian market.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Register CCVNOREC

CCV missing customer record.

CCVNOREC counts CCV database queries that return when they cannot be answered because a subscriber record is missing.

Register CCVNOREC release history

CCVNOREC is added to BCS23.

BCS34

Register is set to zero and register CCVMISSR in OM group ACCSCCVE replaces the register.

BCS31

CCVNOREC increases for the Australian market.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Register CCVPINHT

CCV personal identification number hunting.

CCVPINHT counts CCV database queries that the system answers with a message that indicates that the subscriber tries to enter a personal identification number (PIN) too many times. If the number of tries exceeds a specified threshold within a specified time period, the charge card number is disabled. Suspicion of toll fraud is recorded.

OM group ACCSCCV (continued)

Register CCVPINHT release history

CCVPINHT is added to BCS23.

BCS31

CCVPINHT increases for the Australian market.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Register CCVPINRE

CCV personal identification number restricted.

CCVPINRE counts CCV database queries that are made with a restricted personal identification number (PIN). A restricted PIN permits only station-to-station calls to a billing number with collect service or subscriber-dialed calling card service calls.

Register CCVPINRE release history

BCS23 introduces CCVPINRE.

BCS31

CCVPINRE increases for the Australian market.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Register CCVPINUN

CCV personal identification number unrestricted.

CCVPINUN counts CCV database queries that are made with an unrestricted personal identification number (PIN). An unrestricted PIN is correct for calls to all destinations and may be used for station or person billing.

Register CCVPINUN release history

CCVPINUN is added to BCS23.

BCS31

CCVPINUN increases for the Australian market.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Register CCVRAFTT

CCV returned after time out.

CCVRAFTT counts CCV database answers that are received for queries that have timed out. These replies are not distinguished from unsolicited messages from the database to the switching office.

Register CCVRAFTT release history

CCVRAFTT is added to BCS23.

BCS31

CCVRAFTT increases for the Australian market.

Associated registers

When register CCVRAFTT increases, register CCVTIOUT also increases.

Associated logs

There are no associated logs.

Register CCVSPTRA

CCV signaling connection control part translation problem.

CCVSPTRA counts CCV database queries that return when they are not answered because of signaling connection control part (SCCP) translation problems.

The diagnostic field of a unit data service (UDTS) message indicates SCCP translation problems. The SCCP returns the message to the ACCS application. The following diagnostic indicators indicate SCCP translation problems:

- no translation for any such address
- no translation for this exact address

CCVSPTRA is set to zero when feature package NTX825AA is loaded.

OM group ACCSCCV (continued)

Register CCVSPTRA release history

CCVSPTRA is added to BCS23.

BCS34

Register is set to zero and registers CCVNOXLA and CCVNOXLS in OM group ACCSCCVE replace the register.

BCS31

CCVSPTRA increases for the Australian market.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Register CCVSVRES

CCV service restriction.

CCVSVRES is inactive.

Register CCVSVRES release history

CCVSVRES is added to BCS31.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Register CCVTHREX

CCV exceeded billing threshold.

CCVTHREX counts CCV database queries that return because the personal identification number (PIN) is invalid for any reason other than a bill that is not paid.

Register CCVTHREX release history

CCVTHREX is added to BCS23.

BCS31

CCVTHREX increases for the Australian market.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Register CCVTIOUT

CCV timed out.

CCVTIOUT counts CCV database queries that time out before they receive a database response.

Register CCVTIOUT release history

CCVTIOUT is added to BCS23.

BCS34

Register is set to zero and register CCVTMOUT in OM group ACCSCCVE replaces the register.

BCS31

CCVTIOUT increases for the Australian market.

Associated registers

CCVTIOUT increases when register CCVRAFTT increases.

Associated logs

There are no associated logs.

Register CCVTOTAL

Total number of calling card validation (CCV) queries.

CCVTOTAL counts CCV database queries.

Register CCVTOTAL release history

BCS23 introduces CCVTOTAL.

BCS31

CCVTOTAL increases for the Australian market.

Associated registers

There are no associated registers.

OM group ACCSCCV (end)

Associated logs

There are no associated

Register CCVUNAVA

CCV data unavailable.

CCVUNAVA counts CCV database queries that return because the requested operation is not available in the database.

Register CCVUNAVA release history

CCVUNAVA is added to BCS23.

BCS31

CCVUNAVA increases for the Australian market.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

OM group ACCSCCVE

OM description

Automatic calling card service, calling card validation errors

OM group ACCSCCVE counts various network errors that occur with queries to the calling card validation (CCV) line information database (LIDB).

Some registers in ACCSCCVE replace registers in operational measurements (OM) group ACCSCCV, as group ACCSCCV no longer counts error responses.

Errors that occur when an LIDB query is launched are categorized as signaling connection control part (SCCP), transaction capability application part (TCAP), and miscellaneous errors.

SCCP errors occur during routing and the reason for failure is stored in the diagnostic field of the SCCP portion of the message. TCAP layer errors occur at or near the LIDB. The reason for failure (if caused by protocol problems) is stored in the problem code field of the TCAP portion of the message, or if the failure is caused by other LIDB errors, the reason is stored in the error code field of the TCAP portion of the message. The reason for failure of either of the two miscellaneous errors is also stored in the error code field of the TCAP portion of the message.

Release history

OM group ACCSCCVE was introduced in BCS34.

Registers

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

CCVNOXLS	CCVUNEQU	CCVNETFL	CCVNETCG
CCVSUBFL	CCVSUBCG	CCVNOXLA	CCVPROTP
CCVUNEXD	CCVUNNET	CCVMISSR	CCVDATUN
CCVSCRND	CCVMISRT	CCVMISGR	CCVVACGR
CCVNONGR	CCVTMOUT	CCVMISCE	

Group structure

OM group ACCSCCVE provides one tuple per office.

Key field:

None

OM group ACCSCCVE (continued)

Info field:
None

Associated OM groups

ACCSBNS
Automatic calling card service (ACCS) billed number screening

ACCSBNSE
ACCS billed number screening errors

ACCSCCV
ACCS calling card validation

The count in register CCVTOTAL in OM group ACCSCCV equals the sum of all other register counts in OM groups ACCSCCV and ACCSCCVE.

Associated functional groups

TOPS offices that have exchange alternate billing service (EABS) and perform LIDB queries for CCITT calling cards, domestic calling cards, third-number billing, or collect billing.

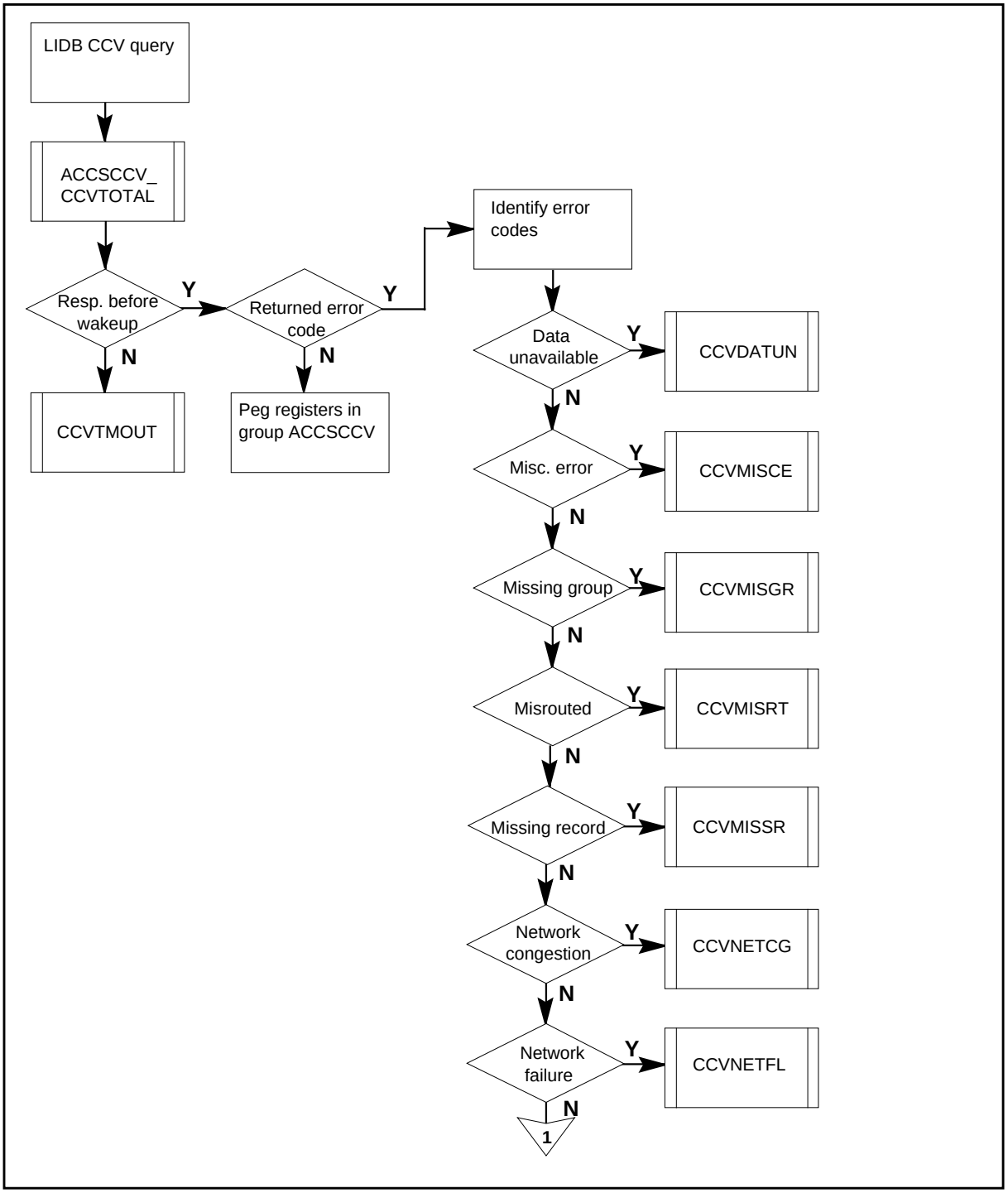
Associated functionality codes

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

Functionality	Code
Exchange Alternate Billing service	NTX825AB01

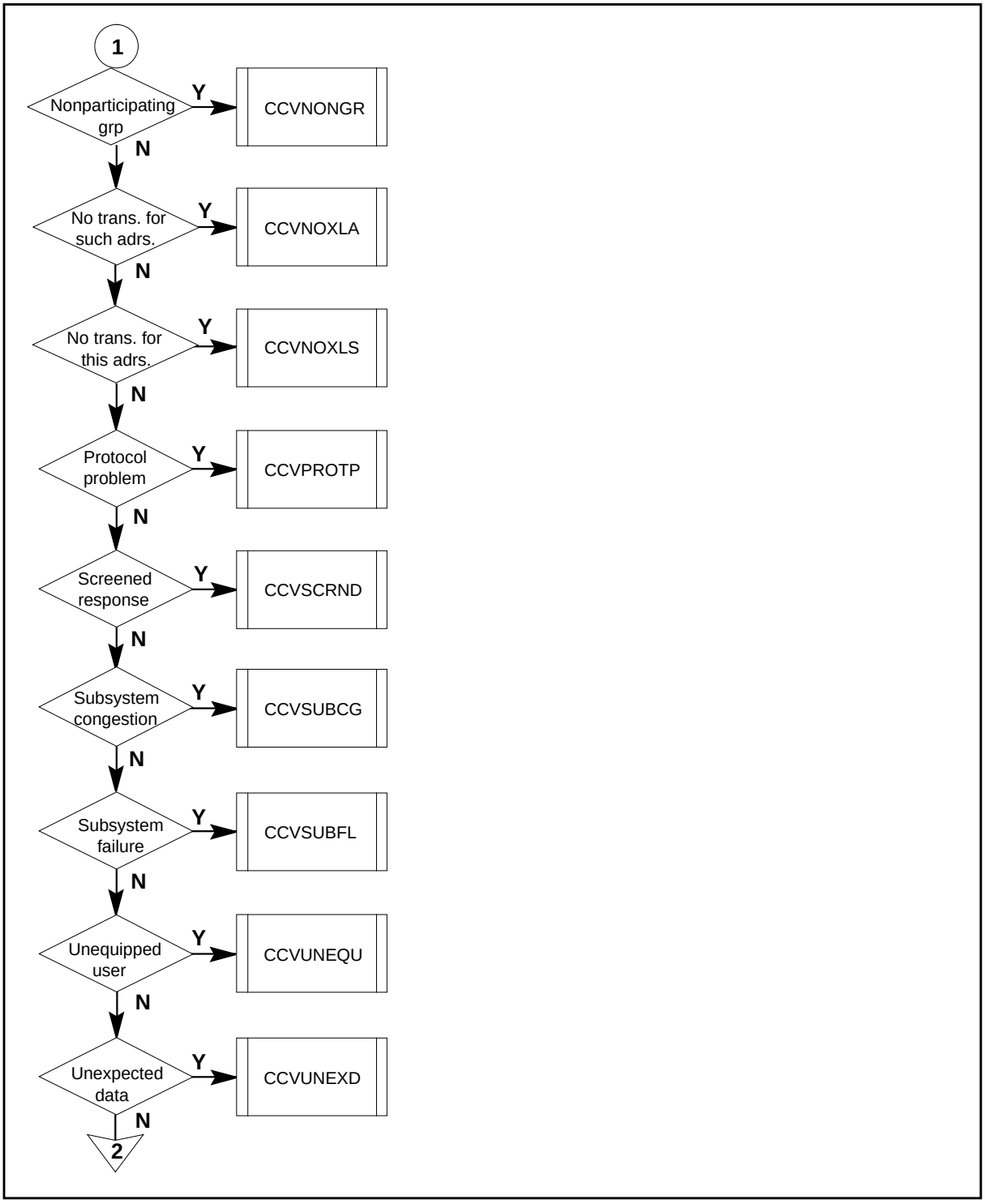
OM group ACCSCCVE (continued)

OM group ACCSCCVE registers

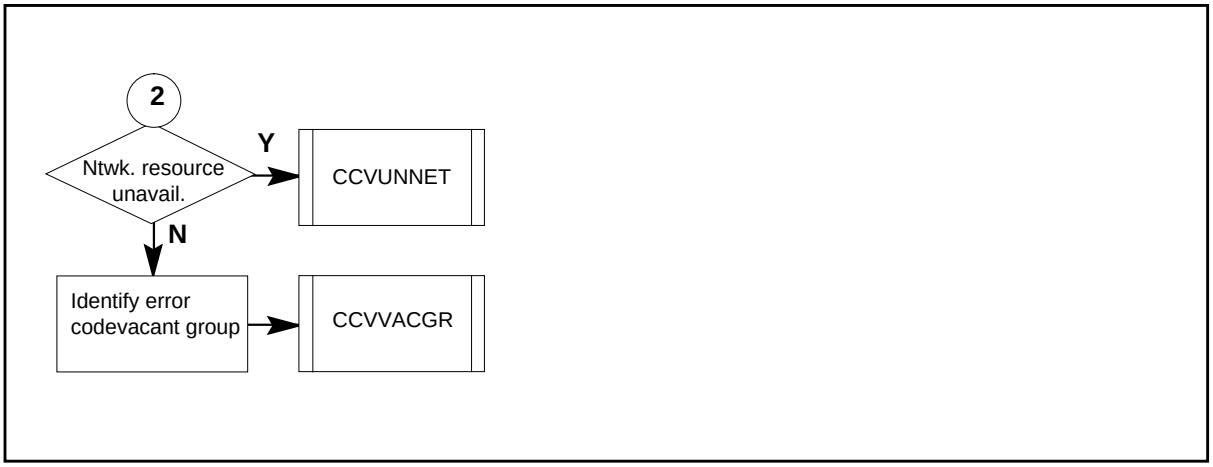


OM group ACCSCCVE (continued)

OM group ACCSCCVE registers (continued)



OM group ACCSCCVE registers (continued)



Register CCVDATUN

CCV data unavailable

CCVDATUN is incremented each time an LIDB query to validate a calling card number results in a response message with the error code Data Unavailable. This error can be caused by a vacant or non-participating group.

Register CCVDATUN release history

Register CCVDATUN was introduced in BCS34.

Associated registers

CCVDATUN replaces register CCVUNAVA in OM group ACCSCCV.

Associated logs

None

Extension registers

None

Register CCVMISCE

CCV miscellaneous error

CCVMISCE is incremented each time an LIDB query to validate a calling card number results in a response message with the error code Miscellaneous Error. This error is generated if the Call Gapping feature is on and the activity at the LIDB exceeds the maximum allowed by the call gapping parameters.

OM group ACCSCCVE (continued)

Register CCVMISCE release history

Register CCVMISCE was introduced in BCS34.

Associated registers

CCVMISC replaces register CCVMISCF in OM group ACCSCCV.

Associated logs

None

Extension registers

None

Register CCVMISGR

CCV missing group

CCVMISGR is incremented each time an LIDB query to validate a calling card number results in a response message with the error code Missing Group. This error occurs when the LIDB receives a request for information from outside the domain that is supported.

Register CCVMISGR release history

Register CCVMISGR was introduced in BCS34.

Associated registers

None

Associated logs

None

Extension registers

None

Register CCVMISRT

CCV misrouted

CCVMISRT is incremented each time an LIDB query to validate a calling card number results in a response message with the error code Misrouted. This error occurs when the LIDB receives a request for information from outside the domain that is supported.

Register CCVMISRT release history

Register CCVMISRT was introduced in BCS34.

Associated registers

None

Associated logs

None

Extension registers

None

Register CCVMISSR

CCV missing record

CCVMISSR is incremented each time an LIDB query to validate a calling card number results in a response message with the error code Missing Record. This error occurs when the line number or special billing number required to process this query is missing in the LIDB.

Register CCVMISSR release history

Register CCVMISSR was introduced in BCS34.

Associated registers

CCVMISSR replaces register CCVNOREC in OM group ACCSCCV.

Associated logs

None

Extension registers

None

Register CCVNETCG

CCV network congestion

CCVNETCG is incremented each time an LIDB query to validate a calling card number results in a response message with the error code Network Congestion. This error occurs when the CCS7 network is congested.

Register CCVNETCG release history

Register CCVNETCG was introduced in BCS34.

Associated registers

None

OM group ACCSCCVE (continued)

Associated logs

None

Extension registers

None

Register CCVNETFL

CCV network failure

CCVNETFL is incremented each time an LIDB query to validate a calling card number results in a response message with the error code Network Failure. This error occurs when the CCS7 network fails.

Register CCVNETFL release history

Register CCVNETFL was introduced in BCS34.

Associated registers

None

Associated logs

None

Extension registers

None

Register CCVNONGR

CCV nonparticipating group

CCVNONGR is incremented each time an LIDB query to validate a calling card number results in a response message with the error code Nonparticipating Group. This error occurs when the billed number belongs to the domain of an exchange carrier that does not participate in LIDB-based services.

Register CCVNONGR release history

Register CCVNONGR was introduced in BCS34.

Associated registers

None

Associated logs

None

Extension registers

None

Register CCVNOXLA

CCV no translation for any such address

CCVNOXLA is incremented each time an LIDB query to validate a calling card number results in a response message with the error code No Translation for Any Such Address. This error indicates a serious signaling connection control part (SCCP) operational problem, either in the operator services system (OSS) or in the signaling transfer point (STP).

Register CCVNOXLA release history

Register CCVNOXLA was introduced in BCS34.

Associated registers

CCVNOXLA and CCVNOXLS count errors that were previously counted by register CCVDBFC in OM group ACCSCCV.

Associated logs

None

Extension registers

None

Register CCVNOXLS

CCV no translation for this specific address

CCVNOXLS is incremented each time an LIDB query to validate a calling card number results in a response message with the error code No Translation for This Specific Address. This error occurs when the STP has no entry in its translation table for this global title.

Register CCVNOXLS release history

Register CCVNOXLS was introduced in BCS34.

Associated registers

CCVNOXLS and CCVNOXLA count errors that were previously counted by register CCVDBFC in OM group ACCSCCV.

Associated logs

None

OM group ACCSCCVE (continued)

Extension registers

None

Register CCVPROTP

CCV protocol problem

CCVPROTP is incremented each time an LIDB query to validate a calling card number results in a response message with the error code Protocol Problem. This error occurs when the LIDB query is not formatted according to protocol.

Register CCVPROTP release history

Register CCVPROTP was introduced in BCS34.

Associated registers

None

Associated logs

None

Extension registers

None

Register CCVSCRND

CCV screened response

CCVSCRND is incremented each time an LIDB query to validate a calling card number results in a response message with the error code Screened Response. This error occurs when the operator services system (OSS) is not authorized to access the requested data.

Register CCVSCRND release history

Register CCVSCRND was introduced in BCS34.

Associated registers

None

Associated logs

None

Extension registers

None

Register CCVSUBCG

CCV subsystem congestion

CCVSUBCG is incremented each time an LIDB query to validate a calling card number results a response message with the error code Subsystem Congestion. This error occurs when there is congestion of the LIDB node.

Register CCVSUBCG release history

Register CCVSUBCG was introduced in BCS34.

Associated registers

CCVSUBCG counts subsystem congestion errors that were previously counted by register CCVDBFC in OM group ACCSCCV.

Associated logs

None

Extension registers

None

Register CCVSUBFL

CCV subsystem failure

CCVSUBFL is incremented each time an LIDB query to validate a calling card number results in a response message with the error code Subsystem Failure. This error occurs when the LIDB node fails.

Register CCVSUBFL release history

Register CCVSUBFL was introduced in BCS34.

Associated registers

CCVSUBFL counts subsystem failures that were previously counted by register CCVDBFC in OM group ACCSCCV.

Associated logs

None

Extension registers

None

Register CCVTMOUT

CCV timeout

OM group ACCSCCVE (continued)

CCVTMOUT is incremented each time an LIDB query to validate a calling card number does not results in a response message within the time limit. This miscellaneous error occurs either because of a failure or an excessive delay in the signaling network (an SCCP error), or a failure in the target LIDB (a TCAP error).

Register CCVTMOUT release history

Register CCVTMOUT was introduced in BCS34.

Associated registers

CCVTMOUT replaces register CCVTIOUT in OM group ACCSCCV.

Associated logs

None

Extension registers

None

Register CCVUNEQU

CCV unequipped user

CCVUNEQU is incremented each time an LIDB query to validate a calling card number results in a response message with the error code Unequipped User. This error occurs as a result of corrupt addressing information in the called party address parameter of the query message.

Register CCVUNEQU release history

Register CCVUNEQU was introduced in BCS34.

Associated registers

None

Associated logs

None

Extension registers

None

Register CCVUNEXD

CCV unexpected data

CCVUNEXD is incremented each time an LIDB query to validate a calling card number results in a response message with the error code Unexpected

Data. This error occurs when no match is found for the personal identification number (PIN).

Register CCVUNEXD release history

Register CCVUNEXD was introduced in BCS34.

Associated registers

CCVUNEXD replaces register CCVDATA in OM group ACCSCCV.

Associated logs

None

Extension registers

None

Register CCVUNNET

CCV unavailable network resource

CCVUNNET is incremented each time an LIDB query to validate a calling card number results in a response message with the error code Unavailable Network Resource. This error occurs if the LIDB is not equipped to process a particular type of query.

Register CCVUNNET release history

Register CCVUNNET was introduced in BCS34.

Associated registers

CCVUNNET replaces register CCVNETRE in OM group ACCSCCV.

Associated logs

None

Extension registers

None

Register CCVVACGR

CCV vacant group

CCVVACGR is incremented each time an LIDB query to validate a calling card number results in a response message with the error code Vacant Group. This error occurs when a segment of the billed number has no valid individual account numbers associated with it.

OM group ACCSCCVE (end)

Register CCVVACGR release history

Register CCVVACGR was introduced in BCS34.

Associated registers

None

Associated logs

None

Extension registers

None

OM group ACCTCODE

OM description

ITOPS account code use (ACCTCODE) monitors attempts by an International Traffic Operator Position System (ITOPS) or by the operator to validate account codes. ACCTCODE contains four registers that count:

- attempts to validate an account code
- attempts by the operator to verify an account code that fails
- successful attempts by the operator to verify an account code
- attempts by the system to verify an account code that fails

Release history

BCS31 introduces OM group ACCTCODE.

Registers

The MAP terminal displays ACCTCODE_GROUP registers as follows:

```
ACCTATMP        ACCTFAIL        ACCTSUCC        ACCTSYSF
```

Group structure

OM group ACCTCODE 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.

Associated functional groups

The International DMS-200 for ITOPS operating group associates with OM group ACCTCODE.

OM group ACCTCODE (continued)

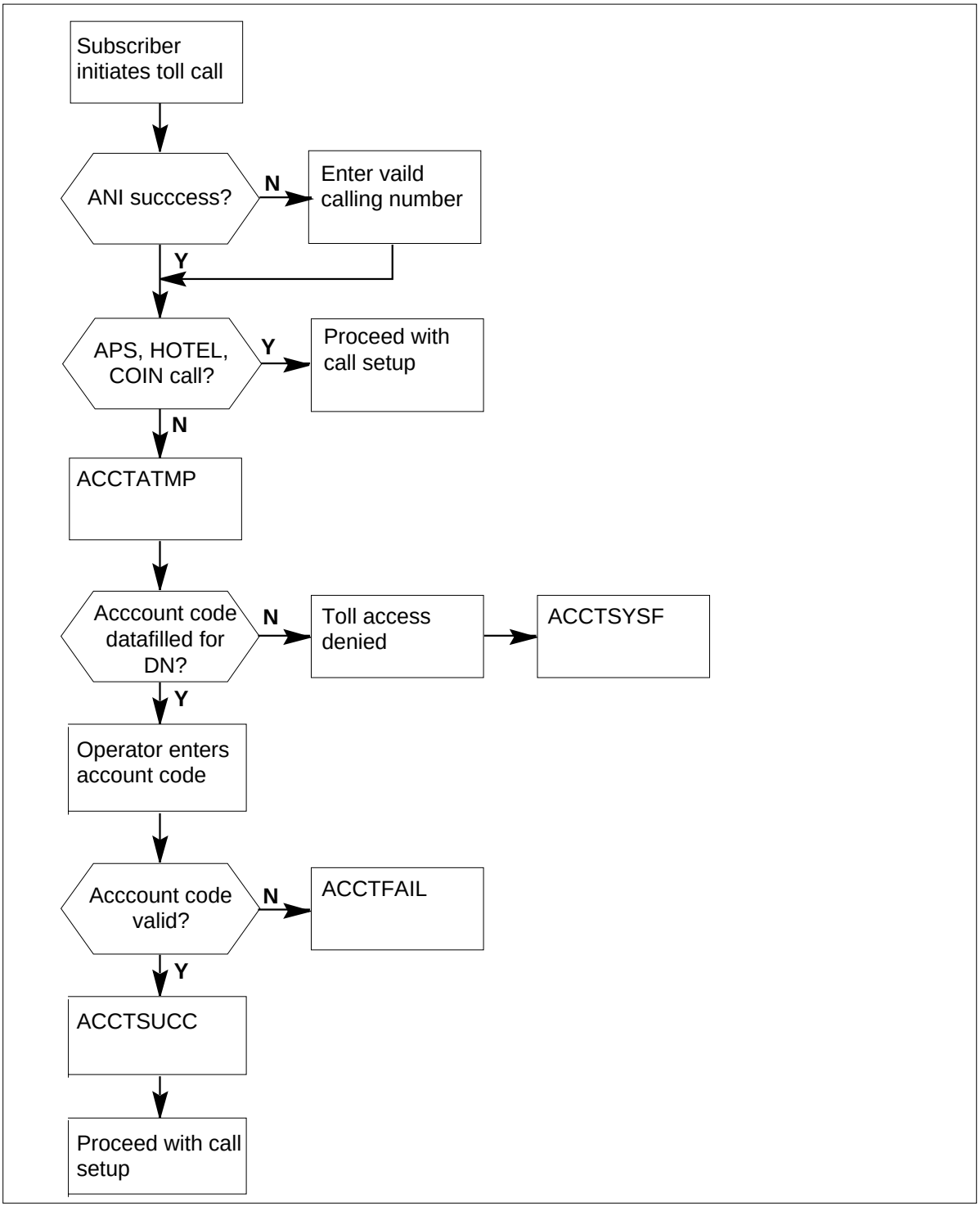
Associated functionality codes

The following table shows the functionality codes that associates with OM group ACCTCODE.

Functionality	Code
ITOPS Account Code Access	NTXH54AA

OM group ACCTCODE (continued)

OM group ACCTCODE registers



OM group ACCTCODE (continued)

Register ACCTATMP

Account code verification attempt (ACCTATMP) counts attempts to verify an account code.

Register ACCTATMP release history

BCS31 releases ACCTATMP.

Associated registers

ACCTFAIL counts attempts initiated by the operator to verify an account code that fails.

ACCTSUCC counts successful attempts initiated by the operator to verify an account code.

ACCTSYSF counts attempts initiated by the system to verify an account code that fails.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register ACCTFAIL

Operator-initiated verification failures (ACCTFAIL) counts attempts initiated by the operator to verify an account code that fails.

Register ACCTFAIL release history

ACCTFAIL is added to BCS31.

Associated registers

ACCTATMP counts attempts to verify an account code.

ACCTSUCC counts successful attempts initiated by the operator to verify an account code.

ACCTSYSF counts attempts initiated by the system to verify an account code that fail.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register ACCTSUCC

Operator-initiated verification successes (ACCTSUCC) counts successful attempts by the operator to verify an account code.

Register ACCTSUCC release history

ACCTSUCC is registered in BCS31

Associated registers

ACCTATMP counts attempts to verify an account code.

ACCTFAIL counts attempts by the operator to verify an account code that fails.

ACCTSYSF counts attempts by the system to verify an account code that fails.

ACCTATMP = ACCTFAIL + ACCTSUCC + ACCTSYSF

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register ACCTSYSF

System-initiated verification failures (ACCTSYSF) counts attempts initiated by the system to verify an account code that fails.

Register ACCTSYSF release history

ACCTSYSF is added to BCS31.

Associated registers

ACCTATMP counts attempts to verify an account code.

ACCTFAIL counts attempts initiated by the operator to verify an account code that fails.

ACCTSUCC counts successful attempts initiated by the operator to verify an account code.

ACCTATMP = ACCTFAIL + ACCTSUCC + ACCTSYSF

OM group ACCTCODE (end)

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

OM group ACDGRP

Functionality Name

Operational measurement group for automatic call distribution group

OM description

Automatic Call Distribution group (ACDGRP) provides information about the traffic for an Automatic Call Distribution (ACD) group.

ACD distributes incoming calls equally to a set of answering positions known as ACD agents. ACD agents and directory numbers (DN) are assigned to ACD groups. The system offers the agent with the longest idle time the incoming calls that terminate on any ACD group DNs. If no agent is available, the system queues calls in the correct ACD group call queue, based on priority level. All calls offered to an ACD group are counted by register ACDOFFR. The system increments register ACDNS when the Night Service feature is active. The system also increments register ACDNS when the system forces a call waiting in the queue to the Night Service route.

When all ACD agents are busy, the system queues incoming calls and returns ringing tone to the caller. If the delay exceeds a preset threshold, the caller hears a recorded announcement. When an ACD agent becomes available, the system connects the first incoming call in the queue to this agent position. The system increments register ACDANSR. The system increments register ACDABNDN when a caller abandons a call waiting in the queue.

The system increments register ACDBLOCK when it cannot connect an incoming call and an agent or provide correct treatment.

You can define an overflow threshold for each ACD group. At the overflow threshold, the system deflects all of the following calls to a specified route. The system increments register ACDDFLCT.

You can define a time delay overflow threshold for each ACD group. At this threshold, the system makes calls available to another ACD group. The system increments registers ACDTMOFL and ACDTMINF. When the call becomes available to another group, the original group or the overflow group can answer it. If the other group answers the overflowed ACD call, the system increments register ACDTMANS.

You can place agents of an ACD group in the controlled interflow (CIF) mode that use a CIF key on the supervisor set. The system routes new calls that come into an ACD group in the CIF mode to a subscriber-defined CIF route. Option CIFROUTE in table ACDRTE defines this route. The system increments register ACDCIF when it routes the call to a CIF route.

OM group ACDGRP (continued)

Release history

Introduced OM group ACDGRP in BCS20.

NA009

Added registers ACDRQABN and ACERQRTE. Register ACDRQABN counts the number of reenqueued ACD calls that callers abandon. Register ACERQRTE counts the number of ACD calls that the system routes to the reenqueue route.

BCS36

Added registers ACDDMCT, ACDICQD, and ACDREQD. Register ACDDMCT counts deny malicious call treatment. Register ACDICQD counts calls that the system sends to the incoming call queue. Register ACDREQD counts calls that the system sends to the overflow out queue.

BCS35

Incremented register ACDANSR for flexible charging system (FCS) calls that FCS agents answer.

BCS34

Added registers ACDUSAGE and ACDUSAG2 to record ACD use.

BCS33

Added register ACDCPK to count the number of ACD calls that ACD agents park.

BCS30

Added register ACDXFER to count ACD calls the system transfers between ACD agents.

BCS29

Added registers ACDTMOFL, ACDTMINF, and ACDTMANS to count calls that the system time-delay overflows. Added register ACDCIF to count calls the system routes to controlled interflow routes.

BCS22

Modified software to prevent deflected calls from cascading to more than one overflow ACD group. If an ACD group can not accept a deflected call, the system gives the incoming call busy line treatment. The system does not deflect the call again. Modified register descriptions for ACDDFLCT and ACDNS according to this software change.

Registers

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

```
ACDOFFR     ACDANSR     ACDDFLCT    ACDABNDN
ACDNS       ACDPRMPT    ACDBLOCK    ACDTMOFL
ACDTMINF    ACDTMANS    ACDCIF      ACDXFER
ACDCPK      ACDUSAGE    ACDUSAG2    ACDICQD
ACDREQD     ACDDMCT     ACDRQABN    ACDRQRTE
```

Group structure

OM group ACDGRP provides one tuple for each ACD group. One tuple consists of the ten registers contained in ACDGRP.

Key field:
AUTOMATIC_CALL_DISTRIB_GROUP

The maximum number of key fields is 256.

Info field:
None

You must enter the data for assigning an ACD group in table ACDGRP in order for the ACDGRP OM registers to function.

Field MAXCQSIZ in table ACDGRP specifies the maximum number of calls the system enqueues in the incoming call queue. Beyond this value, the system deflects calls to the route you assigned in field THROUTE. The system increments register ACDDFLCT.

Field MAXWAIT in table ACDGRP specifies the maximum time (in seconds) that a call waits in the incoming call queue. Beyond this value, the system deflects calls to the route you assigned in field THROUTE. The system increments register ACDDFLCT. A value of zero (0) means the ACD group does not have call queuing capability.

Parameter TIME in table ACDGRP specifies the maximum time (in seconds) that a call waits in the priority zero (0) incoming call queue. At expiration, the system sends the call to an overflow queue. At this threshold, the system makes calls available to another ACD group. The system increments registers ACDTMOFL and ACDTMINF.

Parameter CIFROUTE in table ACDGRP specifies the CIF route. The system increments register ACDCIF when it routes a call to a CIF route.

OM group ACDGRP (continued)

Associated OM groups

External alarms maintenance system (EXT) counts the use of extension blocks. Extension blocks are auxiliary software resources that provide additional storage for data associated with an ACD call.

Feature queuing (FTRQ) counts the use and traffic of software resources required for the execution of ACD calls.

Associated functional groups

The following functional groups are associated with OM group ACDGRP:

- Meridian Digital Centrex
- Meridian 1 (option 111-211)

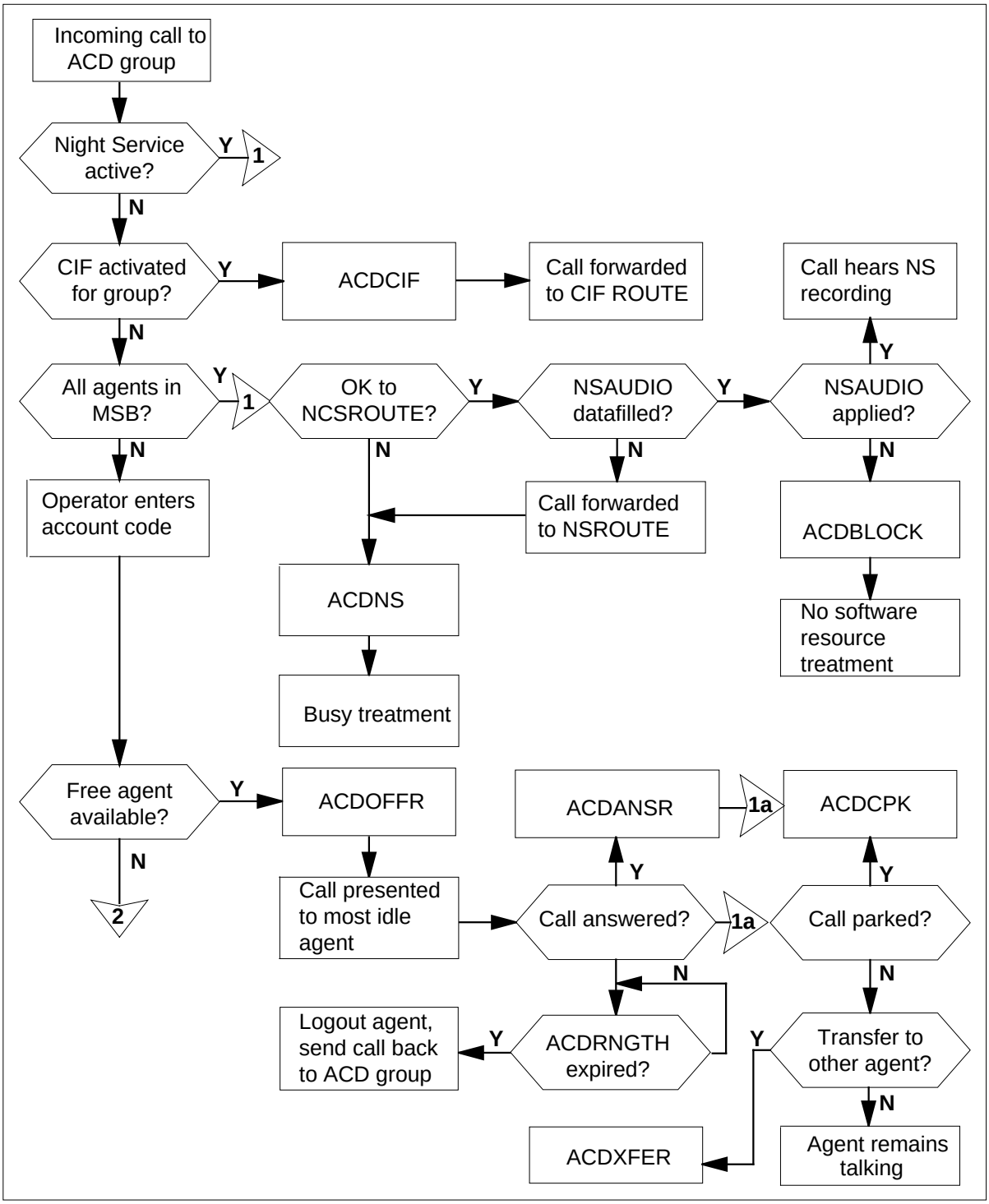
Associated functionality codes

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

Code	Functionality
ACD-Call Processing Control	NTX407AA
ACD-Call Processing	NTX407AB
Network Automatic Call Distribution	NTXE22AA
ACD Enhanced	NTX416AE

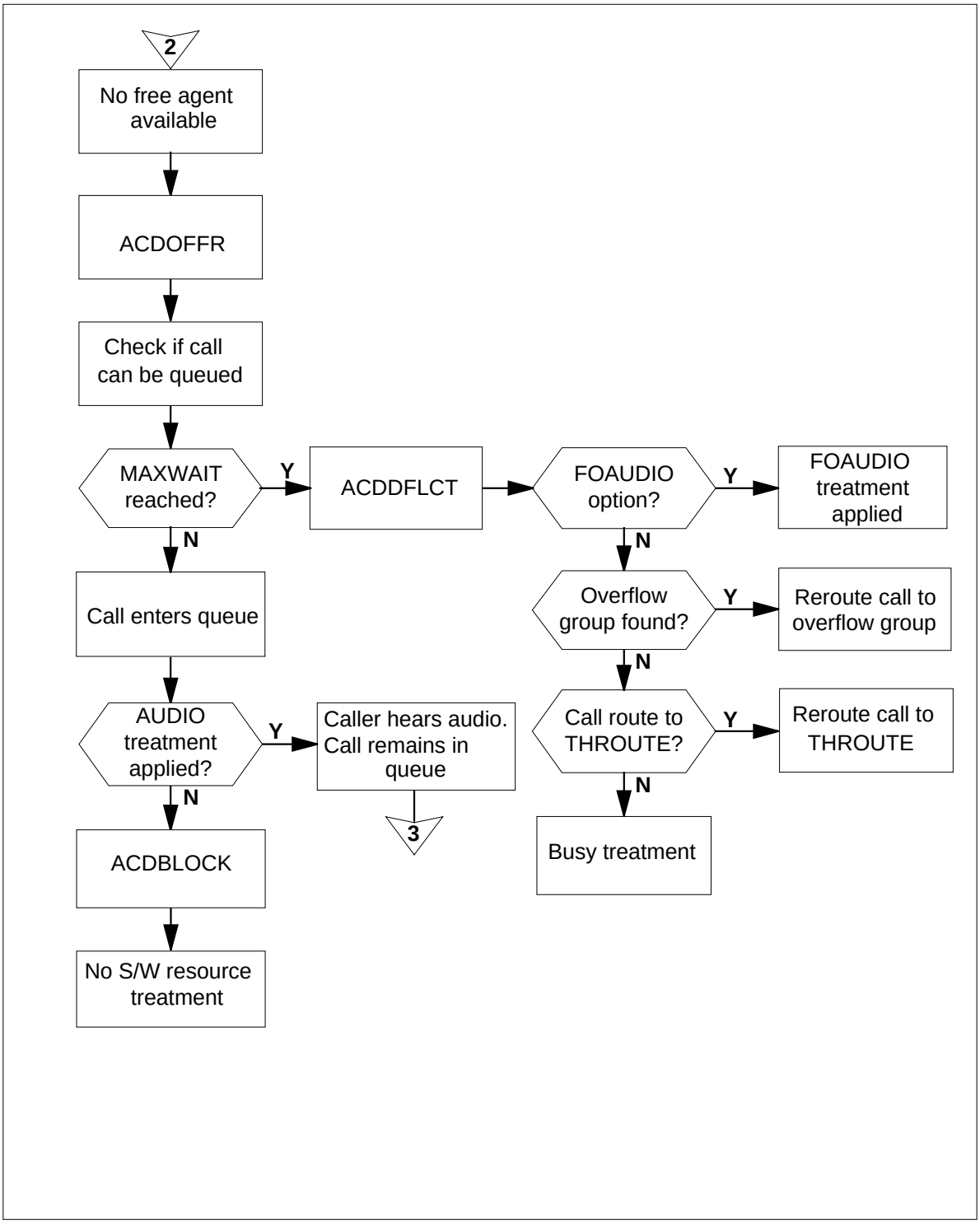
OM group ACDGRP (continued)

OM group ACDGRP registers

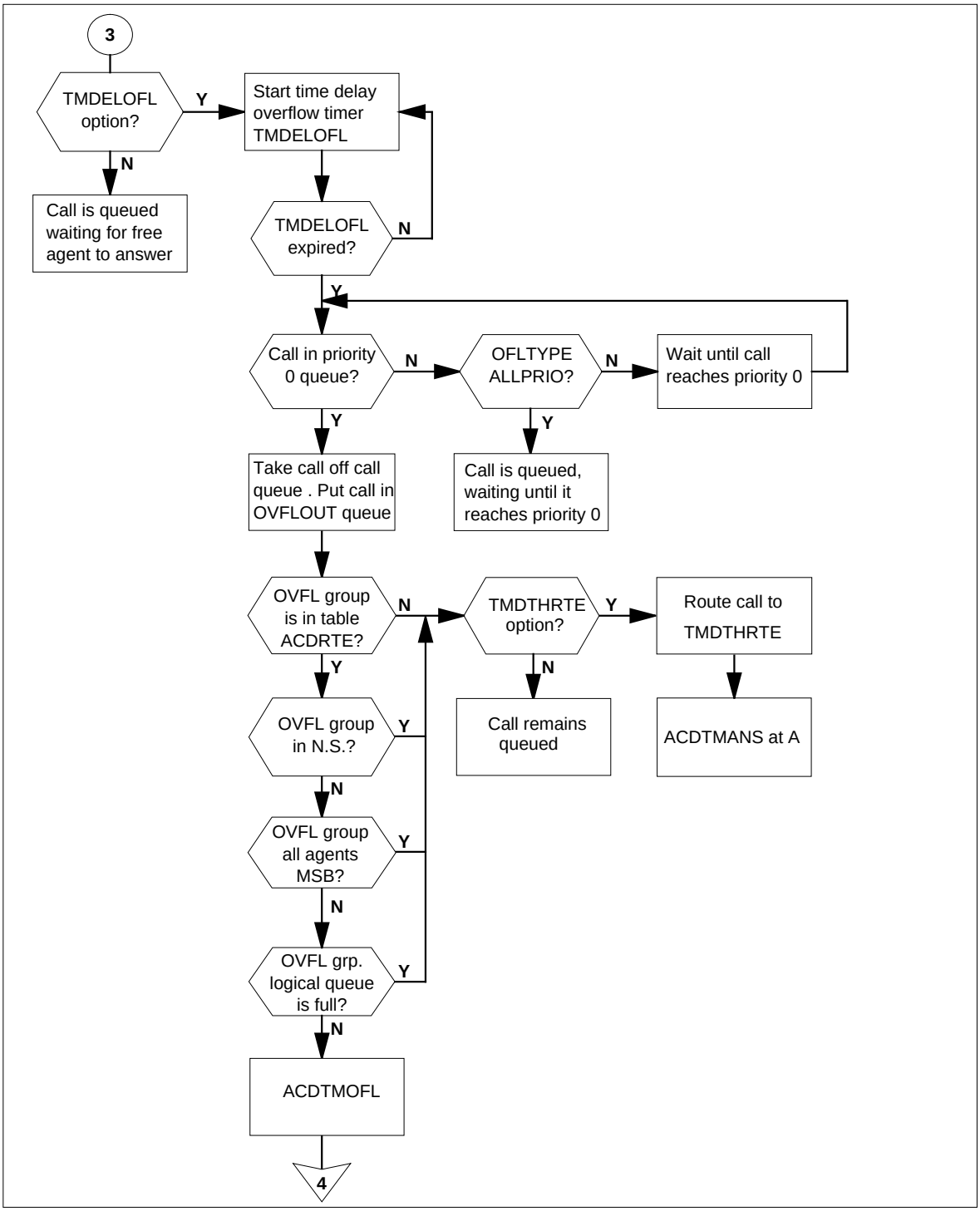


OM group ACDGRP (continued)

OM group ACDGRP registers (continued)

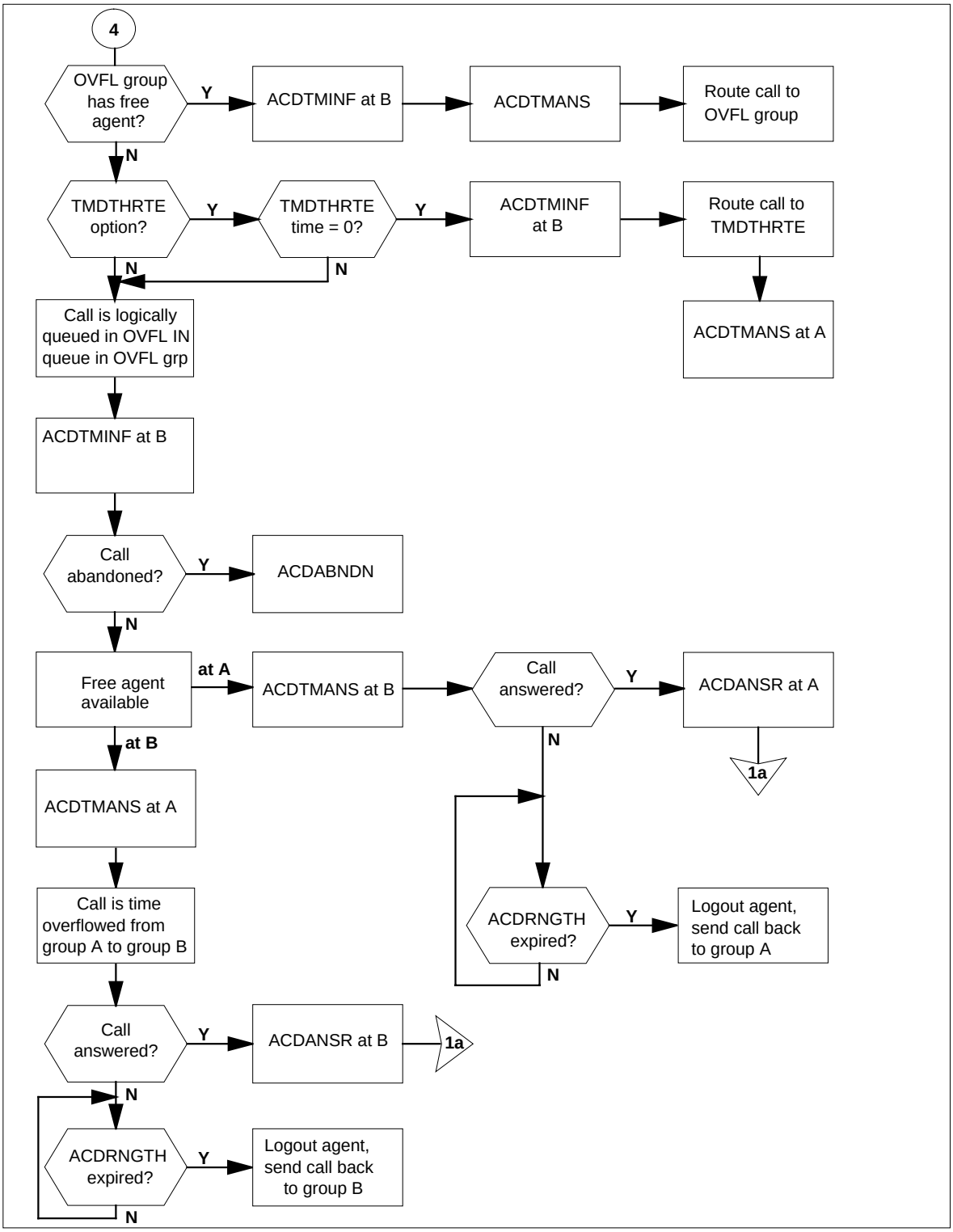


OM group ACDGRP registers (continued)

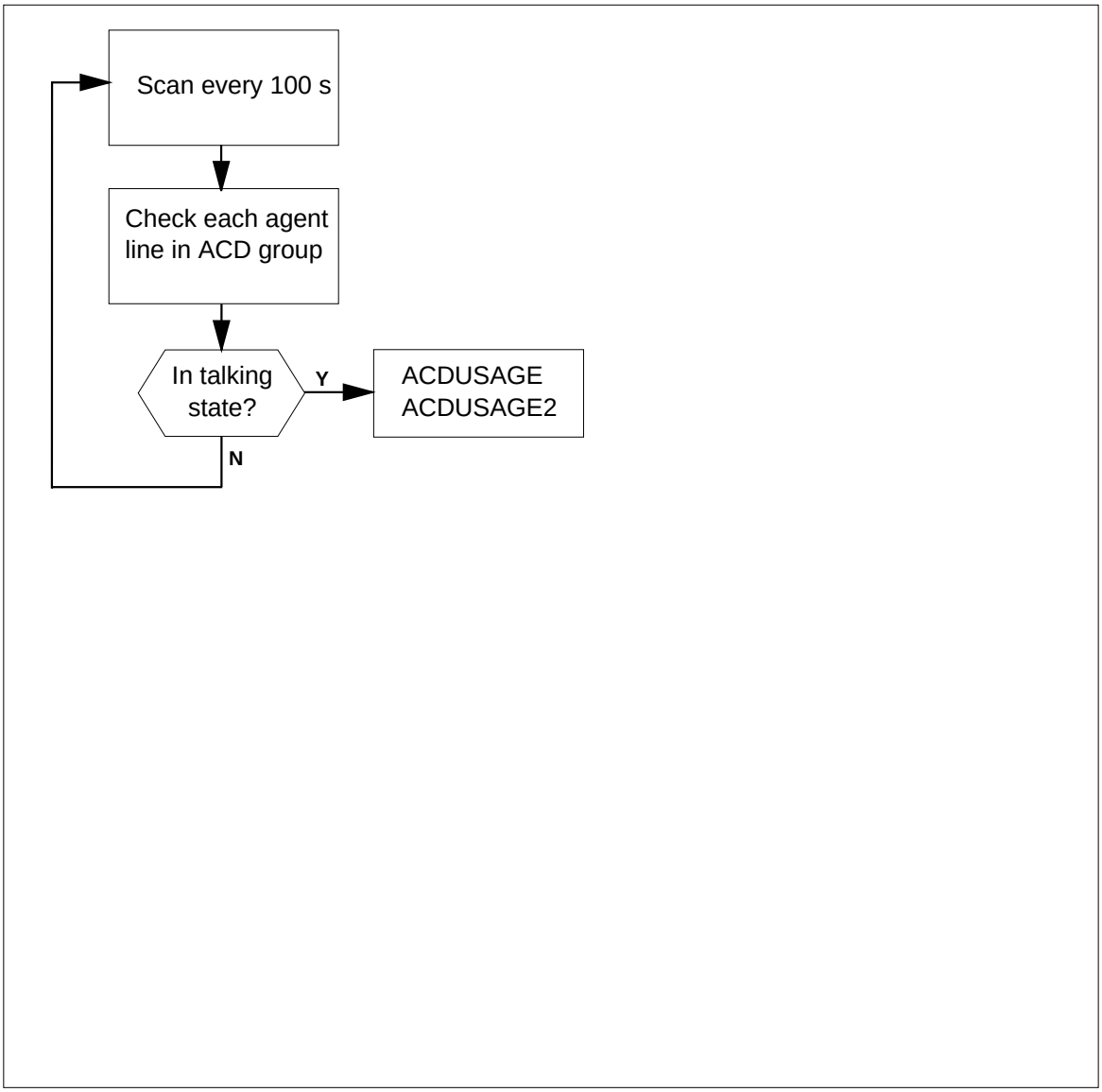


OM group ACDGRP (continued)

OM group ACDGRP registers (continued)

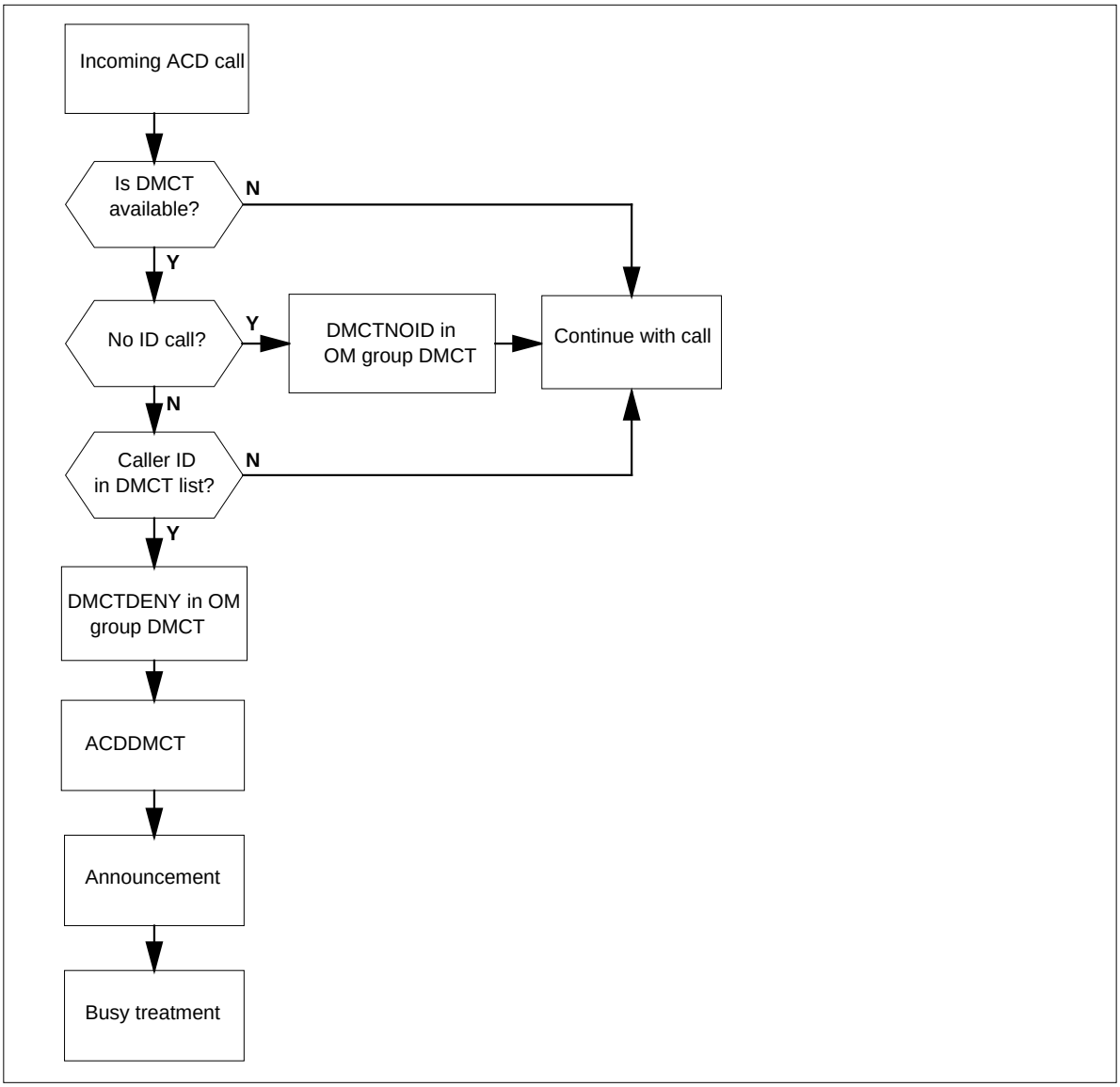


OM group ACDGRP use registers

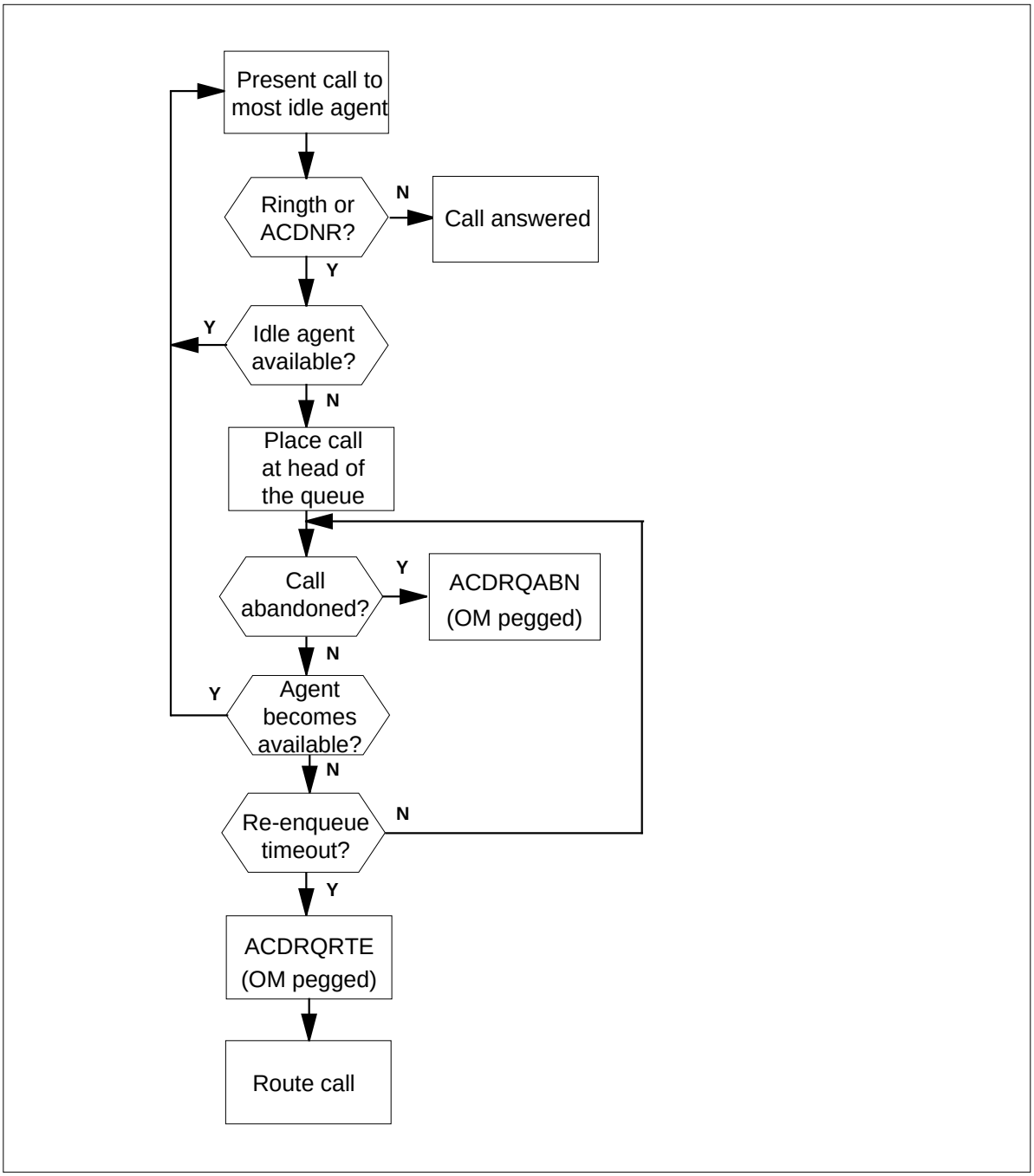


OM group ACDGRP (continued)

OM group ACDGRP Call Screening for ACDGRP



OM group ACDGRP pegging of ACDRQABN and ACDRQRTE at call processing time



Register ACDABNDN

ACD calls abandoned (ACDABNDN) counts calls abandoned by the subscriber. These calls are enqueued calls waiting for connection to an ACD

OM group ACDGRP (continued)

agent or unanswered calls terminating to an ACD agent. ACDABNDN does not count calls the ACD agent answers and abandons.

Register ACDABNDN release history

ACDABNDN was introduced prior to BCS20.

Associated registers

ACDANSR counts calls answered by the agents in an ACD group.

ACDDFLCT counts calls the system prevents from reaching an ACD agent because they exceed the following field values in table ACDGRP:

- maximum size call queue in field MAXCQSIZ
- maximum waiting time in field MAXWAIT

ACDOFFR counts calls offered to all ACD directory numbers (DN) in the ACD group.

ACDTMANS counts ACD calls answered in another group after the system transfers the calls to an overflow queue

ACDTMINF counts ACD calls that overflow the ACD call queue and are presented to another ACD group.

Validation formula

ACDOFFR + ACDTMINF = ACDANSR + ACDDFLCT + ACDTMANS + ACDABNDN

Note: The validation formula is correct if ACDGRP reports for a 24-h transfer period.

Associated logs

None

Extension registers

None

Register ACDANSR

ACD calls answered (ACDANSR) counts calls answered by the agents in an ACD group.

Register ACDANSR release history

ACDANSR was introduced in BCS20.

Associated registers

ACDABNDN counts calls abandoned by the subscriber. The calls are enqueued calls waiting for connection to an ACD agent or unanswered calls terminating to an ACD agent. ACDABNDN does not count calls the ACD agent answers and abandons.

ACDDFLCT counts calls the system prevents from reaching an ACD agent because they exceed the following field values in table ACDGRP:

- maximum call queue size in field MAXCQSIZ
- maximum waiting time in field MAXWAIT

ACDOFFR counts calls offered to all ACD DNs in the ACD group.

ACDTMANS counts ACD calls answered in another group after being transferred to an overflow queue.

ACDTMINF counts ACD calls that overflow the ACD call queue and are presented to another ACD group.

Validation formula

ACDOFFR + ACDTMINF = ACDANSR + ACDDFLCT + ACDTMANS + ACDABNDN

Note: The validation formula is correct if ACDGRP reports for a 24-h transfer period.

Associated logs

None

Extension registers

None

Register ACDBLOCK

ACD blocked calls (ACDBLOCK) counts calls blocked for one of the following reasons:

- The system cannot provide the correct treatment for the caller. For example, the caller should receive, for example, a recorded announcement, music, or ringback tone. The incoming call is routed to no software resources (NOSR) treatment.
- The system cannot make a network connection between the incoming call and the agent. The incoming call is routed to negative acknowledgement (NACK) treatment.

OM group ACDGRP (continued)

Register ACDBLOCK release history

ACDBLOCK was introduced in BCS20.

Associated registers

None

Associated logs

None

Extension registers

None

Register ACDCIF

ACD controlled interflow calls (ACDCIF) counts ACD calls routed to a CIF route.

Register ACDCIF release history

ACDCIF was introduced in BCS29.

Associated registers

None

Associated logs

None

Extension registers

None

Register ACDCPK

ACD calls parked (ACDCPK) count the number of ACD calls parked by ACD agents.

Register ACDCPK release history

ACDCPK was introduced in BCS33.

Associated registers

None

Associated logs

None

Extension registers

None

Register ACDDFLCT

ACD calls deflected (ACDDFLCT) counts calls the system deflects because they exceed the following field values in table ACDGRP:

- maximum size call queue in field MAXCQSIZ
- maximum waiting time in field MAXWAIT

The system forwards a deflected call to the route specified by field THROUTE in table ACDGRP. A deflected call routing to an overflow ACD group that cannot accept it routes to busy line (BUSY) treatment. The system does not deflect the call again. The system increments the correct register, ACDDFLCT or ACDNS, for the overflow ACD group that gives the BUSY treatment.

The system can forward an ACD group call up to four times, if the call is not routed to an overflow ACD group. On the fifth forwarding attempt, the ACD group call is routed to BUSY treatment.

Register ACDDFLCT release history

ACDDFLCT was introduced prior to BCS20.

BCS22

Software modified to prevent deflected calls from cascading to more than one overflow ACD group.

Associated registers

ACDABNDN counts calls abandoned by the subscriber. They are enqueued calls waiting for connection to an ACD agent or unanswered calls terminating to an ACD agent.

ACDANSR counts calls answered by the agents in an ACD group.

ACDOFFR counts calls offered to all ACD DNs in the ACD group.

ACDTMANS counts ACD calls that overflowed to another group that answered them. The system timed these calls out and deflected them to an overflow queue.

ACDTMINF counts ACD calls that overflow the ACD call queue and are presented to another ACD group.

OM group ACDGRP (continued)

Validation formula

ACDOFFR + ACDTMINF = ACDANSR + ACDDFLCT + ACDTMANS + ACDABNDN

Note: The validation formula is correct if ACDGRP reports for a 24-h transfer period.

Associated logs

The system generates log ACD120 when it deactivates an ACD agent because a call failed a predetermined number of consecutive times.

Extension registers

None

Register ACDDMCT

ACD deny malicious call treatment (ACDDMCT) records the number of ACD calls denied termination by the ACD group because of DMCT screening. Incoming ACD calls denied by DMCT screening are not counted as incoming ACD calls offered to the ACD group. Register ACDOFFR is not incremented.

Register ACDDMCT release history

ACDDMCT was introduced in BCS36.

Associated registers

None

Associated logs

None

Extension registers

None

Register ACDICQD

The system increments ACDICQD (ACDICQD) when it queues an incoming ACD group call because a receiving agent is not available.

Register ACDICQD release history

ACDICQD was introduced in BS36.

Associated registers

None

Associated logs

None

Extension registers

None

Register ACDNS

ACD Night Service Calls (ACDNS) counts call attempts to reach an ACD group with the Night Service feature active. When Night Service is active, the system forwards the incoming call to the route specified in field NSROUTE of table ACDGRP. If the call routes to an overflow ACD group that cannot accept it, the call receives BUSY treatment. The system does not deflect the call again. The system increments the correct register, ACDDFLCT or ACDNS, for the overflow ACD group that gives the BUSY treatment.

The system can forward an ACD group call up to four times. On the fifth forwarding attempt, the ACD group call is routed to BUSY treatment.

Register ACDNS release history

ACDNS was introduced in BCS20.

BCS22

Software modified to prevent deflected calls from cascading to more than one overflow ACD group.

Associated registers

ACDABNDN counts calls abandoned by the subscriber. They are enqueued calls waiting for connection to an ACD agent or unanswered calls terminating to an ACD agent.

ACDDFLCT counts calls the system prevents from reaching an ACD agent because they exceed the following field values in table ACDGRP:

- maximum call queue size in field MAXCQSIZ
- maximum waiting time in field MAXWAIT

ACDOFFR counts calls offered to all ACD DNs in the ACD group.

ACDTMANS counts ACD calls answered in another group after being transferred to an overflow queue.

ACDTMINF counts ACD calls that overflow the ACD call queue and are presented to another ACD group.

OM group ACDGRP (continued)

Validation formula

ACDOFFR + ACDTMINF = ACDANSR + ACDDFLCT + ACDTMANS + ACDABNDN

Note: The validation formula is correct if ACDGRP reports for a 24-h transfer period.

Associated logs

None

Extension registers

None

Register ACDOFFR

ACD calls offered (ACDOFFR) counts calls offered to all ACD DNs in the ACD group. Calls offered when the Night Service feature are active are not included in the count.

Register ACDOFFR release history

ACDOFFR was introduced in BCS20.

Associated registers

ACDABNDN counts calls abandoned by the subscriber. The calls are enqueued calls waiting for connection to an ACD agent or unanswered calls terminating to an ACD agent.

ACDANSR counts calls answered by the agents in an ACD group.

ACDDFLCT counts calls the system stops before reaching an ACD agent because the calls exceed the following field values in table ACDGRP:

- maximum size for the call queue in field MAXCQSIZ
- maximum waiting time in field MAXWAIT

ACDTMANS counts ACD calls answered in another group after they are transferred to an overflow queue.

ACDTMINF counts ACD calls that overflow the ACD call queue and are presented to another ACD group.

Validation formula

ACDOFFR+ ACDTMINF = ACDANSR+ ACDDFLCT+ ACDTMANS + ACDABNDN

Note: The validation formula is correct if ACDGRP reports for a 24-h transfer period.

Associated logs

None

Extension registers

None

Register ACDREQD

The system increments ACD calls queued multiple times (ACDREQD) when it must queue a call presented to an agent.

Register ACDREQD release history

ACDREQD was introduced in BCS36.

Associated registers

None

Associated logs

None

Extension registers

None

Register ACDRQABN

ACD calls requeued abandoned (ACDRQABN) counts the number of ACD calls abandoned after being enqueued multiple times.

Register ACDRQABN release history

ACDRQABN was introduced in NA009.

Associated registers

ACDABNDN counts calls abandoned by the subscriber. Abandoned calls are enqueued calls waiting for connection to an ACD agent or unanswered calls terminating to an ACD agent.

Associated logs

None

OM group ACDGRP (continued)

Extension registers

None

Register ACDRQRTE

ACD calls requeued routed (ACDRQRTE) counts the number of ACD calls the system sends to the requeue route when the timer expires in the ACD group call queue.

Register ACDRQRTE release history

ACDRQRTE was introduced in NA009.

Associated registers

None

Associated logs

None

Extension registers

None

Register ACDTMANS

ACD time delay overflow calls answered (ACDTMANS) counts ACD calls answered in another group after being transferred to an overflow queue. Such calls overflow the original ACD group when they been too long in the call queue.

Register ACDTMANS release history

ACDTMANS was introduced in BCS29.

Associated registers

ACDABNDN counts calls abandoned by the subscriber. Abandoned calls are enqueued calls waiting for connection to an ACD agent or unanswered calls terminating to an ACD agent.

ACDANSR counts calls answered by the agents in an ACD group.

ACDDFLCT counts calls that the system stops from reaching an ACD agent because they exceed the following field values in table ACDGRP:

- maximum call queue size in field MAXCQSIZ
- maximum waiting time in field MAXWAIT

ACDOFFR counts calls offered to all ACD DNs in the ACD group.

ACDTMINF counts ACD calls that overflow the ACD call queue and are presented to another ACD group.

Validation formula

ACDOFFR + ACDTMINF = ACDANSR + ACDDFLCT + ACDTMANS + ACDABNDN

Note: The validation formula is correct if ACDGRP reports for a 24-h transfer period.

Associated logs

None

Extension registers

None

Register ACDTMINF

ACD time delay overflow calls presented (ACDTMINF) counts ACD calls that overflow the ACD call queue and are presented to another ACD group. The calls remain available to the original group.

Register ACDTMINF release history

ACDTMINF was introduced in BCS29.

Associated registers

ACDABNDN counts calls abandoned by the subscriber. These are enqueued calls waiting for connection to an ACD agent or unanswered calls terminating to an ACD agent.

ACDANSR counts calls answered by the agents in an ACD group.

ACDDFLCT counts calls that the system stops from reaching an ACD agent because they exceed the following field values in table ACDGRP:

- maximum size of the call queue in field MAXCQSIZ
- maximum waiting time in field MAXWAIT

ACDOFFR counts calls offered to all ACD DNs in the ACD group.

ACDTMANS counts ACD calls answered in another group after it transfers to an overflow queue.

OM group ACDGRP (continued)

Validation formula

ACDOFFR + ACDTMINF = ACDANSR + ACDDFLCT + ACDTMANS + ACDABNDN

Note: The validation formula is correct if ACDGRP reports for a 24-h transfer period.

Associated logs

None

Extension registers

None

Register ACDTMOFL

ACD calls time delay overflowed (ACDTMOFL) counts ACD calls that overflow to another group because the TIME field in table ACDGRP was exceeded.

Field TIME in table ACDGRP specifies the time in seconds that a call can wait in the priority 0 incoming call queue before the call moves to an overflow queue.

Register ACDTMOFL release history

ACDTMOFL was introduced in BCS29.

Associated registers

None

Associated logs

None

Extension registers

None

Register ACDUSAGE

ACD usage (ACDUSAGE) increments when a scanned agent line is in the talking state. The system scans each agent line associated with an ACD group every 100 s and records the ACD group usage.

Register ACDUSAGE release history

ACDUSAGE was introduced in BCS34.

Associated registers

None

Associated logs

None

Extension registers

ACDUSAG2

Register ACDXFER

ACD transferred between ACD agents (ACDXFER) counts the number of ACD calls transferred between ACD agents. The system counts only transfers from one ACD INCALLS key to another ACD INCALLS key.

Register ACDXFER release history

ACDXFER was introduced in BCS30.

Associated registers

None

Associated logs

None

Extension registers

None

OM group ACMS-Canada only

OM description

Analog call management services (ACMS)

The OM group ACMS provides information on error conditions and resource shortfalls. These conditions and shortfalls occur in the stored program control-call management services (SPC-CMS) software.

Release history

BCS29

The OM group ACMS-Canada only was introduced.

Registers

The OM group ACMS-Canada only registers appear on the MAP terminal as follows:

```
ACMSDERR    ACMSIDX     ACMSOVFL    ACMSNORT
```

Group structure

The OM group ACMS-Canada only provides one tuple per office.

Key field:
There is no key field.

Info field:
There is no info field.

Office parameter FTRQAGENTS in Table OFCENG specifies the number of FTRQAGENT blocks.

Office parameter FTRQ8WAREAS in Table OFCENG specifies the number of FTRQ8WAREAS blocks.

Office parameter FTRQ16WAREAS in Table OFCENG specifies the number of FTRQ16WAREAS blocks.

Office parameter NO_OF_HIS_CONTROL_BLKS in Table OFCENG specifies the number of history control blocks.

Office parameter NO_OF_HIS_DATA_BLKS in Table OFCENG specifies the number of history data blocks.

Office parameter NO_OF_MEDIUM_EXT_BLKS in Table OFCENG specifies the number of extension blocks. Applications for the transaction capability application part (TCAP) use the extension blocks to encode and decode.

Office parameter SPCCLITIMEOUT in Table OFCENG specifies the maximum amount of time that can pass between the system and a call. The system places a calling line identification (CLID) in a queue against a trunk. The call arrives on the trunk to use the CLID. An FTRQBLOCK stores the CLID. The system discards the CLID if a call does not arrive before the time period expires.

Office parameter ACMS_NOC_LOG_ON in Table OFCVAR activates or deactivates the ACMS105 log. The office parameter inhibits the generation of log ACMS105 when the parameter is N (no).

Associated OM groups

The EXT monitors the use of extension blocks.

The OM group TCAPERRS counts protocol errors that TCAP detects for each subsystem.

The OM group TCAPUSAG records the use of TCAP in terms of message, transactions, and components for each subsystem.

Associated functional groups

The Stored program control-call management services (SPC-CMS) associated functional group is for the OM group ACMS-Canada only.

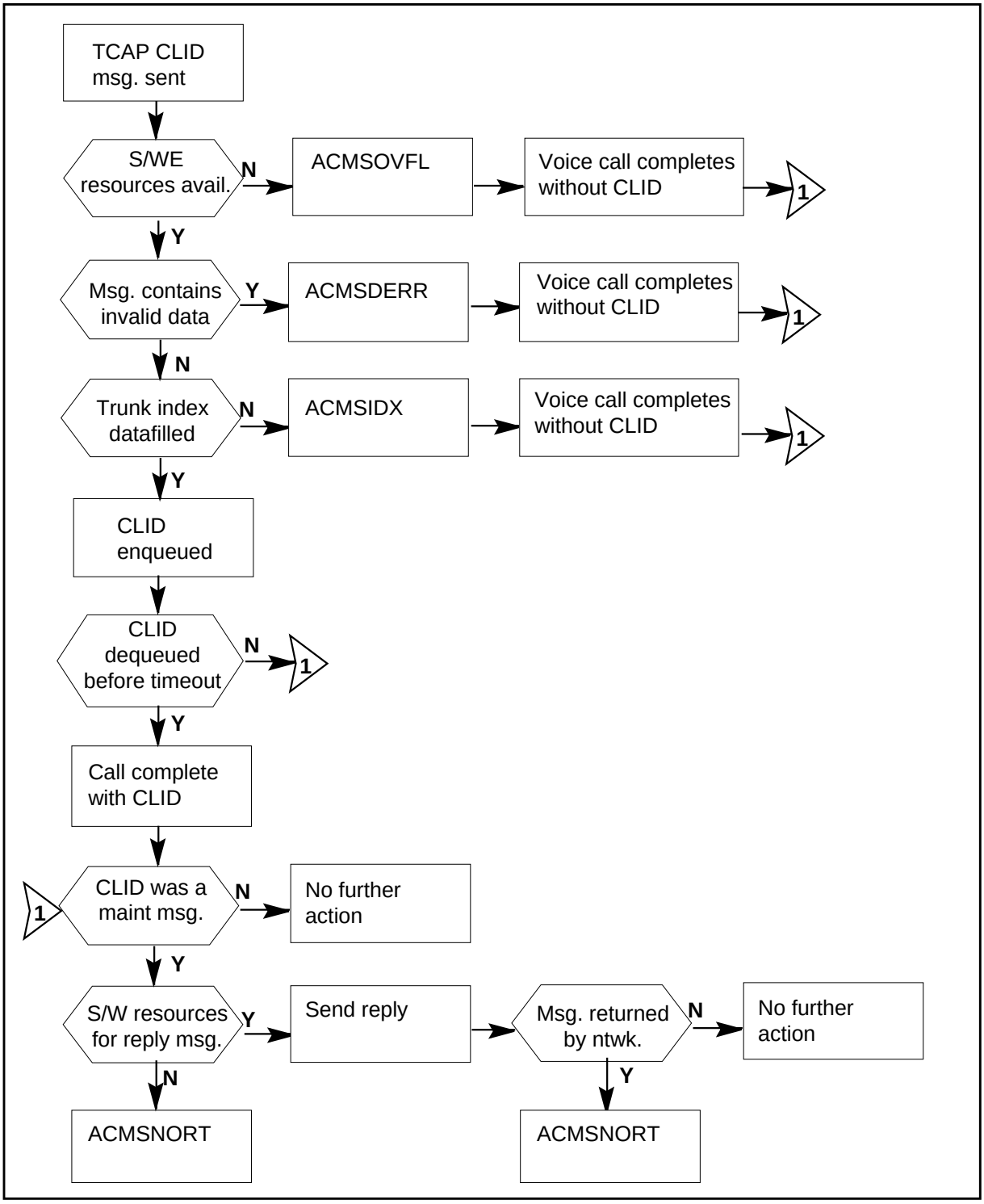
Associated functionality codes

The associated functionality codes for the OM group ACMS-Canada only appear in the following table.

Functionality	Code
CMS NAC Interface	NTXE21AA

OM group ACMS-Canada only (continued)

OM group ACMS-Canada only registers



Register ACMSDERR

ACMS central office data processor data error (ACMSDERR)

Register ACMSDERR counts data errors in the TCAP calling line identification (CLID) message sent for the central office data processor (CODP).

Data errors occur when the TCAP CLID message from the CODP contains invalid data values. Invalid data is missing TCAP parameters or a data value that is outside the valid range.

A data error does not affect completion of the voice call. The arrival of the associated voice call continues when a CLID is not attached.

Register ACMSERR release history

BCS29

Register ACMSDERR was introduced.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register ACMSIDX

ACMS SPC trunk index (ACMSIDX)

Register ACMSIDX counts calls sent from the central office data processor (CODP) have a valid trunk index that is not entered in Table SPCTRKS.

A trunk index error does not affect the completion of a voice call. When a voice call arrives on a per-trunk signaling trunk, the call continues without calling line identification.

Register ACMSIDX release history

BCS29

Register ACMSIDX was introduced.

Associated registers

There are no associated registers.

OM group ACMS-Canada only (continued)

Associated logs

The system generates ACMS100 when Table SPCTRKS does not contain the SPC trunk index that the CODP sends.

Extension registers

There are no extension registers.

Register ACMSNORT

Stored program control-call management services no return message (ACMSNORT)

Register ACMSNORT counts calls for the message that contains maintenance test results. These results cannot return to the central office data processor. The reasons that the results cannot return are as follows:

- the message cannot be transferred through the network.
- the TCAP software cannot send the message because not enough software resources are available.
- the TCAP response encoder software cannot encode the message that contains the maintenance test results.

Register ACMSNORT release history

BCS29

Register ACMSNORT was introduced.

Associated registers

There are no associated registers.

Associated logs

The system generates TCAP101 for one of the following reasons:

- the business services database sends a one way or query message.
- the business services database response message contains an invalid responding transaction identifier.
- the response message contains a return error or reject component.
- the private virtual network sends a return error, reject component, or report error.

Extension registers

There are no extension registers.

Register ACMSOVFL

ACMS SPC-CMS resource overflow (ACMSOVFL)

When software resources are not available and TCAP CLID messages cannot be processed, register ACMSOVFL counts these messages.

The following OM groups can identify resources that are not available:

- FTRQ group: tuples FTRQAGENTS, FTRQ8WAREAS, and FRTQ16WAREAS
- EXT group: tuples HISTORY_DATA, HISTORY_CONTROL_DATA, and TC_AP_MEDIUM_EXT_BLK.

The TCAP CLID message process stops. The system does not place in a queue any CLID. This interruption does not affect the associated voice call.

Register ACMSOVFL release history

BCS29

Register ACMSOVFL was introduced.

Associated registers

Register EXT_EXTOVFL counts requests for an extension block that result in failure because extension blocks are not available.

Register FTRQ_FTRQOVFL counts requests for a feature queue block that result in failure because feature queue blocks are not available.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

OM group ACRJ

OM description

Anonymous caller rejection (ACRJ)

Anonymous caller rejection records the behavior of the Anonymous Caller Rejection (ACRJ) feature. The subscriber can obtain this feature alone or as part of the universal access group of features.

The ACRJ contains six registers that count:

- the number of times ACRJ activates with and without universal access
- the number of times ACRJ deactivates with and without universal access
- the number of rejected calls the system routes to an announcement
- the number of times the subscriber is denied the ACRJ feature.

Release history

The OM group ACRJ is introduced to BCS32.

NA009

The following OMs in OM group ACRJ are pegged for BRI lines:

- ACRJACT
- ACRJDACT
- ACRJANN

BCS35

Registers ACRJAUNV, ACRJDENY, and ACRJDUNV added for universal access.

Registers

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

```
ACRJACT     ACRJDACT    ACRJANN     ACRJAUNV
ACRJDUNV    ACRJDENY
```

Group structure

The OM group ACRJ provides one tuple for each office.

Key field:

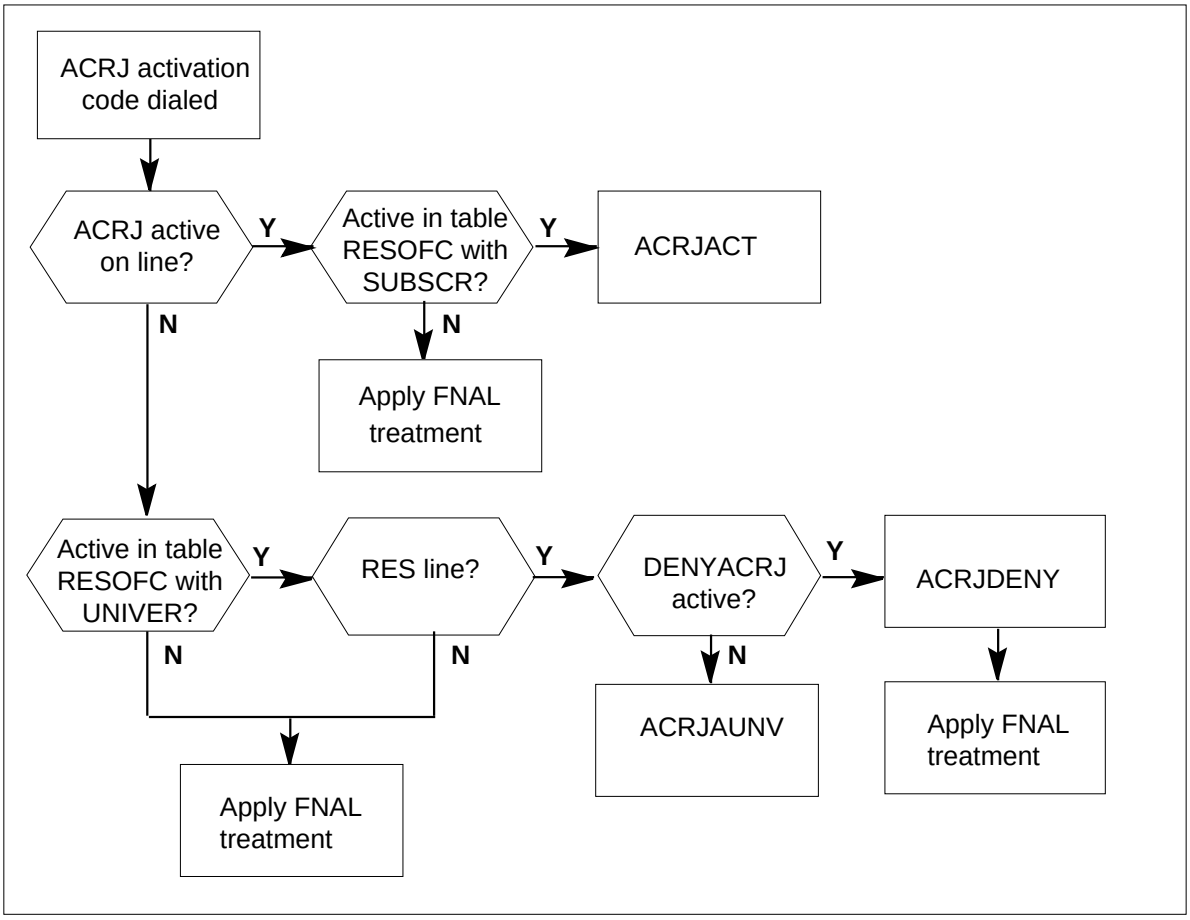
There are no key fields

Info field:

There are no info fields

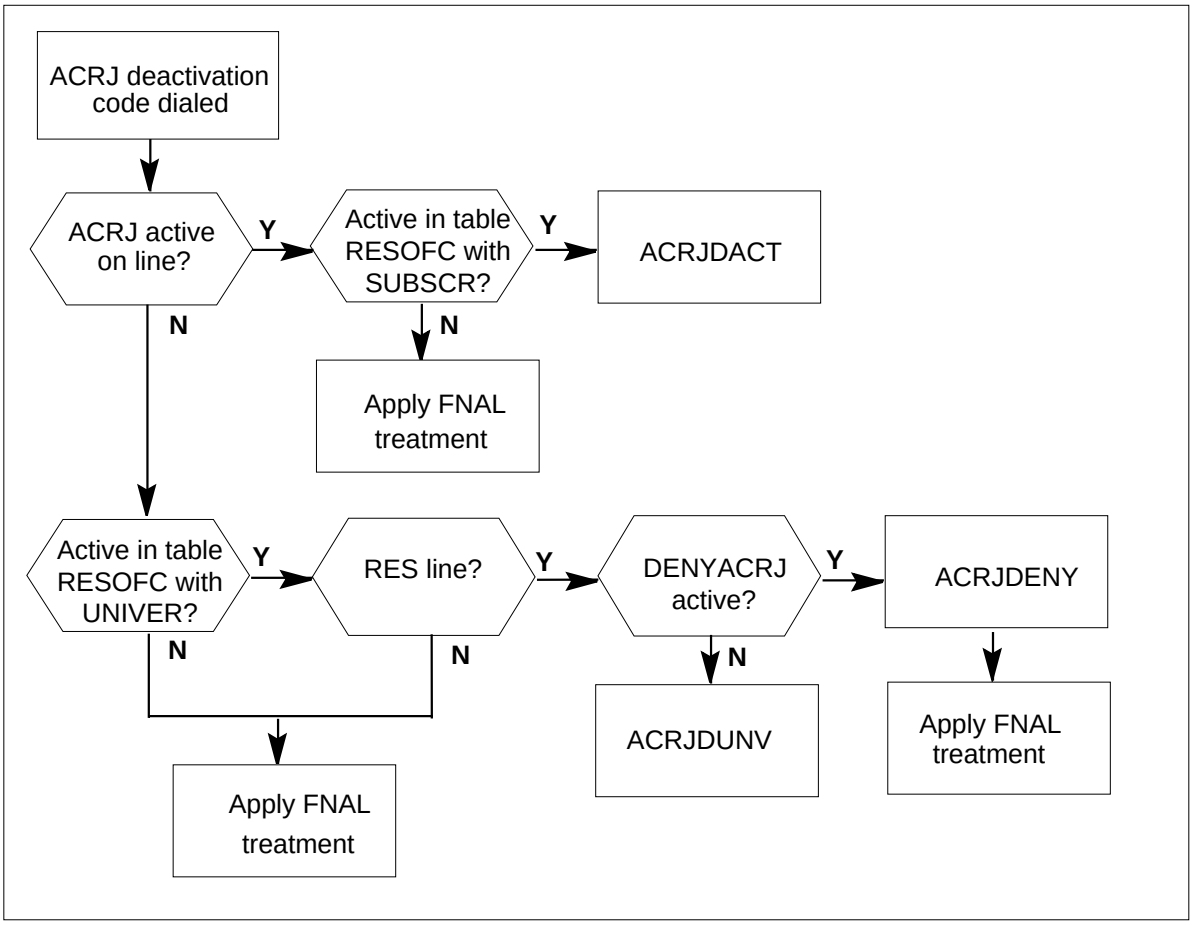
This feature is enabled in tables RESOFC, IBNFEAT, IBNXLA, TMTCNTL, TMTMAP, and OPTCTL.

OM group ACRJ registers-activation code dialed

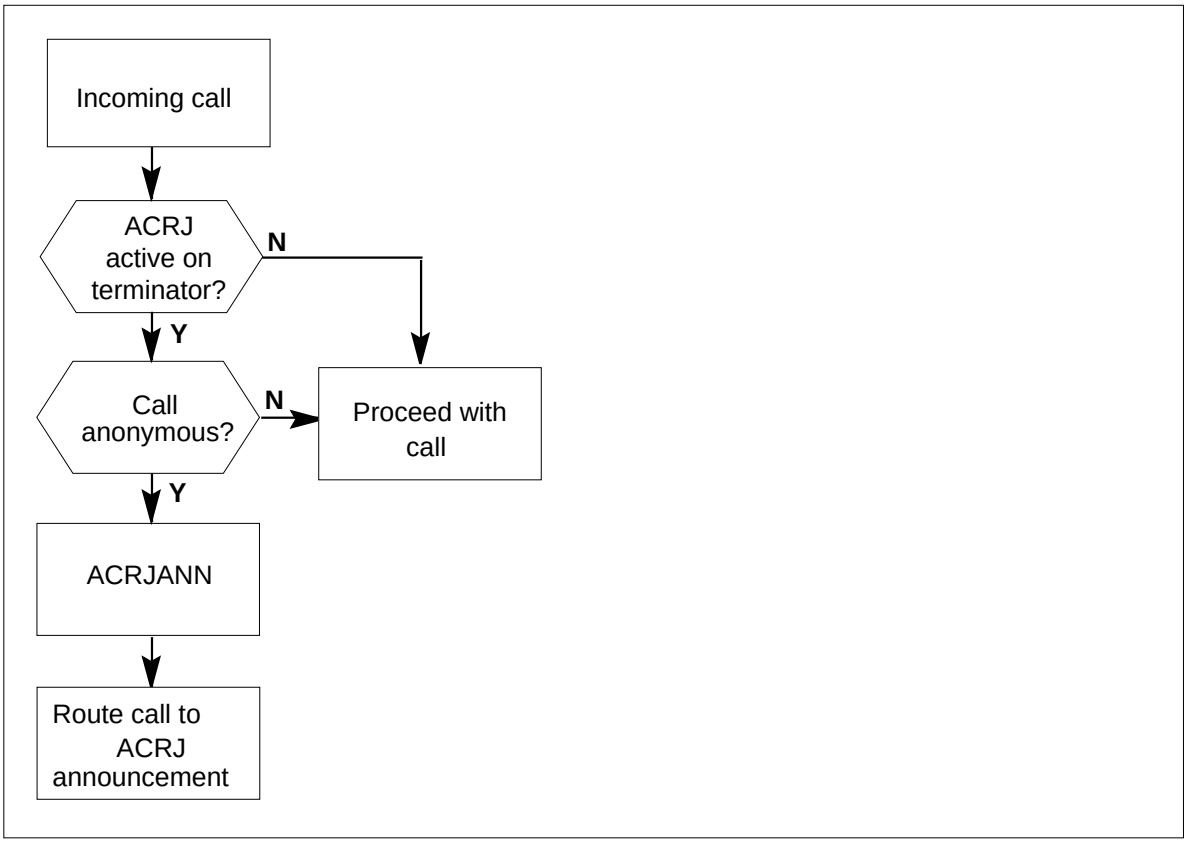


OM group ACRJ (continued)

OM group ACRJ registers-deactivation code dialed



OM group ACRJ registers-incoming call



Associated OM groups

TRMTFR2

Associated operating groups

There are no associated operating groups

Associated functionality codes

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

Functionality	Code
CLASSPLUS--Anonymous Caller rejection	NTXP12AA

Register ACRJACT

ACRJ activation

OM group ACRJ (continued)

ACRJ activation (ACRJACT) counts the number of times subscribers activate the ACRJ.

Register ACRJACT release history

Register ACRJACT is introduced to BCS22.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers

Register ACRJANN

Register ACRJ announcement

Register ACRJ announcement (ACRJANN) counts the number of rejected calls the system routes to an announcement.

Register ACRJANN release history

Register ACRJANN is introduced to BCS32.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register ACRJAUNV

Register ACRJ activation universal

Register ACRJ activation universal (ACRJAUNV) counts the number of activations of the ACRJ with universal access.

Register ACRJAUNV release history

Register ACRJAUNV is introduced to BCS35.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register ACRJDACT

Register ACRJ deactivation

Register ACRJ deactivation (ACRJDACT) counts the number of times subscribers deactivate the ACRJ.

Register ACRJDACT release history

Register ACRJDACT is introduced to BCS32.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register ACRJDENY

Register ACRJ denial

Register ACRJ denial (ACRJDENY) counts the number of times of the ACRJ cannot be accessed because the DENYACRJ option is in effect.

Register ACRJDENY release history

Register ACRJDENY is introduced to BCS35.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

OM group ACRJ (end)

Extension registers

There are no extension registers.

Register ACRJDUNV

Register ACRJ deactivation universal

Register ACRJ deactivation universal (ACRJDUNV) counts the number of deactivations of the ACRJ with universal access.

Register ACRJDUNV release history

Register ACRJDUNV is introduced to BCS35.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

OM group ACRTS

OM description

Attendant console return to service

Attendant console return to service (ACRTS) counts attempts to return an attendant console to service. The DMS software will try to return a console to service several times for some error conditions. When these error conditions occur, the total number of attempts does not equal the total of complete and not complete attempts.

Register ACRTSMAT counts each attempt by a system audit to return a console to service. Register ACRTSMAT counts each manual attempt to return a console to service from a MAP terminal.

When an attempt to return a console to service fails, a second register increments that identifies the reason for failure. The following list explains the indications of the registers:

Register	Reason for failure
ACRTSCAR	Carrier failure between the console and the digital modem.
ACRTSCC	A circuit for the console sent wrong message or data.
ACRTSCHC	Peripheral module speech path not established.
ACRTSCRL	Seizure of a circuit assigned to the console.
ACARTSIL	Both planes of the network lose integrity.
ACARTSNOR	The console did not send a response.
ACRTSNWB	The console lines and the digital modem or the three-port conference circuit (CF3P) did not connect.
ACRTSSE	A fault occurred that no other ACRTS OM group register defines.

Release history

The OM group ACRTS is introduced to BCS22.

OM group ACRTS (continued)

Registers

The following OM group ACRTS registers display on the MAP terminal as follows:

```
ACRTSMAT    ACRTSSAT    ACRTSNOR    ACRTSCC
ACRTSIL     ACRTSNWB    ACRTSCHC    ACRTSCRL
ACRTSCAR    ACRTSSE
```

Group structure

OM group ACRTS provides one tuple for each attendant console. Each tuple consists of the ten registers contained in ACRTS.

Key field:
Table ATTCONS defines the attendant console commonlanguage location identifier (CLLI). The maximum numberof key fields is 255.

Info field:
There are no info fields

Table ATTCONS contains the data used to assign an attendant console to a customer group. The ACRTS key field is the field CONSOLE, the CLLI assigned to the attendant console.

Associated OM groups

CF3P - The shortage of CF3Ps can cause the register CNFOVFL or CNFOVFLT of the CF3P OM group to increase. The CNFOVFL increases when the system cannot satisfy immediately a request for a CF3P because all conference circuits are busy. The CNFOVFLT increases when the system cannot satisfy a non-TOPS circuit request for a CF3P. The system reserves idle circuits for TOPS and cannot immediately satisfy all non-TOPS circuit requests.

Associated operating groups

The following are associated operating groups for OM group ACRTS:

- Meridian Digital Centrex
- Meridian 1 (options 111-211)

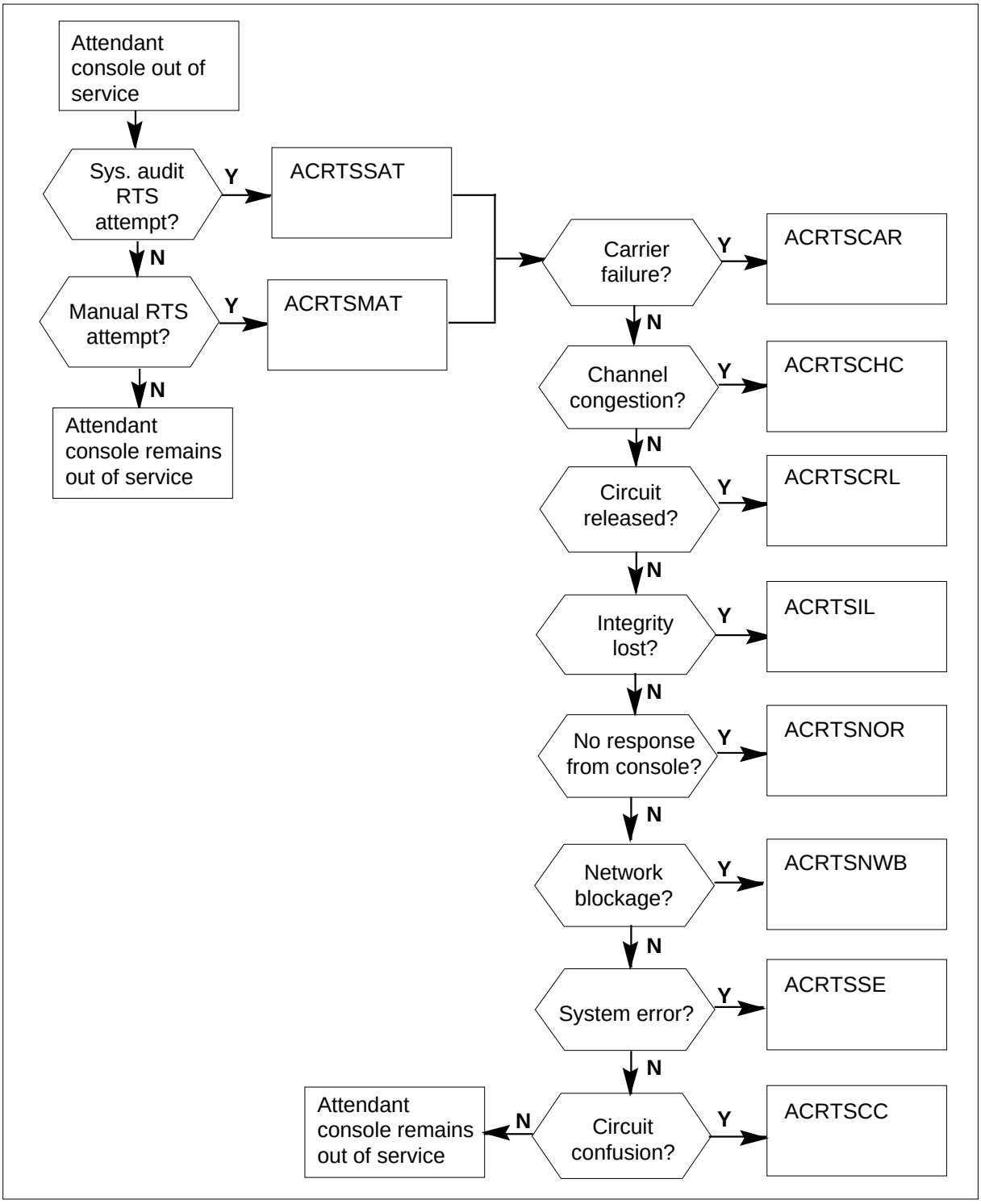
Associated functionality codes

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

Functionality	Code
Integrated Business Network—Basic (IBN)	NTX100AA

OM group ACRTS (continued)

OM group ACRTS registers



Register ACRTSCAR

Attendant console return to service-carrier failure

Attendant console return to service-carrier failure (ACRTSCAR) counts attempts to return the attendant console to service that fail. Attempts will fail because of carrier failure between the console and the digital modem.

Register ACRTSCAR release history

Register ACRTSCAR is introduced to BCS22.

Associated registers

There are no associated registers.

Associated logs

The system generates IBN104 when the attendant console fails to return to service. A trouble code of AC_DM_CARRIER_FAILED indicates that the problem was a carrier failure.

Extension registers

There are no extension registers.

Register ACRTSCC

Attendant console return to service-circuit confusion.

Attendant console return to service-circuit confusion (ACRTSCC) counts attempts to return failed attendant consoles to service. Attempts fail because a peripheral module that manages the attendant console detects differences in a message or data.

Register ACRTSCC release history

Register ACRTSCC is introduced to BCS22.

Associated registers

There are no associated registers.

Associated logs

The system generates IBN104 when the attendant console fails to return to service. A trouble code of AC_CKT_CONFUSION indicates a circuit for the console sent a message or data that was not compatible.

Extension registers

There are no associated registers.

OM group ACRTS (continued)

Register ACRTSCHC

Attendant console return to service-channel congestion

Register ACRTSCHC counts attempts to return the failed attendant consoles to service. Failure occurs because the system cannot establish a peripheral module speech path for data-in, data-out, or voice lines.

Register ACRTSCHC release history

Register ACRTSCHC is introduced to BCS22.

Associated registers

There are no associated registers.

Associated logs

The system generates IBN104 when the attendant console fails to return to service. When the system cannot create a peripheral module speech path, the system generates a trouble code of AC_CHANNEL_CONGESTION. Peripheral module speech path exists for data-in, data-out, or voice lines.

Extension registers

There are no associated registers.

Register ACRTSCRL

Attendant console return to service-circuit released

Attendant console return to service-circuit released (ACRTSCRL) counts release call messages the system receives for an out-of-service attendant console circuit. Seizure of a circuit just assigned to the attendant console triggers a release call message.

Register ACRTSCRL release history

Register ACRTSCRL is introduced to BCS22.

Associated registers

There are no associated registers.

Associated logs

The system generates IBN104 when the attendant console fails to return to service. A trouble code AC_CKT_RELEASED indicates that a source or destination connection to the console is out of service.

Extension registers

There are no extension registers.

Register ACRTSIL

Attendant console return to service-integrity lost

Attendant console return to service-integrity lost (ACRTSIL) counts attempts to return the failed attendant consoles to service. The ACRTSIL counts attempts that fail because both planes of the network lose integrity.

Register ACRTSIL release history

Register ACRTSIL is introduced to BCS22.

Associated registers

There are no associated registers.

Associated logs

The system generates IBN104 when the attendant console fails to return to service. A trouble code of AC_INTEGRITY_LOST indicates that an integrity failure occurred on a circuit for the console.

Extension registers

There are no extension registers.

Register ACRTSMAT

Attendant console return to service-manual attempts

Attendant console return to service-manual attempts (ACRTSMAT) counts attempts to return the attendant console to service that occur at a MAP terminal.

Register ACRTSMAT release history

Register ACRTSMAT is introduced to BCS22.

Associated registers

There are no associated registers.

Associated logs

There are no associated registers.

Extension registers

There are no associated registers,

Register ACRTSNOR

Attendant console return to service-no response

OM group ACRTS (continued)

Attendant console return to service-no response (ACRTSNOR) counts attempts to return the attendant console to service that fail. Failure occurs because a response is not received from the console.

Register ACRTSNOR release history

Register ACRTSNOR is introduced to BCS22.

Associated registers

There are no associated registers.

Associated logs

The system generates IBN104 when the attendant console fails to return to service. A trouble code of AC_NO_RESPONSE indicates that a response was not received from the console during a system audit.

Extension registers

There are no extension registers.

Register ACRTSNWB

Attendant console return to service-network blockage

Attendant console return to service-network blockage (ACRTSNWB) counts attempts to return an attendant console (AC) to service that fail. Failure can occur because no connection occurs the AC lines and the digital modem. Failure also can occur because a connection between the AC lines and the three-port conference circuit (CF3P) does not occur.

Register ACRTSNWB release history

Register ACRTSNWB is introduced to BCS22.

Associated registers

Register ACSYSTR_ACCF3POV counts attempts to return failed attendant consoles to service. Attendant consoles fail because a CF3P is not available. Failure occurs as a result of a shortage of CF3Ps in the switch.

The shortage of CF3Ps can cause register CF3P_CNFOVFL or CF3P_CNFOVFLT of the CF3P OM group to increase.

Register CF3P_CNFOVFL counts each time a request made for a CF3P fails because all conference circuits are busy.

Register CF3P_CNFOVFLT counts each time a non-TOPS circuit request for a CF3P fails. Requests fail because the system reserves the idle circuits for TOPS.

Associated logs

The system generates IBN104 when the attendant console fails to return to service. A trouble code of AC_NETWORK_BLOCKAGE indicates a connection between the AC lines and the digital modem or the CF3P was not made.

Extension registers

There are no extension registers.

Register ACRTSSAT

Attendant console return to service-system audit attempts

Attendant console return to service-system audit attempts (ACRTSSAT) counts attempts by the system audit to return an attendant console to service.

Register ACRTSSAT release history

Register ACRTSSAT is introduced to BCS22.

Associated registers

There are no associated registers.

Associated logs

There are no associated registers.

Extension registers

There are no extension registers.

Register ACRTSSE

Attendant console return to service-system error

Attendant console return to service-system error (ACRTSSE) counts attempts to return the failed attendant consoles. Failure occurs because of an error that no other register counted in the ACRTS OM group.

Register ACRTSSE release history

Register ACRTSSE is introduced to BCS22.

Associated registers

There are no associated registers.

OM group ACRTS (end)

Associated logs

The system generates IBN104 when the attendant console fails to return to service. A trouble code of AC_SYSTEM_ERROR indicates that a fault occurred that no other trouble codes define.

Extension registers

There are no extension registers.

OM group ACSYSTR

OM description

Attendant console system resources (ACSYSTR) counts system resource shortages and faults that a switch encounters. The ACSYSTR counts shortages and faults that occur when the switch attempts to return an attendant console to service (RTS).

If the original console state is AC system busy, a system audit attempts to return the console to service every minute. The correct register increases for each RTS attempt as long as the fault or resource shortage is present.

The DMS software attempts to return a console to service several times for some error conditions. When error conditions occur, the total number of attempts does not equal the total of complete and not complete RTS attempts.

When an RTS attempt fails, the following registers increase:

Register	Explanation
ACCF3PFL	The CF3P did not respond
ACCF3POV	The CF3P resource was not available in the switch
ACDATAER	Attendant console data tables had problems
ACDMFL	The digital modem did not respond
ACDMOVFL	The digital modem is not available
ACERR	Error occurred that is not increased in register ACDMFL or ACCF3PFL
ACEXOVFL	The PORTPERMEXT extension block was not available
ACFLT	A problem caused the console to go down

Release history

The OM group ACSYSTR is introduced to BCS22.

Registers

The OM group ACSYSTR registers display on the MAP terminal as follows:

OM group ACSYSTR (continued)

ACDMOVFL	ACCF3POV	ACDMFL	ACCF3PFL
ACEXOVFL	ACDATAER	ACERR	ACFLT

Group structure

The OM group ACSYSTR provides one tuple for a switch. Each tuple consists of the eight registers contained in ACSYSTR.

Key field:
There are no key fields

Info field:
OMACINFO is the number of attendant consoles in theswitch. The maximum number of consoles is 255.

Associated OM groups

The ACRTS reports on attempts to return an attendant console to service.

The CF3P counts the use of three-port conference circuits (CF3P) used by attendant consoles engaged in three-way calls.

The EXT counts the use of extension blocks. Extension blocks are auxiliary software resources that provide additional storage for data for an attendant console call.

The NRS counts the use of network resource selector (NRS) resources, for example digital modems, which attendant consoles require.

Associated operating groups

The following are associated operating groups for OM group ACSYSTR:

- Meridian Digital Centrex
- Meridian 1 (options 111-211)

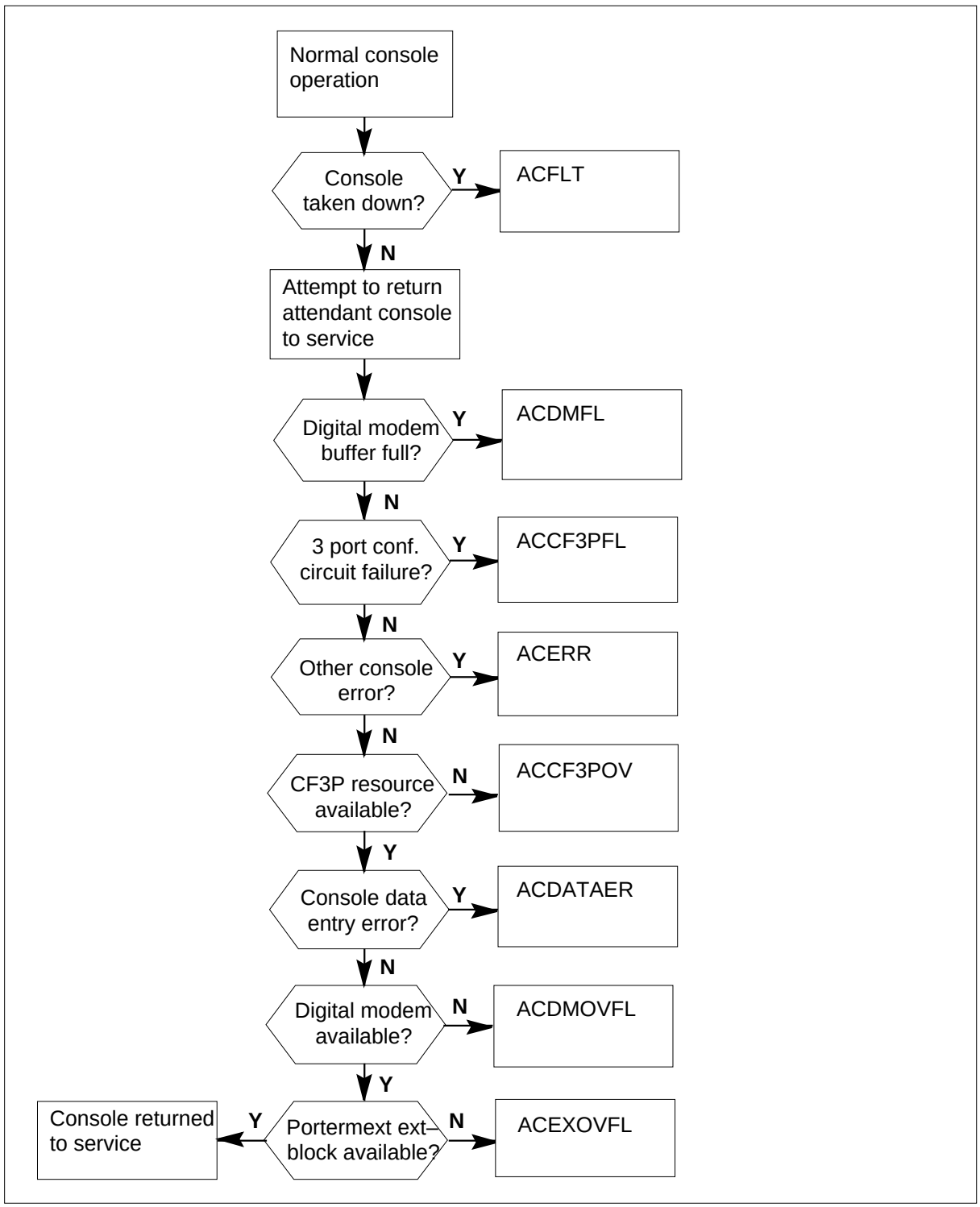
Associated functionality codes

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

Functionality	Code
Integrated Business Network-Basic (IBN)	NTX100
Switch Performance Monitoring System	NTX738

OM group ACSYSTR (continued)

OM group ACSYSTR registers



Register ACCF3PFL

Attendant console system resources-three-port conference circuit failure (ACCF3PFL) increases when a three-port conference circuit (CF3P) sends a bad message or no response.

Register ACCF3PFL release history

Register ACCF3PFL is introduced to BCS22.

Associated registers

There are no associated registers.

Associated logs

IBN104 generates when the attendant console fails to return to service. A problem code of AC_CONF_NO_RESPONSE indicates that a response was not received from the CF3P.

Extension registers

There are no extension registers.

Register ACCF3POV

Attendant console system resources-shortage of three-port conference circuits (ACCF3POV) counts attempts to return failed attendant consoles to service. The ACCF3POV counts attempts to return failed attendant consoles to service because a (CF3P) is not available.

Register ACCF3POV release history

Register ACCF3POV is introduced to BCS22.

Associated registers

A shortage of CF3Ps can cause Register CNFOVFL or CNFOVFLT of the CF3P OM group to increase.

Register CF3P_CNFOVFL increases when the system cannot immediately satisfy a request for CF3P because all conference circuits are busy.

Register CF3P_CNFOVFLT increases when the system cannot immediately satisfy a non-TOPS circuit request for a CF3P. The system cannot immediately satisfy a non-TOPS circuit request for a CF3P because the idle circuits are all reserved for TOPS.

OM group ACSYSTR (continued)

Associated logs

The system generates IBN104 when an attendant console fails to return to service. A trouble code of AC_CONF_UNAVAILABLE indicates that there are not enough of CF3Ps.

Extension registers

There are no extension registers.

Register ACDATAER

Attendant console system resource-datafill error (ACDATAER) counts attempts to return failed attendant consoles to service. Failure occurs because an difference between attendant console data tables is present. The tables at fault are IBNLINES and ATTCONS.

Register ACDATAER release history

Register ACDATAER is introduced to BCS22.

Associated registers

There are no associated registers.

Associated logs

The system generates IBN104 when the attendant console fails to return to service. A trouble code of AC_DATA_ERROR indicates an difference between attendant console data tables.

Extension registers

There are no extension registers.

Register ACDMFL

Attendant console system resources-digital modem failure (ACDMFL) increases when no response is received from a digital modem. Failure occurs when an error in communication between the digital modem and the maintenance trunk module is present. Failure also can occur because a digital modem sent a bad message.

Register ACDMFL release history

Register ACDMFL is introduced to BCS22.

Associated registers

There are no associated registers.

Associated logs

The system generates IBN104 when the attendant console fails to return to service. A trouble code of AC_DM_NO_CARRIER indicates that no response was received from the digital modem. A trouble code of AC_DM_BUFFER_FULL indicates that the digital modem buffer was full.

Extension registers

There are no extension registers.

Register ACDMOVFL

Attendant console system resources-shortage of digital modems (ACDMOVFL) counts attempts to return failed attendant consoles to service. Failure occurs because a digital modem is not available.

Register ACDMOVFL release history

Register ACDMOVFL is introduced to BCS22.

Associated registers

Register NRS_NRSOVFL also increases. Register NRS_NRSOVFL counts each time a network resource selector (NRS) group overflows to another group to find an available digital modem. The NRS group is a digital modem pool.

Associated logs

The system generates IBN104 when the attendant console fails to return to service. A trouble code of AC_DM_UNAVAILABLE indicates not enough digital modems.

Extension registers

There are no extension registers.

Register ACERR

Attendant console system resources—console errors (ACERR) counts attendant console (AC) errors do not cause register ACDMFL or ACCF3PFL to increase.

Register ACERR release history

Register ACERR is introduced to BCS22.

Associated registers

There are no associated registers.

OM group ACSYSTR (continued)

Associated logs

The system generates IBN101 when an AC changes state because of a problem. The following list contains associated trouble codes LOG101 that can be present when ACERR increases:

Trouble Code	Explanation
AC_CKT_CONFUSION	A non-compatible message or data was received from a circuit for an AC.
AC_DM_CARRIER_FAILED	Digital modem carrier failure occurred.
AC_FRAMING_ERROR	Framing error occurred on the digital modem to an AC link.
AC_INTEGRITY_LOST	Integrity failure occurred on a circuit for an AC .
AC_NO_RESPONSE	A response from the AC during a system audit is not present.
AC_OVERRUN_ERROR	Message overrun error occurred on the digital modem to AC link.
AC_PARITY_ERROR	Hardware parity error occurred on the digital modem to AC link.
AC_RESET	Hardware reset occurred to an attendant console.
AC_SW_ERROR	Important software error occurred while a call was in progress.
AC_SW_FAULT	Loss of the console call occurred because of call call error or trapping of the call.
AC_SYSTEM_ERROR	Fault occurred for which no trouble code is present.
AC_TO_DM_INVALID_KEY	The console sent an invalid key code to a digital modem.

Extension registers

There are no extension registers.

Register ACEXOVFL

Attendant console system resources-extension block overflow (ACEXOVFL) counts attempts to return an attendant console to service that fail. Failure occurs when PORTPERMEXT extension block is not available.

The office parameter NUMPERMEXT of table OFCENG determines the number of PORTPERMEXT extension blocks available in a switch.

Register ACEXOVFL release history

Register ACEXOVFL is introduced to BCS24.

Associated registers

Register EXT_EXTOVFL, with a key index of three, also increases. The key indices of three corresponds to the office parameter NUMPERMEXT. Register EXT_EXTOVFL increases when a request for an extension block with a key index of three failed. Failure occurs because none are idle.

Associated logs

The system generates IBN104 when the attendant console fails to return to service. A trouble code of AC_NO_EXT_RESOURCE indicates that no PORTPERMEXT extension block was available.

Extension registers

There are no extension registers.

Register ACFLT

Attendant console system resources—console faults (ACFLT) increases when an attendant console fails as a result of a problem.

Register ACFLT release history

Register ACFLT is introduced to BCS24.

Associated registers

There are no associated registers.

OM group ACSYSTR (continued)

Associated logs

When a problem removes an attendant console from service, the system generates an IBN102. The following problem codes associates with LOG102 when register ACERR increases.

Trouble Code	Explanation
AC_DM_CARRIER_FAILED	Digital modem carrier failure occurred.
AC_DM_MSG_ERROR	A digital modem message detects an error.
AC_DM_MSG_TOO_LONG	Digital modem message was too long.
AC_FRAMING_ERROR	Framing error occurred on the digital modem to an AC link.
AC_INTEGRITY_LOST	Integrity failure occurred on a circuit for an AC.
AC_NO_RESPONSE	No response was received from the console during a system audit.
AC_OVERRUN_ERROR	Message overrun error occurred on the digital modem to AC link.
AC_PARITY_ERROR	Hardware parity error occurred on the digital modem to AC link.
AC_RESET	Hardware reset occurred to an attendant console.
AC_SW_ERROR	Important software error occurred while a call was in progress.
AC_CKT_CONFUSION	Non-compatible message or data was received from a circuit associated with an AC.
AC_SW_FAULT	The console call was lost because of call error or trapping of the call.
AC_SYSTEM_AUDIT	System audit force release removed a console from service.
AC_SYSTEM_ERROR	Fault occurred for which no trouble code exists.
AC_TO_DM_INVALID_KEY	A console sent an invalid key code to a digital modem.

Extension registers

There are no extension registers.

OM group ACTAKEDN

OM description

Attendant console take down (ACTAKEDN) reports on problems that result in an attendant console being taken down. These problems can occur during normal console operation or a system audit.

Many hardware-related errors that an attendant console sustains are not serious enough to justify taking down the console. If problems accumulate between system audits to exceed a threshold (set by office parameter AC_MAX_NUM_ERRORS), the system removes the console from service. Registers ACTDCC, ACTDINLO, ACTDINKY, ACTDPFO, ACTDRES, ACTDCARF, ACTDSYS, ACTDDMFL, and ACTDCTRL increase to indicate the problem that exceeds the threshold.

During system audits, the location of a fault removes the console from service and causes register ACTDAUD to increase. Register ACTDCNR increases when the the system removes the console from service because the console does not respond. When the system removes the console from service due to a manual force release from a MAP terminal, register ACTDMAN increases. Register ACTDSERR increases if a software error causes the system to take the console down.

Release history

The OM group ACTAKEDN was introduced in BCS22.

Registers

The OM group ACTAKEDN registers display on the MAP terminal as follows:

```
ACTDCC      ACTDINLO    ACTDINKY    ACTDPFO
ACTDRES     ACTDCARF    ACTDSYS     ACTDDMFL
ACTDCTRL    ACTDSERR    ACTDMAN     ACTDAUD
ACTDCNR
```

Group structure

The OM group ACTAKEDN provides one tuple for each attendant console. Each tuple consists of the 13 registers contained in ACTAKEDN.

Key field:
the attendant console common language identifier (CLLI) that table ATTCONS defines. The maximum number of key fields is 255.

Info field:
There is no Info field.

Table ATTCONS contains the data used to assign an attendant console to a customer group. The ACTAKEDN key field is the field CONSOLE, the CLLI assigned to the attendant console.

Office parameter AC_MAX_NUM_ERRORS in table OFCSTD specifies the maximum number of hardware-related errors an attendant console can sustain between system audits. When the errors exceed the maximum, the system removes the console from service. If the value of AC_MAX_NUM_ERRORS exceeds the threshold, the system removes the console from service. The correct register in the ACTAKEDN OM group increases. If a hardware-related error occurs, and the value of AC_MAX_NUM_ERRORS is not exceeded, the correct register in OM group ACTRBL increases. A register in OM group ACTAKEDN does not increase in these events.

Associated OM groups

OM group ACTRBL counts problems encountered by an attendant console that are not serious enough to take down the console. These problems can occur during normal console operation or system audits.

Associated operating groups

The following are associated operating groups for OM group ACTAKEDN:

- Meridian Digital Centrex
- Meridian 1 (option 111-211)

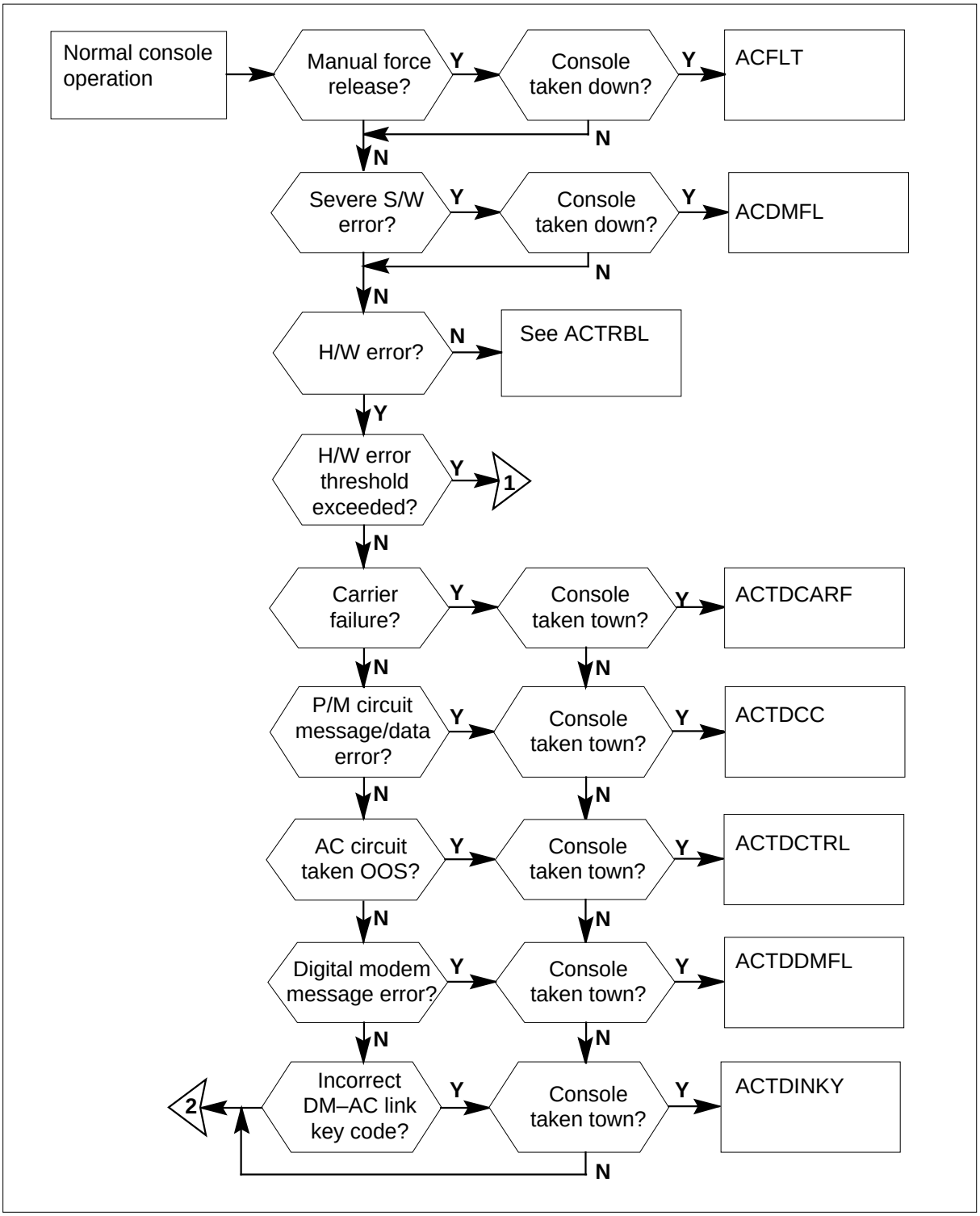
Associated functionality codes

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

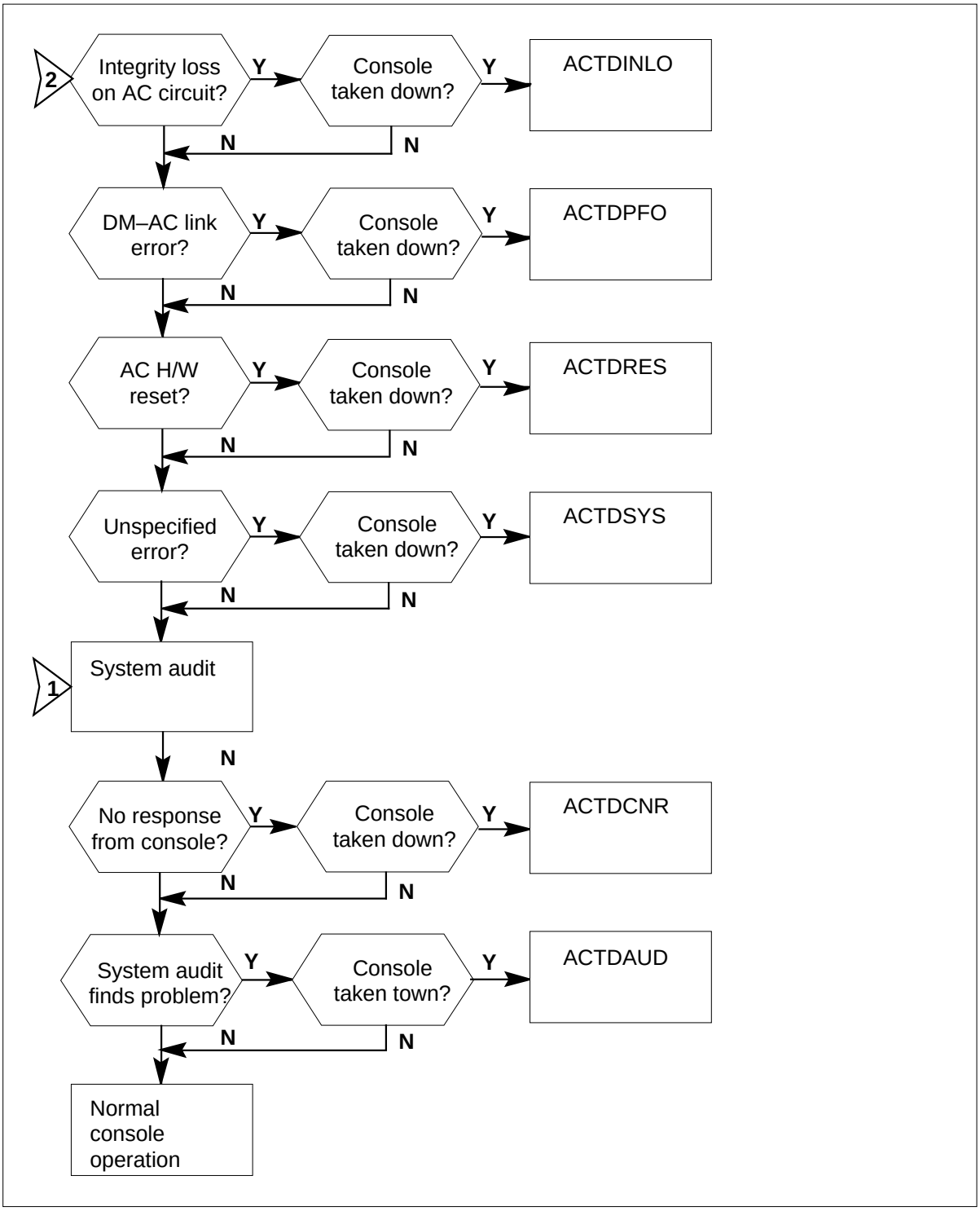
Functionality	Code
Integrated Business Network Basic (IBN)	NTX100

OM group ACTAKEDN (continued)

OM group ACTAKEDN registers



OM group ACTAKEDN registers (continued)



OM group ACTAKEDN (continued)

Register ACTDAUD

Attendant console take down—system audit force release (ACTDAUD)

Register ACTDAUD increases when the system removes an attendant console from service due to a system audit.

Register ACTDAUD release history

Register ACTDAUD was introduced in BCS22.

Associated registers

Register ACTDCNR increases when a system audit removes the attendant console from service because the console does not respond.

Associated logs

The system generates IBN102 when the system removes an attendant console from service due to a problem. A problem code of AC_SYSTEM_AUDIT indicates that a system audit force release removed the console from service.

Extension registers

There are no extension registers.

Register ACTDCARF

Attendant console take down—carrier failure (ACTDCARF)

Register ACTDCARF increases when the system removes an attendant console from service because a carrier failure causes the threshold for ACTDCC to be exceeded.

Office parameter AC_MAX_NUM_ERRORS in table OFCSTD sets the threshold for ACTDCARF. The threshold specifies the maximum number of hardware-related errors an attendant console can sustain during an audit interval. When the number of errors exceeds the maximum, the system removes the console from service.

Register ACTDCARF release history

Register ACTDCARF was introduced in BCS22.

Associated registers

The ACTRBL_ACTRCARF increases when a digital modem ceases to receive carrier information from the attendant console. When ACTRBL_ACTRCARF increases, a common internal counter also increases. The common internal counter sums the total number of hardware-related errors for several registers between system audits.

If the number of errors exceeds the threshold set by office parameter AC_MAX_NUM_ERRORS, the following actions occur:

- the system removes the console from service
- register ACTDCARF increases instead of register ACTRBL_ACTRCARF

Associated logs

The system generates IBN102 when the system removes an attendant console from service due to a problem. A problem code of AC_DM_CARRIER_FAILED indicates a digital modem carrier failure.

Extension registers

There are no extension registers.

Register ACTDCC

The threshold for Attendant console take down-circuit confusion (ACTDCC)

Office parameter AC_MAX_NUM_ERRORS in table OFCSTD sets the threshold for Register ACTDCC. The threshold specifies the maximum number of hardware-related errors an attendant console can sustain during an audit interval. When the number of errors exceed the maximum, the system removes the console from service.

Register ACTDCC release history

Register ACTDCC was introduced in BCS22.

Associated registers

Register ACTRBL_ACTRCC counts problem messages that occur on a circuit for the attendant console during normal console operation. If the problem occurs at the source or destination, the source or destination becomes idle. The console loses that party, but the console stays up. If the problem occurs for other connections, the software attempts to recover.

When register ACTRBL_ACTRCC increases, a common internal counter also increases. The common internal counter sums the total number of hardware-related errors for several registers between system audits.

If the number of errors exceeds the threshold set by office parameter AC_MAX_NUM_ERRORS, the following actions occur:

- the system removes the console from service
- register ACTDCC increases instead of register ACTRBL_ACTRCARF

OM group ACTAKEDN (continued)

Associated logs

The system generates IBN102 when the system removes an attendant console from service due to a problem. A problem code of AC_CKT_CONFUSION indicates that an inconsistent message or inconsistent data were received. The inconsistent message or data were received from a circuit associated with the console.

Extension registers

There are no extension registers.

Register ACTDCNR

Attendant console take down—no response (ACTDCNR)

Register ACTDCNR increases when an the system removes the attendant console from service. The system removes the attendant console from service when the console does not respond to a system audit.

Register ACTDCNR release history

Register ACTDCNR was introduced in BCS22.

Associated registers

Register ACTRBL_ACTRCNR increases when the attendant console does not respond to a system audit.

Associated logs

The system generates IBN102 when the system removes an attendant console from service due to a problem. A problem code of AC_NO_RESPONSE indicates that no response was received from the console during a system audit.

Extension registers

There are no extension registers.

Register ACTDCTRL

Attendant console take down—circuit released (ACTDCTRL)

Register ACTDCTRL increases when the system removes an attendant console from service. The system removes an associated circuit from service because the system removes an associated circuit from service. This removal exceeds the threshold for register ACTDCC.

The following are causes of the removal from service of the circuit of the attendant console:

- a forced release from a MAP terminal
- the manual or system removal from service of the peripheral module (PM)

The removal from service of the circuit of the attendant console does not occur at the source or destination.

Office parameter AC_MAX_NUM_ERRORS sets the threshold for register ACTDCC. The threshold specifies the maximum number of hardware-related errors an attendant console can sustain during an audit interval. When the number of errors exceed the maximum, the system removes the console from service.

Register ACTDCTRL release history

Register ACTDCTRL was introduced in BCS22.

Associated registers

Register ACTRBL_ACTRCTRL counts each time the system removes a circuit associated with an attendant console from service during normal console operation.

The following are causes of the removal from service of the circuit of the attendant console:

- a forced release from a MAP terminal
- the manual or system removal from service of the PM

Register ACTRBL_ACTRCTRL only increases if the system removes the circuit associated with the console from service at the source or destination. The system counts any other occurrence in the correct register of the ACTAKEDN OM group.

When register ACTRBL_ACTRCTRL increases, a common internal counter also increases. The common internal counter sums the total number of hardware-related errors for several registers between system audits.

If the number of errors exceeds the threshold set by office parameter AC_MAX_NUM_ERRORS, the following actions occur:

- the system removes the console from service
- register ACTDCARF increases instead of register ACTRBL_ACTRCARF

OM group ACTAKEDN (continued)

Associated logs

The system generates IBN102 when the system removes an attendant console from service due to a problem. A problem code of AC_CKT_RELEASED indicates that the system removed from service a source or destination connection to the console.

Extension registers

There are no extension registers.

Register ACTDDMFL

Attendant console take down—digital modem message failure (ACTDDMFL)

Register ACTDDMFL increases when the system removes an attendant console from service because a wrong message from the digital modem (DM) exceeds the threshold for register ACTDDMFL.

Office parameter AC_MAX_NUM_ERRORST sets the threshold for ACTDDMFL. The threshold specifies the maximum number of hardware-related errors an attendant console can sustain during an audit interval. When the number of errors exceeds the maximum, the system removes the console from service.

Register ACTDDMFL release history

Register ACTDDMFL was introduced in BCS22.

Associated registers

Register ACTRBL_ACTRDMFL increases when the attendant console receives a wrong message from the DM. When register ACTRBL_ACTRDMFL increases, a common internal counter also increases. The common internal counter sums the total number of hardware-related errors for several registers between system audits.

If the number of errors exceeds the threshold set by office parameter AC_MAX_NUM_ERRORS, the following actions occur:

- the system removes the console from service
- register ACTDDMFL increases instead of register ACTRBL_ACTRDMFL

Associated logs

The system generates IBN102 when the system removes an attendant console from service due to a problem. A problem code of AC_DM_MSG_ERROR indicates the detection of an error in a DM message. A problem code of AC_DM_MSG_TOO_LONG indicates that a DM message was too long.

Extension registers

There are no extension registers.

Register ACTDINKY

Attendant console take down—invalid key code (ACTDINKY)

Register ACTDINKY increases when an invalid code on the DM to the attendant console link exceeds the threshold ACTDCC and removes the console from service.

Office parameter AC_MAX_NUM_ERRORS sets the threshold for register ACTDINKY. The threshold specifies the maximum number of hardware-related errors an attendant console can sustain during an audit interval. When the number of errors exceeds the maximum, the system removes the console from service.

Register ACTDINKY release history

Register ACTDINKY was introduced in BCS22.

Associated registers

Register ACTRBL_ACTRINKY increases when the attendant console sends an invalid key code to the DM. When register ACTRBL_ACTRINKY increases, a common internal counter also increases. The common internal counter sums the total number of hardware-related errors for several registers between system audits. If the number of errors exceeds the threshold set by office parameter AC_MAX_NUM_ERRORS, the system removes the console from service. Register ACTDINKY increases instead of ACTRBL_ACTRINKY.

Associated logs

The system generates IBN102 generates when the system removes an attendant console from service due to a problem. A problem code of AC_TO_DM_INVALID_KEY indicates that the console sent an invalid key code to the DM.

Extension registers

There are no extension registers.

Register ACTDINLO

Attendant console take down—integrity lost (ACTDINLO)

Register ACTDINLO increases when the system removes an attendant console from service because integrity loss on a circuit of the attendant console exceeds the threshold for register ACTDINLO.

OM group ACTAKEDN (continued)

Office parameter AC_MAX_NUM_ERRORS sets the threshold for register ACTDINLO. The threshold specifies the maximum number of hardware-related errors an attendant console can sustain during an audit interval. When the number of errors exceeds the maximum, the system removes the console from service.

Register ACTDINLO release history

Register ACTDINLO was introduced in BCS22.

Associated registers

Register ACTRBL_ACTRINLO increases when an integrity failure occurs on a circuit of an attendant console during normal console operation. If an integrity failure occurs at source or destination, the source or destination is released. For other events, the software attempts to recover.

When register ACTRBL_ACTRINLO increases, a common internal counter also increases. The common internal counter sums the total number of hardware-related errors for several registers between system audits.

If the number of errors exceeds the threshold set by office parameter AC_MAX_NUM_ERRORS, the following actions occur:

- the system removes the console from service
- register ACTDINLO increases instead of register ACTRBL_ACTRINLO

Associated logs

The system generates IBN102 when the system removes an attendant console from service because of a problem. A problem code of AC_INTEGRITY_LOST indicates that an integrity failure occurred on a circuit associated with the console.

Extension registers

There are no extension registers.

Register ACTDMAN

Attendant console take down—manual force release (ACTDMAN)

Register ACTDMAN increases when the system removes an attendant console from service due to a manual force release from a MAP terminal.

Register ACTDMAN release history

Register ACTDMAN was introduced in BCS22.

Associated registers

There are no associated registers.

Associated logs

The system generates IBN102 when the system removes an attendant console from service because of a problem. A problem code of AC_MANUAL_FRLS indicates the manual force release of a console at a MAP terminal.

Extension registers

There are no extension registers.

Register ACTDPFO

Attendant console take down—parity, framing, or overrun error (ACTDPFO)

Register ACTDPFO increases when the system removes an attendant console from service. Removal from service occurs when one of the following exceeds the threshold for register ACTDPFO:

- hardware parity
- framing
- an overrun error on the DM to attendant console (AC) link

Office parameter AC_MAX_NUM_ERRORS sets the threshold for register ACTDPFO. The threshold specifies the maximum number of hardware-related errors an attendant console can sustain during an audit interval. When the number of errors exceeds the maximum number, the system removes the console from service.

Register ACTDPFO release history

Register ACTDPFO was introduced in BCS22.

Associated registers

Register ACTRBL_ACTRPFO counts each time a hardware parity, framing, or overrun error occurs on the DM-to-AC link. When register ACTRBL_ACTRPFO increases, a common internal counter also increases. The common internal counter sums the total number of hardware-related errors for several registers between system audits. If the number of problems exceeds the threshold set by office parameter AC_MAX_NUM_ERRORS, the system removes the console from service. This removal causes register ACTDPFO to increase instead of register ACTRBL_ACTRPFO.

OM group ACTAKEDN (continued)

Associated logs

The system generates IBN102 when the system removes the attendant console from service because of a problem. A problem code of AC_PARITY_ERROR indicates that a hardware parity error occurred on the DM-to-AC link. A code of AC_FRAMING_ERROR indicates that a framing error occurred on the DM-to-AC link. A code of AC_OVERRUN_ERROR indicates that a message overrun occurred on the DM-to-AC link.

Extension registers

There are no extension registers.

Register ACTDRES

Attendant console take down—reset (ACTDRES)

Register ACTDRES increases when the system removes an attendant console from service. The system removes the console because hardware reset exceeds the threshold for register ACTDRES.

Office parameter AC_MAX_NUM_ERRORS sets the threshold for register ACTDRES. The threshold specifies the maximum number of hardware-related errors an attendant console can sustain during an audit interval. When the number of errors exceeds the maximum, the system removes console from service.

Register ACTDRES release history

Register ACTDRES was introduced in BCS22.

Associated registers

Register ACTRBL_ACTRRES increases when an attendant console has a hardware reset. The reasons for a reset include local power failure, or carrier failure from the central control to the attendant console. When register ACTRBL_ACTRRES increases, a common internal counter also increases. The common internal counter sums the total number of hardware-related errors for several registers between system audits.

If the number of errors exceeds the threshold set by office parameter AC_MAX_NUM_ERRORS, the following actions occur:

- the system removes the console from service
- register ACTDRES increases instead of register ACTRBL_ACTRRES

Associated logs

The system generates IBN102 when the system removes an attendant console from service because of a problem. A problem code of AC_NO_RESET indicates that a hardware reset occurred on the console.

Extension registers

There are no extension registers.

Register ACTDSERR

Attendant console take down—software error (ACTDSERR)

Register ACTDSERR increases when the system removes an attendant console from service because of a software error.

Register ACTDSERR release history

Register ACTDSERR was introduced in BCS22.

Associated registers

Register ACTRBL_ACTRSERR increases when a software error occurs on the attendant console but the error is not severe enough to take down the console.

Associated logs

The system generates IBN102 generates when the system removes an attendant console from service because of a problem. A problem code of AC_SW_ERROR indicates that a severe software error occurred while a call was in progress.

Extension registers

There are no extension registers.

Register ACTDSYS

Attendant console take down—system error (ACTDSYS)

Register ACTDSYS increases when the system removes an attendant console from service. This removal occurs because an error that is not shown exceeds the threshold for register ACTDSYS.

Office parameter AC_MAX_NUM_ERRORS sets the threshold for register ACTDSYS. The threshold specifies the maximum number of hardware-related errors an attendant console can sustain during an audit interval. When the number of errors exceed the maximum, the system removes the console from service.

OM group ACTAKEDN (end)

Register ACTDSYS release history

Register ACTDSYS was introduced in BCS22.

Associated registers

Register ACTRBL_ACTRSYS increases when an error occurs that is not counted by any other register in the ACTRBL group. When register ACTRBL_ACTRSYS increases, a common internal counter also increases. The common internal counter sums the total number of hardware-related errors for several registers between system audits.

If the number of errors exceeds the threshold set by office parameter AC_MAX_NUM_ERRORS, the following actions occur:

- the system removes the console from service
- register ACTDSYS increases instead of register ACTRBL_ACTRSYS

Associated logs

The system generates IBN102 when the system removes an attendant console from service. A problem code of AC_SYSTEM_ERROR indicates that a fault without a problem code occurred.

Extension registers

There are no extension registers.

OM group ACTRBL

OM description

Attendant console trouble (ACTRBL) counts problems encountered by an attendant console that are not severe enough to take down the console. These problems can occur during normal console operation or system audits.

The OM group ACTRBL employs 13 peg registers to track attendant console problems. The following is a list of these registers and the reasons for register increases:

Register	Reason for Register Increases
ACTRCARF	A carrier failure occurred between the console and the digital modem (DM).
ACTRCC	Problem message occurred on a circuit associated with the console.
ACTRCLFR	Call is lost due to removal of console from service.
ACTRCNR	The console did not send a response during a system audit.
ACTRCTRL	Removal of the circuit associated with the console.
ACTRDMFL	Console has received a wrong message from the DM.
ACTRINKY	Console sent an incorrect key code to the DM.
ACTRINLO	Console circuit lost integrity.
ACTRPFO	Hardware parity, framing, or overrun error occurred on the DM to attendant console link.
ACTRRES	Console hardware reset occurred.
ACTRSERR	Software error occurred, but the error did not take down the console.
ACTRSLFT	The loss of a console call because of suicide or trap.
ACTRSYS	An error occurred that is not counted in any other ACTRBL OM group register.

When registers ACTRCARF, ACTRCC, ACTRCTRL, ACTRDMFL, ACTRINKY, ACTRINLO, ACTRPFO, ACTRRES, and ACTRSYS increase,

OM group ACTRBL (continued)

a common internal counter also increases. The common internal counter sums the total number of problems for these registers between system audits.

If the number of errors exceeds the value set by office parameter AC_MAX_NUM_ERRORS in table OFCSTD, the following actions occur:

- the system removes the console from service
- the correct register in OM group ACTAKEDN increases instead of a register in OM group ACTRBL

Release history

The OM group ACTRBL was introduced in BCS22.

Registers

The OM group ACTRBL registers display on the MAP terminal as follows:

```
ACTRCC      ACTRINLO    ACTRINKY    ACTRPFO
ACTRRES     ACTRCARF    ACTRSYS     ACTRDMFL
ACTRCTRL    ACTRSERR    ACTRSFLT    ACTRCLFR
ACTRCNR
```

Group structure

The OM group ACTRBL provides one tuple for each attendant console. Each tuple consists of the 13 registers contained in ACTRBL.

Key field:
The common language location identifier (CLLI) for theattendant console that is defined in table ATTCONS. Themaximum number of key fields is 255.

Info field:
There is no Info field.

Table ATTCONS contains the data used to assign an attendant console to a customer group. Field CONSOLE is the CLLI assigned to the attendant console that serves as the ACTRBL key field.

Office parameter AC_MAX_NUM_ERRORS specifies the maximum number of hardware-related errors an attendant console (AC) can sustain during an audit interval.

If the number of errors exceeds the value of AC_MAX_NUM_ERRORS, the following actions occur:

- the system removes the console from service
- the correct register in the ACTAKEDN OM group increases instead of a register in the ACTRBL OM group

Associated OM groups

The OM group ACTAKEDN reports on the problems that cause the system to remove an AC from service.

Associated functional groups

The following operating groups associate with OM group ACTRBL:

- Meridian Digital Centrex
- Meridian 1 (options 111-211)

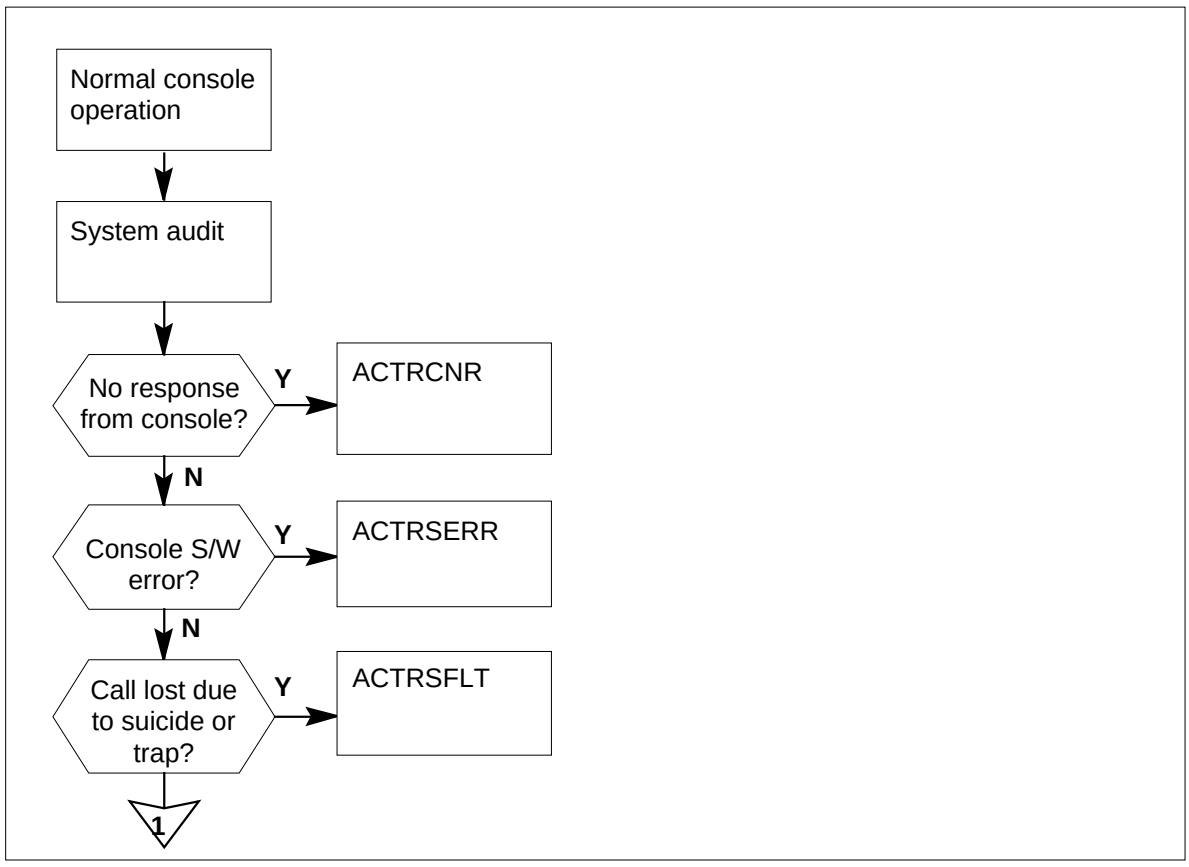
Associated functionality codes

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

Functionality	Code
Integrated Business Network Basic (IBN)	NTX100

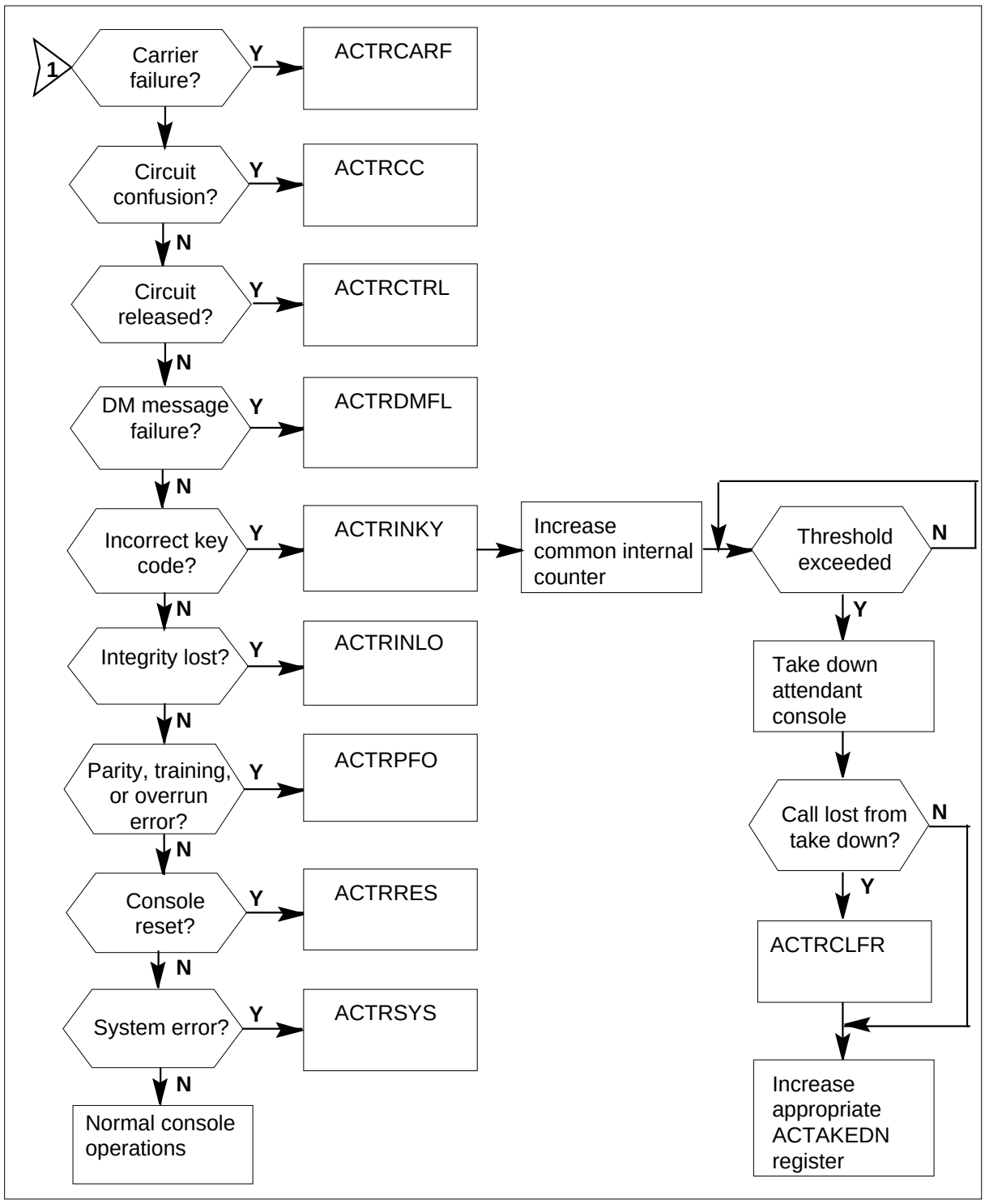
OM group ACTRBL (continued)

OM group ACTRBL registers



OM group ACTRBL (continued)

OM group ACTRBL registers (continued)



OM group ACTRBL (continued)

Register ACTRCARF

Attendant console trouble—carrier failure (ACTRCARF)

Register ACTRCARF increases when a DM no longer receives carrier information from the AC.

When register ACTRCARF increases, a common internal counter also increases. The common internal counter sums the total number of hardware-related errors for several registers between system audits.

If the number of errors exceeds the threshold set by office parameter AC_MAX_NUM_ERRORS, the following actions occur:

- the system removes the console from service
- the ACTAKEDN_ACTDCARF register increases instead of register ACTRCARF

Register ACTRCARF release history

Register ACTRCARF was introduced in BCS22.

Associated registers

Register ACTAKEDN_ACTDCARF increases when a carrier failure causes the system to remove the AC from service. The system removes the console from service because the number of errors exceeds the threshold for hardware-related errors set by office parameter AC_MAX_NUM_ERRORS.

Associated logs

The system generates IBN101 when the AC changes state as a result of a problem. A problem code of AC_DM_CARRIER FAILED indicates that a carrier failure occurred.

Extension registers

There are no extension registers.

Register ACTRCC

Attendant console trouble—circuit confusion (ACTRCC)

Register ACTRCC increases when a confusion message occurs. The confusion message occurs on a circuit that associates with an attendant console during normal console operation. If a confusion message occurs at the source or destination, the source or destination becomes idle. The console loses that party, but the console stays up. If confusion messages occur at other connections, the software attempts to recover.

When register ACTRCC increases, a common internal counter also increases. The common internal counter sums the total number of hardware-related errors for several registers between system audits.

If the number of errors exceeds the threshold set by office parameter AC_MAX_NUM_ERRORS, the following actions occur:

- the system removes the console from service
- register ACTDCC in OM group ACTAKEDN increases instead of register ACTRCARF

Register ACTRCC release history

Register ACTRCC was introduced in BCS22.

Associated registers

Register ACTDCC in OM group ACTAKEDN increases when:

- a messaging or data difference from a peripheral module for an attendant console causes an error
- the number of errors exceeds the threshold for hardware-related errors set by office parameter AC_MAX_NUM_ERRORS
- the system removes the AC from service

Associated logs

The system generates IBN101 when the AC changes state as a result of a problem. A problem code of AC_DM_CKT_CONFUSION indicates that the system received a confusion message from a circuit associated with the console.

Extension registers

There are no extension registers.

Register ACTRCLFR

Attendant console trouble—call lost from release (ACTRCLFR)

Register ACTRCLFR counts every time a call is lost when the system removes an AC from service. When the system removes the console from service, the register in OM group ACTAKEDN increases. This register corresponds to the reason that the system removed the console from service.

Register ACTRCLFR release history

Register ACTRCLFR was introduced in BCS22.

OM group ACTRBL (continued)

Associated registers

The correct register in OM group ACTAKEDN increases.

Associated logs

The system generates IBN101 when the AC changes state as a result of a problem. A problem code of AC_CALL_FREED indicates the forced termination of a call being processed.

Extension registers

There are no extension registers.

Register ACTRCNR

Attendant console trouble—no response (ACTRCNR)

Register ACTRCNR increases when the AC does not respond to a system audit.

Register ACTRCNR release history

Register ACTRCNR was introduced in BCS22.

Associated registers

Register ACTAKEDN_ACTDCNR increases when a system audit removes an AC from service because the console did not respond.

Associated logs

The system generates IBN101 when an AC changes state as a result of a problem. A problem code of AC_NO_RESPONSE indicates that the system did not receive a response from the console during a system audit.

Extension registers

There are no extension registers.

Register ACTRCTRL

Attendant console trouble—circuit released (ACTRCTRL)

Register ACTRCTRL increases when the system removes a circuit associated with an AC from service during normal console operation.

The system removes the circuit from service when one of the following actions occur:

- a circuit is force-released from a MAP terminal
- you or the system takes down the peripheral module

Register ACTRCTRL only increases if the system removes the circuit from service at the source or destination. Any other occurrence increases the correct register in OM group ACTAKEDN.

When register ACTRCTRL increases, a common internal counter also increases. The common internal counter sums the total number of hardware-related errors for several registers between system audits. If the number of errors exceeds the threshold set by office parameter AC_MAX_NUM_ERRORS, the system removes the console from service. Register ACTDCARF in OM group ACTAKEDN increases instead of ACTRCARF.

If the number of errors exceeds the threshold set by office parameter AC_MAX_NUM_ERRORS, the following actions occur:

- the system removes the console from service
- register ACTDCARF in OM group ACTAKEDN increases instead of register ACTRCARF

Register ACTRCTRL release history

Register ACTRCTRL was introduced in BCS22.

Associated registers

Register ACTDCTRL in OM group ACTAKEDN increases when the system removes a circuit associated with an AC from service.

Register ACTDCTRL in OM group ACTAKEDN increases when:

- the number of errors exceeds the threshold for hardware-related errors set by office parameter AC_MAX_NUM_ERRORS
- the system removes a circuit associated with an attendant console

Associated logs

The system generates IBN101 when an attendant console changes state as a result of a problem. A problem code of AC_CKT_RELEASED indicates that the system removed a source or destination connection to the console from service.

Extension registers

There are no extension registers.

Register ACTRDMFL

Attendant console trouble—digital modem message failure (ACTRDMFL)

OM group ACTRBL (continued)

Register ACTRDMFL increases when the AC receives a wrong message from the DM.

When register ACTRDMFL increases, a common internal counter also increases. The common internal counter sums the total number of hardware-related errors for several registers between system audits.

If the number of errors exceeds the threshold set by office parameter AC_MAX_NUM_ERRORS, the following actions occur:

- the system removes the console from service
- register ACTDDMFL in OM group ACTAKEDN increases instead of register ACTRDMFL

Register ACTRDMFL release history

Register ACTRDMFL was introduced in BCS22.

Associated registers

Register ACTDDMFL in OM group ACTAKEDN increases when the system receives a wrong message from the DM. This message causes the system to remove the AC from service. The system removes the console from service because the number of errors exceeds the threshold for hardware-related errors. The office parameter AC_MAX_NUM_ERRORS sets the threshold.

Associated logs

The system generates IBN101 when the AC changes state as a result of a problem. A problem code of AC_DM_MSG_ERROR indicates the detection of an error in a DM message. A code of AC_DM_MSG_TOO_LONG indicates that a DM message was too long.

Extension registers

There are no extension registers.

Register ACTRINKY

Attendant console trouble—invalid key code (ACTRINKY)

Register ACTRINKY counts each time the AC sends an incorrect key code to the DM.

When register ACTRINKY increases, a common internal counter also increases. The common internal counter sums the total number of hardware-related errors for several registers between system audits. If the number of errors exceeds the threshold set by office parameter AC_MAX_NUM_ERRORS, the system removes the console from service.

Register ACTDINKY in OM group ACTAKEDN increases instead of ACTRINKY.

If the number of errors exceeds the threshold set by office parameter AC_MAX_NUM_ERRORS, the following actions occur:

- the system removes the console from service
- register ACTDINKY in OM group ACTAKEDN increases instead of register ACTRINKY

Register ACTRINKY release history

Register ACTRINKY was introduced in BCS22.

Associated registers

Register ACTDINKY in OM group ACTAKEDN increases when a wrong key code on the DM-to-AC link causes the system to remove the AC from service. The system removes the AC from service because the number of errors exceeds the threshold for hardware-related errors. The offfice parameter AC_MAX_NUM_ERRORS sets the threshold..

Associated logs

The system generates IBN101 when the AC changes state as a result of a problem. A problem code of AC_TO_DM_INVALID_KEY indicates that the console sent a wrong key code to the DM.

Extension registers

There are no extension registers.

Register ACTRINLO

Attendant console trouble—integrity lost (ACTRINLO)

Register ACTRINLO counts integrity failure on circuits associated with an AC during normal console operation. If the failure occurs at source or destination, the source or destination is released. For other occurrences, the software attempts to recover.

When register ACTRINLO increases, a common internal counter also increases. The common internal counter sums the total number of hardware-related errors for several registers between system audits.

OM group ACTRBL (continued)

If the number of errors exceeds the threshold set by office parameter AC_MAX_NUM_ERRORS, the following actions occur:

- the system removes the console from service
- register ACTDINLO in OM group ACTAKEDN increases instead of register ACTRINLO

Register ACTRINLO release history

Register ACTRINLO was introduced in BCS22.

Associated registers

Register ACTDINLO in OM group ACTAKEDN increases when an integrity loss on a circuit associated with an AC causes the system to remove the console from service. The system removes the console from service because the number of errors exceeds the threshold for hardware-related errors set by office parameter AC_MAX_NUM_ERRORS.

Associated logs

The system generates IBN101 when an AC changes state as a result of a problem. A problem code of AC_INTEGRITY_LOST indicates that an integrity failure occurred on a circuit associated with the console.

Extension registers

There are no extension registers.

Register ACTRPFO

Attendant console trouble—parity, framing, or overrun error (ACTRPFO)

Register ACTRPFO counts hardware parity, framing, or overrun errors. These errors occur on a DM-to-AC link.

When register ACTRPFO increases, a common internal counter also increases. The common internal counter sums the total number of hardware-related errors for several registers between system audits.

If the number of errors exceeds the threshold set by office parameter AC_MAX_NUM_ERRORS, the following actions occur:

- the system removes the console from service
- register ACTDPFO in OM group ACTAKEDN increases instead of register ACTRPFO

Register ACTRPFO release history

Register ACTRPFO was introduced in BCS22.

Associated registers

Register ACTDPFO in OM group ACTAKEDN increases when a hardware parity, framing, or overrun error on the DM-to-AC link causes the system to remove an AC from service. The system removes the AC from service because the number of errors exceeds the threshold for hardware-related errors. The office parameter AC_MAX_NUM_ERRORS sets the threshold.

Associated logs

The system generates IBN101 when an AC changes as a result of a problem. A problem code of AC_PARITY_ERROR indicates that a hardware parity error occurred on the DM-to-AC link. A code of AC_FRAMING_ERROR indicates that a framing error occurred on the DM-to-AC link. A code of AC_OVERRUN_ERROR indicates that a message overrun occurred on the DM-to-AC link.

Extension registers

There are no extension registers.

Register ACTRRES

Attendant console trouble—console reset (ACTRRES)

Register ACTRRES counts hardware resets for an AC. Reasons for a reset include a local power failure, or a carrier failure from the central control to the AC.

When register ACTRRES increases, a common internal counter also increases. The common internal counter sums the total number of hardware-related errors for several registers between system audits.

If the number of errors exceeds the threshold set by office parameter AC_MAX_NUM_ERRORS, the following actions occur:

- the system removes the console from service
- register ACTDRES in OM group ACTAKEDN increases instead of register ACTRRES

Register ACTRRES release history

Register ACTRRES was introduced in BCS22.

Associated registers

Register ACTDRES in OM group ACTAKEDN increases when a hardware reset on an AC causes the system to remove the console from service. The system removes the console from service because the number of errors

OM group ACTRBL (continued)

exceeds the threshold for hardware-related errors set by office parameter AC_MAX_NUM_ERRORS.

Associated logs

The system generates IBN101 when an AC changes state as a result of a problem. A problem code of AC_RESET indicates that a hardware reset occurred on the console.

Extension registers

There are no extension registers.

Register ACTRSERR

Attendant console trouble—console software failure (ACTRSERR)

Register ACTRSERR counts software errors on an AC that are not severe enough to take down the console.

Register ACTRSERR release history

Register ACTRSERR was introduced in BCS22.

Associated registers

Register ACTDSERR in OM group ACTAKEDN increases when a software error removes the console from service.

Associated logs

The system generates IBN101 when the AC changes state as a result of a problem. A problem code of AC_SW_ERROR indicates that a important software error occurred while a call was in progress.

Extension registers

There are no extension registers.

Register ACTRSFLT

Attendant console trouble—suicide failure or trap (ACTRSFLT)

Register ACTRSFLT counts calls that are lost on an AC as a result of call suicide or trapped calls.

Register ACTRSFLT release history

Register ACTRSFLT was introduced in BCS22.

Associated registers

There are no associated registers.

Associated logs

Register IBN101 generates when an attendant console changes state as a result of a problem. A problem code of AC_SW_FAULT indicates the loss of a console call as a result of call suicide or trapped calls.

Extension registers

There are no extension registers.

Register ACTRSYS

Attendant console trouble—system error (ACTRSYS)

Register ACTRSYS counts errors that are not increased in any other register in OM group ACTRBL.

When register ACTRSYS increases, a common internal counter also increases. The common internal counter sums the total number of hardware-related errors for several registers between system audits. If the number of errors exceeds the threshold set by office parameter AC_MAX_NUM_ERRORS, the system removes the console from service. Register ACTDSYS in OM group ACTAKEDN increases instead of ACTRSYS.

If the number of errors exceeds the threshold set by office parameter AC_MAX_NUM_ERRORS, the following actions occur:

- the system removes the console from service
- register ACTDSYS in OM group ACTAKEDN increases instead of register ACTRSYS

Register ACTRSYS release history

Register ACTRSYS was introduced in BCS22.

Associated registers

Register ACTDSYS in OM group ACTAKEDN increases when an error that is not shown causes the system to remove an AC from service. The system removes an AC from service because the number of errors exceeds of the threshold for hardware-related errors set by office parameter AC_MAX_NUM_ERRORS.

Associated logs

Register IBN101 generates when an AC changes state because of a problem. A problem code of AC_SYSTEM_ERROR indicates that a fault occurred that does not have a problem code.

OM group ACTRBL (end)

Extension registers

There are no extension registers.

OM group ADASAPU

OM description

Automated Directory Assistance Service application processing unit (ADASAPU)

ADASAPU records call processing statistics for the Automated Directory Assistance Service (ADAS) application that runs on the application processing unit (APU).

In TOPS07, the prompt talkover feature adds two new registers, TLKOVR1 and TLKOVR2, to OM group ADASAPU. These registers track occurrences of talkover during the play out of the locality and listing prompts. TLKOVR1 records the number of occurrences of talkover during the play out of the first prompt (locality prompt). TLKOVR2 records the number of occurrences of talkover during the play out of the second prompt (listing prompt).

Note: The standard ADAS call model orders prompting such that the subscriber is first prompted for locality and then listing information; however, individual operating companies can reverse the prompting order.

Release history

OM group ADASAPU was introduced in BCS36.

TOPS07

Functional group OSDA ADAS Talkover (AVPU0001) introduces registers TLKOVR1 and TLKOVR2 through the ADAS Talkover functionality.

TOPS12

Register BARGEIN is part of feature 59011381 in functionality ADAS Base Barge-In, ALPP0001.

Registers

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

OM group ADASAPU (continued)

```
>omshow adasapu holding

ADASAPU

CLASS: HOLDING
START:2005/03/23 13:30:00 WED;STOP: 2005/03/23 14:00:00 WED;
SLOWSAMPLES: 18 ; FASTSAMPLES:    180;

     KEY (ADASAPUX_OM_KEY)
          TOTHFL    TOTDTZ      TOTINVD     INVPR1
          INVPR2    TSOONR1     TLONGR1     SILENR1
          TSOONR2   TLONGR2     SILENR2     SETNFAIL
          DTMFFAIL  RECFAIL     TLKOVR1     TLKOVR2
          BARGEIN   APUFL18     APUFL19     APUFL20
          APUFL21   APUFL22     APUFL23     APUFL24
          APUFL25   APUFL26     APUFL27     APUFL28
          APUFL29   APUFL30     APUFL31     APUFL32
```

Note: Registers APUFL17-APUFL32 are filler registers that act as placeholders for future register assignments.

Group structure

OM group ADASAPU provides one tuple per office.

Key field:
ADASAPUX_OM_KEY

Info field:
None

Associated OM groups

None

Associated functional groups

Functional group (AVPU0001) is associated with OM group ADASAPU.

OM group ADASAPU (continued)

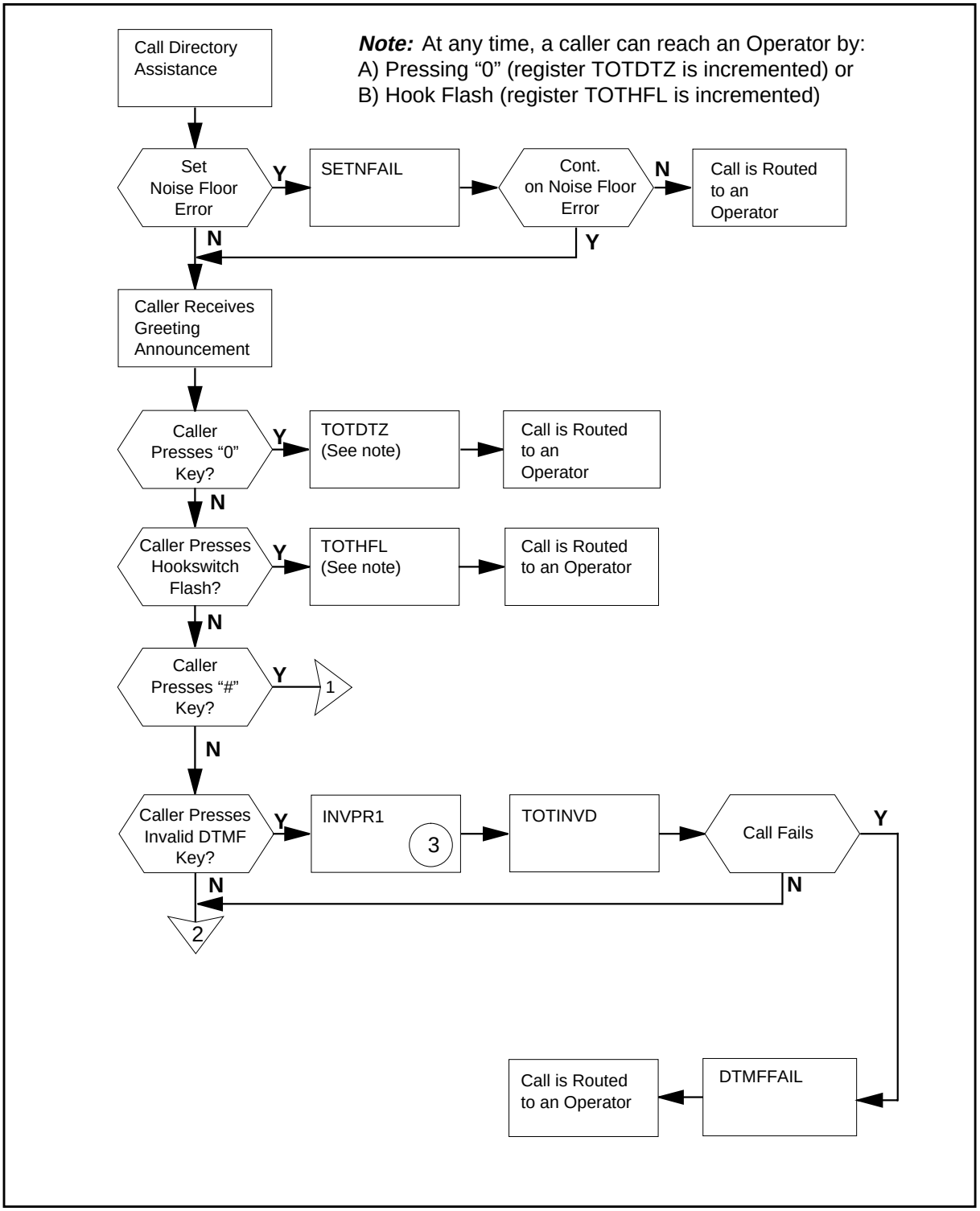
Associated functionality codes

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

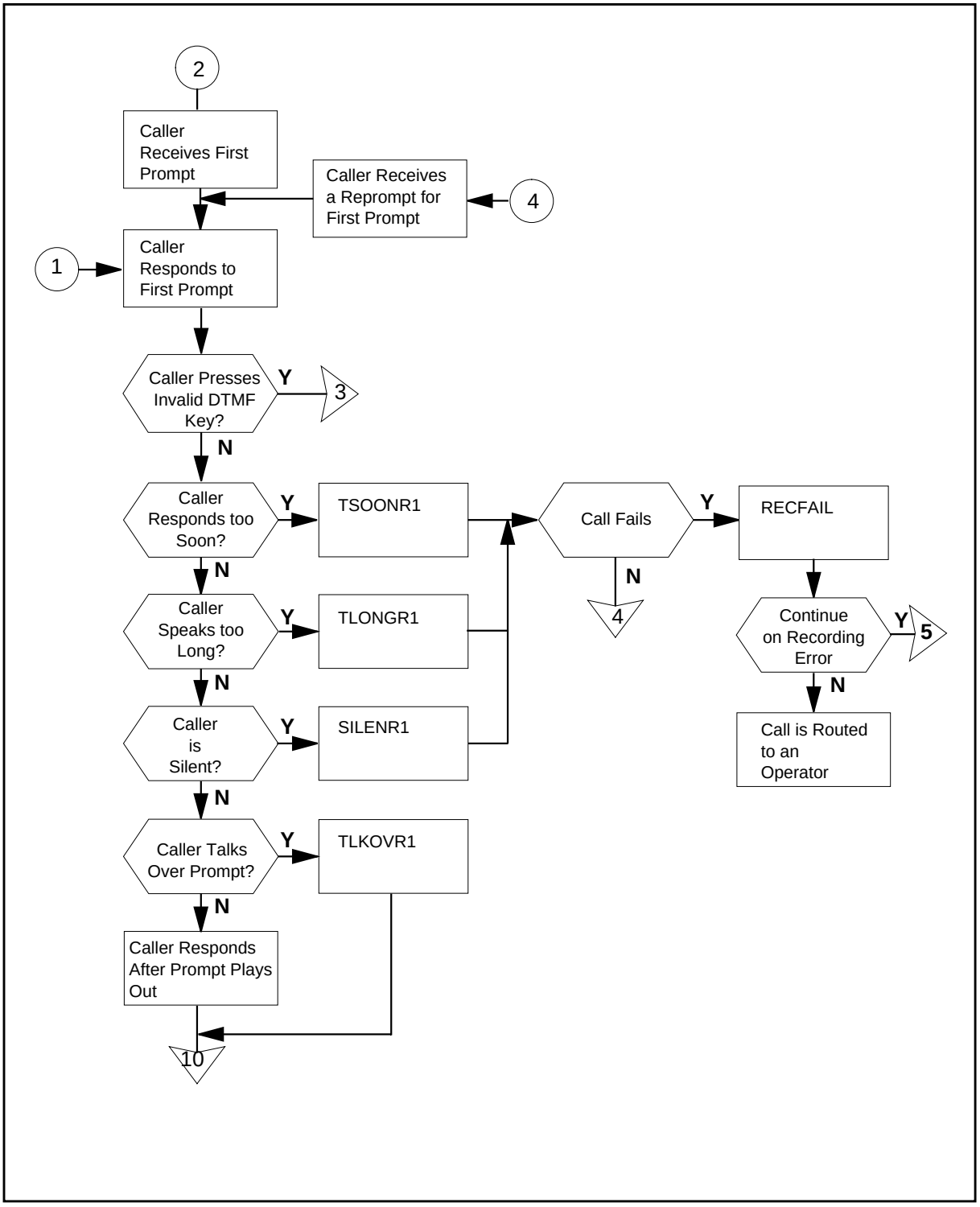
Functionality	Code
TOPS ADAS APU	NTG320AA
OSDA ADAS Talkover	AVPU0001 (Non-CM)
ALPP ADAS Base Barge-in	ALPP0001

OM group ADASAPU (continued)

OM group ADASAPU registers

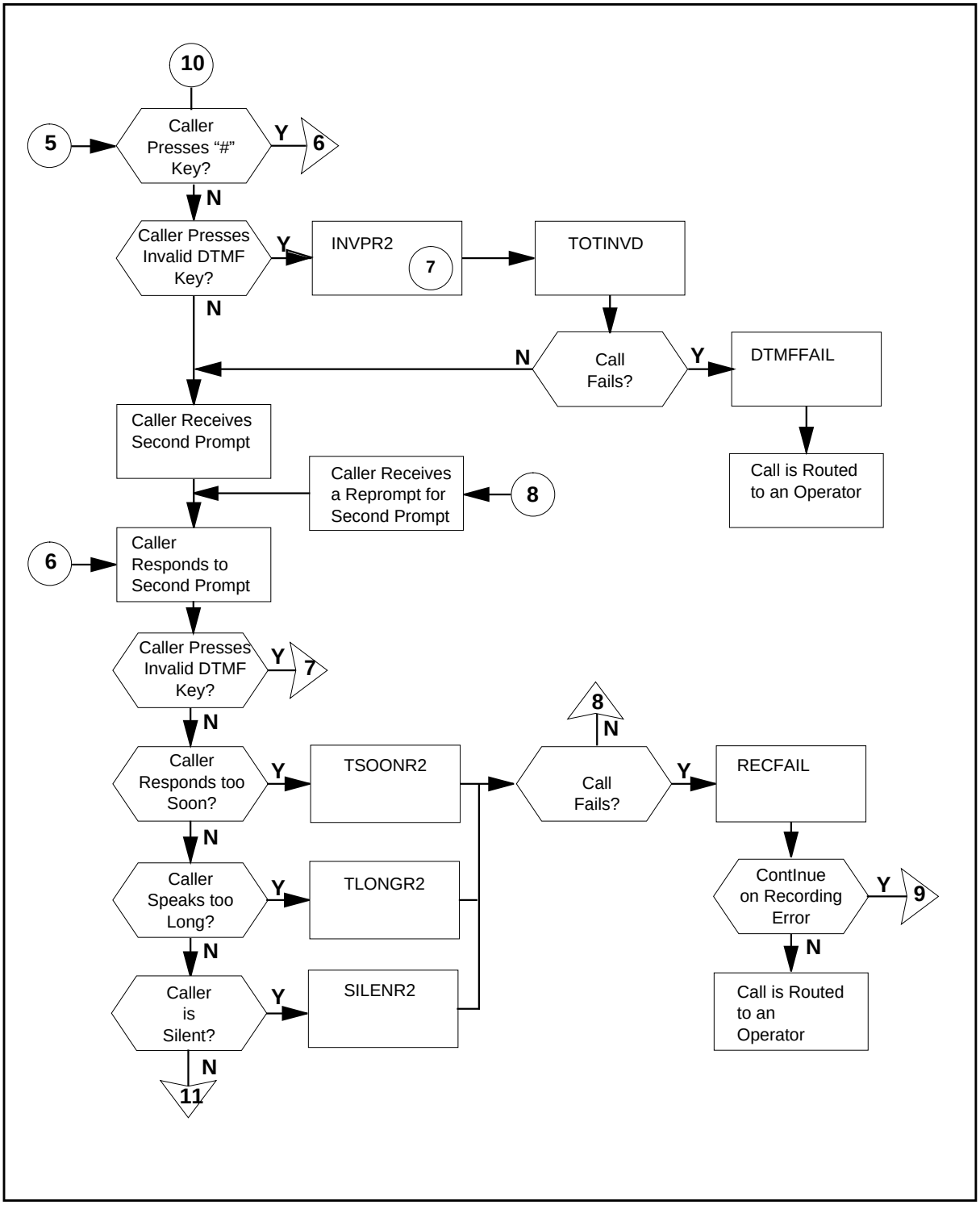


OM group ADASAPU registers (continued)

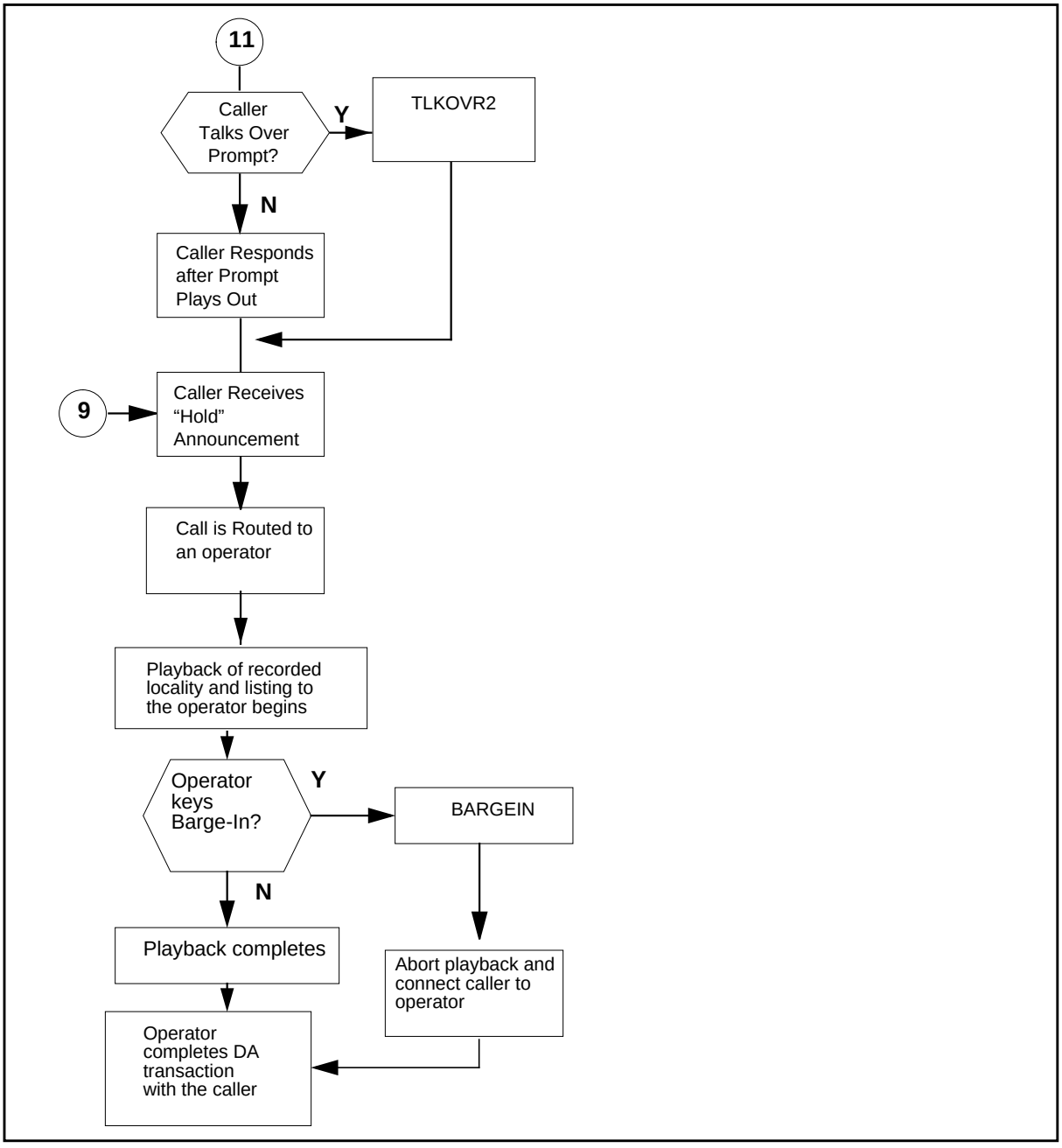


OM group ADASAPU (continued)

OM group ADASAPU registers (continued)



OM group ADASAPU registers (continued)



Register BARGEIN

Barge-In (BARGEIN)

OM group ADASAPU (continued)

The DMS switch pegs register BARGEIN each time an ADAS call successfully records a locality and listing and is attached to an operator who uses Barge-In to abort the ADAS playback.

Register BARGEIN release history

BARGEIN was introduced in TOPS12.

Associated registers

None

Associated logs

None

Extension registers

None

Register DTMFFAIL

Dual-tone multifrequency failure (DTMFFAIL)

The DMS switch pegs register DTMFFAIL each time an ADAS call fails because the caller enters too many invalid dual-tone multifrequency (DTMF) key hits (1-9, *, #). The number of invalid DTMF keys hits tolerated is set by a datafillable parameter, MAXIMUM_DTMF_ATTEMPTS (set on the ADAS Operation Administration and Maintenance [OAM] workstation).

Note: The “#" is only invalid when the skip prompts and messages option is disabled.

Register DTMFFAIL release history

DTMFFAIL was introduced in BCS36.

Associated registers

None

Associated logs

None

Extension registers

None

Register INVPR1

Invalid dual-tone multifrequency key hits during first prompt (INVPR1)

The DMS switch pegs register INVPR1 each time the caller enters an invalid DTMF key hit during the playing of the first prompt.

Register INVPR1 release history

INVPR1 was introduced in BCS36.

Associated registers

None

Associated logs

None

Extension registers

None

Register INVPR2

Invalid dual-tone multifrequency key hits during second prompt (INVPR2)

The DMS switch pegs register INVPR2 each time the caller enters an invalid DTMF key hit during the playing of the second prompt.

Register INVPR2 release history

INVPR2 was introduced in BCS36.

Associated registers

None

Associated logs

None

Extension registers

None

Register RECFAIL

Record failure (RECFAIL)

The DMS switch pegs register RECFAIL each time an ADAS call fails because of too many recording failures. The failures that cause the DMS switch to peg this register are as follows:

- The caller speaks too soon.
- The caller speaks to long.
- The caller does not speak at all.

OM group ADASAPU (continued)

The number of invalid recording errors that are tolerated is set by a datafillable parameter, MAXIMUM_RECORD_ATTEMPTS. Register RECFAIL is not incremented when the datafillable parameter CONTINUE_ON_RECORDING_ERROR is enabled.

Note: These parameters are set on the ADAS OAM workstation.

Register RECFAIL release history

RECFAIL was introduced in BCS36.

Associated registers

None

Associated logs

None

Extension registers

None

Register SETNFAIL

Set noise failure (SETNFAIL)

The DMS switch pegs register SETNFAIL each time the set noise failure threshold is exceeded for an ADAS call. Register SETNFAIL is only incremented when the datafillable parameter, CONTINUE_ON_NOISE_FLOOR_ERROR, (set on the ADAS OAM workstation) is enabled.

Between the playing of the introductory message and the playing of the first prompt, the background noise level of the voice channel is measured to establish the set noise floor threshold. This measure enables the voice recognition system to distinguish the voice noise level from the background noise level and record only the spoken responses. Set noise failure occurs if increases in background noise (noise floor) exceed the set noise failure threshold.

Note: This parameter is set on the ADAS OAM workstation.

Register SETNFAIL release history

SETNFAIL was introduced in BCS36.

Associated registers

None

Associated logs

None

Extension registers

None

Register SILENR1

Silent reprompt during first recording (SILENR1)

The DMS switch pegs register SILENR1 each time a reprompt plays because the caller was silent in response to the first prompt.

Register SILENR1 release history

SILENR1 was introduced in BCS36.

Associated registers

None

Associated logs

None

Extension registers

None

Register SILENR2

Silent reprompt during second recording (SILENR2)

The DMS switch pegs register SILENR2 each time a reprompt plays because the caller was silent in response to the second prompt.

Register SILENR2 release history

SILENR2 was introduced in BCS36.

Associated registers

None

Associated logs

None

Extension registers

None

OM group ADASAPU (continued)

Register TLKOVR1

Talkover during first prompt (TLKOVR1)

The DMS switch pegs register TLKOVR1 each time the caller terminates the play-out of the first prompt by speaking before the prompt completes.

Note: The DMS switch increments register TLKOVR1 only when speech detection algorithms determine that speech occurs within the valid window that is set for the first prompt for prompt talkover. The valid window is set at the ADAS OAM Workstation.

Register TLKOVR1 release history

TLKOVR1 was introduced in TOPS07.

Associated registers

None

Associated logs

None

Extension registers

None

Register TLKOVR2

Talkover during second prompt (TLKOVR2)

The DMS switch pegs register TLKOVR2 each time the caller terminates the play-out of the second prompt by speaking before the prompt completes.

Note: The DMS switch increments register TLKOVR2 only when speech detection algorithms determine that speech occurs within the valid window that is set for the second prompt for prompt talkover. The valid window is set at the ADAS OAM Workstation.

Register TLKOVR2 release history

TLKOVR2 was introduced in TOPS07.

Associated registers

None

Associated logs

None

Extension registers

None

Register TLONGR1

Too-long reprompt during first recording (TLONGR1)

The DMS switch pegs register TLONGR1 each time a reprompt plays because the caller spoke too long in response to the first prompt.

Register TLONGR1 release history

TLONGR1 was introduced in BCS36.

Associated registers

None

Associated logs

None

Extension registers

None

Register TLONGR2

Too-long reprompt during second recording (TLONGR2)

The DMS switch pegs register TLONGR2 each time a reprompt plays because the caller spoke too long in response to the second prompt.

Register TLONGR2 release history

TLONGR2 was introduced in BCS36.

Associated registers

None

Associated logs

None

Extension registers

None

Register TOTDTZ

Total dual-tone multifrequency zeroes (TOTDTZ)

OM group ADASAPU (continued)

The DMS switch pegs register TOTDTZ to track the total number of callers that enter “0" (to speak to an operator) for all ADAS calls.

Register TOTDTZ release history

TOTDTZ was introduced in BCS36.

Associated registers

None

Associated logs

None

Extension registers

None

Register TOTHFL

Total hookswitch flashes (TOTHFL)

The DMS switch pegs register TOTHFL to track the total number of callers that perform hookswitch flashes (to speak to an operator) for all ADAS calls.

Register TOTHFL release history

TOTHFL was introduced in BCS36.

Associated registers

None

Associated logs

None

Extension registers

None

Register TOTINVD

Total invalid dual-tone multifrequency digits (TOTINVD)

The DMS switch pegs register TOTINVD to track the total number of invalid DTMF key hits that occur for all ADAS calls.

Register TOTINVD release history

TOTINVD was introduced in BCS36.

Associated registers
None

Associated logs
None

Extension registers
None

Register TSOONR1
Too-soon response to first prompt (TSOONR1)

The DMS switch pegs register TSOONR1 each time a reprompt plays because the caller spoke too soon in response to the first prompt.

Register TSOONR1 release history
TSOONR1 was introduced in BCS36.

Associated registers
None

Associated logs
None

Extension registers
None

Register TSOONR2
Too-soon response to second prompt (TSOONR2)

The DMS switch pegs register TSOONR2 each time a reprompt plays because the caller spoke too soon in response to the second prompt.

Register TSOONR2 release history
TSOONR2 was introduced in BCS36.

Associated registers
None

Associated logs
None

OM group ADASAPU (end)

Extension registers

None

OM group ADASDSGN

OM description

Automated directory assistance system design

Automated directory assistance system design (ADASDSGN) registers track the internal operations of the call processing engine (CPE).

Release history

OM group ADASDSGN was introduced in BCS35.

Registers

The OM group ADASDSGN registers are displayed on the MAP terminal by using the OMSHOW command:

```
>OMSHOW ADASDSGN ACTIVE
```

The following shows the result of the OMSHOW command:

```
SDCMERR         SDVPUERR        UNKNMSG         DSCRDMSG
AUDCBRST        DSGNFLO06       DSGNFLO07       DSGNFLO08
DSGNFLO09       DSGNFLO010      DSGNFLO011      DSGNFLO012
DSGNFLO013      DSGNFLO014      DSGNFLO015      DSGNFLO016
DSGNFLO017      DSGNFLO018      DSGNFLO019      DSGNFLO020
DSGNFLO021      DSGNFLO022      DSGNFLO023      DSGNFLO024
DSGNFLO025      DSGNFLO026      DSGNFLO027      DSGNFLO028
DSGNFLO029      DSGNFLO030      DSGNFLO031      DSGNFLO032
```

Group structure

OM group ADASDSGN provides one tuple.

Key field:
none

Info field:
none

Number of tuples:
1

Associated OM groups

None

OM group ADASDSGN (continued)

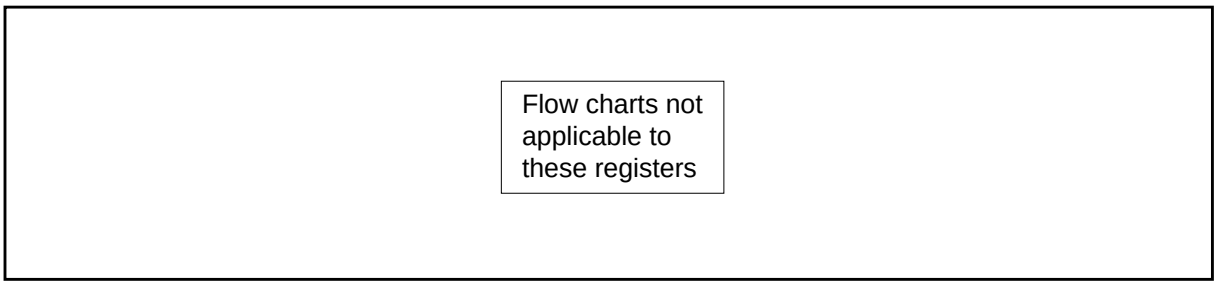
Associated functional groups

The OSDA Directory Assistance functional group is associated with OM group ADASDSGN.

Associated functionality codes

OSDA Automatic DA Service (ADAS)

OM group ADASDSGN registers



Register SDCMERR

Send computing module error

Register SDCMERR counts the number of messages that could not be sent to the computing module due to a communications error.

Register SDCMERR release history

Register SDCMERR was introduced in BCS35.

Associated registers

None

Associated logs

None

Extension registers

None

Register SDVPUERR

Send voice processing unit error

Register SDVPUERR counts the number of messages that could not be sent to the VPU due to a communications error.

Register SDVPUERR release history

Register SDVPUERR was introduced in BCS35.

Associated registers

None

Associated logs

None

Extension registers

None

Register UNKNMSG

Unknown call message

Register UNKNMSG counts the number of messages received by a CPE that could not be mapped to a call instance currently being handled by the CPE.

Register UNKNMSG release history

Register UNKNMSG was introduced in BCS35.

Associated registers

None

Associated logs

UCPE301

Extension registers

None

Register DSCRDMSG

Discarded messages

Register DSCRDMSG counts the number of messages that were discarded because they were not a response to the latest VPU request.

Register DSCRDMSG release history

Register DSCRDMSG was introduced in BCS35.

Associated registers

None

OM group ADASDSGN (end)

Associated logs

UCPE302

Extension registers

None

Register AUDCBRST

Audit call data block reset

Register AUDCBRST counts the number of times a call data block was reset because it exceeded the maximum number of audits allowed.

Register AUDCBRST release history

Register AUDCBRST was introduced in BCS35.

Associated registers

None

Associated logs

None

Extension registers

None

OM group ADASSRV

OM description

Automated Directory Assistance Service

ADASSRV provides operational measurements (OMs) for Automated Directory Assistance Service (ADAS). These measurements indicate how effectively ADAS reduces subscriber and operator time.

Release history

OM group ADASSRV was introduced in BCS34.

Registers

The following OM group ADASSRV registers display on the MAP terminal as follows:

ADASLS	ADASLU	ADASOHV	ADASFTIM
ADASFTM2	ADASSTIM	ADASSTM2	ADASOPV
ADASOTIM	ADASOTM2		

Group structure

OM group ADASSRV provides one tuple per office.

Key field:
None

Info field:
None

Associated OM groups

VSNCOM

Associated functional groups

The ADAS functional group is associated with OM group ADASSRV.

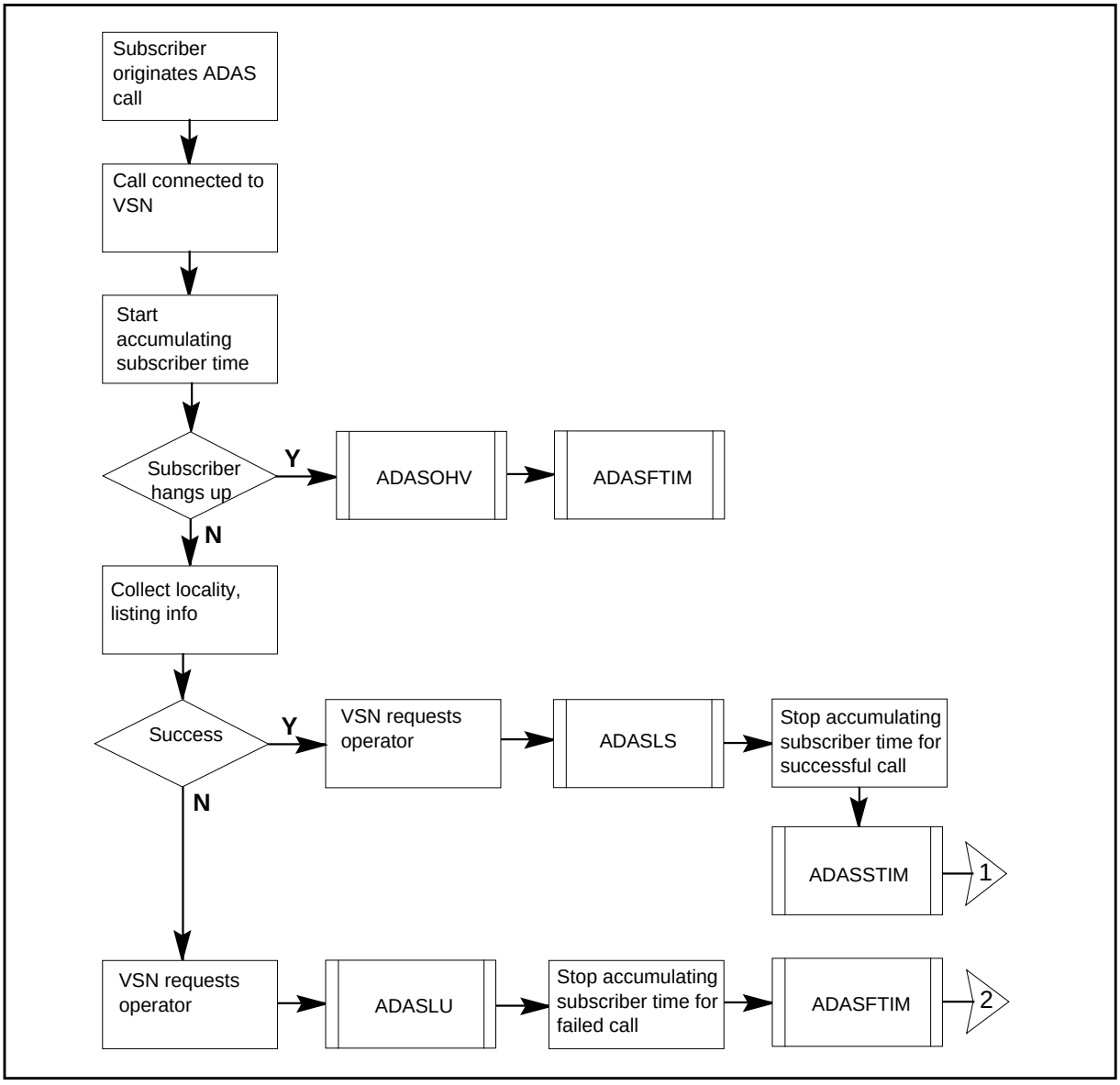
OM group ADASSRV (continued)

Associated functionality codes

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

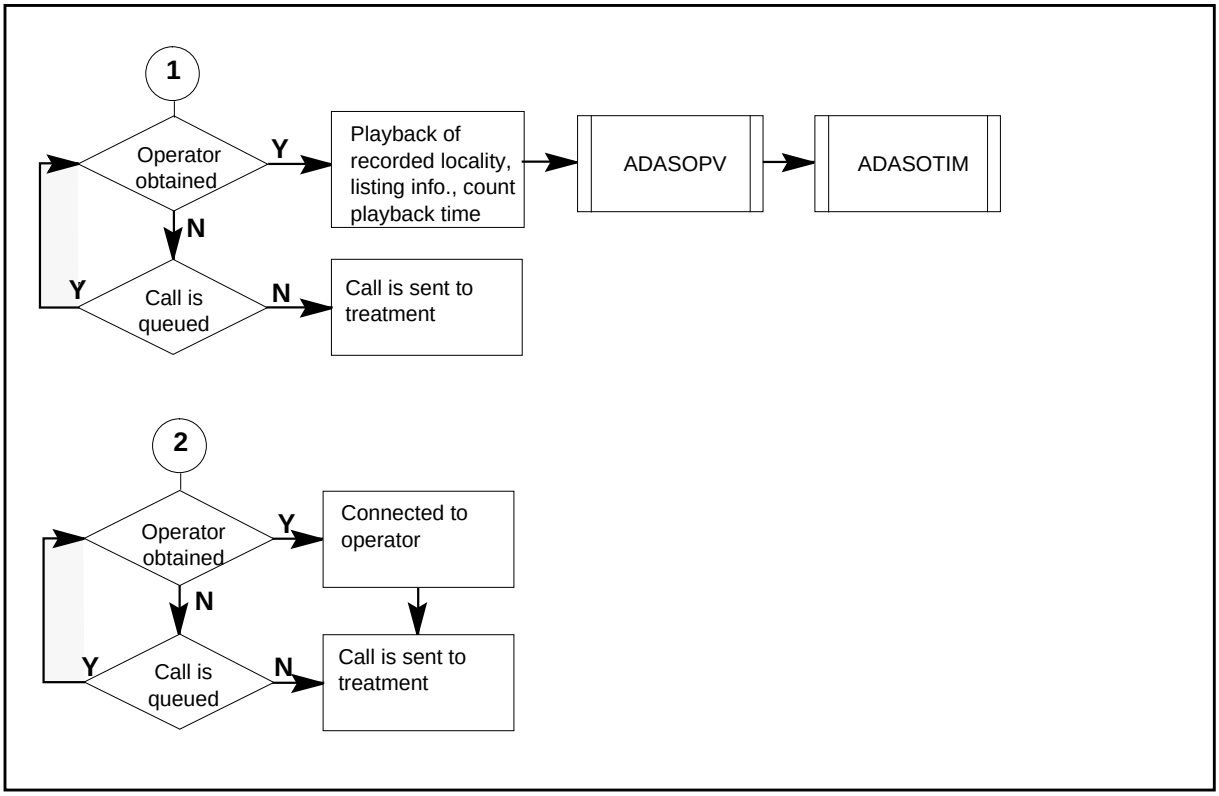
Functionality	Code
TOPS ADAS	NTXQ23AA

OM group ADASSRV registers



OM group ADASSRV (continued)

OM group ADASSRV registers (continued)



ADASFTIM

ADAS failed call times

ADASFTIM records the accumulated caller time (in seconds) for calls that are queued to an operator because the caller failed to record the audio responses for listing and locality. ADASFTIM is used in conjunction with registers ADASLU and ADASOHV to determine the average time from start of ADAS processing until the call is queued to an operator.

ADASFTIM release history

ADASFTIM was introduced in BCS34.

Associated registers

ADASOHV is incremented each time a caller hangs up while connected to the voice service node (VSN).

ADASLU is incremented each time the VSN requests an operator following unsuccessful collection of the locality and listing information from the caller.

ADASFTIM 6 (ADASLU + ADASOHV) = average time for failed calls (in seconds)

Associated logs

None

Extension registers

ADASFTM2

ADASLS

ADAS listing collected successfully

ADASLS is incremented each time a call is made for which the VSN requests an operator following successful collection of the locality and listing information from the caller. This register is incremented every time register ADASSTIM is incremented. ADASLS is used in conjunction with register ADASSTIM to determine the average caller time elapsed before calls are queued for an operator.

ADASLS release history

ADASLS was introduced in BCS34.

Associated registers

ADASSTIM records the accumulated subscriber time (in seconds) for successful calls while at the VSN.

ADASSTIM 6 ADASLS = average time for successful calls (in seconds)

Associated logs

None

Extension registers

None

ADASLU

ADAS listing collected unsuccessfully

ADASLU is incremented each time a call is made for which the VSN requests an operator following unsuccessful collection of the locality and listing information from the caller. When this register is incremented, register ADASFTIM is also incremented. ADASLU is used in conjunction with register ADASOHV to determine the average time elapsed before calls are

OM group ADASSRV (continued)

queued to an operator (or calls end) for calls that have not collected audio responses from the caller.

ADASLU release history

ADASLU was introduced in BCS34.

Associated registers

ADASFTIM records the accumulated subscriber time (in seconds) for unsuccessful calls while at the VSN.

ADASOHV is incremented each time a subscriber hangs up while connected to the VSN.

ADASFTIM 6 (ADASLU + ADASOHV) = average time for failed calls (in seconds)

Associated logs

None

Extension registers

None

ADASOHV

ADAS call goes on-hook while at voice service node

ADASOHV is incremented each time a call goes on-hook while at the VSN. When this register is incremented, register ADASFTIM is also incremented. ADASOHV is used in conjunction with register ADASLU to determine the average caller time elapsed before calls are either ended or queued to an operator because locality and listing information was not collected from the caller.

ADASOHV release history

ADASOHV was introduced in BCS34.

Associated registers

ADASFTIM records the accumulated caller time (in seconds) for unsuccessful calls while at the VSN.

ADASLU is incremented each time the VSN requests an operator following unsuccessful collection of the locality and listing information from the caller.

ADASFTIM 6 (ADASLU + ADASOHV) = average time for failed calls (in seconds)

Associated logs

None

Extension registers

None

ADASOPV

ADAS calls to operator for playback by the voice service node

ADASOPV is incremented each time an ADAS call obtains an operator and connects successfully to the VSN for playback to the operator of the caller's recorded locality and listing information. This register is incremented every time register ADASOTIM is incremented. ADASOPV is used in conjunction with ADASOTIM to determine the average playback time of the VSN to the operator.

ADASOPV release history

ADASOPV was introduced in BCS34.

Associated registers

ADASOTIM records accumulated playback time (in seconds) for calls that obtain an operator and connect to the VSN for playback of recorded locality and listing information.

ADASOTIM 6 ADASOPV = average playback time for a call (in seconds)

Associated logs

None

Extension registers

None

ADASOTIM

ADAS operator to voice service node playback call times

ADASOTIM records accumulated playback time (in seconds) of locality and listing information for calls that successfully obtain an operator who receives playback from the VSN. ADASOTIM is used in conjunction with ADASOPV to determine the average playback time to the operator.

ADASOTIM release history

ADASOTIM was introduced in BCS34.

OM group ADASSRV (end)

Associated registers

ADASOPV is incremented each time a call obtains an operator and connects to the VSN for playback of recorded locality and listing information.

ADASOTIM 6 ADASOPV = average playback time of a call (in seconds)

Associated logs

None

Extension registers

ADASOTM2

ADASSTIM

ADAS subscriber-VSN successful call time

ADASSTIM records the caller time (in seconds) to record the locality and listing information successfully and to be connected to an operator by the VSN. ADASSTIM is used in conjunction with register ADASLS to determine the average elapsed time from start of ADAS processing until the call is queued to an operator.

ADASSTIM release history

ADASSTIM was introduced in BCS34.

Associated registers

ADASLS is incremented each time the VSN requests an operator following successful collection of the locality and listing information.

ADASSTIM 6 ADASLS = average time for successful call (in seconds)

Associated logs

None

Extension registers

ADASSTM2

OM group AIN

OM description

Advanced intelligent network (AIN)

This OM group is the platform for (AIN) traffic and maintenance measurements.

Release history

SN07 (DMS)

Register DLFL description added for CR Q00765666.

BCS36

OM group AIN is introduced in BCS36.

Registers

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

Map terminal display of OM group AIN registers

```
TRIG          TRIG2       INTROFF      INTROFF2
CPFLBFQ       CPFLAFQ     MAXQEXCD     TIOVFBFQ
CIOVFBFQ      TIOVFAFQ    CIOVFAFQ     RSPTMOUT
INVCMDMG      INVCMDSE    AMAMAX       AMASLPID
AMACONV       AINCALL     AINCALL2     AUGPEXH
CCTMOUT       DLFL
```

An OMSHOW example of OM group AIN on the MAP terminal follows:

OM group AIN (continued)

```
AIN

CLASS:  ACTIVE
START:1995/02/28 10:00:00 TUE; STOP: 1995/02/28
10:18:58 TUE
SLOWSAMPLES:        1 ;     FASTSAMPLES:        4 ;

KEY (AIN_MSGSET)
     TRIG       TRIG2     INTROFF     INTROFF2
  CPFLBFQ     CPFLAFQ    MAXQEXCD     TIOVFBFQ
 CIOVFBFQ    TIOVFAFQ    CIOVFAFQ     RSPTMOUT
 INVCMDMG    INVCMDSE      AMAMAX     AMASLPID
  AMACONV     AINCALL    AINCALL2      AUGPEXH
  CCTMOUT     DLFL
1 RO1
        0           0           0           0
        0           0           0           0
        0           0           0           0
        0           0           0           0
        0           0           0           0
        0           0
7 RO2
        0           0           0           0
        0           0           0           0
        0           0           0           0
        0           0           0           0
        0           0           0           0
        0           0
```

Note: The DMS-100EUR switch only uses the key field, 6 INAPV8, which appears above.

Group structure

The OM group AIN provides one tuple for each key.

Key field:

AIN_MSGSET is the AIN application identifier for a call.
This OM group enables increments for R01 and R02 messages.

INAPV8 is the key field for CS-1R on the DMS-SSP.
This OM group enables increments for CS-1R calls.

Info field:
None

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 AIN appear in the following table.

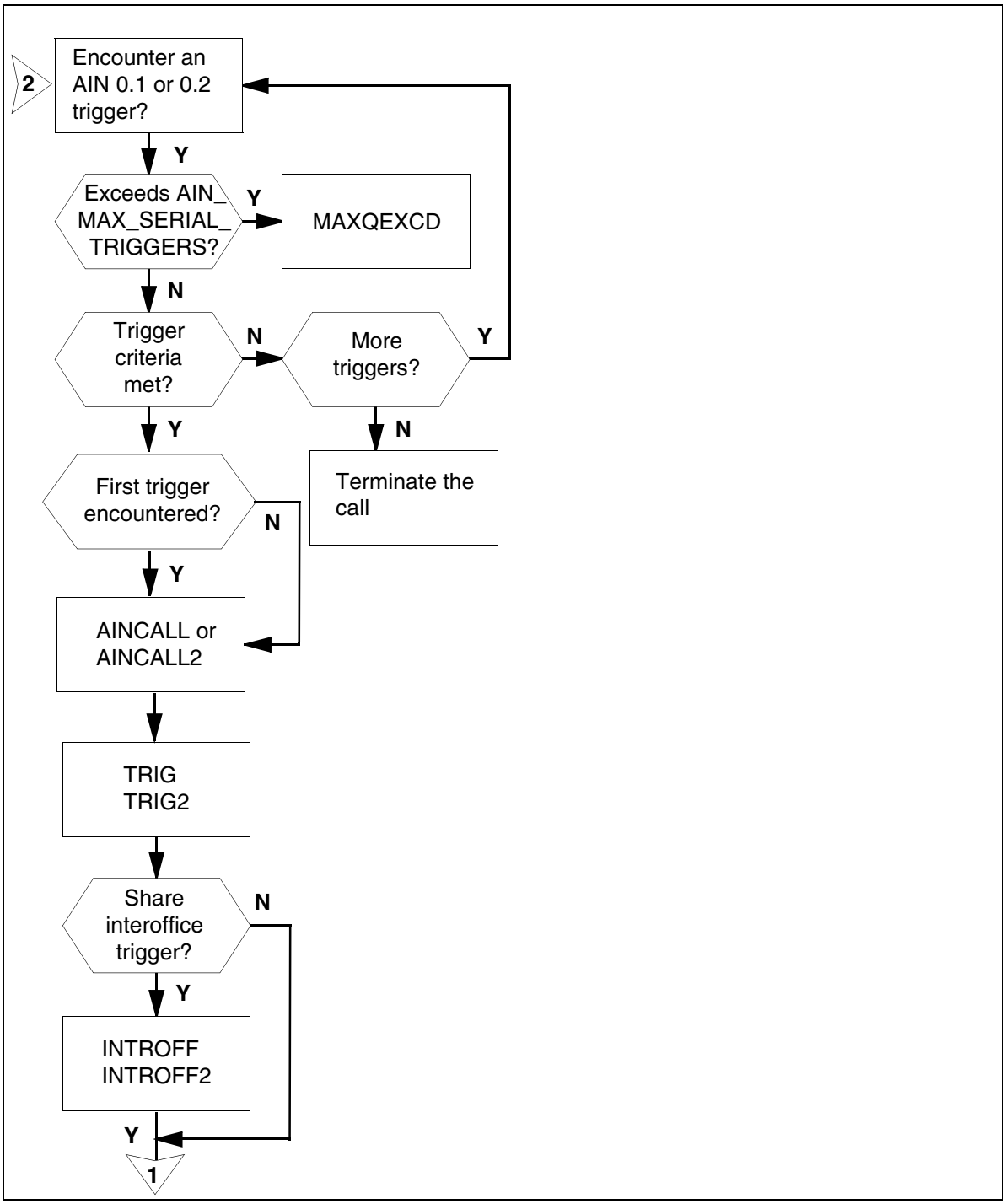
Functionality	Code
AIN Base	NTXQ42AA
DSSP OAM (DMS-100EUR)	not applicable
AUS A/I-ISUP INAP I/W	AUS00038
JPN SSP to TOPS Fallback	JPN00032

The following flow chart shows how OM group AIN registers are incremented for R01 and R02 messages.

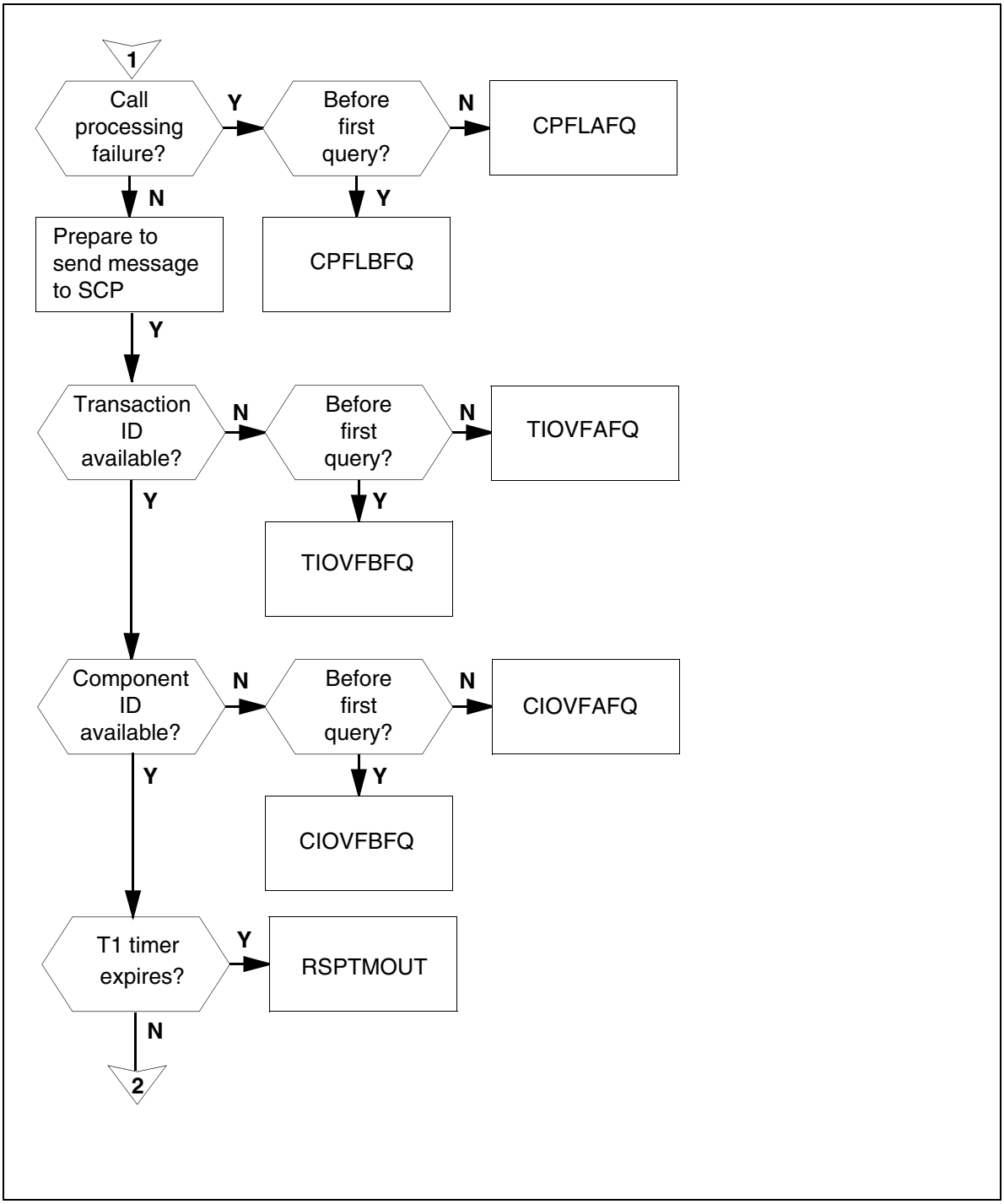
For CS-1R OM increments, refer to OM group EIN of this document.

OM group AIN (continued)

OM group AIN registers

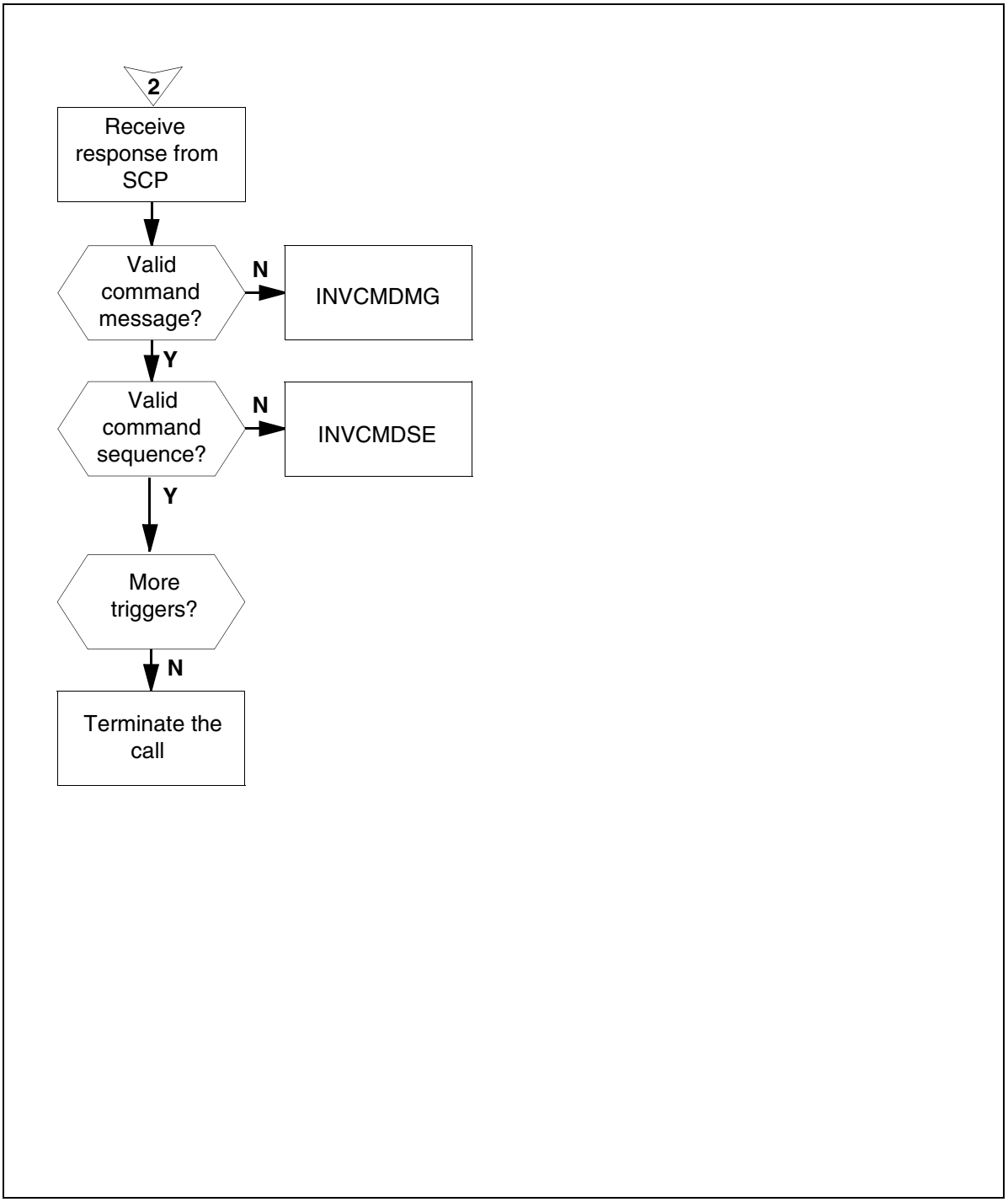


OM group AIN registers (continued)

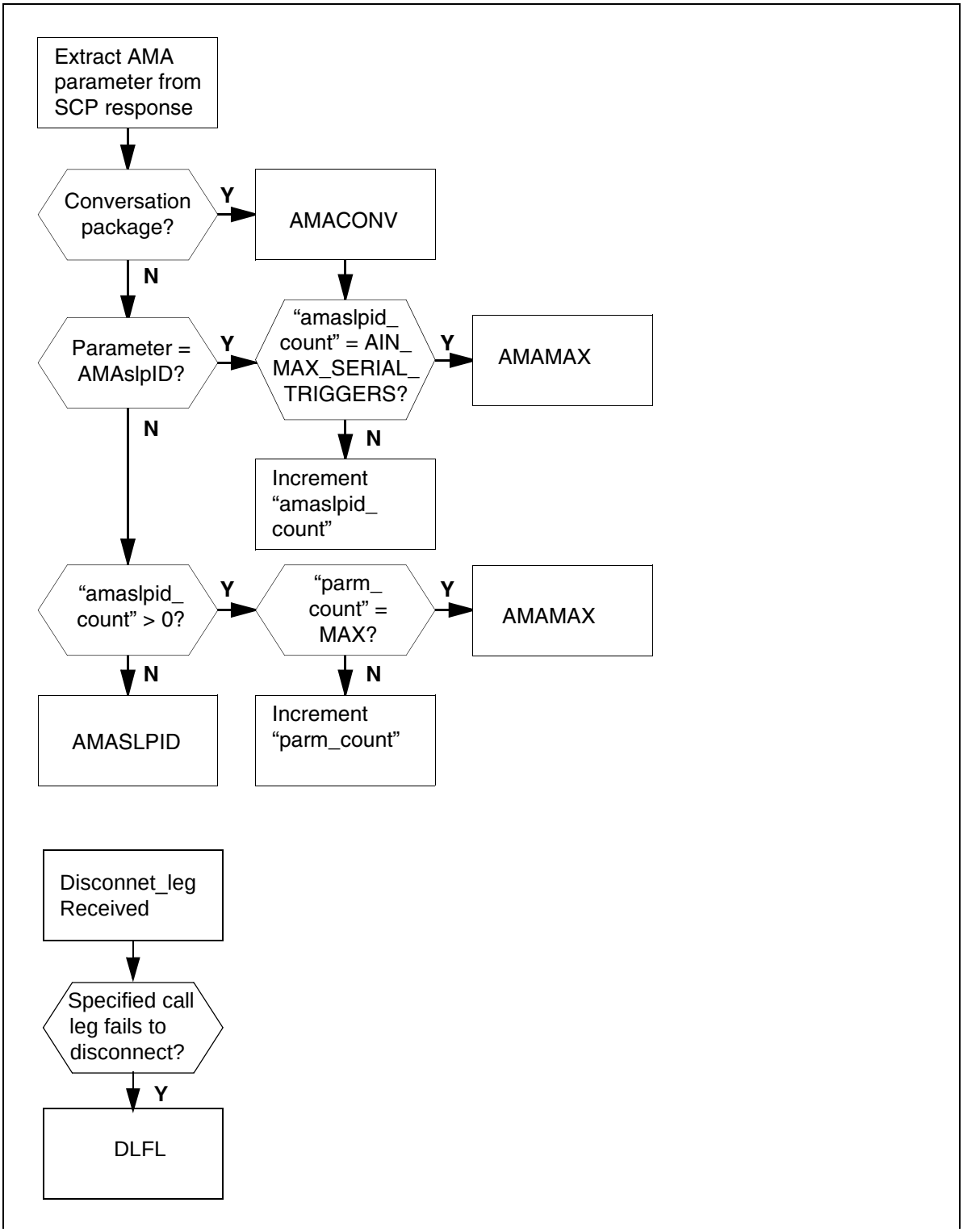


OM group AIN (continued)

OM group AIN registers (continued)



OM group AIN registers (continued)



OM group AIN (continued)

Register AINCALL

AIN calls

AINCALL counts the number of AIN calls that occur. An AIN call is defined as any call which triggers at least once.

For AIN Essentials and Service Enablers, the register AINCALL increments when the first AIN AIN Essentials and Service Enablers trigger for a given call is encountered and all criteria is met. When more than one trigger is satisfied for a given call, no consideration is given to subsequent triggers. Calls that fail after the trigger criteria is met count as AIN calls. A call that encounters switch-based call forwarding is considered as one call. A call that escapes from the trigger is not an AIN call.

Register AINCALL release history

AINCALL is introduced in NA009.

Associated registers

TRIG, TRIG2

Associated logs

None

Extension registers

AINCALL2

Register AMACONV

Automatic message accounting conversation (AMACONV)

Register (AMACONV) increases any time an automatic message accounting (AMA) parameter arrives at the service switching point (SSP). For (AMACONV) to increase, the AMA must arrive at the SSP in a conversation package from the off-board processor.

Register AMACONV release history

Register AMACONV is 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 AMAMAX

Automatic message accounting maximum (AMAMAX)

Register (AMAMAX) increases when the maximum AMA parameters allowed for a single AMA record are exceeded. The system defines AIN release 0.1 AMA maximum as follows:

- the maximum number of AMAslpID parameters equals the setting of office parameter AIN_MAX_SERIAL_TRIGGERS
- 6 AMADigitsDialedWC
- 2 AMALineNumber
- 1 AMABusinessCustomerID
- 1 AMAAlternateBillingNumber

Register AMAMAX release history

AMAMAX is 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 AMASLPID

Automatic message accounting slpID (AMASLPID)

Register (AMASLPID) increases when any automatic message accounting (AMA) parameter arrives at the SSP. For (AMASLPID) to increase, the AMA must arrive in an off-board processor response message before an AMAslpID parameter is received.

Register AMASLPID release history

Register AMASLPID is introduced in BCS36.

Associated registers

There are no associated registers.

OM group AIN (continued)

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register CIOVFAFQ

Component identification overflow after the first AIN query (CIOVFAFQ) counts the number of AIN calls that fail. AIN calls can fail after the system sends the first AIN query. The first AIN query is not received because the invoke identification is not available for the invoke component. CIOVFAFQ counts AIN calls that fail in this way. This overflow occurs after the use of all invoke identifications assigned to the AIN applications(s) in the table TCAPTRID.

> ***Note:*** Table TCAPTRID is obsolete. Identifier pools (IDPL) automatically allocate transaction and component identifiers for all applications. See Data Schema Reference Manual for details.

For R01 and R02, register CIOVFAFQ increases when an AIN release 0.1 call fails after the system sends the first AIN query. Failure can with the use of all the invoke identification names assigned to AIN in table TCAPTRID.

Register CIOVFAFQ release history

Register CIOVFAFQ is 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 CIOVFBFQ

Component identification overflow before the first AIN query (CIOVFBFQ).

Register (CIOVFBFQ) counts the number of AIN calls that fail because an invoke identification for the invoke component is not available. Register (CIOVFBFQ) only counts calls that fail before the system sends the first AIN

query. This failure occurs because of the use of all the invoke identification names assigned to the AIN application(s) in the table TCAPTRID.

Note: Table TCAPTRID is obsolete. Identifier pools (IDPL) automatically allocate transaction and component identifiers for all applications. See Data Schema Reference Manual for details.

For R01 and R02, register CIOVFBFQ increases when an AIN release 0.1 call fails because of the use of all of the invoke identification names assigned to AIN in table TCAPTRID. The calls must fail before the system sends the first query for CIOVFBFQ to increase.

Register CIOVFBFQ release history

Register CIOVFBFQ is 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 CPFLAFQ

AIN call processing failure after the first query for AIN calls

Register (CPFLAFQ) counts AIN calls that fail when an SSP is offline because of a hardware or software initialization. Register (CPFLAFQ) also counts calls that fail because of a failure in the AIN call processing routine. Register (CPFLAFQ) only counts this failure after the system sends the first AIN query.

Call failures already counted by register INVCMDMG and INVCMDSE are not counted in CPFLAFQ.

For AIN release 0.1 calls, the R01 and R02 registers of CPFLAFQ are increased when an AIN release 0.1 call fails. The registers only count failures that occur after the system sends the first query to the service control point (SCP). The registers count failures that occur for one of the following reasons:

- AIN release 0.1 subsystem is out of service
- The system receives a CONTINUE message from the SCP. More triggers at the INFO_ANALYZED trigger detection point are not present, but enough information to continue normal routing is not present.

OM group AIN (continued)

Register CPFLAFQ release history

Register CPFLAFQ is 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 CPFLBFQ

AIN call processing failure before the first query for AIN calls (CPFLBFQ)

(CPFLBFQ) counts AIN calls that fail. Failures that occur when the system terminates an SSP because of a hardware or software initialization. Failures that occur because of a failure in the AIN call processing routine. Failures that occur before the system sends the first AIN query message. The system sends the AIN query message to the SS7 transport link to be passed to the SCP.

For AIN release 0.1 calls, the R01 and R02 registers increase when an AIN release 0.1 call fails. The registers only count failures that occur before the first query goes to the SCP for one of the following reasons:

- the system detects an AIN release 0.1 subsystem out-of-service failure before the system sends the query to the SS7 transport link
- the system can not build the AIN required parameter BEARER_CAPABILITY. The system can not build BEARER_CAPABILITY because the system can not map the incoming BEARER_CAPABILITY parameter to the correct AIN BEARER_CAPABILITY parameter.
- the system has not fulfilled requirements associated with the requested digit-collection format. This results in a call take-down during pre-query digit collection

Register CPFLBFQ release history

Register CPFLBFQ was added in BCS36.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register INTROFF

AIN share interoffice trunk triggers (INTROFF)

Register (INTROFF) counts the number of AIN share interoffice trunk triggers to accumulate the number of shared interoffice trunk calls.

For AIN release 0.1 calls, only the R01 and R02 registers INTROFF increase. The registers increase when a call triggered the share interoffice trunk trigger.

Register INTROFF release history

Register INTROFF is introduced in BCS36.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

INTROFF2

Register INTROFF2

AIN share interoffice trunk triggers 2 is an overflow register for register INTROFF.

Register INTROFF2 release history

INTROFF2 is introduced in BCS36.

Associated registers

INTROFF

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

OM group AIN (continued)

Register INVCMDMG

Invalid command message for AIN calls (INVCMDMG)

Register (INVCMDMG) counts calls that fail. The register counts failure that occurs because the SSP receives a response from the SCP. The system cannot decipher the response, or the response has bad data.

For AIN release 0.1 calls, the R01 and R02 registers INVCMDMG increases. Registers increase when the SSP receives an AIN release 0.1 message from the SCP that contains one of the following errors:

- unrecognized correlation ID
- unrecognized operation code
- missing required parameters
- missing conditional parameters
- not planned parameter sequence
- not planned communication
- not planned message
- wrong data value
- wrong parameters

Register INVCMDMG release history

Register INVCMDMG is introduced in BCS36.

Associated registers

There are no associated logs.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register INVCMDSE

Invalid command sequence for AIN calls(INVCMDSE)

Register (INVCMDSE) counts calls that fail. Failures that occur because the SSP receives a response from the SCP that contains not complete or out-of-sequence commands.

For AIN release 0.1 calls, the R01 and R02 registers INVCMDSE increase. Registers increase when the SSP receives an not planned AIN release 0.1 message sequence.

Register INVCMDSE release history

Register INVCMDSE is 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 MAXQEXCD

Maximum number of AIN queries exceeded for an AIN call

Maximum number of AIN queries exceeded for an AIN call (MAXQEXCD) counts the number of AIN calls that fail because the limit on the number of AIN queries is exceeded.

For AIN release 0.1 calls, register MAXQEXCD increments when an AIN release 0.1 call fails because the limit on the number of AIN release 0.1 queries is exceeded.

Office parameter AIN_MAX_SERIAL_TRIGGERS in table OFCENG determines the number of times that an AIN release 0.1 call triggers without being routed out of the SSP. The default value for this parameter is 6.

CS-1R calls can trigger once.

Register MAXQEXCD release history

Register MAXQEXCD is introduced in BCS36.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

OM group AIN (continued)

Register RSPTMOUT

SSP time-out awaiting SCP response to an AIN or CS-1R query

SSP time-out awaiting SCP response to an AIN or CS-1R query (RSPTMOUT) counts the number of calls that fail because a reply is not sent to the SSP from the SCP within the time interval specified by one of the following office parameters:

- AIN_T1_TIMER
- INAP_TSSF_WFI_TIMER

For AIN release 0.1 calls, the R01 and R02 registers RSPTMOUT are incremented when a reply in response to an AIN release 0.1 query is not sent to the SSP from the SCP within the interval defined by AIN_T1_TIMER.

Register RSPTMOUT release history

RSPTMOUT is 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 TIOVFAFQ

Transaction identification overflow or wrong after the first AIN query (TIOVFAFQ).

Register (TIOVFAFQ) counts AIN calls that fail. The register counts the failures that occur because the transaction identification is not available in the SSP. The transaction identification must not be available after the system sends the first AIN or CS-IR query for the register to increase.

Office parameter MAX_NO_OF_TRANS_ID in table OFCENG defines the total number of transaction identification names available to the SSP. The system uses the parameter to allocate transaction identification names

available to the SSP for launching database queries to a SCP. Enter the number of transaction identification names for AIN in table TCAPTRID.

Note: Table TCAPTRID is obsolete. Identifier pools (IDPL) automatically allocate transaction and component identifiers for all applications. See Data Schema Reference Manual for details.

For AIN release 0.1 calls, the R01 and R02 registers TIOVFAFQ increase. Registers increase when an AIN release 0.1 call fails because the transaction identification is not available in the SSP. The register counts only failures that occur after the system sends the first query.

Register TIOVFAFQ release history

TIOVFAFQ is 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 TIOVFBFQ

Transaction identification overflow or wrong before the first AIN query (TIOVFBFQ).

Register (TIOVFBFQ) counts AIN calls that fail because the transaction identification is not available in the SSP. For the register to increase the failure must occur before the system sends the first AIN query.

Office parameter MAX_NO_OF_TRANS_ID in table OFCENG defines the total number of transaction identification names available to the SSP. Transaction identification names available to the SSP for launching database queries to a SCP database. The number of transaction identification names allocated for AIN can be entered in table TCAPTRID.

Note: Table TCAPTRID is obsolete. Identifier pools (IDPL) automatically allocate transaction and component identifiers for all applications. See Data Schema Reference Manual for details.

For AIN release 0.1 calls, the R01 and R02 registers TIOVFBFQ increase. Registers increase when an AIN release 0.1 call fails because the transaction

OM group AIN (continued)

identification is not available in the SSP. The register counts only failures that occur before the system sends the first query to the SCP.

Register TIOVFBFQ release history

Register TIOVFBFQ is 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 TRIG

AIN triggers (TRIG)

Register (TRIG) counts the number of AIN or CS-IR triggers that occur.

For AIN release 0.1, the R01 and R02 registers TRIG increase when:

- the system encounters an AIN 0.1 subscribed trigger (that includes the share interoffice trunk trigger).
- the system meets all the requirements of the subscribed trigger
- the system correctly initiates the IN feature

The system provides a second register (TRIG2) because of the potentially large number of increments to this register.

Register TRIG release history

Register TRIG is introduced in BCS36.

Associated registers

TRIG2

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register TRIG2

AIN triggers 2 (TRIG2) is an overflow register for register TRIG.

Register TRIG2 release history

TRIG2 is introduced in BCS36.

Associated registers

TRIG

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register DLFL

Register Disconnect Leg Failures counts the number of times that the Disconnect Leg response fails to complete its task.

Register DLFL release history

The SN07 (DMS) product release introduces register DLFL.

Related registers

Register ISDL records the number of subscriber-based Disconnect Leg messages received by the DMS. Register IODL records the number of office-based Disconnect Leg messages received by the SSP.

Related logs

There are no related logs.

Extension registers

There are no extension registers.

OM group AINACG

OM description

Advanced intelligent network (AIN) automatic code gapping (AINACG)

This operational measurement (OM) group provides operational measurements for the automatic code gapping (ACG) feature in the SSP. It is used to monitor the blocking of AIN R0.1 queries by ACG, ACG control list overflows, and changes that are made to ACG control lists.

Release history

OM group AINACG was introduced in NA005.

Registers

The following OM group AINACG registers display on the MAP terminal as follows:

```
BLKCASCP    BLKCASMS    SCPOVLDO    SMSOVLDO
CTRLCHA
```

Group structure

OM group AINACG provides one tuple per office.

Key field:
none

Info field:
none

Associated OM groups

none

OM group AINACG (continued)

Associated functional groups

The following functional group is associated with OM group AINACG:

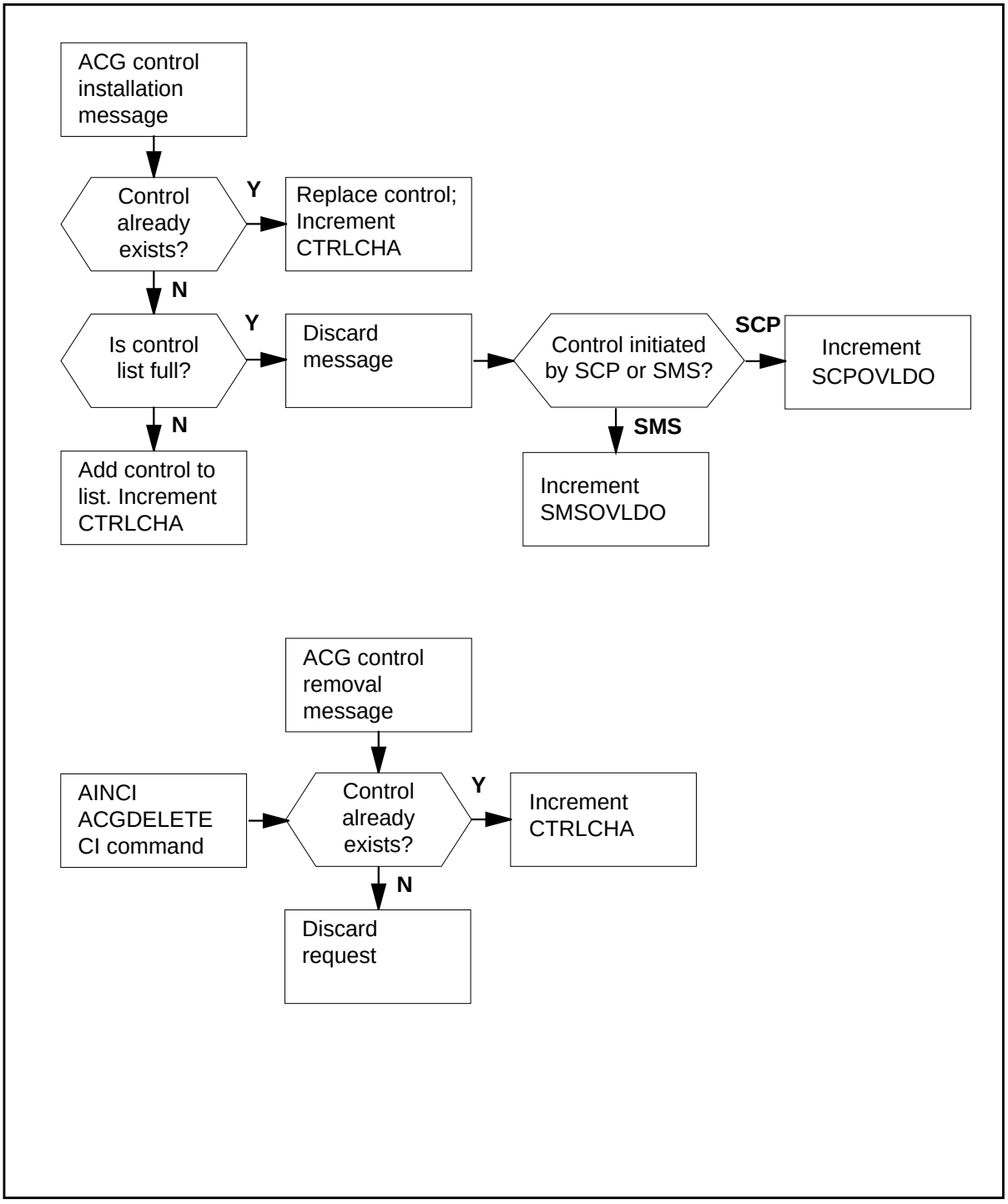
- AIN Call Model Control (AIN00007)

Associated functionality codes

The functionality code associated with OM group AINACG is shown in the following table.

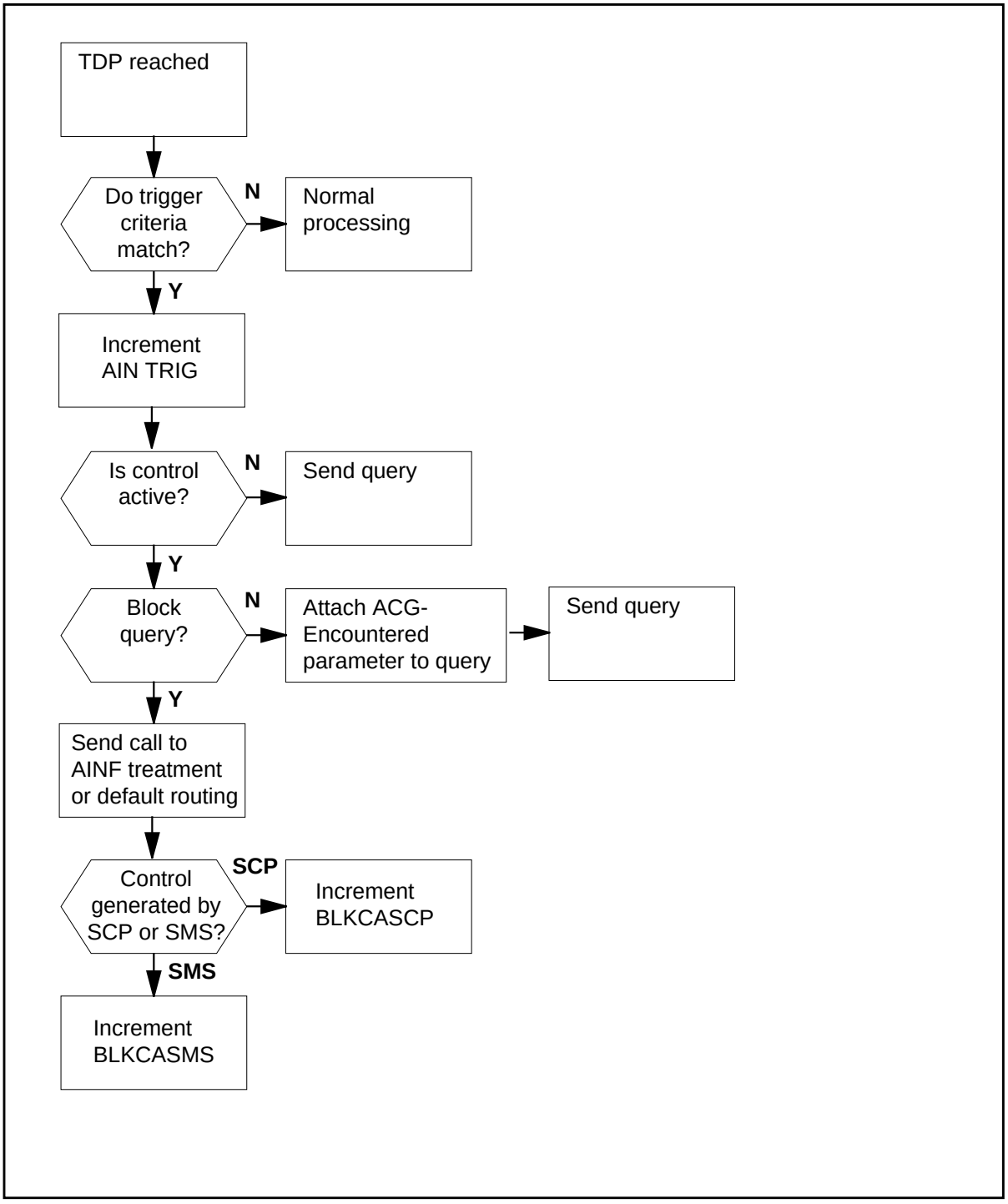
Functionality	Code
AIN Call Model Control	AIN00007

OM group AINACG registers CTRLCHA, SCPOVLDO, and SMSOVLDO



OM group AINACG (continued)

OM group AINACG registers BLKCASCP and BLKCASMS



Register BLKCASCP

Blocked call/query due to SCP overload controls

This register counts the number of AIN calls that are blocked by AIN ACG SCP overload control and are sent to either AIN default routing or AIN final treatment.

Register BLKCASCP release history

Register BLKCASCP was introduced in NA005.

Associated registers

none

Associated logs

none

Extension registers

none

Register BLKCASMS

Blocked call/query due to SMS initiated controls

This register counts the number of AIN calls that are blocked by AIN ACG SMS originated code control and are sent to either AIN default routing or AIN final treatment.

Register BLKCASMS release history

Register BLKCASMS was introduced in NA005.

Associated registers

none

Associated logs

none

Extension registers

none

Register CTRLCHA

Control list changes

OM group AINACG (continued)

Register CTRLCHA counts the number of times the following events occur:

- an AIN ACG item is added to the service control point (SCP) overload control list
- an AIN ACG item is added to the service management system (SMS) originated control list
- an existing control item in either list is replaced or removed

Note: When a control item is removed from the SCP or SMS control list using ACG restore functionality, it is not reflected in the CTRLCHA register.

Register CTRLCHA release history

Register CTRLCHA was introduced in NA005.

Associated registers

none

Associated logs

Log AIN610 indicates addition or replacement of an existing control. Log AIN611 indicates removal of a control.

Extension registers

none

Register SCPOVLDO

SCP overload list overflow

This register counts the number of times that no more ACG control items can be added to the AIN ACG SCP overload control list because the list is full.

Register SCPOVLDO release history

Register SCPOVLDO was introduced in NA005.

Associated registers

none

Associated logs

Log AIN300 indicates the SCP control list overflow.

Extension registers

none

Register SMSOVLDO

SMS overload list overflow

This register counts the number of times that no more ACG control items can be added to the AIN ACG SMS originated control list because the list is full.

Register SMSOVLDO release history

Register SMSOVLDO was introduced in NA005.

Associated registers

none

Associated logs

Log AIN301 indicates the SMS control list overflow.

Extension registers

none

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OM group AINICOFF

OM description

Advanced intelligent networks incoming office-based (AINICOFF)

OM group AINICOFF counts AIN Service Enablers office-based messages that the service control point (SCP) sends to the service switching point (SSP). OM group AINICOFF monitors the incoming traffic to the SSP.

When different triggers or events cause the SSP to send a message, a separate OM register provides a count for each trigger and event type. OM registers increment when the system correctly sends or receives the message that corresponds to that register. The system correctly sends a message when the message is encoded into the transaction capability application part (TCAP) protocol. The system correctly receives a message when the system decodes the message from the TCAP protocol.

To decode a TCAP message involves several stages of error checking. The system counts messages after the decoding of message parameters or when errors are present in the message parameters. The system does not count a message when the system detects an error in the TCAP package or component.

Errors that can occur in the TCAP package or component follow.

- all fatal protocol errors
- errors as a result of a bad group of messages, packages, or component types
- an invalid response message
- bad correlation identifiers
- duplicated messages

OM group AINICOFF contains registers that count call-related, incoming, office-based, Service Enablers messages. The system counts messages entered as R02 in tables TRIGDIG, TRIGITM, or TRIGINFO.

Operating company personnel can subscribe to the office-based triggers that follow:

- Specific_Digit_String
- N11

Release history

SN07 (DMS)

The register IODL was added by activity Q00765666.

OM group AINICOFF (continued)

NA017

The register IOCTR was added, (59037140).

NA008

The NA008 product release introduced OM group AINICOFF.

Registers

The following figure illustrates OM group AINICOFF registers as they appear on the MAP terminal display.

Map terminal display of OM group AINICOFF registers

```
IOAR        IOCON        IODISC        IOSTR
IOCRE       IOCITR       IOSN          IORRBE
IOCLOSI     IOCINFO      IOCCALL       IOCTR
IODL
```

Group structure

OM group AINICOFF provides one tuple per office.

Key field:
None

Info field:
None

Related OM groups

The following related OM groups provide AIN Service Enablers message counts:

- AIN outgoing office-based (AINOGOFF) counts the AIN Service Enablers office-based messages that the SSP sends to the SCP. This OM group monitors the outgoing traffic to the SCP.
- AIN outgoing subscription-based (AINOGSUB) counts the AIN Service Enablers subscription-based messages that the SSP sends to the SCP. This OM group monitors the outgoing traffic to the SCP.
- AIN incoming subscription-based (AINICSUB) counts the AIN Service Enablers subscription-based messages sent from the SCP to the SSP. This OM group monitors the incoming subscription traffic to the SSP.
- AIN non-call-related (AINNCR) counts the AIN messages that pass between the SSP and SCP on a non-call-related basis.

- Advanced intelligent networks (AIN) is the platform for AIN traffic and maintenance measurements. OM group AIN counts messages entered as R01 in tables TRIGDIG, TRIGINFO, or TRIGITM.
- AIN automatic code gapping (AINACG) provides operational measurements for the automatic code gapping (ACG) feature in the SSP. This OM group monitors AIN R0.1 and R0.2 queries: ACG, ACG control list overflows, and changes made to the ACG control lists.

Related OM group validation formulas follow.

- total of AINICOFF group + total of AINOGOFF group + total of AINOGSUB group + total of AINICSUB group = total call-related messages
- total of AINICOFF group + total of AINICSUB group + AINNCR registers NACG + NAGCR + NUPREQ + NMFC = total incoming Service Enablers messages received from the SCP

Related functional groups

There are no related functional groups.

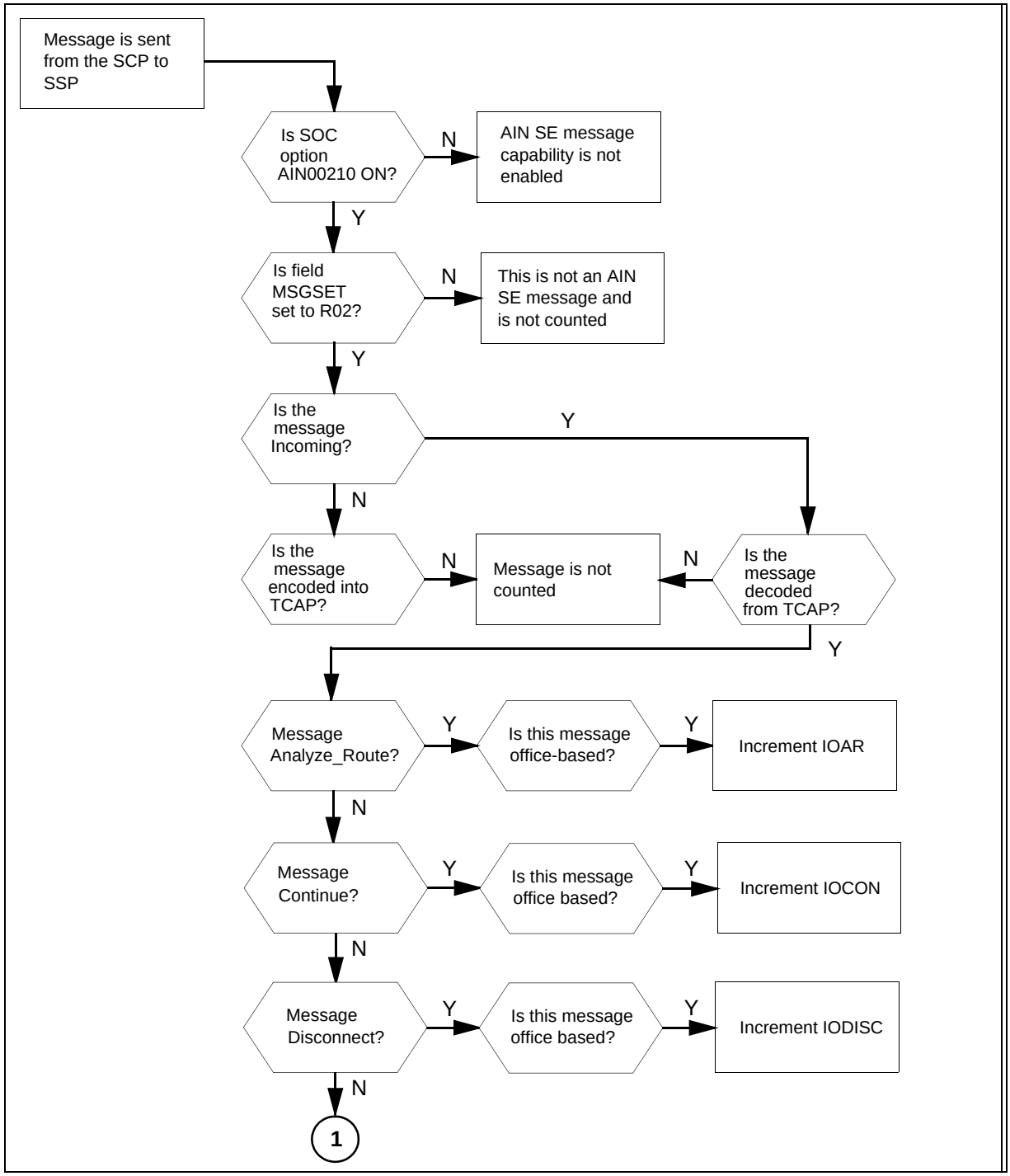
Related functionality codes

There are no related functionality codes.

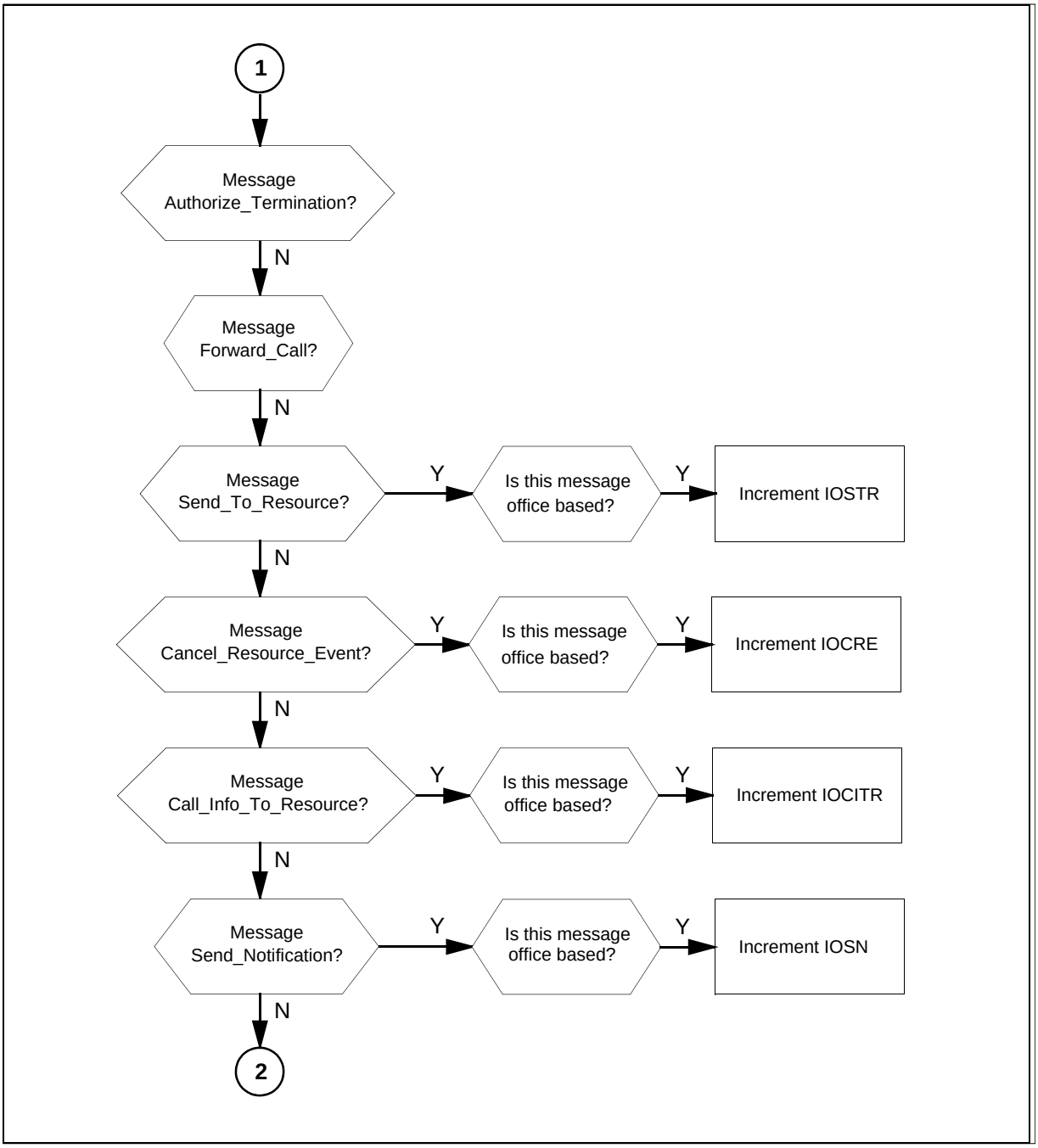
The figure that follows illustrates the logical flow of OM group AINICOFF registers.

OM group AINICOFF (continued)

Logic flow for OM group AINICOFF registers

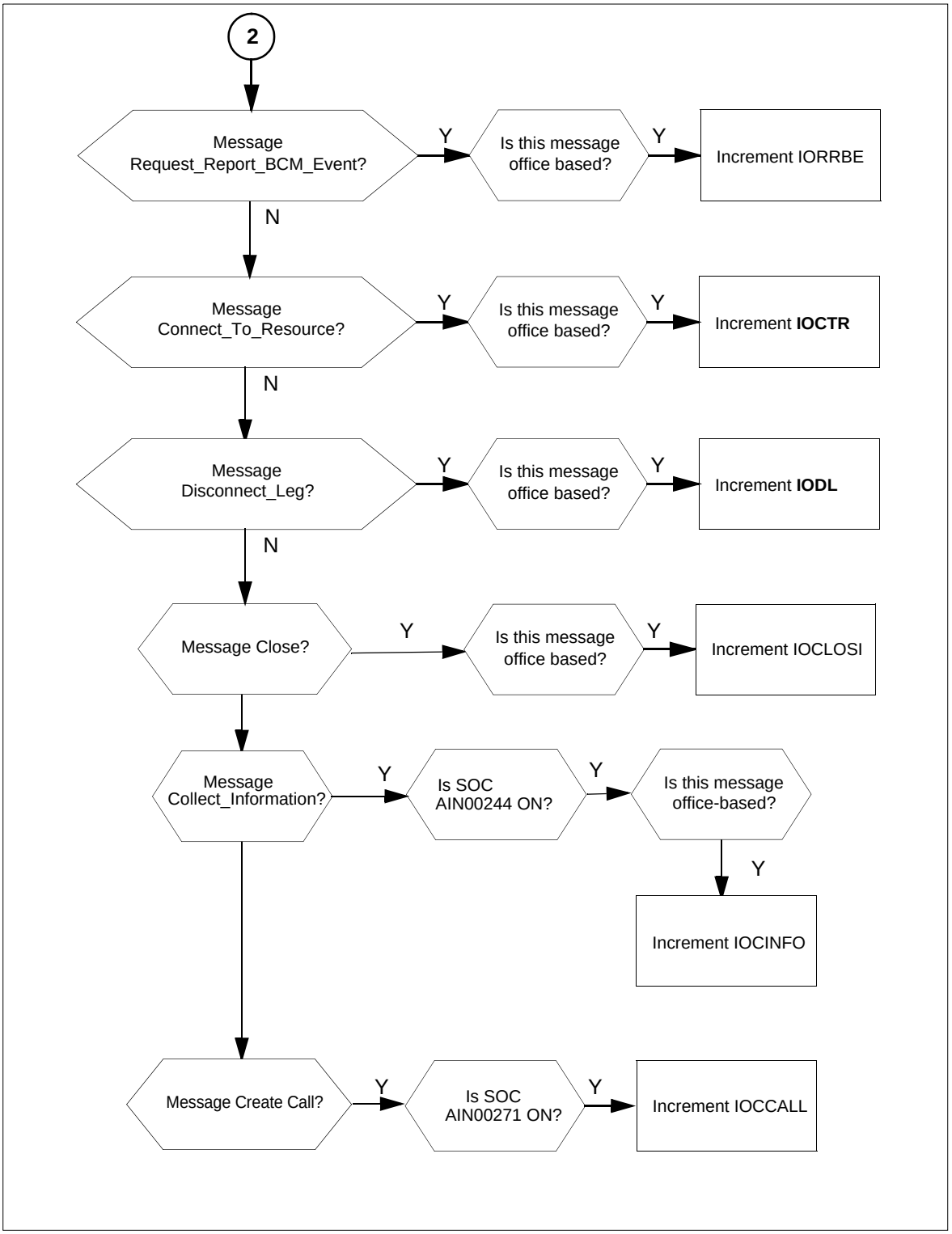


Logic flow for OM group AINICOFF registers (continued)



OM group AINICOFF (continued)

Logic flow for OM group AINICOFF registers (continued)



Register IOAR

Register IO Analyze_Route (IOAR) counts the Analyze_Route messages that the SSP receives from the SCP in a transaction that an office-based message initiates.

Register IOAR release history

The NA008 product release introduced register IOAR.

Related registers

Register ISAR counts the Analyze_Route messages the SSP receives from the SCP in a transaction that a line-subscribed message initiates. Registers IOAR + ISAR = total Analyze_Route messages.

Related logs

There are no related logs.

Extension registers

There are no extension registers.

Register IOCON

Register IO Continue (IOCON) counts the Continue messages that the SSP receives from the SCP in a transaction that an office-based message initiates.

Register IOCON release history

The NA008 product release introduced register IOCON.

Related registers

Register ISCON counts the messages that the SSP receives from the SCP in a transaction that a subscribed message initiates. Registers IOCON + ISCON = total Continue messages.

Related logs

There are no related logs.

Extension registers

There are no extension registers.

Register IOCTR

Register IO Connect_To_Resource (IOCTR) counts the incoming Connect_To_Resource messages received at the SSP from the SCP in transactions initiated by office-based messages.

OM group AINICOFF (continued)

Register IOCTR release history

The NA017 product release introduced register IOCTR.

Related registers

Register IOCTR counts all the Incoming Connect_To_Resource messages and outgoing CTR_Clear messages.

Related logs

There are no related logs.

Extension registers

There are no extension registers.

Register IODISC

Register IO Disconnect (IODISC) counts the disconnect messages that the SSP receives from the SCP in a transaction that an office-based message initiates.

Register IODISC release history

The NA008 product release introduced register IODISC.

Related registers

Register ISDISC counts the disconnect messages that the SSP receives from the SCP in a transaction that a subscribed message initiates. Registers IODISC + ISDISC = total disconnect messages.

Related logs

There are no related logs.

Extension registers

There are no extension registers.

Register IOSTR

Register IO Send_To_Resource (IOSTR) counts the Send_To_Resource messages received at the SSP from the SCP in a transaction that an office-based message initiates.

Register IOSTR release history

The NA008 product release introduced register IOSTR.

Related registers

Register ISSTR counts the Send_To_Resource messages that the SSP receives from the SCP in a transaction that a subscribed message initiates.

Register IORCLR counts the Resource_Clear messages sent from the SSP to the SCP in a transaction that an office-based message initiates.

Register ISRCLR counts the Resource_Clear messages sent from the SSP to the SCP in a transaction that a subscribed message initiates.

Register IOCRE counts the Cancel_Resource_Event messages that the SSP receives from the SCP in a transaction that an office-based message initiates.

Register ISCRE counts the Cancel_Resource_Event messages that the SSP receives from the SCP in a transaction that a subscribed message initiates.

The validation formula for related registers follow.

- IOSTR + ISSTR = total Send_To_Resource messages
- IOCRE + ISCRE = total Cancel_Resource_Event messages

Related logs

There are no related logs.

Extension registers

There are no extension registers.

Register IOCRE

Register Cancel_Resource_Event counts the Cancel_Resource_Event messages that the SSP receives from the SCP in a transaction that an office-based message initiates.

Register IOCRE release history

The NA008 product release introduced register IOCRE.

Related registers

ISCRE counts the Send_To_Resource messages that the SSP receives from the SCP in a transaction that a subscribed message initiates.

IORCLR counts the Resource_Clear messages that the SSP receives from the SCP in a transaction that an office-based message initiates.

ISRCLR counts the Resource_Clear messages that the SSP sends to the SCP in a transaction that a subscribed message initiates.

IOSTR counts the Send_To_Resource messages the SSP receives from the SCP in a transaction that an office-based message initiates.

OM group AINICOFF (continued)

ISSTR counts the Send_To_Resource messages that the SSP receives from the SCP in a transaction that a subscribed message initiates.

The validation formulas for related registers follow.

- IOCRE + ISCRE = total Cancel_Resource_Event messages
- IOSTR + ISSTR = total Send_To_Resource messages

Related logs

There are no related logs.

Extension registers

There are no extension registers.

Register IOCITR

Register IO Call_Info_To_Resource (IOCITR) counts the Call_Info_To_Resource messages received at the SSP from the SCP in a transaction that an office-based message initiates.

Register IOCITR release history

The NA008 product release introduced register IOCITR.

Related registers

Register ISCITR counts the Call_Info_To_Resource messages that the SSP receives from the SCP in a transaction that a subscribed message initiates. Registers IOCITR + ISCITR = total Call_Info_To_Resource messages.

Register IOCIFR counts the Call_Info_From_Resource messages sent from the SSP to the SCP in a transaction that an office-based message initiates.

Register ISCIFR counts the Call_Info_From_Resource messages sent from the SSP to the SCP in a transaction that a subscribed message initiates.

Related logs

There are no related logs.

Extension registers

There are no extension registers.

Register IOSN

Register IO Send_Notification (IOSN) counts the Send_Notification messages received at the SSP from the SCP in a transaction that an office-based message initiates.

Register IOSN release history

The NA008 product release introduced register IOSN.

Related registers

Register ISSN counts the Send_Notification messages that the SSP receives from the SCP in a transaction that a subscribed message initiates. Registers IOSN + ISSN = total Send_Notification messages.

Register IOTN counts the Termination_Notification messages that the SSP sends to the SCP in a transaction that an office-based message initiates.

Register ISTN counts the Termination_Notification messages that the SSP sends to the SCP in a transaction that a subscribed message initiates.

Related logs

There are no related logs.

Extension registers

There are no extension registers.

Register IORRBE

Register IO Request_Report_BCM_Event (IORRBE) counts the Request_Report_BCM_Event messages that the SSP receives from the SCP in a transaction that an office-based message initiates. Registers IORRBE + ISRRBE = total Request_Report_BCM_Event messages.

Register IORRBE release history

The NA008 product release introduced register IORRBE.

Related registers

There are no related registers.

Related logs

There are no related logs.

Extension registers

There are no extension registers.

Register IOCLOSI

Register IO Close (IOCLOSI) counts the close messages that the SSP receives from the SCP in a transaction that an office-based message initiates.

OM group AINICOFF (continued)

Register IORRBE release history

The NA008 product release introduced register IORRBE.

Related registers

There are no related registers.

Related logs

There are no related logs.

Extension registers

There are no extension registers.

Register IOCINFO

Register IO Collect_Information (IOCINFO) counts the Collect_Information messages received in response to an office-based trigger encounter. The register increments when the SSP correctly decodes a Collect_Info message and when AIN SOC AIN00244 is ON.

Register IOCINFO release history

The NA010 product release introduced register IOCINFO.

Related registers

Register ISCINFO counts the Collect_Information messages received in response to a subscribed trigger encounter. Registers IOCINFO + ISCINFO = total Collect_Information messages.

Related logs

There are no related logs.

Extension registers

There are no extension registers.

Register IOCCALL

Register IO Create_Call counts the incoming Create_Call messages that the SSP receives from the SCP. The register increments when the SSP correctly decodes Create_Call messages and when AIN SOC AIN00271 is ON.

Register IOCCALL release history

The NA013 product release introduces register IOCCALL.

Related registers

OM register CCTMOUT in OM group AIN counts the number of times that the user rejects the Create_Call service by allowing a time-out after

Create_Call gives notification to the user. Register IOCLOSO records the number of CLOSE messages sent by Create_Call functionality in addition to CLOSE messages from other AIN applications in the SSP.

Related logs

There are no related logs.

Extension registers

There are no extension registers.

Register IODL

Register Incoming Office-based Disconnect Leg (IODL) counts the number of incoming office-based Disconnect Leg responses received by the SSP.

Register IOCCALL release history

The NA019 product release introduces register IODL.

Related registers

Register ISDL records the number of subscriber-based Disconnect Leg messages received by the SSP.

Register DLFL counts the number of times that the Disconnect Leg response fails to complete its task.

Related logs

There are no related logs.

Extension registers

There are no extension registers.

OM group AINICSUB

OM description

Advanced intelligent network incoming subscription-based (AINICSUB) counts AIN Service Enablers subscription-based messages. The service control point (SCP) sends these messages to the service switching point (SSP). The system uses AINICSUB to monitor the incoming subscription traffic to the SSP.

The SSP can send messages that are the result of more than one type of trigger or event. A separate OM register provides a count for each trigger and event type. An OM register increases when the system correctly sends or receives the message that goes with the OM register. The system sends a message correctly when the system codes the message into the transaction capability application part (TCAP) protocol. The system receives a message correctly when the system decodes the message from the TCAP protocol.

To decode a TCAP message involves several stages of error checking. The system counts the message after the system decodes the message parameters. The system decodes messages if errors are present in the message parameters. The system does not count a message when the system detects an error in the TCAP package or component.

Types of errors in the TCAP package or component follow:

- very important protocol errors
- errors as a result of a bad group of messages, packages or component types
- invalid response message
- bad correlation identifiers
- duplicated messages

OM group AINICSUB contains registers that count call-related, incoming, subscribed, AIN Service Enablers messages. The registers count messages entered as R02 in tables TRIGDIG, TRIGINFO, and TRIGITM.

The system can subscribe to the triggers that follow by line or by group:

- Off-Hook_Immediate
- Off-Hook_Delay
- Shared_Interoffice_Trunk
- Public_Feature_Code
- Specific_Feature_Code
- Customized_Dialing_Plan

OM group AINICSUB (continued)

- automatic flexible routing (AFR)

  Note: An AFR trigger can be office-based or subscribed. The system counts messages sent as a result of this trigger as subscribed.

- O_Called_Party_Busy
- O_No_Answer
- Termination_Attempt
- Prefix
- T_Busy
- T_No_Answer

Release history

SN07 (DMS)

The register ISDL was added to OM group AINICSUB, (Q00765666).

NA017

The register ISCTR was added to OM group AINICSUB, (59037140).

NA008

NA008 introduced OM group AINICSUB.

Registers

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

Map terminal display of OM group AINICSUB registers

```
ISAR          ISCON         ISAUTHT          ISFC
ISDISC        ISSTR         ISCRE            ISCITR
ISSN          ISRRBE        ISCLOSI          ISCINFO
ISOFRCL       ISCTR         ISDL
```

Group structure

OM group AINICSUB provides one tuple per office.

Key field:
There is no Key field.

Info field:
There is no Info field.

Related OM groups

Related OM groups that provide message counts for AIN Service Enablers follow:

- AIN outgoing office-based (AINOGOFF) counts the AIN Service Enablers office-based messages that the SSP sends to the SCP. This OM group monitors the outgoing traffic to the SCP.
- AIN outgoing subscription-based (AINOGSUB) counts AIN Service Enablers subscription-based messages that the SSP sends to the SCP. This OM group monitors the outgoing traffic to the SCP.
- AIN incoming office-based (AINICOFF) counts AIN Service Enablers office-based messages that the SCP sends to the SSP. This OM group monitors the incoming traffic to the SSP.
- AIN non-call-related (AINNCR) counts the AIN messages that pass between the SSP and SSP on a non-call-related basis.
- Advanced intelligent networks (AIN) is the platform for AIN traffic and maintenance measurements. OM group AIN counts messages entered as R01 in tables TRIGDIG, TRIGINFO, and TRIGITM.
- AIN automatic code gapping (AINACG) provides operational measurements for the automatic code gapping (ACG) feature in the SSP. This OM group monitors the blocking of AIN R0.1 queries by: ACG, ACG control list overflows, and changes made to the ACG control lists.

Related validation formulas for the OM group follow:

- total of AINICSUB group + total of AINICOFF group = total of all incoming call-related AIN Service Enablers messages
- total of AINICSUB group + total of AINICOFF group + AINNCR registers NACG + NAGCR + NUPREQ + NMFC +NUPD + NUSUCC= total incoming AIN Service Enablers messages received from the SCP
- total of AINICSUB group + total of AINOGSUB group + total of AINICOFF group + total of AINOGOFF group = total call-related messages

Related functional groups

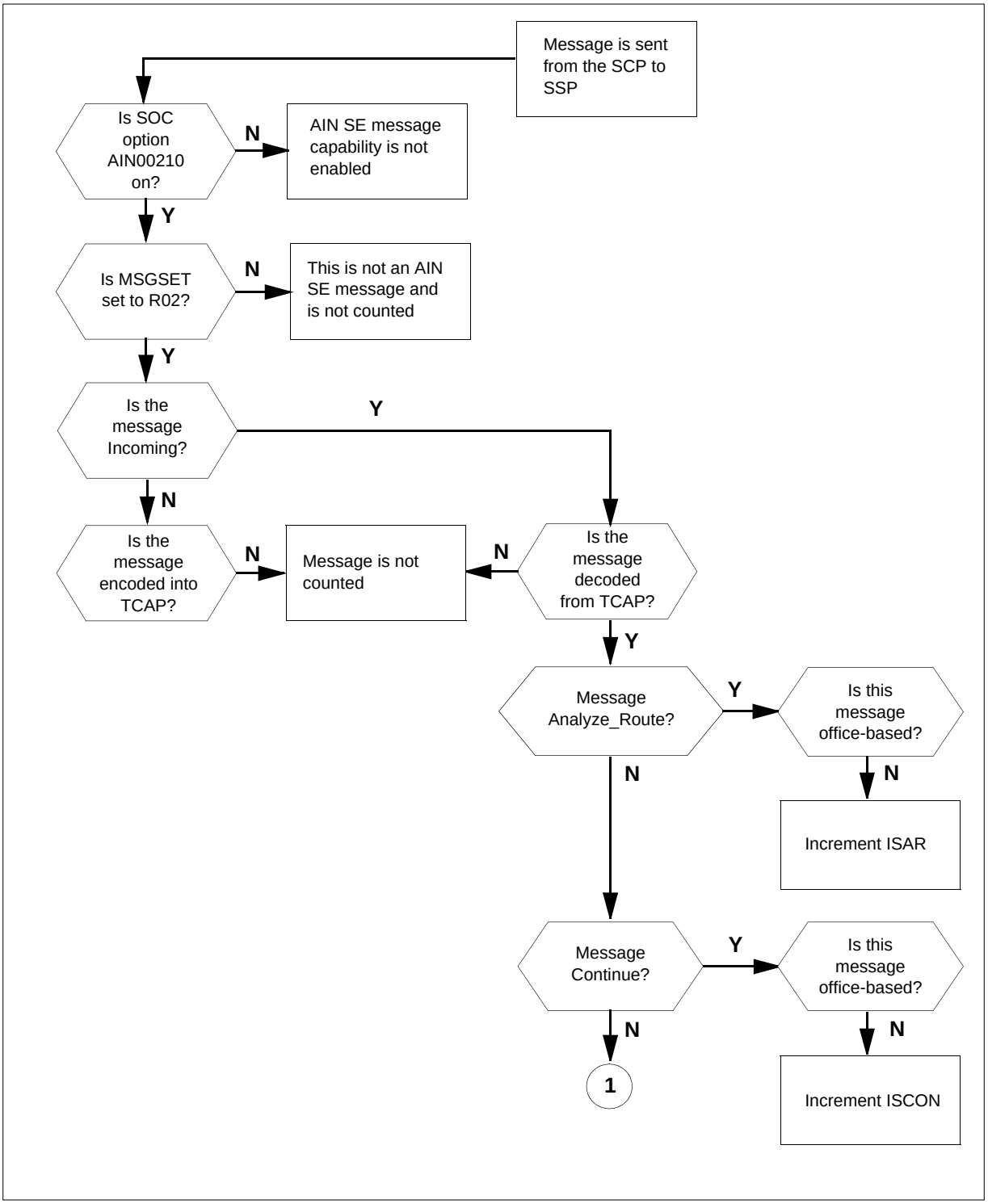
There are no related functional groups.

Related functionality codes

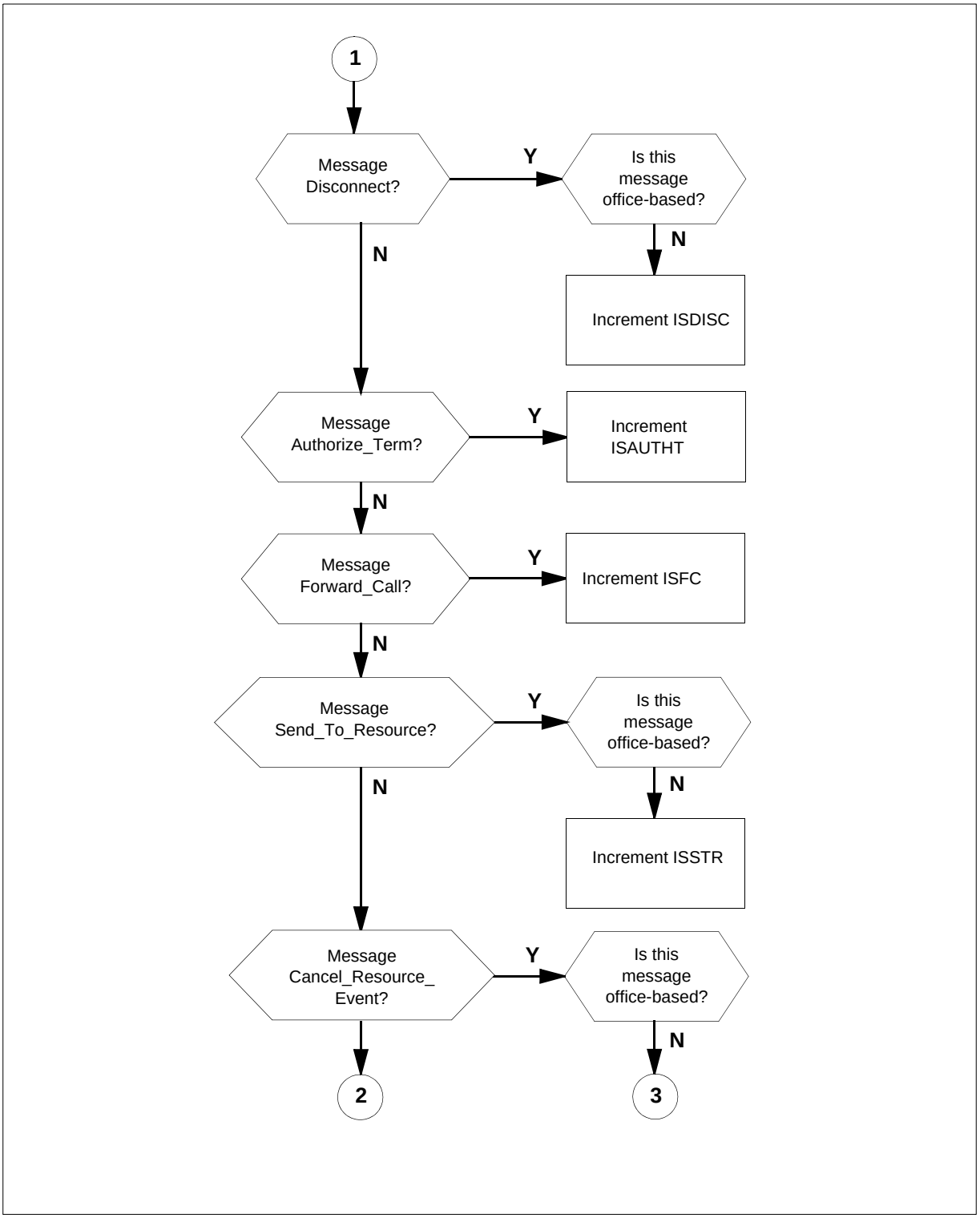
There are no correct functionality codes.

OM group AINICSUB (continued)

OM group AINICSUB registers

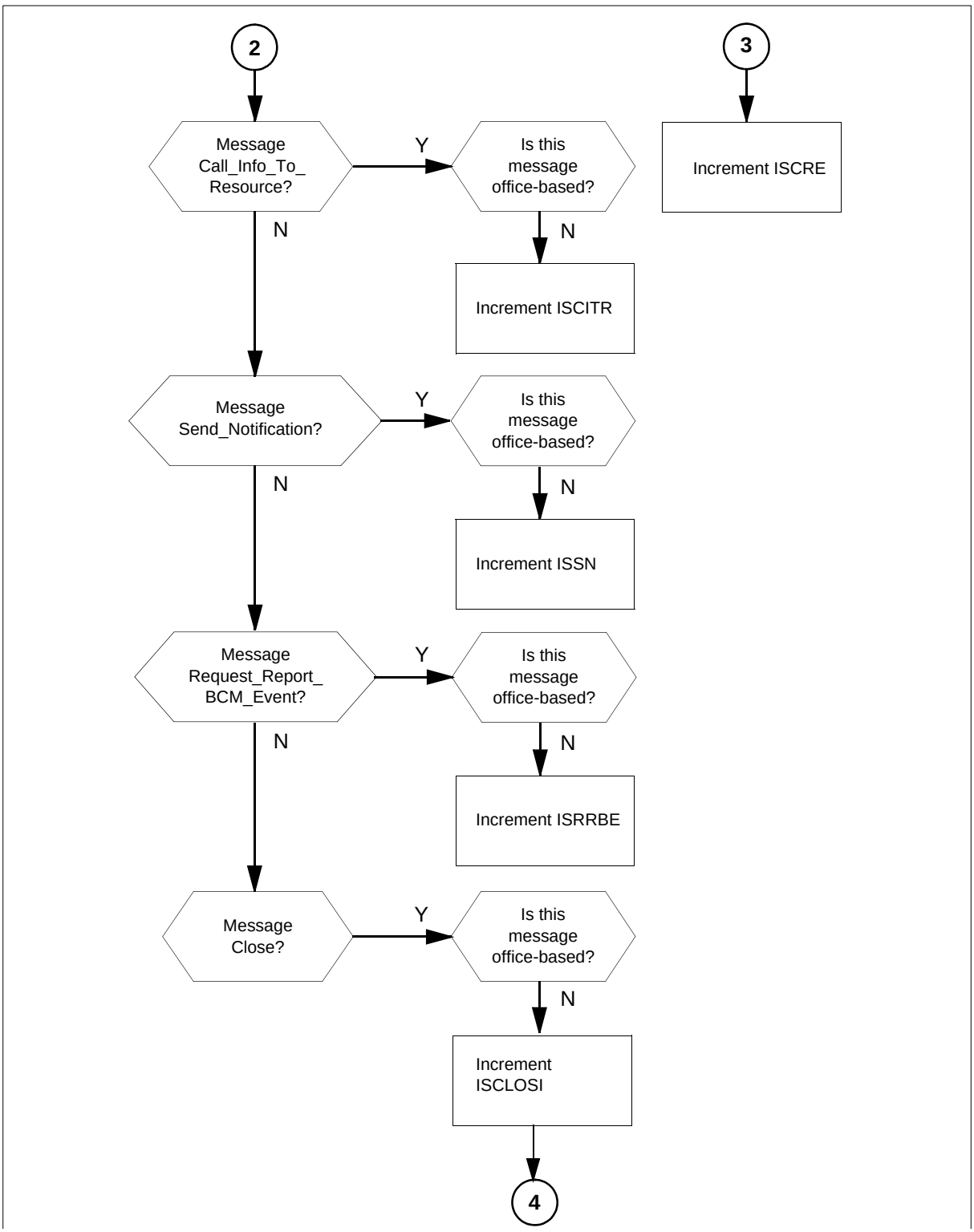


OM group AINICSUB registers (continued)

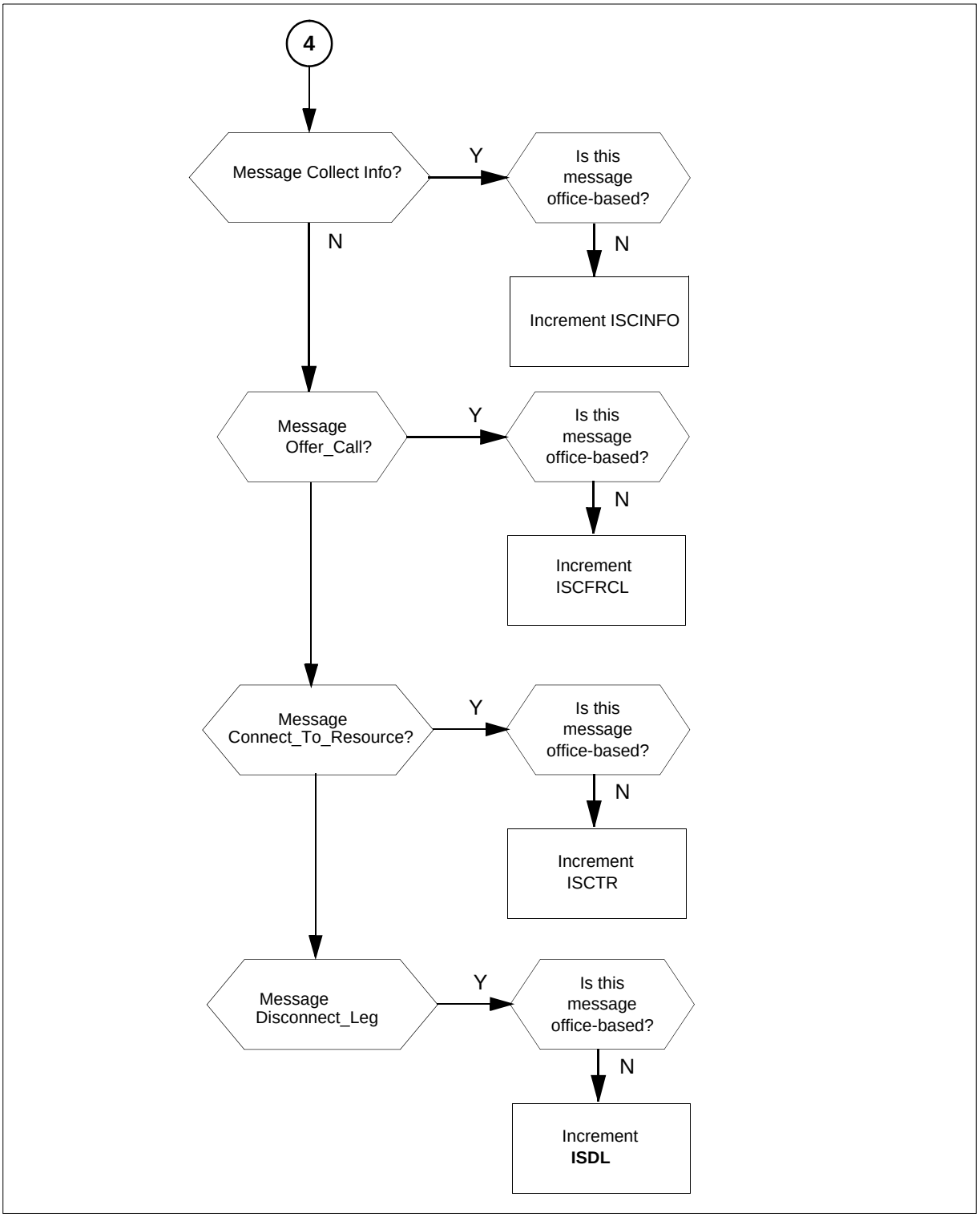


OM group AINICSUB (continued)

OM group AINICSUB registers (continued)



OM group AINICSUB registers (continued)



OM group AINICSUB (continued)

Register ISAR

IS Analyze_Route (ISAR)

The ISAR register counts analyze_route messages that the SSP receives from the SCP in a transaction that an subscribed message initiates.

Register ISAR release history

NA008 introduced the ISAR register.

Related registers

The IOAR register counts the analyze_route messages that the SSP receives from the SCP in a transaction that an office-based message initiates.

The validation formula for this register isISAR + IOAR = total analyze_route messages

Related logs

There are no related logs.

Extension registers

There are no extension registers.

Register ISCINFO

Interactive Subscribed Collect_Information (ISCINFO)

The ISCINFO register counts the Collect_Information messages received in response to a line-subscribed trigger encounter.

Register ISCINFO release history

NA010 introduced the ISCINFO register.

Related registers

The IOCINFO register counts the Collect_Information messages that the SSP receives when the SSP hits an office subscribed trigger.

The validation formula for this register isISCINFO + IOCINFO = total Collect_Information messages

Related logs

There are no related logs.

Extension registers

There are no extension registers.

Register ISCON

IS Continue (ISCON)

The ISCON register counts continue messages that the SSP receives from the SCP, in a transaction that a subscribed message initiates.

Register ISCON release history

NA008 introduced the ISCON register.

Related registers

The IOCON register counts the continue messages that the SSP receives from the SCP in a transaction that an office-based message initiates.

The validation formula for this register isISCON + IOCON = total continue messages

Related logs

There are no related logs.

Extension registers

There are no extension registers.

Register ISAUTHT

IS Authorize_Termination (ISAUTHT)

The ISAUTHT register counts authorize_termination messages that the SSP receives from the SCP in a transaction that a subscribed message initiates.

Register ISAUTHT release history

NA008 introduced the ISAUTHT register.

Related registers

There are no related registers.

Related logs

There are no related logs.

Extension registers

There are no extension registers.

OM group AINICSUB (continued)

Register ISCTR

Register IS Connect_To_Resource (ISCTR) counts the Connect_To_Resource messages the SSP receives from the SCP in a subscribed-message initiated transaction.

Register ISCTR release history

The NA017 product release introduced the ISCTR register.

Related registers

There are no related registers.

Related logs

There are no related logs.

Extension registers

There are no extension registers.

Register ISFC

IS Forward_Call (ISFC)

The ISFC register counts forward_call messages that the SSP receives from the SCP in a transaction that a subscribed message initiates.

Register ISFC release history

NA008 introduced the ISFC register.

Related registers

There are no related registers.

Related logs

There are no related logs.

Extension registers

There are no extension registers.

Register ISDISC

IS Disconnect (ISDISC)

The ISDISC register counts the disconnect messages that the SSP receives from the SCP in a transaction that a subscribed message initiates.

Register ISDISC release history

NA008 introduced the ISDISC register.

Related registers

The IODISC register counts the disconnect messages that the SSP receives from the SCP in a transaction that an office-based message initiates.

The validation formula for this register is IODISC + ISDISC = total disconnect messages

Related logs

There are no related logs.

Extension registers

There are no extension registers.

Register ISSTR

IS Send_To_Resource (ISSTR)

The ISSTR register counts the send_to_resource messages that the SSP receives from the SCP in a transaction that a subscribed message initiates.

Register ISSTR release history

NA008 introduced the ISSTR register.

Related registers

The IOCRE register counts the cancel_resource_event messages that the SSP receives from the SCP in a transaction that an office-based message initiates.

The IOSTR register counts the send_to_resource messages that the SSP receives from the SCP in a transaction that an office-based message initiates.

The ISRCLR register counts the resource_clear messages that the SSP sends to the SCP in a transaction that a subscribed message initiates.

The IORCLR register counts the resource_clear messages that the SSP sends to the SCP in a transaction that an office-based message initiates.

Validation formulas for the related registers follow:

- IOCRE + ISCRE = total cancel_resource_event messages
- IOSTR + ISSTR = total send_to_resource messages

Related logs

There are no related logs.

OM group AINICSUB (continued)

Extension registers

There are no extension registers.

Register ISCRE

IS Cancel_Resource_Event (ISCRE)

The ISCRE register counts the cancel_resource_event messages that the SSP receives from the SCP in a transaction that a subscribed message initiates.

Register ISCRE release history

NA008 introduced the ISCRE register.

Related registers

The IOCRE register counts the cancel_resource_event messages that the SSP receives from the SCP in a transaction that an office-based message initiates.

The ISSTR register counts the send_to_resource messages that the SSP receives from the SCP in a transaction that a subscribed message initiates.

The IOSTR register counts the send_to_resource messages that the SSP receives from the SCP in a transaction that an office-based message initiates.

The ISRCLR register counts the resource_clear messages that the SSP sends to the SCP in a transaction that a subscribed message initiates.

The IORCLR register counts the resource_clear messages that the SSP sends to the SCP in a transaction that an office-based message initiates.

Validation formulas for related registers follow:

- IOCRE + ISCRE = total cancel_resource_event messages
- ISSTR + IOSTR = total send_to_resource messages

Related logs

There are no related logs.

Extension registers

There are no extension registers.

Register ISCITR

IS Call_Info_To_Resource (ISCITR)

The ISCITR register counts call_info_to_resource messages that the SSP receives from the SCP in a transaction that a subscribed message initiates.

Register ISCITR release history

NA008 introduced the ISCITR register.

Related registers

The IOCITR register counts the call_info_to_resource messages that the SSP receives from the SCP in a transaction that an office-based message initiates.

The validation formula for this register isIOCITR + ISCITR = total call_info_to_resource messages

The IOCIFR register counts the call_info_from_resource messages that the SSP sends to the SCP in a transaction that an office-based message initiates.

The ISCIFR register counts the call_info_from_resource messages that the SSP sends to the SCP in a transaction that a subscribed message initiates.

Related logs

There are no related logs.

Extension registers

There are no extension registers.

Register ISSN

IS Send_Notification (ISSN)

The ISSN register counts the send_notification messages that the SSP receives from the SCP in a transaction that a subscribed message initiates.

Register ISSN release history

NA008 introduced the ISSN register.

Related registers

The IOSN register counts the send_notification messages that the SSP receives from the SCP in a transaction that an office-based message initiates.

The validation formula for this register isIOSN + ISSN = total send_notification messages

The IOTN register counts the termination_notification messages that the SSP sends to the SCP in a transaction that an office-based message initiates.

The ISTN register counts the termination_notification messages that the SSP sends to the SCP in a transaction that a subscribed message initiates.

OM group AINICSUB (continued)

Related logs

There are no related logs.

Extension registers

There are no extension registers.

Register ISRRBE

IS Request_Report_BCM_Event (ISRRBE)

The ISRRBE register counts request_report_BCM_event messages that the SSP receives from the SCP in a transaction that a subscribed message initiates.

The validation formula for this register isISRRBE + IORRBE = total request_report_BCM_event messages

Register ISRRBE release history

NA008 introduced the ISRRBE register.

Related registers

There are no related registers.

Related logs

There are no related logs.

Extension registers

There are no extension registers.

Register ISCLOSI

IS Close (ISCLOSI)

The ISCLOSI register counts close messages that the SSP receives from the SCP in a transaction that a subscribed message initiates.

Register ISCLOSI release history

NA008 introduced the ISCLOSI register.

Related registers

There are no related registers.

Related logs

There are no related logs.

Extension registers

There are no extension registers.

Register ISOFRCL

Interactive, Subscribed, Offer_Call (ISOFRCL)

The ISOFRCL register counts Offer_Call messages that the SSP receives from the SCP in a transaction that a subscribed message initiates.

Register ISOFRCL release history

NA011 introduces the ISOFRCL register.

Related registers

There are no related registers.

Related logs

There are no related logs.

Extension registers

There are no extension registers.

Register ISDL

Incoming Subscriber Disconnect Leg (ISDL).

The ISDL register counts the number of incoming subscriber-based Disconnect Leg responses received by the SSP.

Register ISDL release history

The NA019 product release introduces register ISDL.

Related registers

Register IODL records the number of office-based Disconnect Leg messages received by the SSP.

Register DLFL counts the number of times that the Disconnect Leg response fails to complete its task.

Related logs

There are no related logs.

Extension registers

There are no extension registers.

OM group AINOGOFF

OM description

OM group Advanced intelligent network outgoing office-based (AINOGOFF).

The OM group AINOGOFF counts AIN Service Enablers office-based messages the service switching point (SSP) sends to the service control point (SCP). This OM group monitors outgoing traffic to the SCP.

The SSP can send messages that are the result of more than one kind of trigger or event. A separate OM register provides a count for each trigger and event type. An OM registers increases when the system sends or receives the message that corresponds with the register. A message sends when the message encodes into the transaction-capability application part (TCAP) protocol. The system receives a message correctly when the message decodes from the TCAP protocol.

Decoding a TCAP message involves several error checks. After the message parameters decode, the TCAP package counts the message when it detects an error in the message parameters. When the TCAP package or component detects an error, the message is not counted.

The following are errors in the TCAP package or component:

- all fatal protocol errors
- errors as a result of a bad group of messages, packages or component types
- invalid response message
- bad correlation identifiers
- duplicated messages

The OM group AINOGOFF contains 10 registers that count call-related, outgoing, office-based, Service Enablers messages. The registers count messages entered as R02 in tables TRIGDIG or TRIGINFO.

The following office-based triggers can subscribe to:

- Specific_Digit_String
- N11

Release history

SN07 (DMS)

The register EOOTS was added to the flowchart by activity Q00765666.

OM group AINOGOFF (continued)

SN06 (DMS)

Register EOOTS added. Documentation amended at SN07 (DMS) for CR Q00527425-04.

NA017

The registers (EOTOUT, EODCLED, and EOODCING) were added to the AINOGOFF, (59037100, originally 59028609 and 59028631). Also, the register (IOCCLR) was added to OM group AINOGOFF, (59037140).

NA008

OM group AINOGOFF was introduced.

Registers

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

Map terminal display of OM group AINOGOFF registers

```
TOIASDS      TOIAN11      EONB         EOOCB
EOONA        EOOANS       IOTN         IOCIFR
IORCLR       IOCLOSO      EOODCLED     EOODCING
EOTOUT       TOIAOPFC     IOCCLR       EOOTS
```

Group structure

The OM group AINOGOFF provides one tuple for each office.

Key field:
There is no key field.

Info field:
There is no key field.

Associated OM groups

The following associated OM groups provide AIN Service Enablers message counts:

- The OM group AIN incoming office-based (AINICOFF) counts AIN Service Enablers office-based messages the service control point (SCP) sends to the service switching point (SSP). This OM group monitors the incoming traffic to the SSP.
- The OM group AIN outgoing subscription-based (AINOGSUB) counts the AIN Service Enablers subscription-based messages the SSP sends to the SCP. This OM group monitors the outgoing traffic to the SCP.

OM group AINOGOFF (continued)

- The OM group AIN outgoing subscription-based 2 (AINOGSB2) also counts the AIN Service Enablers subscription-based messages the SSP sends to the SSP. This OM group monitors outgoing traffic to the SCP.
- The OM group AIN incoming subscription-based (AINICSUB) counts the AIN Service Enablers subscription-based messages the SCP sends to the SSP. This OM group monitors the incoming subscription traffic to the SSP.
- The OM group AIN non-call-related (AINNCR) counts AIN messages. This OM group counts the AIN messages that pass between the SSP and SSP on a non-call-related basis.
- The OM group Advanced intelligent networks (AIN) is the platform for AIN traffic and maintenance measurements. The OM group AIN counts messages entered as R01 in tables TRIGDIG or TRIGINFO.
- AIN automatic code gapping (AINACG) provides operational measurements for the automatic code gapping (ACG) feature in the SSP. This OM group monitors the following:
  - — AIN R0.1 queries that ACG blocks
  - — ACG control list overflows
  - — changes to the ACG control lists

The validation formulas for associated OM groups follow:

- total of AINOGOFF group + total of AINOGSUB group = total outgoing call-related Service Enablers messages
- AINOGOFF registers TOIASDS + TOIAN11 + AINOGSUB registers TSIAPFC + TSIASFC + TSIACDP + TSNBAFR + TSOCBCB + TSONANA + TSOAOHI + TSICOHD + TSICSIT = total of all originating Service Enabler trigger detection point (TDP) messages.
- AINOGOFF registers EONB +EOONA + EOOANS +EOOCB + AINOGSUB registers ESNB + ESOANS +ESONA + ESOCB + ESTBSY + ESTNA = total Service Enablers event detection point (EDP) messages
- total of AINOGOFF group + total of AINOGSUB group + total of AINICOFF group + total of AINICSUB group = total call-related messages
- total of AINOGOFF group + total of AINOGSUB group + AINNCR registers NAOVFW + NAGCRS + NUPDAT + NMSUCC + NSREP = total outgoing messages
- AINOGOFF registers TOIASDS + TOIAN11 + TOIAOPFC AINOGSUB registers TSIAPFC + TSIASFC + TSIACDP = total Info_Analyzed messages

OM group AINOGOFF (continued)

- AINOGOFF register EOTOUT + AINOGSUB register ESOMTOUT + AINOGSB2 ESTMTOUT = total Timeout messages.
- AINOGOFF registers EOOCLED + EOODCING + AINOGSUB registers ESODCLED + ESODCING = total O_Disconnect messages.

Associated functional groups

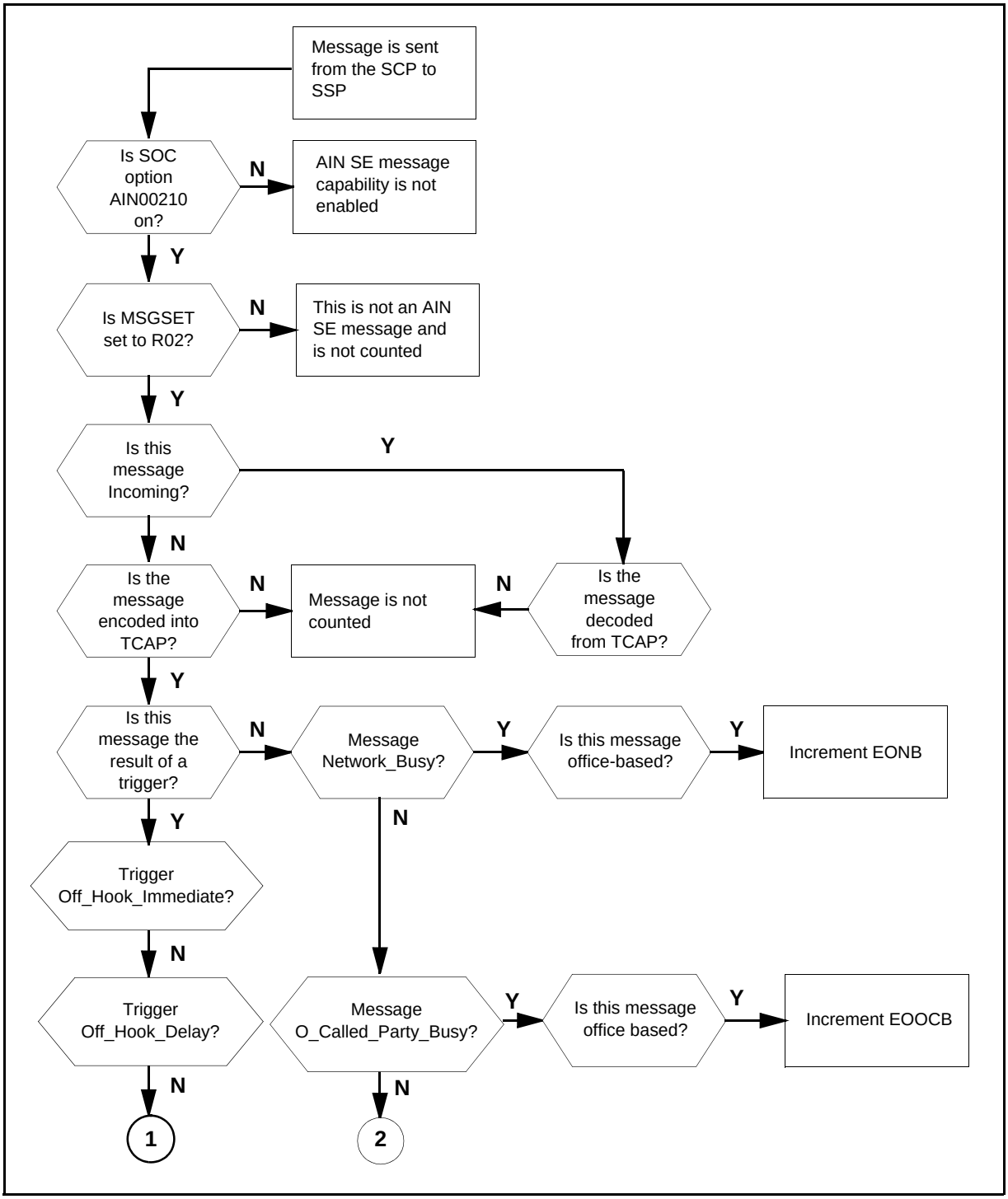
There are no applicable associated functional groups.

Associated functionality codes

There are no applicable associated functionality codes.

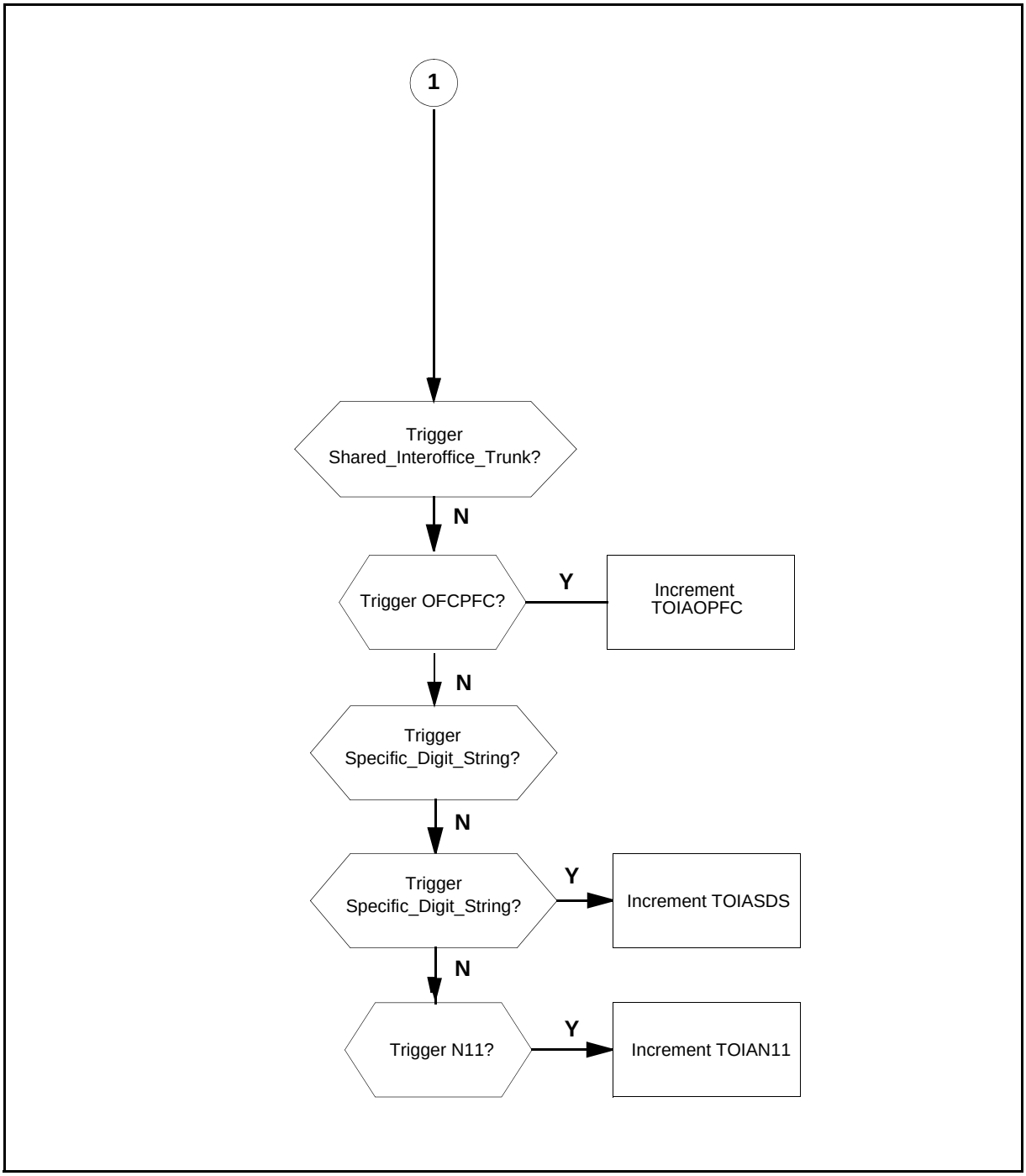
OM group AINOGOFF (continued)

OM group AINOGOFF registers



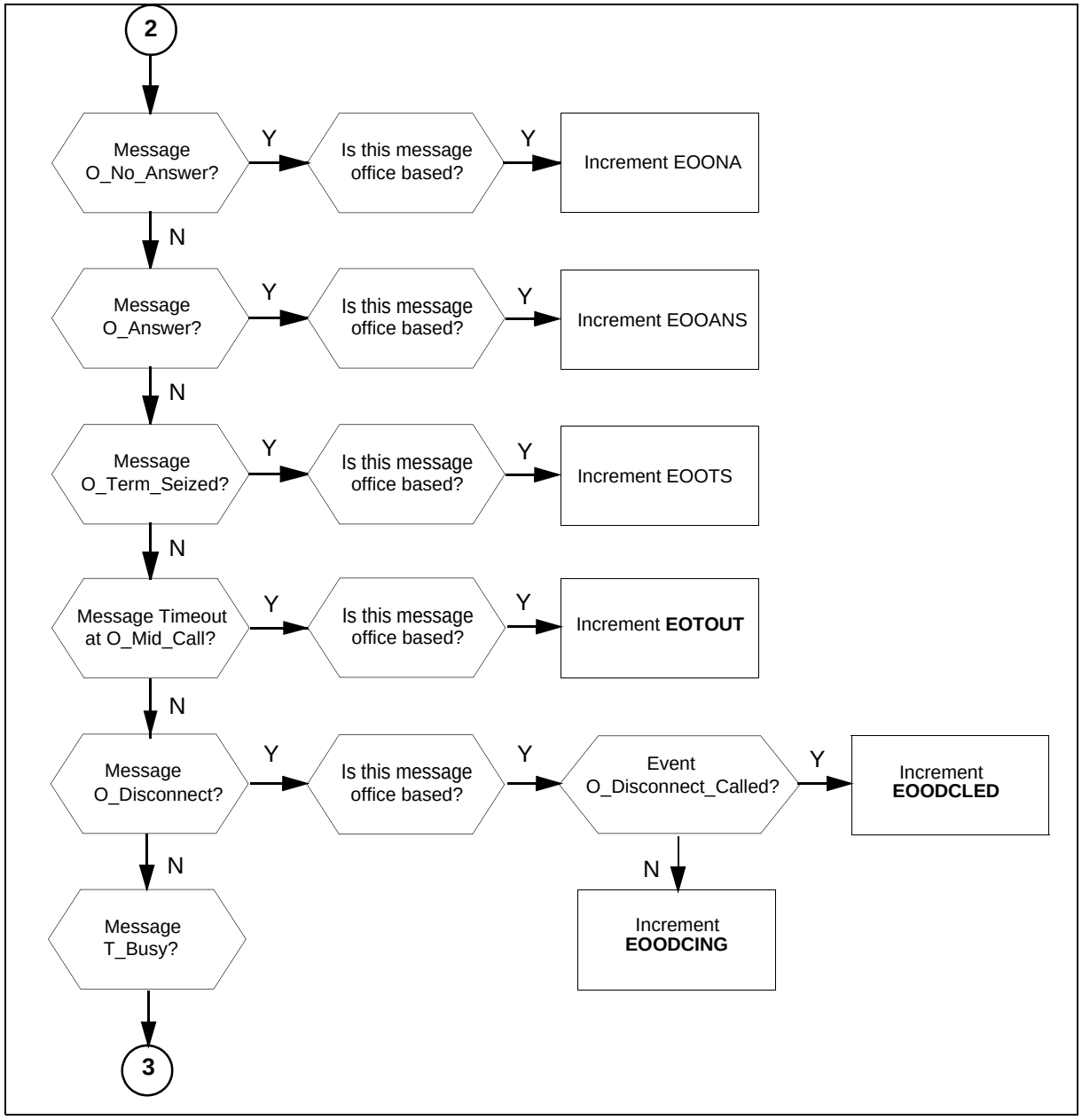
OM group AINOGOFF (continued)

OM group AINOGOFF registers



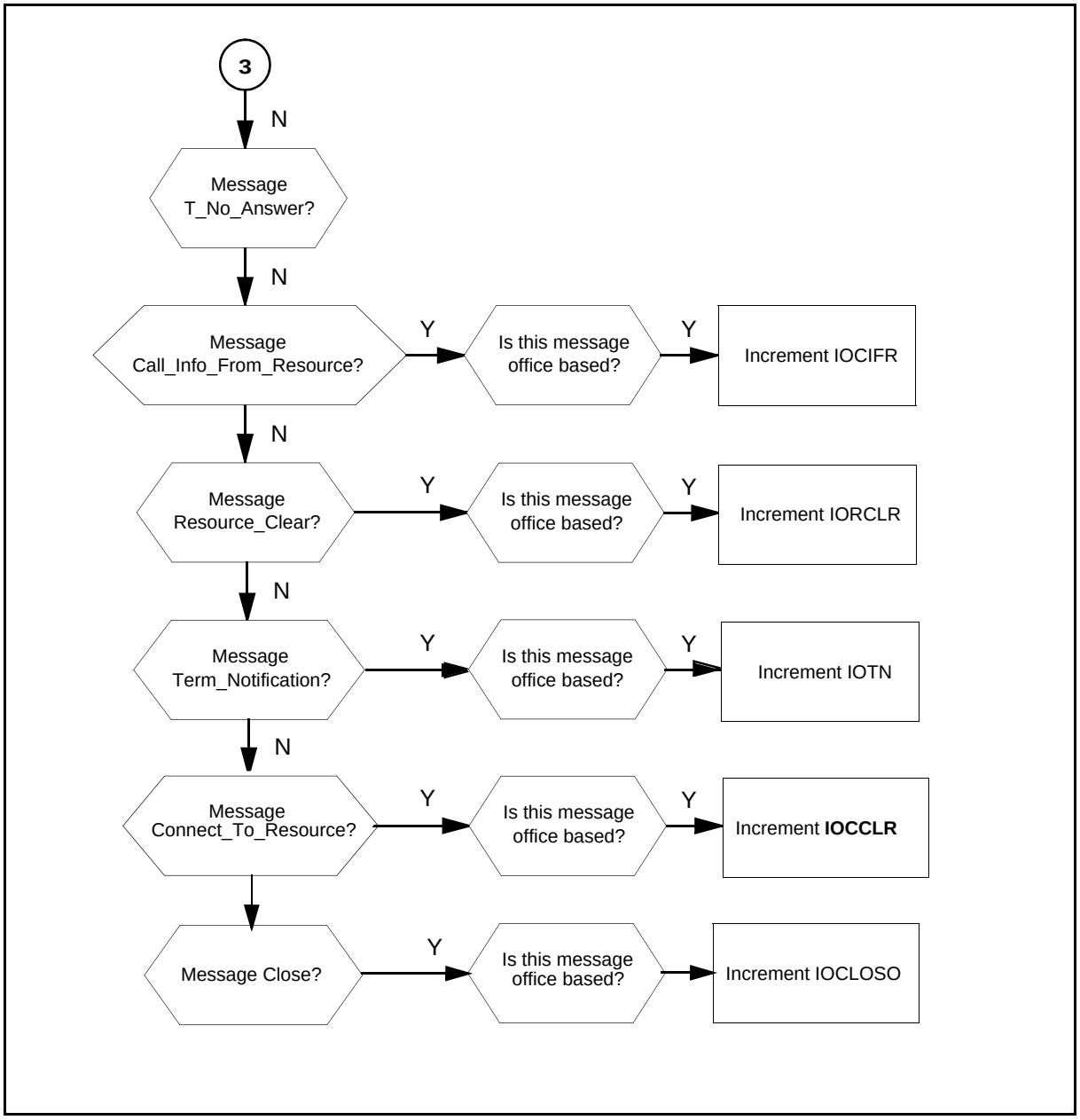
OM group AINOGOFF (continued)

OM group AINOGOFF registers



OM group AINOGOFF (continued)

OM group AINOGOFF registers



Register TOIASDS

TO Info_Analyzed for Specific_Digit_String (TOIASDS)

Register TOIASDS counts Info_Analyzed messages the SSP sends to the SCP. These messages are a result of a Specific_Digit_String trigger at the Info_Analyzed trigger detection point

Register TOIASDS release history

Register TOIASDS 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 TOIAN11

TO Info_Analyzed for N11 TOIAN11

Register TOIAN11 counts Info_Analyzed messages the SSP sends to the SCP. The messages are a result of a N11 trigger at the Info_Analyzed trigger detection point.

Register TOIAN11 release history

Register TOIAN11 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 EONB

EO Network_Busy (EONB)

Register (EONB) counts the number of Network_Busy messages the SSP sends to the SCP. These messages are a result of a Network_Busy event request.

Register EONB release history

Register EONB was introduced in NA008.

OM group AINOGOFF (continued)

Associated registers

Register ESNB counts Network_Busy messages the SSP sends to the SCP. The messages are a result of a Network_Busy event request.

The validation formulas for associated registers follow:

- AINOGSCUB register ESNB + AINOGOFF registers EONB + TSNBAFR = total Network_Busy messages
- AINOGOFF registers EONB +EOONA + EOOANS +EOOCB + AINOGSUB registers ESNB + ESOANS +ESONA + ESOCB + ESTBSY + ESTNA = total Service Enablers event detection point (EDP) messages

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register EOOCB

EO O_Called_Party_Busy (EOOCB)

Register EOOCB counts O_Called_Party_Busy messages the SSP sends to the SCP. These messages are a result of an O_Called_Party_Busy event request.

Register EOOCB release history

Register EOOCB was introduced in NA008.

Associated registers

Register ESOCB counts O_Called_Party_Busy messages the SSP sends to the SCP. These messages are a result of an O_Called_Party_Busy event request. AINGOSUB registers ESOCB + TSOCBCB + AINOGOFF register EOOCB = total O_Called_Party_Busy messages.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register EOONA

EO O_No_Answer (EOONA)

Register EOONA counts O_No_Answer messages the SSP sends to the SCP. These messages are a result of an O_No_Answer event request.

Register EOONA release history

Register EOONA was introduced in NA008.

Associated registers

Register ESONA counts O_No_Answer messages the SSP sends to the SCP. These messages are a result of a O_No_Answer event request. AINOGSUB registers ESONA + TSONANA + EOONA = total O_No_Answer messages.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register EOOANS

EO O_Answer (EOOANS)

EO O_Answer (EOOANS) counts O_Answer messages sent from the SSP to the SCP. These messages are a result of an O_Answer event request.

Register EOOANS release history

Register EOOANS was introduced in NA008.

Associated registers

Register ESOANS counts O_Answer messages the SSP sends to the SCP. These messages are a result of a O_Answer event request. AINOGSUB register ESOANS + AINOGOFF register EOOANS = total O_Answer messages.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register EOOTS

EO O_Term_Seized (EOOTS)

OM group AINOGOFF (continued)

EO O_Term_Seized (EOOTS) counts O_Term_Seized messages sent from the SSP to the SCP as a result of an O_Term_Seized EDP-N being armed by an office subscribed trigger.

Register EOOTS release history

Register EOOTS was introduced in SN06.

Associated registers

Register ESOTS counts O_Term_Seized messages the SSP sends to the SCP as a result of an O_Term_Seized EDP-N being armed by a non-office subscribed trigger.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register IOTN

IO Termination_Notification (IOTN)

Register IOTN counts Termination_Notification messages the SSP sends to the SCP, in a transaction that initiates by an office-based message.

Register IOTN release history

Register IOTN was introduced in NA008.

Associated registers

Register ISTN counts Termination_Notification messages sent from the SSP to the SCP, in a transaction that a subscribed message initiates.

Register IOSN counts Send_Notification messages received at the SSP from the SCP, in a transaction that an office-based message initiates.

Register ISSN counts Send_Notification messages received by the SSP from the SCP, in a transaction that a subscribed message initiates.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register IOCCLR

Register IO CTR_Clear (IOCCLR) counts CTR_Clear messages sent from the SSP to the SCP, in a transaction an office-based message initiates IO CTR_Clear.

Register IOCCLR release history

Register IOCCLR was introduced in NA017.

Associated register

There are associated registers.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register IOCIFR

IO Call_Info_From_Resource (IOCIFR)

Register IOCIFR counts Call_Info_From_Resource messages the SSP sends to the SCP in a transaction that an office-based message initiates.

Register IOCIFR release history

Register IOCIFR was introduced in NA008.

Associated registers

Register ISCIFR counts Call_Info_From_Resource messages the SSP sends to the SCP, in a transaction that a subscribed message initiates. AINOGSUB register ISCIFR + AINOGOFF register IOCIFR = total Call_Info_From_Resource messages.

Register IOCITR counts Call_Info_To_Resource messages received at the SSP from the SCP, in a transaction that an office-based message initiates.

Register ISCITR counts Call_Info_To_Resource messages received by the SSP from the SCP, in a transaction that a subscribed message initiates.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

OM group AINOGOFF (continued)

Register IORCLR

IO Resource_Clear (IORCLR)

Register IORCLR counts Resource_Clear messages sent from the SSP to the SCP, in a transaction an office-based message initiates IO Resource_Clear .

Register IORCLR release history

Register IORCLR was introduced by NA008.

Associated registers

Register ISRCLR counts Resource_Clear messages sent from the SSP to the SCP, in a transaction that initiates by a subscribed message. AINOGSUB register ISRCLR + AINOGOFF register IORCLR = total Resource_Clear messages.

Register IOSTR counts Send_to_Resource messages received at the SSP from the SCP, in a transaction that an office-based message initiates.

Register IOCRE counts Cancel_Resource_Event messages received at the SSP from the SCP, in a transaction that an office-based message initiates.

Register ISSTR counts Send_To_Resource messages received by the SSP from the SCP, in a transaction that a subscribed message initiates.

Register ISCRE counts Cancel_Resource_Event messages received by the SSP from the SCP, in a transaction that a subscribed message initiates.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register IOCLOSO

IO Close IOCLOSO

Register IOCLOSO counts Close messages the SSP sends to the SCP, in a transaction that an office-based message initiates.

Register IOCLOSO release history

Register IOCLOSO was introduced in NA008.

Associated registers

Register ISCLOSO counts Close messages the SSP sends to the SCP, in a transaction that a subscribed message initiated. AINOGSUB register ISCLOSO + AINICOFF register IOCLOSI + AINICSUB register ISCLOSI + AINOGOFF register IOCLOSO = total closed messages.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register EOODCING

Register EOODCING counts the number of O_Disconnect_Calling Requested Event messages sent from the SSP to the SCP as a result of an O_Disconnect Calling EDP-R being armed by an office subscribed trigger.

Register EOODCING release history

Register EOODCING is introduced in NA017.

Associated registers

Register ESODCING counts the number of O_Disconnect_Calling event messages as a result of an O_Disconnect Calling EDP-R being armed by an individual subscribed trigger.

These messages are a result of an O_Disconnect_calling event request. AINOGSUB registers ESODCING + EOODCING = Total number of O_Disconnect Calling event requests sent to the SCP.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register EOODCLED

Register EOODCLED counts the number of O_Disconnect_Called Requested Event messages sent from the SSP to the SCP as a result of a O_Disconnect_Called EDP-R being armed, by an office subscribed trigger.

Register EOODCLED release history

Register EOODCLED is introduced in NA017.

OM group AINOGOFF (end)

Associated registers

Register ESODCLED counts the number of O_Disconnect_Called event messages as a result of an O_Disconnect Calling EDP-R being armed by an individual subscriber.

These messages are a result of a O_Disconnect _Calling event request. AINOGSUB registers ESODCLED + EOODCLED = Total number of O_Disconnect_Called event requests sent to the SCP.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register EOTOUT

Officebased TimeOUT (EOTOUT)

Officebased TimeOUT (EOTOUT) counts the number of Timeout Requested Event messages sent from the SSP to the SCP as a result of an O_Mid_Call Timeout EDP-R being armed by an office subscribed trigger.

Register EOTOUT release history

Register EOOANS was introduced in NA017.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

OM group AINNCR

OM description

Advanced intelligent networks non-call-related (AINNCR) counts AIN service enabler non-call-related messages. These messages pass between the service control point (SCP) and the service switching point (SSP).

Note: A non-call-related (NCR) message refers to a message that does not affect call processing.

The SSP sends messages resulting from more than one type of trigger or event. A separate OM register provides a count for each trigger and event type. An OM register increases when the system correctly sends or receives a message that corresponds to that OM register. The system correctly sends a message when the system codes the message into the transaction capability application part (TCAP) protocol. The system receives a message correctly when the system decodes the message from the TCAP protocol.

To decode a TCAP message involves several stages of error checking. The system counts the message after decoding the message parameters. The system decodes messages even when errors are present in the message parameters. The system does not count the message when the system detects an error in the TCAP package or component.

Errors in the TCAP package or component are as follows:

- all fatal protocol errors
- errors as a result of a bad group of message, package or component type
- invalid response message
- bad correlation identifiers
- duplicated messages

The OM group AINNCR contains 11 registers that count all non-call-related AIN Service Enablers messages. Enter Messages as R02 in tables TRIGDIG or TRIGINFO to ensure an accurate message count.

Release history

OM group AINNCR is introduced in NA008.

Registers

The OM group AINNCR registers display on the MAP terminal as follows:

OM group AINNCR (continued)

NACG	NAOVFW	NAGCR	NAGCRS
NUPREQ	NUPDAT	NMFC	NMSUCC
NSREP	NUSUCC	NUPD	

Group structure

OM group AINNCR provides one tuple per office.

Key field:
There is no Key field

Info field:
There is no Info field

Associated OM groups

The following associated OM groups provide message counts for AIN service enablers:

- AIN outgoing office-based messages (AINOGOFF) counts the AIN Service Enablers office-based messages sent from the SSP to the SCP. This OM group monitors outgoing traffic to the SCP.
- AIN incoming office-based messages (AINICOFF) counts AIN Service Enablers office-based messages sent from the SCP to the SSP. This OM group monitors incoming traffic to the SSP.
- AIN outgoing subscription-based messages (AINOGSUB) counts the AIN Service Enablers subscription-based messages. These messages are sent from the SSP to the SCP. This OM group monitors the outgoing traffic to the SCP.
- AIN incoming subscription-based messages (AINICSUB) counts the AIN Service Enablers subscription-based messages sent from the SCP to the SSP. This OM group monitors incoming subscription traffic to the SSP.
- Advanced intelligent networks (AIN) is the platform for AIN traffic and maintenance measurements. OM group AIN counts R01 message entries from tables TRIGDIG or TRIGINFO.
- AIN automatic code gapping (AINACG) provides operational measurements for the automatic code gapping (ACG) feature on the SSP. This OM group monitors the blocking of AIN R0.1 queries by ACG, ACG control list overflows, and changes made to the ACG control lists.

The associated OM group validation formulas are as follows:

- total of AINNCR group = total non-call-related messages
- AINNCR registers NAOVFW + NAGCRS + NUPDAT + NMSUCC + NSREP + total of AINOGSUB group + total of AINOGOFF group = total outgoing messages
- AINNCR registers NACG + NAGCR + NUPREQ + NMFC + NUPD + NUSUCC + total of AINICSUB group + total of AINICOFF group = total incoming messages

Associated functional groups

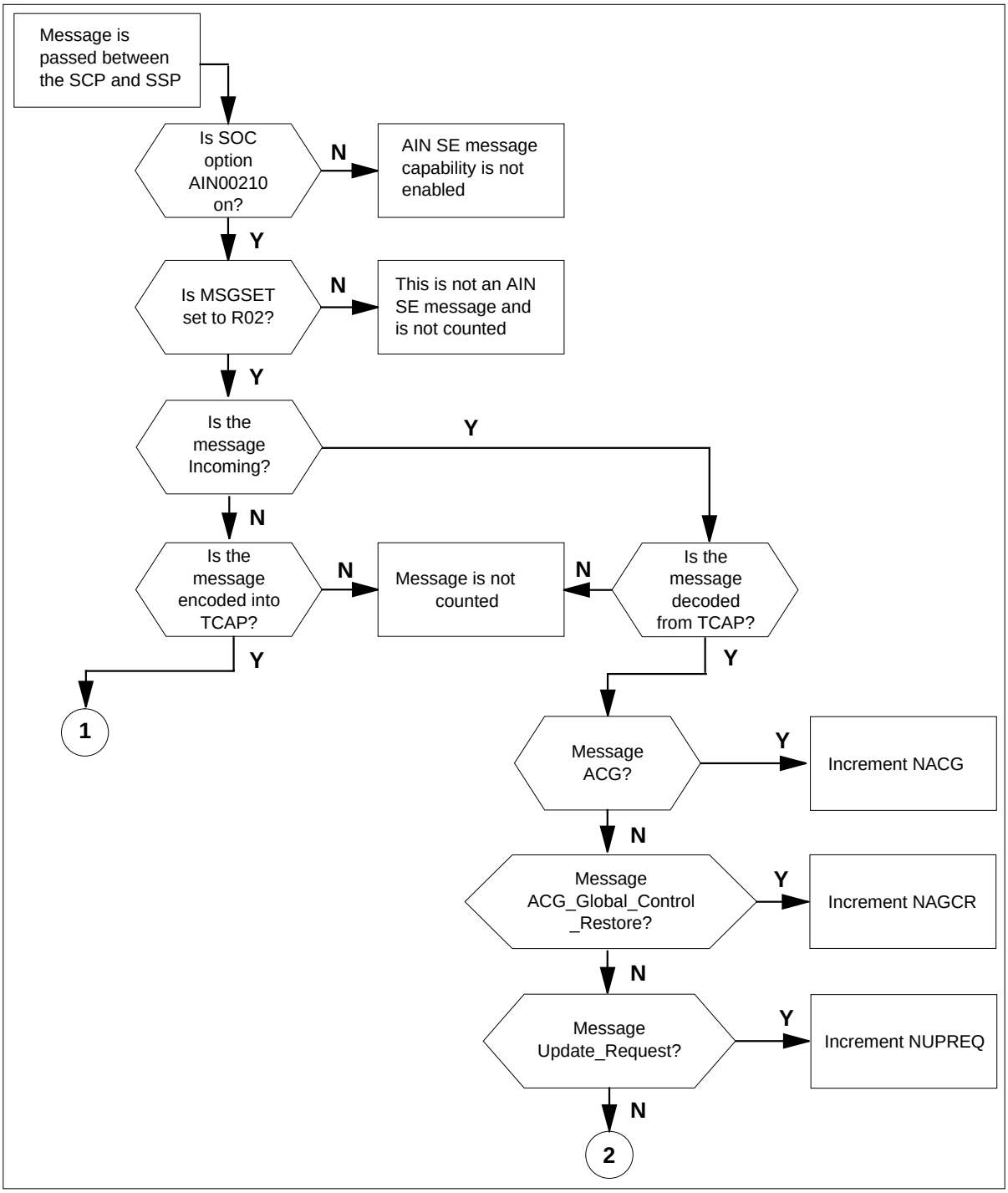
There are no correct associated functional groups.

Associated functionality codes

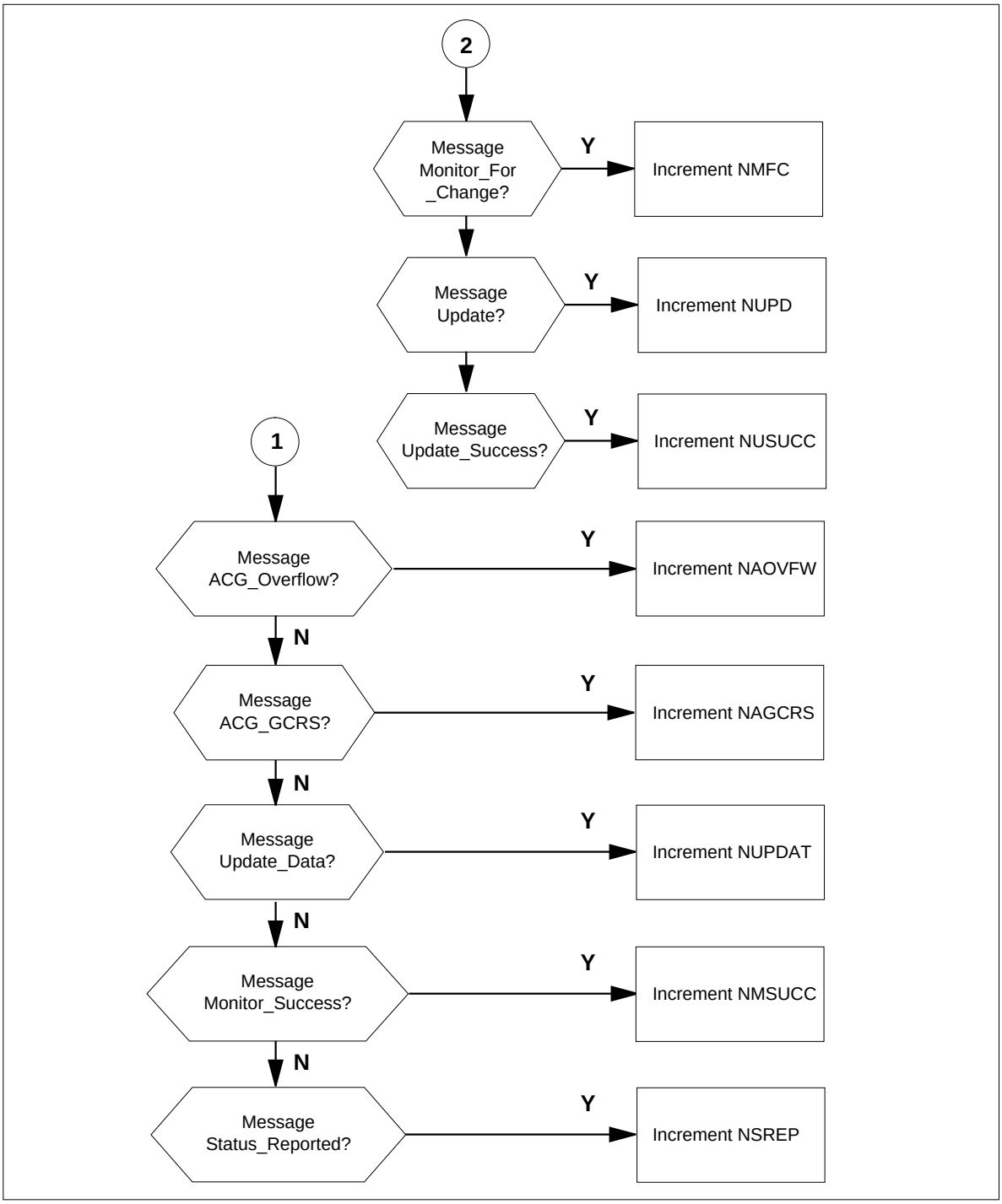
There are no correct associated functionality codes.

OM group AINNCR (continued)

OM group AINNCR registers



OM group AINNCR registers (continued)



OM group AINNCR (continued)

Register NACG

Register N Automatic_Code_Gap (NACG) counts Automatic_Code_Gap messages the SSP receives from the SCP.

The following are validation formulas for register NACG:

- AINNCR registers NACG + NAGCR + NUPREQ + NMFC = total of all incoming, non-call-related messages
- AINNCR registers NACG + NAGCR + NUPREQ + NMFC + total of AINICSUB group + total of AINICOFF group = total incoming messages
- AINNCR registers NACG + NUPREQ + NAGCR + NMFC = total of all incoming, unsolicited, non-call-related messages

Register NACG release history

Register NACG is 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 NAOVFW

Register N ACG_Overflow (NAOVFW) counts ACG_overflow messages sent from the SSP sends to the SCP.

The following are validation formulas for register NAOVFW:

- AINNCR registers NAOVFW + NAGCRS + NUPDAT + NMSUCC + NSREP = total of all outgoing non-call-related messages
- AINNCR registers NAOVFW + NAGCRS + NUPDAT + NMSUCC + NSREP+ total of AINOGSUB group + total of AINOGOFF group = total outgoing messages

Register NAOVFW release history

Register NAOVFW is introduced in NA008.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

There are not extension registers.

Register NAGCR

Register N ACG_Global_Control_Restore (NAGCR) counts ACG_global_control_restore messages the SSP receives from the SCP.

The following are validation formulas for register NAGCR:

- AINNCR registers NAGCR + NACG + NUPREQ + NMFC = total of all incoming, non-call-related messages
- AINNCR registers NAGCR + NACG + NUPREQ + NMFC + total of AINICSUB group + total of AINICOFF group = total incoming messages
- AINNCR registers NAGCR + NACG + NUPREQ + NMFC = total of all incoming, unsolicited, non-call-related messages

Register NAGCR release history

Register NAGCR is 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 NAGCRS

N ACG_Global_Control_Restore_Success (NAGCRS) counts ACG_global_control_restore_success messages the SSP sends to the SCP.

The following are validation formulas for register NAGCRS:

- AINNCR registers NAGCRS + NAOVFW + NUPDAT + NMSUCC + NSREP = total of all outgoing non-call-related messages
- AINNCR registers NAGCRS + NAOVFW + NUPDAT + NMSUCC + NSREP+ total of AINOGSUB group + total of AINOGOFF group = total outgoing messages

OM group AINNCR (continued)

Register NAGCRS release history

Register NAGCRS is 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 NUPREQ

Register N Update_Request (NUPREQ) counts update_request messages the SSP receives from the SCP.

The following are validation formulas for register NUPREQ:

- AINNCR registers NUPREQ + NAGCR + NACG + NMFC = total of all incoming, non-call-related messages
- AINNCR registers NUPREQ + NACG + NAGCR + NMFC + total of AINICSUB group + total of AINICOFF group = total incoming messages
- AINNCR registers NUPREQ + NAGCR + NACG + NMFC = total of all incoming, unsolicited, non-call-related messages

Register NUPREQ release history

Register NUPREQ is 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 NUPDAT

Register N Update_Data (NUPDAT) counts update_data messages the SSP sends to the SCP.

The following are validation formulas for register NUPDAT:

- AINNCR registers NUPDAT + NAGCRS + NAOVFW + NMSUCC + NSREP = total of all outgoing non-call-related messages
- AINNCR registers NUPDAT + NAGCRS + NAOVFW + NMSUCC + NSREP+ total of AINOGSUB group + total of AINOGOFF group = total outgoing messages

Register NUPDAT release history

Register NUPDAT is 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 NMFC

Register N Monitor_For_Change (NMFC) counts monitor_for_change messages the SSP receives from the SCP.

The following are validation formulas for register NMFC:

- AINNCR registers NMFC + NACG + NAGCR + NUPREQ + total of AINICSUB group + total of AINICOFF group = total incoming messages
- AINNCR registers NMFC + NAGCR + NUPREQ + NACG + total of AINICSUB group + total of AINICOFF group = total incoming messages
- AINNCR registers NMFC + NAGCR + NACG + NUPREQ = total of all incoming, unsolicited, non-call-related messages

Register NMFC release history

Register NMFC is introduced in NA008.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

OM group AINNCR (continued)

Extension registers

There are no extension registers,

Register NMSUCC

Register N Monitor_Success (NMSUCC) counts monitor_success messages sent from the SSP sends to the SCP.

The following are validation formulas for register NMSUCC:

- AINNCR registers NMSUCC + NAGCRS + NUPDAT + NAOVFW + NSREP = total of all outgoing non-call-related messages
- AINNCR registers NMSUCC + NAGCRS + NAOVFW + NUPDAT + NSREP+ total of AINOGSUB group + total of AINOGOFF group = total outgoing messages

Register NMSUCC release history

Register NMSUCC is 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 NSREP

Register N Status_Reported (NSREP) counts status_reported messages the SSP sends to the SCP.

The following are validation formulas for register NSREP:

- AINNCR registers NSREP + NAGCRS + NUPDAT + NMSUCC + NAOVFW = total of all outgoing non-call-related messages
- AINNCR registers NSREP + NAGCRS + NAOVFW + NUPDAT + NMSUCC + total of AINOGSUB group + total of AINOGOFF group = total outgoing messages

Register NSREP release history

Register NSREP is 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 NUPD

N Update (NUPD) counts Update messages sent from the SSP to the SCP.

Register NUPD release history

Register NUPD is introduced in NA009.

Associated registers

NUSUCC

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register NUSUCC

N Update_Success (NUSUCC) counts Update_Success messages sent from the SSP to the SCP.

Register NUPD release history

Register NUPD is introduced in NA009.

Associated registers

NUPD

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

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OM group AINOGSB2

OM description

OM group advanced intelligent networks outgoing subscription-based Two (AINOGSB2), counts AIN Service Enablers subscription-based messages sent by the SSP to the SCP. OM group AINOGSB2 monitors outgoing traffic to the SCP.

The SSP sends messages in response to more than one type of trigger or event. A separate OM register provides a count for each trigger and event type. OM registers increment when the system sends or receives a message that corresponds with the register. A correct message is sent when the system encodes the message into transaction capability application part (TCAP) protocol. A correct message is received when the system decodes the message from TCAP protocol.

The system performs several stages of error checks to decode a TCAP message. The system decodes message parameters and counts the messages. The system counts a message even when errors are present in the message parameters. The system does not count a message when errors are detected in the TCAP package or its components.

The following errors can be detected in a TCAP package or its components:

- fatal protocol errors
- errors resulting from a bad group of messages, packages or component types
- invalid response messages
- bad correlation identifiers
- duplicate messages

OM group AINOGSB2 contains registers that count call-related, outgoing, subscribed, Service Enablers messages. The registers count messages entered as R02 in Tables TRIGDIG, TRIGITM, or TRIGINFO.

Release history

SN07 (DMS)

The register TSTKTRM was added by activity Q00765666.

SN06 (DMS)

Register ESOTS added. Documentation amended at SN07 (DMS) for CR Q00527425-04.

OM group AINOGSB2 (continued)

NA017

Added a new register ESTMTOUT, (59037100, originally 59028609). Also, added a new register ISCCLR, (59037140).

NA016

NA016 introduced OM group AINOGSB2.

Registers

The following figure lists OM group AINOGSB2 registers as they appear on the MAP terminal display:

Map terminal display of OM group AINOGSB2 registers

```
ESTMTOUT          ISCCLR          TSTKTRM          ESOTS
```

Group structure

OM group AINOGSB2 provides one tuple per office.

Key field:
There is no Key field.

Info field:
There is no Info field.

Associated OM groups

The following associated OM groups provide AIN Service Enablers message counts:

- OM group AIN outgoing office-based (AINOGOFF) counts AIN Service Enablers office-based messages the SSP sends to the SCP. This OM group monitors outgoing traffic to the SCP.
- The OM group AIN outgoing subscription-based (AINOGSUB) counts the AIN Service Enablers subscription-based messages the SSP sends to the SCP. This OM group monitors the outgoing traffic to the SCP.
- OM group AIN incoming office-based (AINICOFF) counts AIN Service Enablers office-based messages the SCP sends to the SSP. This OM group monitors incoming traffic to the SSP.
- OM group AIN incoming subscription-based (AINICSUB) counts AIN Service Enablers subscription-based messages the SCP sends to the SSP. This OM group monitors incoming subscription traffic to the SSP.
- OM group AIN non-call-related (AINNCR) counts AIN messages that pass between the SSP and SSP on a non-call-related basis. OM group

advanced intelligent networks (AIN) is the platform for AIN traffic and maintenance measurements. OM group AIN counts messages entered as R01 in Tables TRIGDIG, TRIGITM, or TRIGINFO.

- OM group AIN automatic code gapping (AINACG) provides operational measurements for the automatic code gapping (ACG) feature in the SSP. This OM group monitors AIN R0.1 queries, ACG blocks, ACG control list overflows, and changes made to ACG control lists.

The following lists related validation formulas for the OM group:

- Total of AINOGSUB group + total of AINOGSB2 + total of AINOGOFF group = total outgoing call-related Service Enabler messages
- AINOGOFF registers TOIASDS + TOIAN11 + AINOGSUB registers TSIAPFC + TSIASFC + TSIACDP + TSNBAFR + TSOCBCB +TSONANA + TSOAOHI + TSICOHD + TSICSIT + TSICPRIB + TSIA1PLS + TSIASPCR + TSIAINT + TSIAOPSV = total originating basic call model (BCM) Service Enablers trigger detection point (TDP) messages
- AINOGOFF registers EONB + EOONA + EOOANS + EOOCB + EOODCLED + EOODCING + EOTOUT +AINOGSUB registers ESNB + ESONA + ESOANS + ESOCB + ESTBSY+ ESTNA + ESTANS + ESODCLED + ESODCING + ESOMTOUT + AINOGSB2 register ESTMTOUT = total Service Enablers event detection point (EDP) messages
- Total of AINOGSUB group + total of AINOGSB2 group + total of AINICSUB group + total of AINICOFF group + total of AINOGOFF group = total call-related messages
- Total of AINOGSUB group + total of AINOGSB2 group + total of AINOGOFF group + AINNCR registers NAOVFW + NAGCRS + NUPDAT + NMSUCC + NSREP = total outgoing messages
- AINOGOFF register EOTOUT + AINOGSUB register ESOMTOUT + AINOGSB2 ESTMTOUT = total Timeout messages

Associated functional groups

There are no associated functional groups.

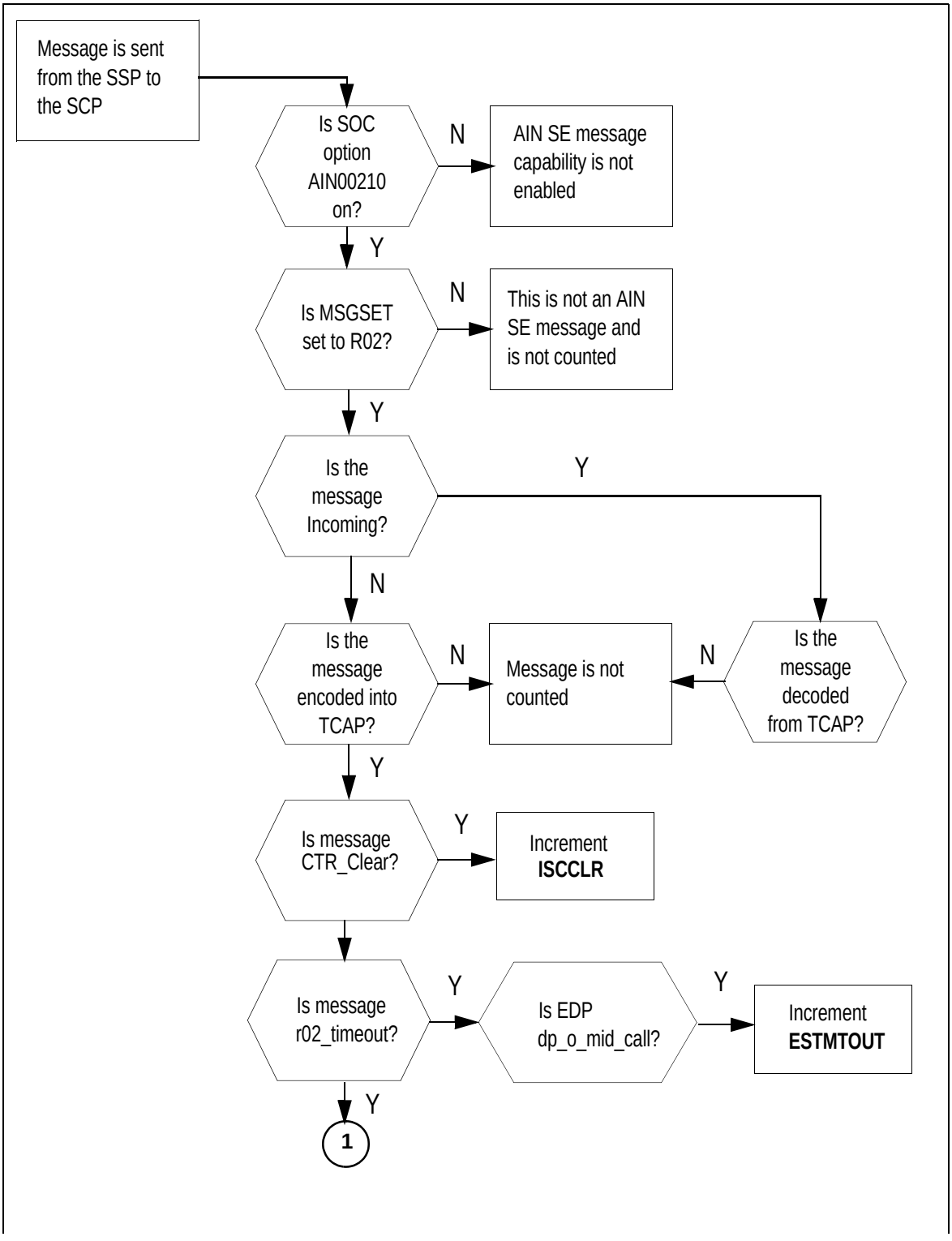
Associated functionality codes

There are no associated functionality codes.

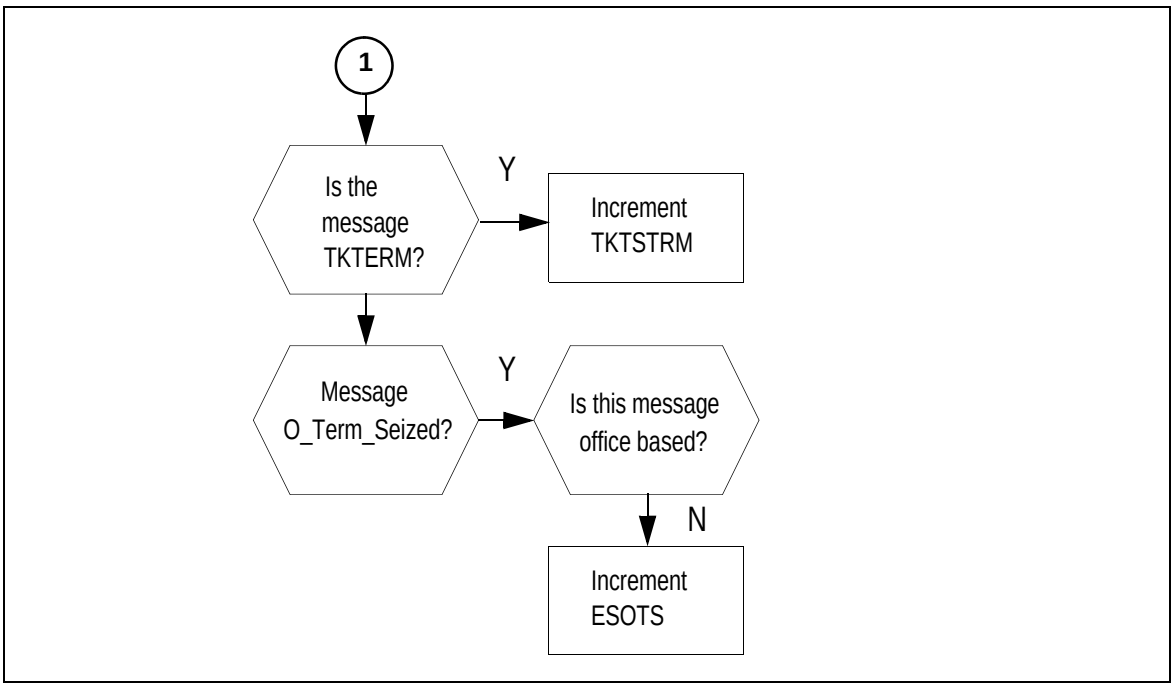
The following figure illustrates the logical flow for OM group AINOGSB2 registers.

OM group AINOGSB2 (continued)

OM group AINOGSB2 registers



OM group AINOGSB2 registers (continued)



Register ISCCLR

IS CTR_Clear (ISCCLR)

The ISCCLR register counts CTR_Clear messages that the SSP sends to the SCP in a transaction that a subscribed message initiates. This register is part of advanced intelligent networks outgoing subscription-based (AINOGSB2) OM group.

Register ISCCLR release history

The NA017 product release introduced the ISCCLR register.

Associated registers

The IOCCLR register counts CTR_Clear messages sent from the SSP to the SCP, in a transaction an office-based message initiates IO CTR_Clear.

Associated logs

None.

OM group AINOGSB2 (continued)

Extension registers

None.

Register ESTMTOUT

Event subscribed T-Mid_call TimeOUT (ESTMTOUT).

Register ESTMTOUT counts the number of Timeout Requested Events messages sent from the SSP to the SCP as a result of a T_Mid_Call Timeout EDP-R being armed by a non-office subscriber trigger.

Register ESTMTOUT release history

Product release NA17 introduced register ESTMTOUT.

Associated registers

Register ESOMTOUT counts the number of Timeout Requested Event messages sent from the SSP to the SCP as a result of a O_Mid_Call Timeout EDP-R being armed by a non-office subscribed trigger.

Associated logs

None.

Extension registers

None.

Register ESOTS

Event subscribed O_Term_Seized (ESOTS).

Register ESOTS counts the number O_Term_Seized messages sent from the SSP to the SCP as a result of an O_Term_Seized EDP-N being armed by a non-office subscribed trigger.

Register ESOTS release history

Product release SN06 introduced register ESOTS.

Associated registers

Register EOOTS counts the number of O_Term_Seized messages sent from the SSP to the SCP as a result of an O_Term_Seized EDP-N being armed by an office based trigger.

Associated logs

None.

Extension registers

None.

Register TSTKTRM

Register TSTKTRM records messages sent from the SSP as a result of TKTERM trigger.

Register TSTKTRM release history

The NA019 product release introduces register TKTERM.

Associated registers

There are no related registers.

Associated logs

There are no related logs.

Extension registers

There are no extension registers.

OM group AINOGSUB

OM description

The OM group Advanced intelligent networks outgoing subscription-based (AINOGSUB) counts AIN Service Enablers subscription-based messages that the service switching point (SSP) sends to the service control point (SCP). This OM group monitors the outgoing traffic to the SCP.

The SSP can send messages that are the result of more than one type of trigger or event. A separate OM register provides a count for each trigger and event type. An OM register increments when the system sends or receives a message that corresponds with the register. The system sends a message correctly when the system encodes the message into the transaction capability application part (TCAP) protocol. The system receives a message when the system decodes the message from the TCAP protocol.

The AIN messaging system performs several stages of error checks to decode a TCAP message. The system decodes the message parameters and counts the messages. The system counts the message when errors are present in the message parameters. The system does not count a message when the system detects an error in the TCAP package or component.

Types of errors in the TCAP package or component follow:

- All fatal protocol errors
- Errors as a result of a bad group of messages, packages or component types
- Invalid response message
- Bad correlation identifiers
- Duplicated messages

OM group AINOGSUB contains registers that count call-related, outgoing, subscribed, Service Enablers messages. The registers count messages entered as R02 in tables TRIGDIG, TRIGINFO, and TRIGITM.

Triggers that are subscribed to by line or group follow:

- Automatic flexible routing (AFR)
- Channel_Setup PRI
- Specified_Carrier
- One_Plus_Prefix
- International
- Operator_Services

OM group AINOGSUB (continued)

- Customized_Dialing_Plan
- Off-Hook_Immediate
- Off-Hook_Delay
- Public_Feature_Code
- Shared_Interoffice_Trunk
- Specific_Feature_Code
- O_Called_Party_Busy
- O_No_Answer
- Termination_Attempt
- T_Busy
- T_No_Answer

Note: Triggers: AFR, One_Plus_Prefix, Operator_Services, Specified_Carrier, and International can be office-based or subscribed. All messages sent as a result of this trigger count as subscribed.

Registers

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

TSOAOHI	TSICOHD	TSICSIT	TSIAPFC
TSIASFC	TSIACDP	TSNBAFR	ESNB
TSOCBCB	ESOCB	TSONANA	ESONA
ESOANS	TSTATTA	ESTBSY	ESTNA
ISCIFR	ISRCLR	ISCLOSO	ISTN
TSTBSY	TSTNA	ESTANS	TSICPRIB
TSIA1PLS	TSIASPCR	TSIAINT	TSIAOPSV
TSTRSA	**ESODCLED**	**ESODCING**	**ESOMTOUT**

Group structure

OM group AINOGSUB provides one tuple per office.

Key field:
There is no Key field

Info field:
There is no Info field

Related OM groups

Related OM groups that provide message counts for AIN Service Enablers follow:

- AIN outgoing office-based (AINOGOFF) counts AIN Service Enablers office-based messages that the SSP sends to the SCP. This OM group monitors the outgoing traffic to the SCP.
- AIN incoming office-based (AINICOFF) counts AIN Service Enablers office-based messages that the (SCP) sends to the (SSP). This OM group monitors the incoming traffic to the SSP.
- AIN incoming subscription-based (AINICSUB) counts the AIN Service Enablers subscription-based messages that the SCP sends to the SSP. This OM group monitors the incoming subscription traffic to the SSP.
- AIN non-call-related (AINNCR) counts the AIN messages that pass between the SSP and SSP on a non-call-related basis.
- Advanced intelligent networks (AIN) is the platform for AIN traffic and maintenance measurements. The OM group AIN counts messages entered as R01 in tables TRIGDIG or TRIGINFO.
- AIN automatic code gapping (AINACG) provides operational measurements for the automatic code gapping (ACG) feature in the SSP. This OM group monitors AIN R0.1 queries ACG blocks, ACG control list overflows, and changes made to the ACG control lists.
- The OM group AIN outgoing subscription-based 2 (AINOGSB2) also counts the AIN Service Enablers subscription-based messages the SSP sends to the SCP. This OM group monitors outgoing traffic to the SCP.

Related OM group validation formulas follow:

- total of AINOGSUB group + total of AINOGOFF group = total outgoing call-related Service Enablers messages
- AINOGOFF registers TOIASDS + TOIAN11 + TOIAOPFC + AINOGSUB registers TSIAPFC + TSIASFC + TSIACDP + TSNBAFR + TSOCBCB + TSONANA + TSOAOHI + TSICOHD + TSICSIT = total originating basic call model (BCM) Service Enablers trigger detection point (TDP) messages
- AINOGOFF registers EONB + EOONA + EOOANS + EOOCB + AINOGSUB registers ESNB + ESONA + ESOANS + ESOCB + ESTANS + ESTBSY + ESTNA = total Service Enablers event detection point (EDP) messages

OM group AINOGSUB (continued)

- total of AINOGSUB group + total of AINICSUB group + total of AINICOFF group + total of AINOGOFF group = total call-related messages
- total of AINOGSUB group + total of AINOGOFF group + AINNCR registers NAOVFW + NAGCRS + NUPDAT + NMSUCC + NSREP = total outgoing messages
- AINOGOFF registers TOIASDS + TOIAN11 + TOIAOPFC + AINOGSUB registers TSIAPFC + TSIASFC + TSIACDP = total Info_Analyzed messages
- AINOGOFF register EONB + AINOGSUB registers ESNB + TSNBAFR = total Network_Busy messages
- AINOGSUB registers TSICOHD + TSICSIT + TSICPRIB = total Collect_Information messages
- AINOGSUB registers TSTATTA + TSTBSY + TSTNA = total terminating basic call model (BCM) AIN Service Enablers trigger detection point (TDP) messages
- AINOGOFF register EONB + AINOGSUB registers ESNB + TSNBAFR = total Network_Busy messages

Related functional groups

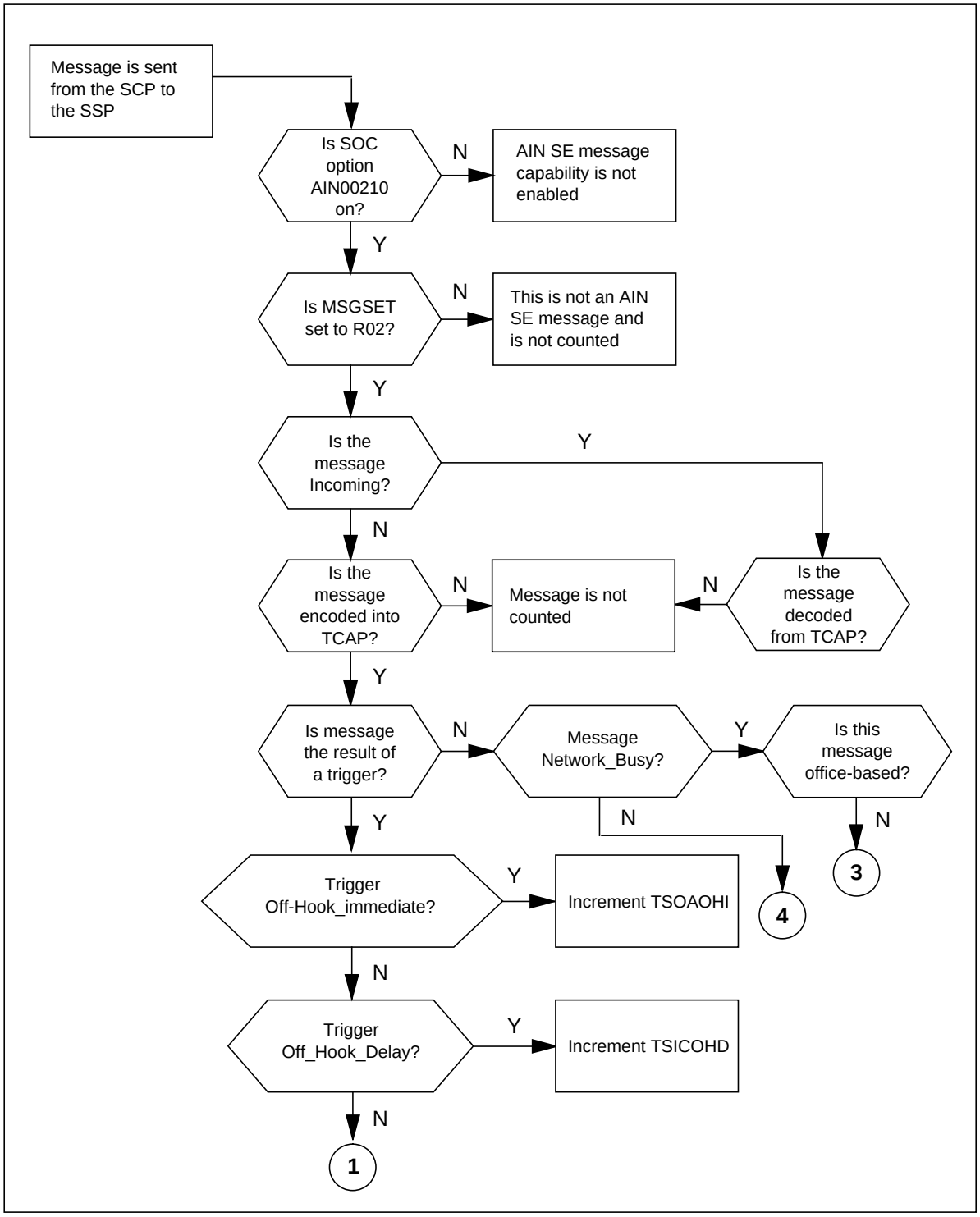
There are no related functional groups.

Related functionality codes

There are no related functionality codes.

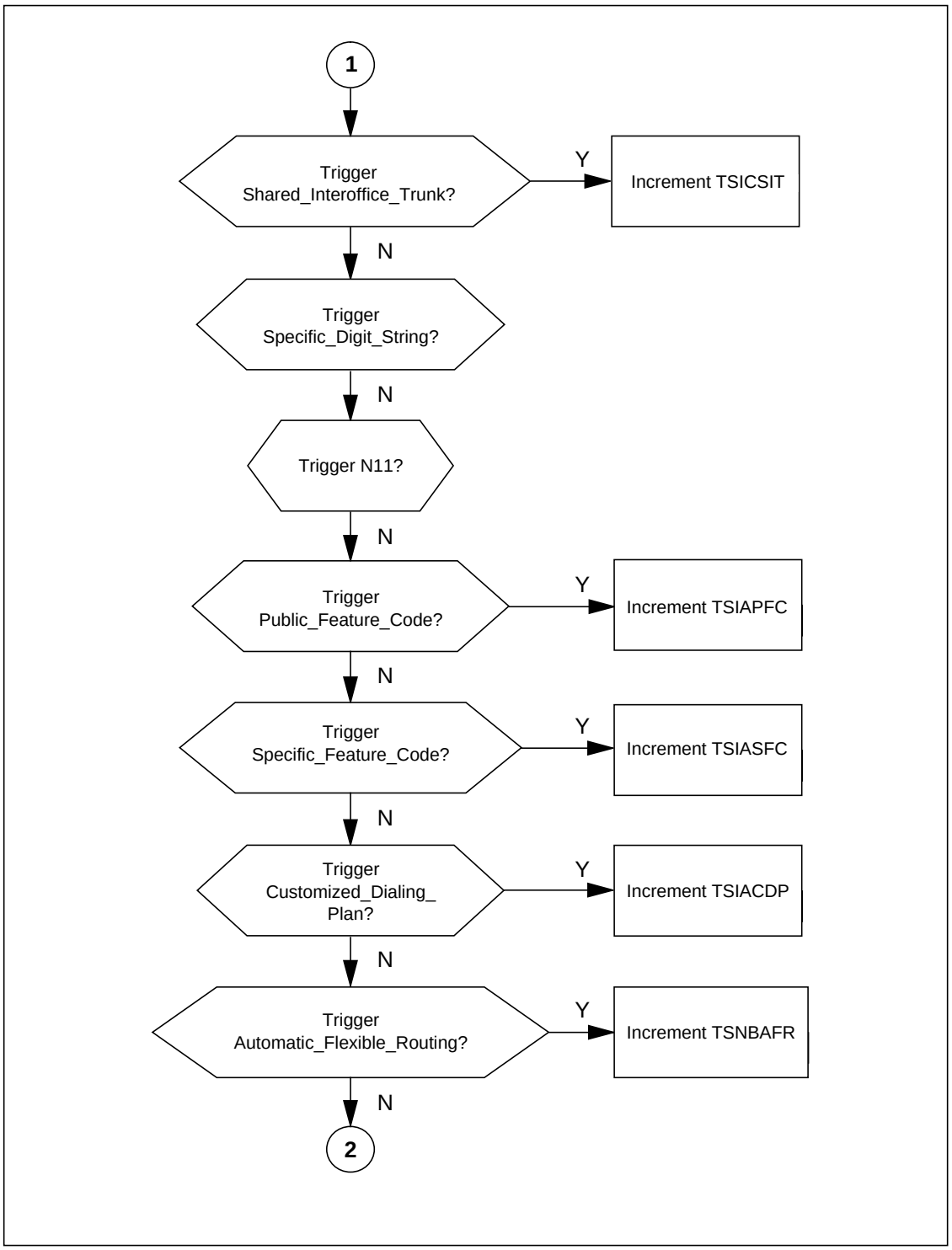
OM group AINOGSUB (continued)

OM group AINOGSUB registers



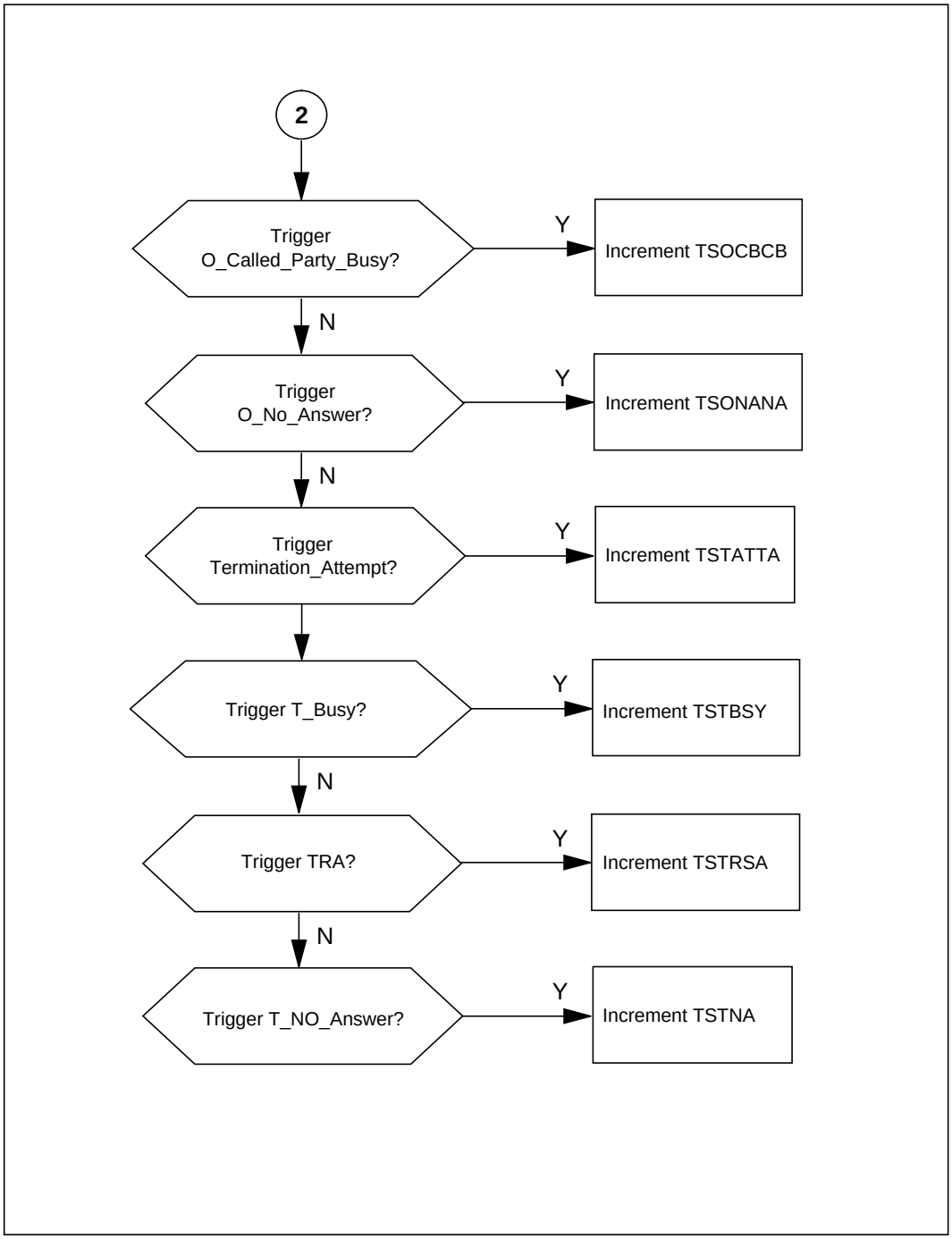
OM group AINOGSUB (continued)

OM group AINOGSUB registers (continued)



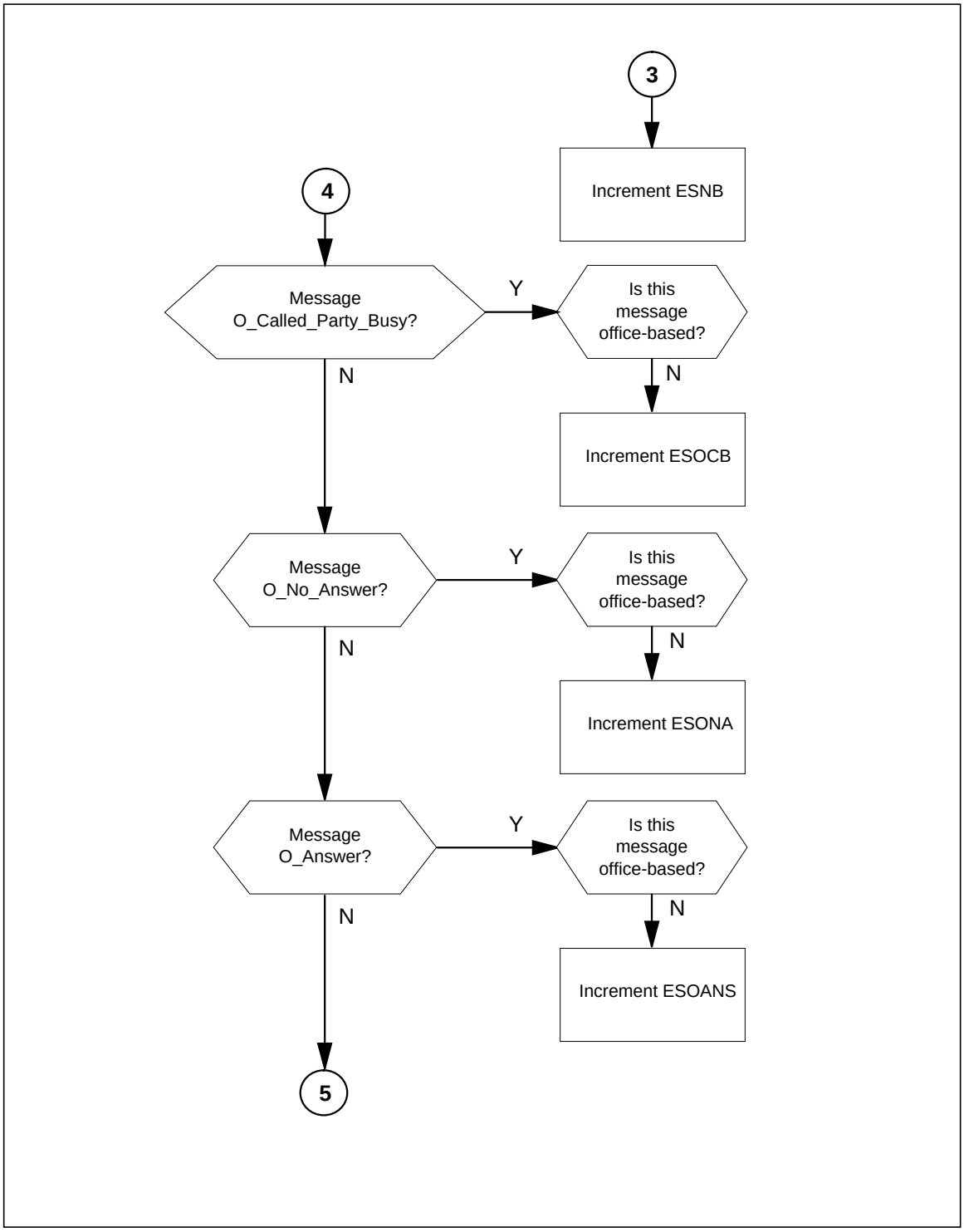
OM group AINOGSUB (continued)

OM group AINOGSUB registers (continued)

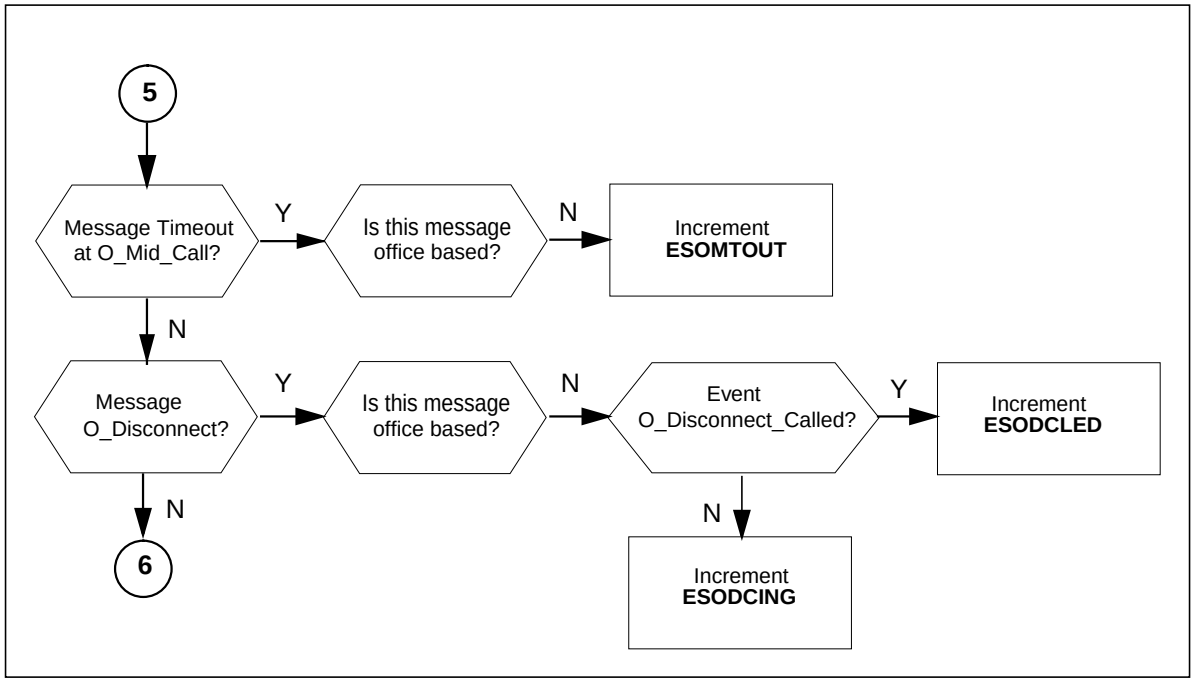


OM group AINOGSUB (continued)

OM group AINOGSUB registers (continued)

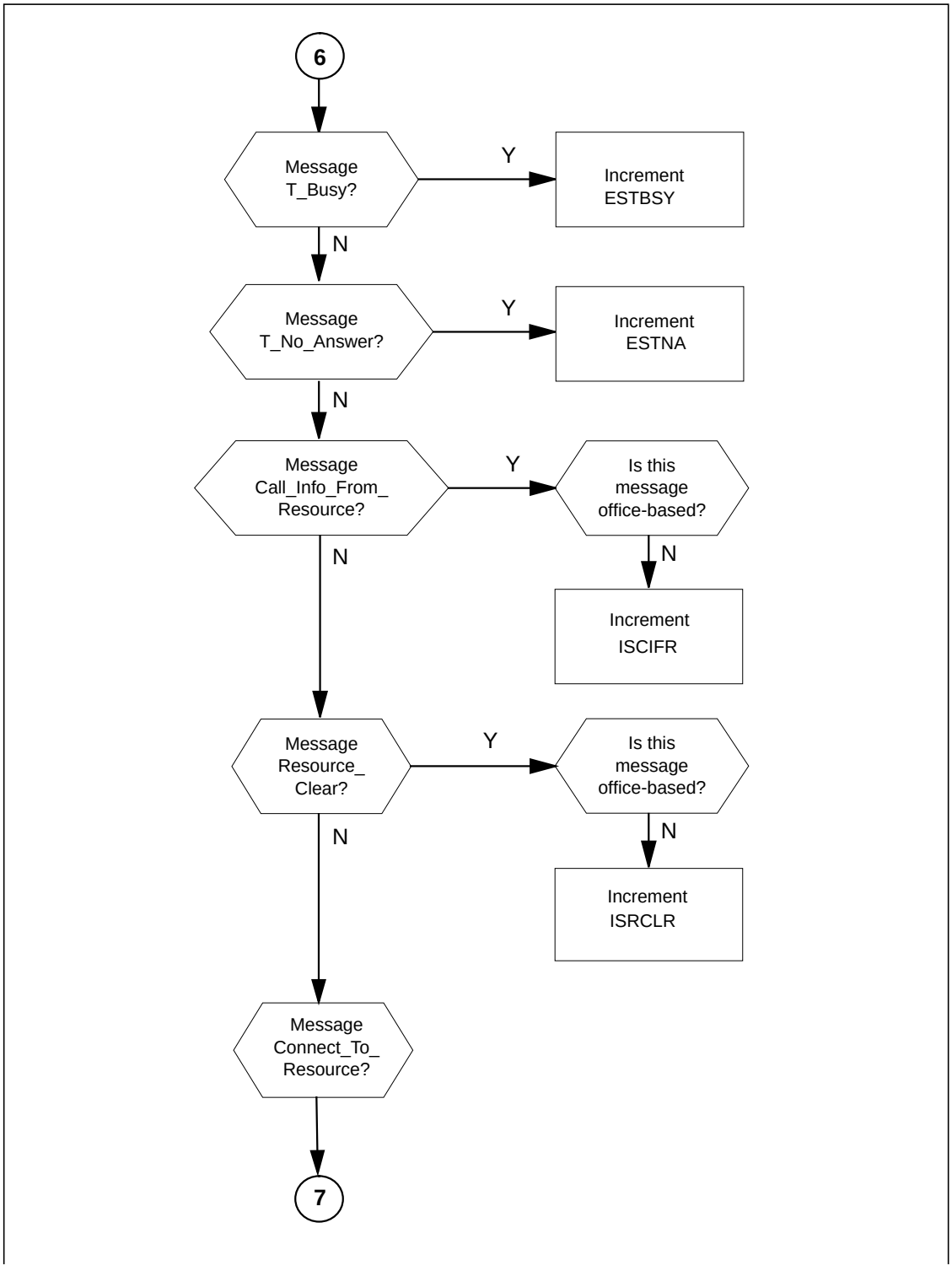


OM group AINOGSUB registers (continued)

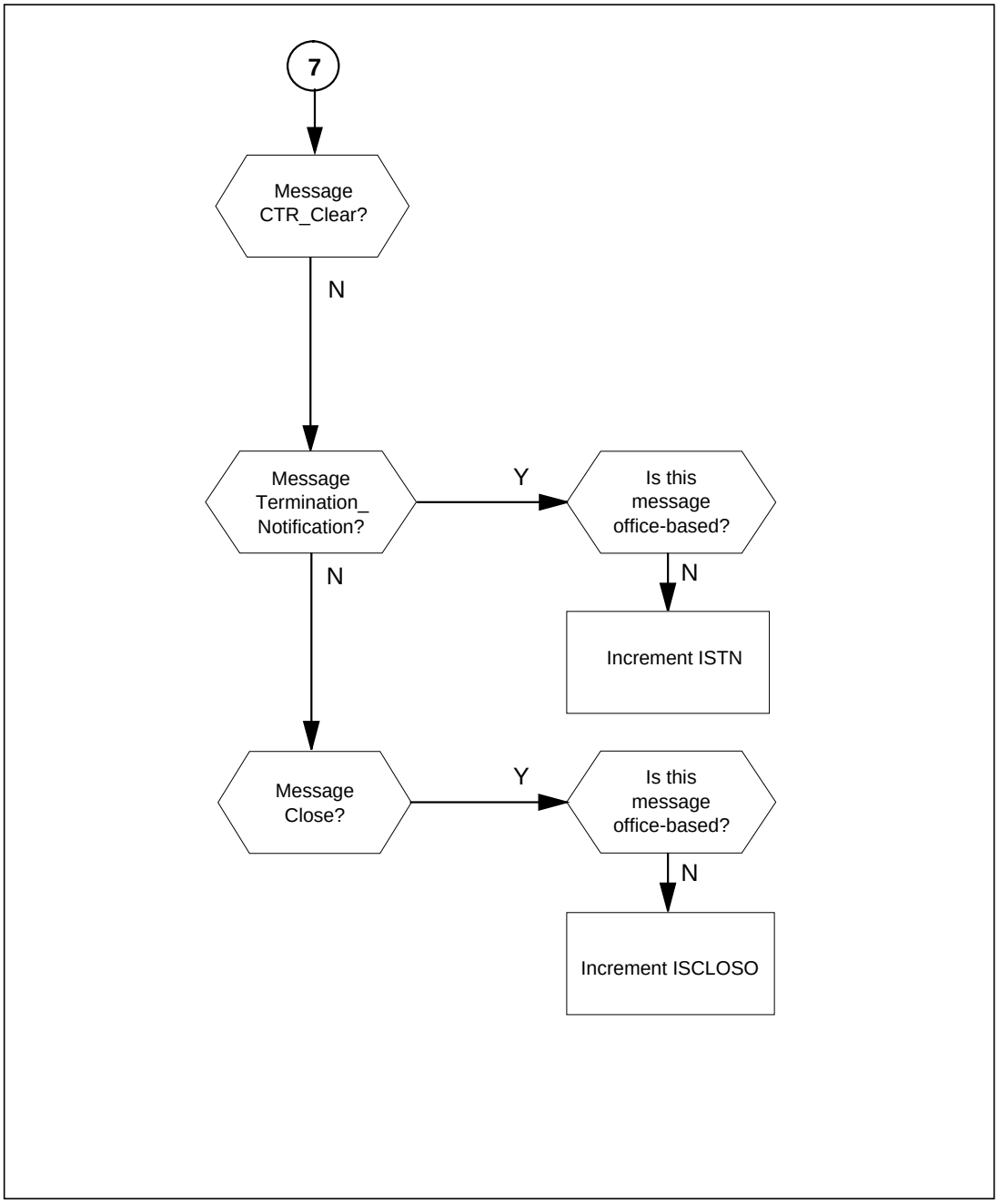


OM group AINOGSUB (continued)

OM group AINOGSUB registers (continued)



OM group AINOGOFF registers (end)



OM group AINOGSUB (continued)

Register TSOAOHI

TS Origination_Attempt at the Off-Hook_Immediate (TSOAOHI)

The TSOAOHI register counts Origination_Attempt messages that the SSP sends to the SCP, as a result of an Off-Hook_Immediate trigger at the Origination_Attempt trigger detection point (TDP).

Register TSOAOHI release history

The NA008 product release introduced the TSOAOHI register.

Related registers

There are no related registers.

Related logs

There are no related logs.

Extension registers

There are no extension registers.

Register TSICOHD

TS Info_Collected message for the Off-Hook_Delay (TSICOHD)

The TSICOHD register counts Info_Collected messages that the SSP sends to the SCP, as a result of an Off-Hook_Delay trigger.

Register TSICOHD release history

The NA008 product release introduced the TSICOHD register.

Related registers

There are no related registers.

Related logs

There are no related logs.

Extension registers

There are no extension registers.

Register TSICSIT

TS Info_Collected message for the Shared_Interoffice_Trunk (TSICSIT)

The TSICSIT register counts Info_Collected messages that the SSP sends to the SCP, as a result of an encounter with trigger Shared_Interoffice_Trunk at the Info_Collected TDP.

OM group AINOGSUB (continued)

Related registers

Register ESTMTOUT counts the number of Timeout Requested Event messages sent from the SSP to the SCP as a result of a T_Mid_Call Timeout EDP-R being armed by a non-office subscribed trigger.

Related logs

There are no related logs.

Extension registers

There are no extension registers.

Register ESONA

ES O_No_Answer (ESONA)

The ESONA register counts O_No_Answer messages that the SSP sends to the SCP, as a result of an O_No_Answer event request.

AINOGOFF register EOONA + AINOGSUB registers ESONA + TSONANA = total O_No_Answer messages

Register ESONA release history

The NA008 product release introduced the ESONA register.

Related registers

The EOONA register counts O_No_Answer messages that the SSP sends to the SCP, as a result of an O_No_Answer event request.

AINOGOFF register EOONA + AINOGSUB registers ESONA + TSONANA = total O_No_Answer messages.

Related logs

There are no related logs.

Extension registers

There are no extension registers.

Register ESOANS

ES O_Answer (ESOANS)

The ESOANS register counts O_Answer messages the SSP sends to the SCP, as a result of an O_Answer event request.

Register TSICSIT release history

The NA008 product release introduced the TSICSIT register.

Related registers

There are no related registers.

Related logs

There are no related logs.

Extension registers

There are no extension registers.

Register TSIAPFC

TS Info_Analyze message for the Public_Feature_Code (TSIAPFC)

The TSIAPFC register counts Info_Analyzed messages that the SSP sends to the SCP, as a result of a Public_Feature_Code trigger at the Info_Analyzed TDP.

Register TSIAPFC release history

The NA008 product release introduced the TSIAPFC register.

Related registers

There are no related registers.

Related logs

There are no related logs.

Extension registers

There are no extension registers.

Register TSIASFC

TS Info_Analyze message for the Specific_Feature_Code (TSIASFC)

The TSIASFC register counts Info_Analyzed messages that the SSP sends to the SCP, as a result of a Specific_Feature_Code trigger at the Info_Analyzed TDP.

Register TSIASFC release history

The NA008 product release introduced the TSIASFC register.

Related registers

There are no related registers.

OM group AINOGSUB (continued)

Related logs

There are no related logs.

Extension registers

There are no extension registers.

Register TSIACDP

TS Info_Analyze message for the Customized_Dialing_Plan (TSIACDP)

The TSIACDP register counts Info_Analyzed messages that the SSP sends to the SCP, as a result of a Customized_Dialing_Plan trigger at the Info_Analyzed TDP.

Register TSIACDP release history

The NA008 product release introduced the TSIACDP register.

Related registers

There are no related registers.

Related logs

There are no related logs.

Extension registers

There are no extension registers.

Register TSNBAFR

TS Network_Busy message for the AFR (TSNBAFR)

The TSNBAFR register counts Network_Busy messages that the SSP sends to the SCP, as a result of an automatic flexible routing (AFR) trigger at the Network_Busy TDP.

Register TSNBAFR release history

The NA008 product release introduced the TSNBAFR register.

Related registers

There are no related registers.

Related logs

There are no related logs.

Extension registers

There are no extension registers.

Register ESNB

ES Network_Busy (ESNB)

The ESNB register counts Network_Busy messages that the SSP sends to the SCP, as a result of a Network_Busy event request.

Register ESNB release history

The NA008 product release introduced the ESNB register.

Related registers

The EONB register counts the number of Network_Busy messages that the SSP sends to the SCP, as a result of a Network_Busy event request.

AINOGOFF register EONB + AINOGSUB registers ESNB + TSNBAFR = total Network_Busy messages.

Related logs

There are no related logs.

Extension registers

There are no extension registers.

Register TSOCBCB

TS O_Called_Party_Busy for the O_Called_Party_Busy (TSOCBCB)

The TSOCBCB register counts O_Called_Party_Busy messages that the SSP sends to the SCP, as a result of an O_Called_Party_Busy trigger. When OTS Screening is active the system does not peg this register.

Register TSOCBCB release history

The NA008 product release introduced the TSOCBCB register.

Related registers

There are no related registers.

Related logs

There are no related logs.

Extension registers

There are no extension registers.

Register ESOCB

ES O_Called_Party_Busy message for the O_Called_Party_Busy (ESOCB)

OM group AINOGSUB (continued)

The ESOCB register counts the number of O_Called_Party_Busy messages sent from the SSP to the SCP as a result of a O_Called_Party_Busy EDP-R.

Register ESOCB release history

The NA008 product release introduced the ESOCB register.

Related registers

The EOOCB register counts O_Called_Party_Busy messages sent from the SSP to the SCP, as a result of an O_Called_Party_Busy event request.

AINOGOFF register EOOCB + AINOGSUB registers ESOCB + TSOCBCB = total O_Called_Party_Busy messages.

Related logs

There are no related logs.

Extension registers

There are no extension registers.

Register TSONANA

TS O_No_Answer message for the O_No_Answer (TSONANA)

The TSONANA register counts the number of O_No_Answer messages sent from the SSP to the SCP as a result of an O_No_Answer trigger. When OTS Screening is active the system does not peg this register.

Register TSONANA release history

The NA008 product release introduced the TSONANA register.

Related registers

There are no related registers.

Related logs

There are no related logs.

Extension registers

There are no extension registers.

Register ESODCING

Register ESODCING counts the number of O_Disconnect_Calling Requested Event messages sent from the SSP to the SCP as a result of an O_Disconnect_Calling EDP-R being armed by a non-office subscribed trigger.

Register ESODCING release history

Product release NA017 introduces register ESODCING.

Associated registers

Register EOODCING counts the number of O_Disconnect_Calling Requested Event messages sent from the SSP to the SCP as a result of an O_Disconnect Calling EDP-R being armed by an office subscribed trigger.

Associated logs

There are no associated logs.

Extension registers

None.

Register ESODCLED

Register ESODCLED counts the number of O_Disconnect_Called Requested Event messages sent from the SSP to the SCP as a result of an O_Disconnect_Called EDP-R being armed by a non-office subscribed trigger.

Register ESODCLED release history

Product release NA017 introduces register ESODCLED.

Associated registers

Register EOODCLED counts the number of O_Disconnect_Called Requested Event messages sent from the SSP to the SCP as a result of an O_Disconnect_Called EDP-R being armed by an office subscribed trigger.

Associated logs

There are no associated logs.

Extension registers

None.

Register ESOMTOUT

Event Subscribed O_Mid_call TimeOut (ESOMTOUT)

Register ESOMTOUT counts the number of Timeout Requested Event messages sent from the SSP to the SCP as a result of an O_Mid_Call Timeout EDP-R being armed by a non-office subscribed trigger.

Register ESOMTOUT release history

Product release NA017 introduces register ESOMTOUT.

AINOGOFF register EOOANS + AINOGSUB register ESOANS = total O_Answer messages

Register ESOANS release history

The NA008 product release introduced the ESOANS register.

Related registers

The EOOANS register counts O_Answer messages the SSP sends to the SCP, as the result of an O_Answer event request.

AINOGOFF register EOOANS + AINOGSUB register ESOANS = total O_Answer messages.

Related logs

There are no related logs.

Extension registers

There are no extension registers.

Register TSTATTA

TS Termination_Attempt for the Termination_Attempt (TSTATTA)

The TSTATTA register counts Termination_Attempt messages that the SSP sends to the SCP, as a result of a Termination_Attempt trigger.

Register TSTATTA release history

The NA008 product release introduced the TSTATTA register.

Related registers

There are no related registers.

Related logs

There are no related logs.

Extension registers

There are no extension registers.

Register ESTBSY

ES T_Busy (ESTBSY)

The ESTBSY register counts T_Busy messages that the SSP sends to the SCP, as a result of a T_Busy event request.

OM group AINOGSUB (continued)

Register ESTBSY release history

The NA008 product release introduced the ESTBSY register.

Related registers

The TSTBSY register counts T_Busy messages sent from the SSP to the SCP. T_Busy messages indicate a line-subscibed trigger encounter with trigger T_Busy.

AINOGSUB registers TSTBSY + ESTBSY = total number of T_Busy messages.

Related logs

There are no related logs.

Extension registers

There are no extension registers.

Register ESTNA

ES T_No_Answer (ESTNA)

The ESTNA register counts T_No_Answer messages that the SSP sends to the SCP, as a result of a T_No_Answer event request.

Register ESTNA release history

The NA008 product release introduced the ESTNA register.

Related registers

The TSTNA register counts T_No_Answer messages sent from the SSP to the SCP. T_No_Answer messages indicate a line-subscibed trigger encounter with the T_No_Answer trigger.

AINOGSUB registers TSTNA + ESTNA = total number of T_No_Answer messages.

Related logs

There are no related logs.

Extension registers

There are no extension registers.

Register ISCIFR

IS Call_Info_From_Resource (ISCIFR)

The ISCIFR register counts Call_Info_From_Resource messages that the SSP sends to the SCP, in a transaction that a subscribed message initiates.

Register ISCIFR release history

The NA008 product release introduced the ISCIFR register.

Related registers

The IOCIFR register counts Call_Info_From_Resource messages that the SSP sends to the SCP, in a transaction that an office-based message initiates.

AINOGOFF register IOCIFR + AINOGSUB register ISCIFR = total Call_Info_From_Resource messages.

The IOCITR register counts Call_Info_To_Resource messages the SSP receives from the SCP, in a transaction that an office-based message initiates.

The ISCITR register counts Call_Info_To_Resource messages received by the SSP from the SCP, in a transaction that a subscribed message initiates.

Related logs

There are no related logs.

Extension registers

There are no extension registers.

Register ISRCLR

IS Resource_Clear (ISRCLR)

The ISRCLR register counts Resource_Clear messages that the SSP sends to the SCP, in a transaction that a subscribed message initiates.

Register ISRCLR release history

The NA008 product release introduced the ISRCLR register.

Related registers

The IORCLR register counts Resource_Clear messages that the SSP sends to the SCP, in a transaction that an office-based message initiates.

AINOGOFF register IORCLR + AINOGSUB register ISRCLR = total Resource_Clear messages.

The IOSTR register counts Send_to_Resource messages that the SSP receives from the SCP, in a transaction that an office-based message initiates.

OM group AINOGSUB (continued)

The ISSTR register counts Send_To_Resource messages received by the SSP from the SCP, in a transaction that a subscribed message initiates.

The IOCRE register counts Cancel_Resource_Event messages that the SSP receives from the SCP, in a transaction that an office-based message initiates.

The ISCRE register counts Cancel_Resource_Event messages received by the SSP from the SCP, in a transaction that a subscribed message initiates.

Related logs

There are no related logs.

Extension registers

There are no extension registers.

Register ISCLOSO

IS Close (ISCLOSO)

The ISCLOSO register counts Close messages that the SSP sends to the SCP, in a transaction that a subscribed message initiates.

Register ISCLOSO release history

The NA008 product release introduced the ISCLOSO register.

Related registers

The IOCLOSO register counts Close messages that the SSP sends to the SCP, in a transaction that a office-based message initiates.

AINOGSUB register ISCLOSO + AINICOFF register IOCLOSI + AINICSUB register ISCLOSI + AINOGOFF register IOCLOSO = total closed messages.

Related logs

There are no related logs.

Extension registers

There are no extension registers.

Register ISTN

IS Termination_Notification (ISTN)

The ISTN register counts Termination_Notification messages that the SSP sends to the SCP, in a transaction that a subscribed message initiates.

Register ISTN release history

The NA008 product release introduced the ISTN register.

Related registers

The IOTN register counts Termination_Notification messages that the SSP sends to the SCP, in a transaction that an office-based message initiates.

AINOGOFF register IOTN + AINOGSUB register ISTN = total Termination_Notification messages.

The IOSN register counts Send_Notification messages that the SSP receives from the SCP, in a transaction that an office-based message initiates.

The ISSN register counts Send_Notification messages received by the SSP from the SCP, in a transaction that a subscribed message initiates.

Related logs

There are no related logs.

Extension registers

There are no extension registers.

Register TSTBSY

TDP subscribed T_Busy (TSTBSY)

The TSTBSY register counts each occurrence of a T_Busy trigger detection point-request (TDP-R).

Register TSTBSY release history

The NA010 product release introduced the TSTBSY register.

Related registers

There are no related registers.

Related logs

There are no related logs.

Extension registers

There are no extension registers.

Register TSTNA

TDP subscribed T_No_Answer (TSTNA)

OM group AINOGSUB (continued)

The TSTNA register counts each occurrence of a T_No_Answer trigger detection point-request (TDP-R).

Register TSTNA release history

The NA010 product release introduced the TSTNA register.

Related registers

There are no related registers.

Related logs

There are no related logs.

Extension registers

There are no extension registers.

Register ESTANS

EDP subscribed T_Answer (ESTANS)

The ESTANS register counts the number of times that the T_Answer event detection point-notification (EDP-N) occurs.

Register ESTANS release history

The NA010 product release introduced the ESTANS register.

Related registers

There are no related registers.

Related logs

There are no related logs.

Extension registers

There are no extension registers.

Register TSICPRIB

TDP subscribed Info_Collected Channel_Setup_PRI trigger (TSICPRIB)

The TSICPRIB register counts the number of times that the Channel_Setup_PRI trigger occurs.

Register TSICPRIB release history

The NA010 product release introduced the TSICPRIB register.

Related registers

There are no related registers.

Related logs

There are no related logs.

Extension registers

There are no extension registers.

Register TSIA1PLS

TDP subscribed Info_Analyzed One_Plus_Prefix trigger (TSIA1PLS)

The TSIA1PLS register counts the number of times that the One_Plus_Prefix trigger occurs.

Register TSIA1PLS release history

The NA011 product release introduced the TSIA1PLS register.

Related registers

There are no related registers.

Related logs

There are no related logs.

Extension registers

There are no extension registers.

Register TSIASPCR

TDP subscribed Info_Analyzed Specified_Carrier trigger (TSIASPCR)

The TSIASPCR register counts the number of times that the Specified_Carrier trigger occurs.

Register TSIASPCR release history

The NA011 product release introduced the TSIASPCR register.

Related registers

There are no related registers.

Related logs

There are no related logs.

OM group AINOGSUB (continued)

Extension registers

There are no extension registers.

Register TSIAINT

TDP subscribed Info_Analyzed International trigger (TSIAINT)

The TSIAINT register counts the number of times that the International trigger occurs.

Register TSIAINT release history

The NA011 product release introduced the TSIAINT register.

Related registers

There are no related registers.

Related logs

There are no related logs.

Extension registers

There are no extension registers.

Register TSIAOPSV

TDP subscribed Info_Analyzed Operator_Services trigger (TSIAOPSV)

The TSIAOPSV register counts the number of times that the Operator_Services trigger occurs.

Register TSIAOPSV release history

The NA011 product release introduced the TSIAOPSV register.

Related registers

There are no related registers.

Related logs

There are no related logs.

Extension registers

There are no extension registers.

Release history

NA017

New Operational Measurement registers (ESOMTOUT, ESODCLED, and ESODCING) are defined with this activity to count the number of Timeout

OM group AINOGSUB (end)

Requested Event and O_Disconnet Called Requested Event messages sent form the SSP to SCP(59037100), originally (59028609 and 59028631).

NA008

OM group AINOGSUB was introduced.

OM group AIOD

OM description

Automatic identified outward dialing (AIOD)

Automatic identified outward dialing (AIOD) provides information about the transfer of outgoing billed calls from PBX stations.

Six registers count the following activities:

- automatic identified outward dialing (AIOD) call identification messages received by the host DMS
- AIOD calls
- billable AIOD calls
- call identification messages the host DMS does not receive
- manual busy AIOD receivers
- system busy AIOD receivers

Two usage registers record when AIOD receivers are manual busy and system busy.

The AIOD feature bills and transfers outgoing calls to PBX stations. The host DMS sends information about the PBX line and the PBX trunk call over a separate data link. The data link connects the PBX to the host DMS. PBX stations with AIOD facilities send a call identification message to the host DMS for every call made. The PBX station with AIOD facilities ignores messages for calls that cannot be billed.

The host DMS must receive a call identification message from the PBX station. The host DMS must receive the message before the system will direct PBX line or trunk calls with billing capabilities. The DMS must receive the identification message before the time call processing routes the call to the PBX station. The operating company specifies a waiting period to process the call. The system directs expired calls to automatic identified outward dialing failure (AIFL) treatment, or to default PBX numbers and PBX special billing numbers.

Release history

The OM group AIOD was introduced in BCS20.

Registers

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

OM group AIOD (continued)

```
AIODDAT     AIODCAL     AIODBIL     AIODDEF
AIODMB      AIODSB      AIODMBU     AIODSBU
```

Group structure

The OM group AIOD provides one tuple for each AIOD group.

Key field:
COMMON_LANGUAGE_NAME represents the name of the AIOD group.

Info field:
There is no info field.

If the AIOD call identification message is not received enter in field FAILDEF in table AIODGRP.

If the AIOD call identification message is late, call processing waits the length of time datafilled in field TIMEOUT in table AIODGRP.

Associated OM groups

There are no associated OM groups.

Associated functional groups

The PBXs with AIOD facilities operating group associates with OM group AIOD.

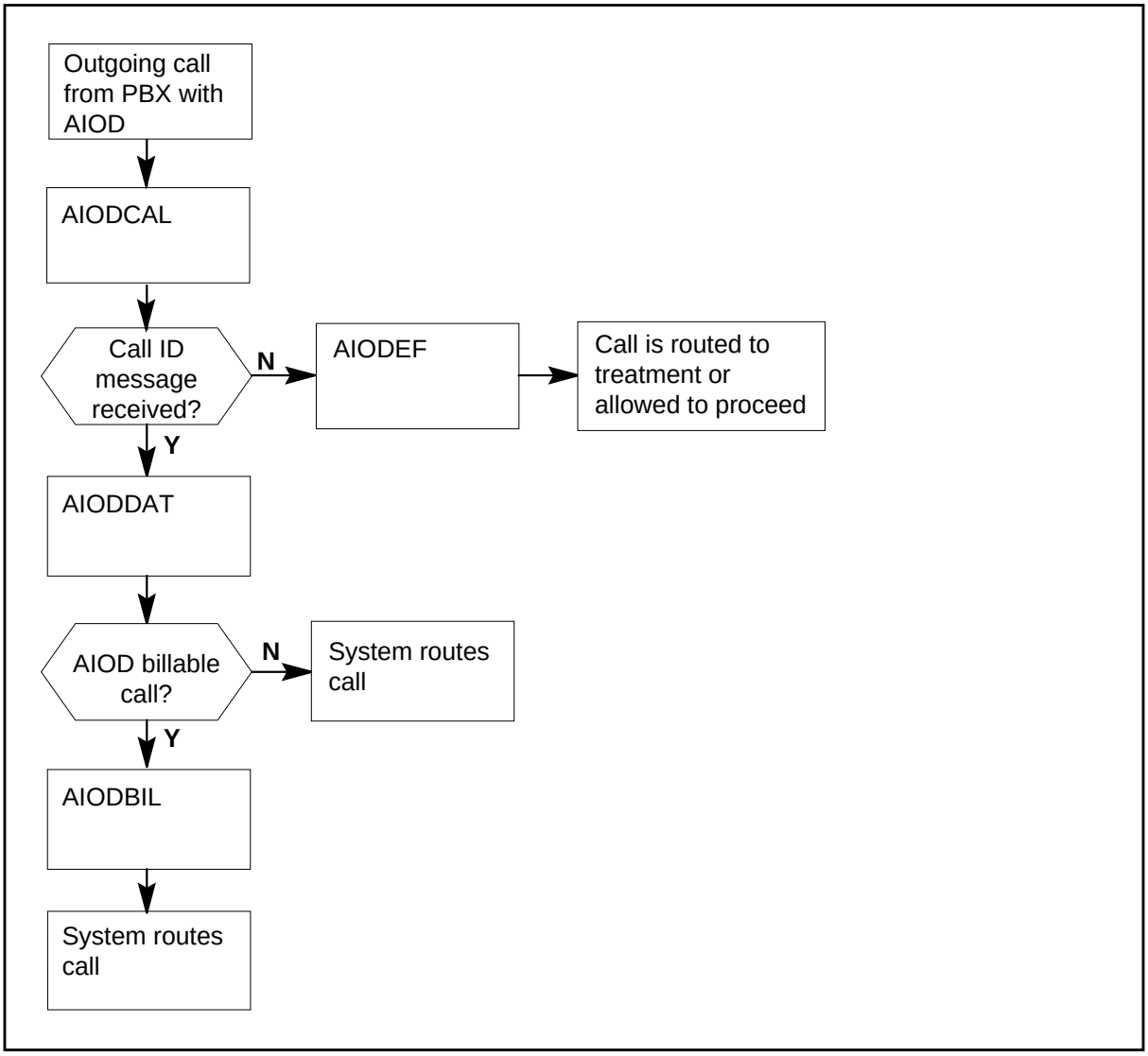
Associated functionality codes

The functionality codes that associate with the OM group AIOD appear in the following table.

Functionality	Code
Automatic Identified Outward Dialing	NTX174AA

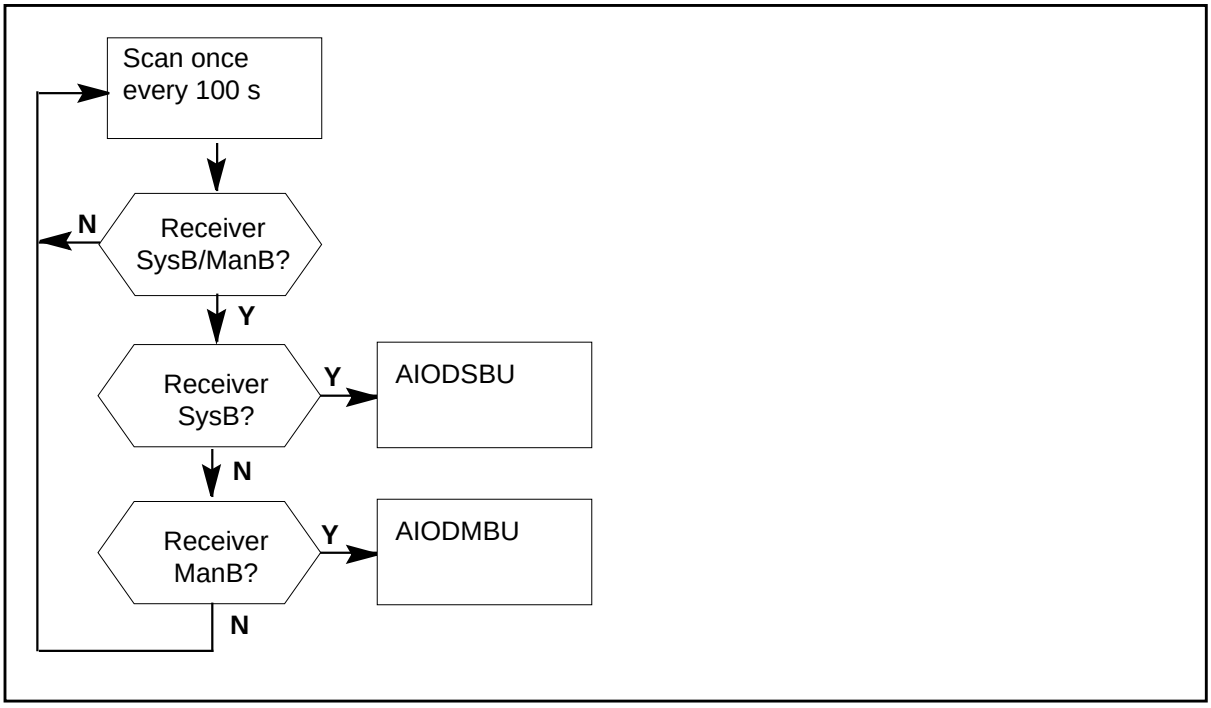
OM group AIOD (continued)

The OM group AIOD registers



OM group AIOD (continued)

The OM group AIOD registers (continued)



Register AIODBIL

AIOD billable calls (AIODBIL)

Register AIOD billable calls (AIODBIL) counts billable AIOD calls.

Register AIODBIL release history

Register AIODBIL 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 AIODCAL

AIOD calls (AIODCAL)

The AIOD calls (AIODCAL) counts outgoing calls from PBX stations with AIOD facilities. Register AIODCAL includes local or calls without billing capabilities.

Register AIODCAL release history

Register AIODCAL was introduced before BCS20.

Associated registers

Register AIODBIL counts billable AIOD calls.

AIODCAL - AIODBIL = Number of local calls.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register AIODDAT

AIOD data messages (AIODDAT)

Register AIOD data messages (AIODDAT) counts AIOD call identification messages the host DMS receives.

Register AIODDAT release history

Register AIODDAT was introduced prior to BCS20.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register AIODDEF

AIOD defaults (AIODDEF)

Register AIOD defaults (AIODDEF) counts AIOD calls. The host DMS has not received a call identification message.

OM group AIOD (continued)

The system sends the call to automatic identified outward dialing failure (AIFL) treatment. The system may send the call with a bill to the default PBX number or the PBX special billing number. Enter the default action in field FAILDEF in table AIODGRP.

Register AIODDEF release history

Register AIODDEF was introduced prior to BCS20.

Associated registers

There are no associated registers.

Associated logs

The generation of log LINE138 occurs when the system directs a call with the status of call processing busy.

Extension registers

There are no extension registers.

Register AIODMB

AIOD manual busy (AIODMB)

Register AIOD manual busy (AIODMB) counts AIOD receivers in the host DMS that are manual busy.

Register AIODMB release history

Register AIODMB was introduced prior to BCS20.

Associated registers

There are no associated registers.

Associated logs

The generation of log TRK207 occurs when call processing detects trouble with a receiver.

Extension registers

There are no extension registers.

Register AIODMBU

AIOD manual-busy usage (AIODMBU)

Register AIODMBU is a usage register. The scan rate is slow: 100 s.

Register AIODMBU records manually busy AIOD receivers in the host DMS.

Register AIODMBU release history

Register AIODMBU was introduced prior to BCS20.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register AIODSB

AIOD system busy (AIODSB)

Register AIOD system busy (AIODSB) counts AIOD receivers in the host DMS that are system busy.

Register AIODSB release history

Register AIODSB was introduced prior to BCS20.

Associated registers

There are no associated registers.

Associated logs

The generation of log TRK207 occurs when call processing detects trouble with a receiver.

The generation of log TRK209 occurs when call processing detects that no AIOD call identification message can be received.

Extension registers

There are no extension registers.

Register AIODSBU2

AIOD system-busy usage (AIODSBU)

Register AIODSBU is a usage register. The scan rate is slow: 100 s. Register AIODSBU records when the AIOD receivers in the host DMS are system busy.

Register AIODSBU release history

Register AIODSBU was introduced prior to BCS20.

OM group AIOD (end)

Associated registers

There are no associated registers.

Associated logs

The generation of log TRK207 occurs when call processing detects trouble with a receiver.

The generation of log TRK209 occurs when call processing detects that no AIOD call identification message can be received.

Extension registers

There are no extension registers.

OM group AMA

OM description

Automatic message accounting summary (AMA)

The OM group AMA records:

- the total number of AMA record entries that the system generates for downstream processing
- the number of occurrences of emergency transfer between AMA tape units
- the number of times the system routes an AMA call to a Traffic Operator Position System (TOPS)

The AMA subsystem collects call data and automatically records it on a data storage device. During a call, most call processing agencies store call data in a call condense block (CCB). At call disconnect, the CCB sends the data to a buffer. The method the AMA subsystem uses to record call data is the Device-Independent Recording Package (DIRP) feature. The DIRP feature automatically assigns the AMA records to selected recording devices like disk or tape. The stored data transmits to the operating company downstream data processing center. The AMA data can be retrieved automatically as required for correct customer billing and call analysis.

Release history

The OM group AMA was created before BCS20.

Registers

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

```
AMAENT      AMAENT2         AMAEMTR         AMAFREE
AMAROUTE    AMASCRN
```

Group structure

The OM group AMA provides one tuple for each office.

Key field:
There is no Key field.

Info field:
There is no Info field.

OM group AMA (continued)

Associated OM groups

The OM group EXT_EXTOVFL increases when a type of extension block is not available.

Associated functional groups

The functional group DIRP Device Independent Recording Package TOPS Traffic Operator Position System is an associated functional group of OM group AMA.

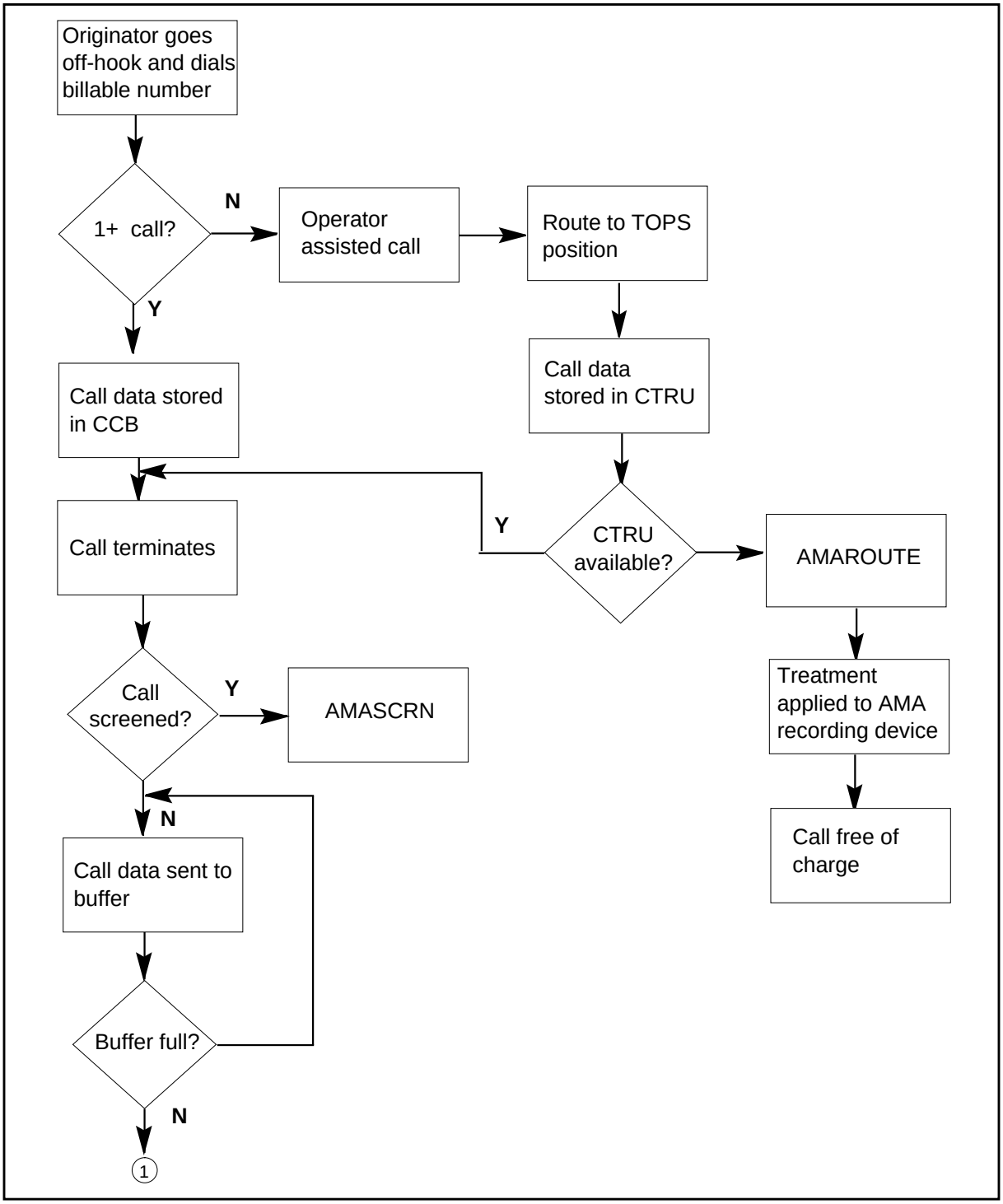
Associated functionality codes

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

Functionality	Code
TOPS Call Processing Features	NTX030CC
Local Automatic Message Accounting (LAMA)	NTX042AA
Central Automatic Message Accounting (CAMA)	NTX044AA
IBN-Station Message Detail Recording	NTX102AA
DMS-250 Call Detail Recording Type II	NTX221AA

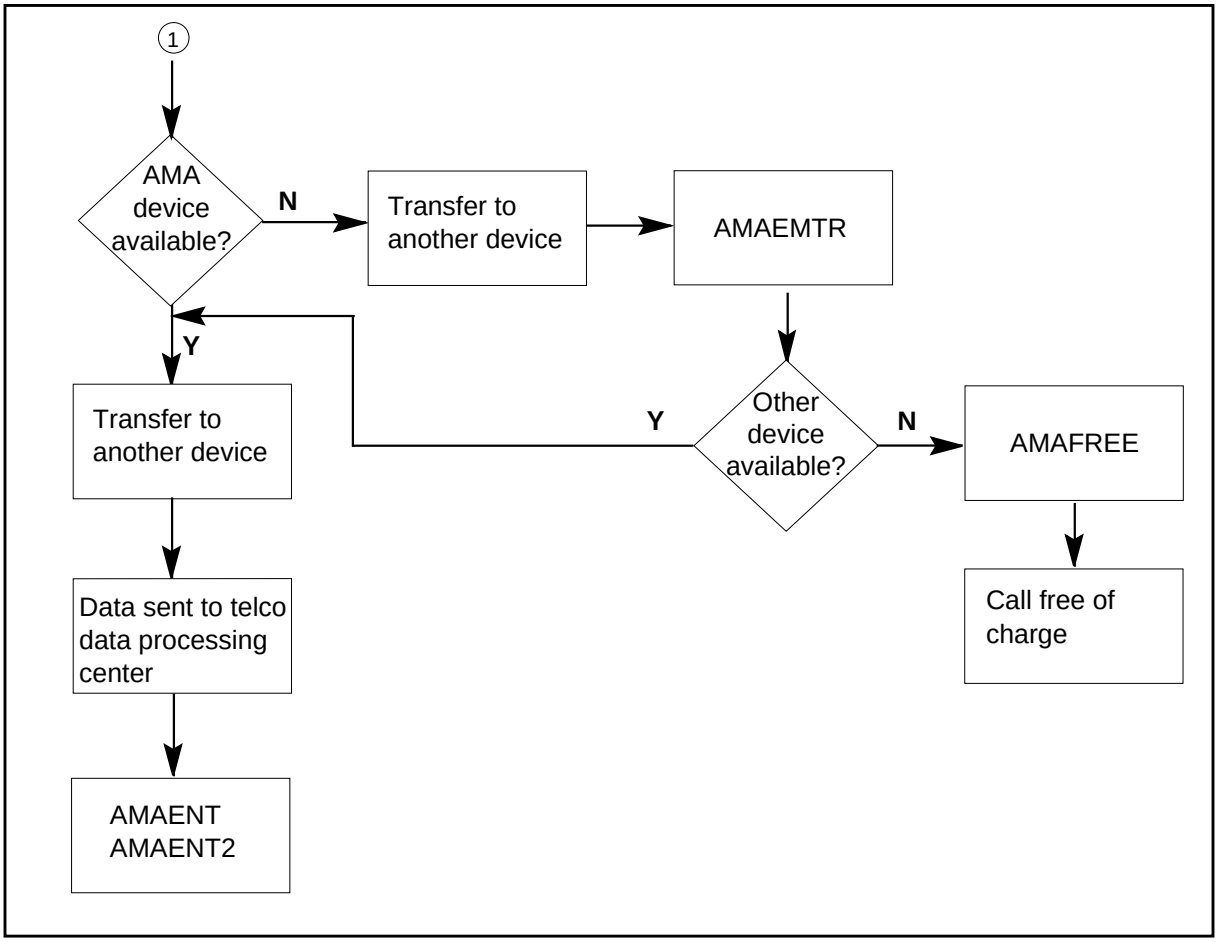
OM group AMA (continued)

OM group AMA registers



OM group AMA (continued)

OM group AMA registers (continued)



Register AMAEMTR

AMA emergency transfer (AMAEMTR)

Register AMAEMTR counts emergency transfers between AMA tape units.

An emergency transfer occurs when an active tape unit is not present. An emergency transfer also occurs when the system cannot write a correct end-of-tape transfer record. An emergency transfer does not imply a loss of data unless the “from" or “to" tape drive number in the AMA117 log with the transfer is -1. A-1 signifies no active drive assigned before or after the transfer. In this case, the current software tape buffer, which possibly contains call data, is overwritten.

This register does not apply to DMS-250. The values are set to zero.

Register AMAEMTR release history

Register AMAEMTR was introduced in BCS20

Associated registers

There are no associated registers.

Associated logs

The AMA subsystem generates AMA117. Log AMA117 contains the AMA options and the current status of the AMA options in accordance with the data in table AMAOPTS.

The DIRP subsystem generates DIRP101. Log DIRP101 indicates conditions that prevent the normal operation of DIRP and reports major DIRP events.

Extension registers

There are no extension registers.

Register AMAENT

AMA record entries (AMAENT)

Register AMAENT counts AMA record entries the system generates for downstream processing. You can identify these records as X`fx' records (x=0-6). One call generates one initial AMA record entry. TOPS calls that involve a billing number on a “hot" list or charge adjustments can generate additional initial record entries. The system generates the complete set of initial record entries (with possible intervening extension entries) for a call consecutively on a last-in, first-out basis.

This register increases when the system formats call record entries, after the call ends.

The total number of calls that are put on AMA tape or disk can be not equal to AMAENT if the AMA fails because of no devices (files).

In DMS-250 applications, this register increases when a call detail record (CDR) is made for AMA.

Register AMAENT release history

Register AMAENT was introduced in BCS20.

Associated registers

There are no associated registers.

OM group AMA (continued)

Associated logs

The AMA buffer subsystem generates AMAB100 when the system makes an AMA call entry. This subsystem generates the log only if the office parameter SPECIAL_AMA_REPORT is set to ON in office parameter tables.

The AMA buffer subsystem generates AMAB101 when the system makes a LAMA call entry. This subsystem generates the log only if parameter SPECIAL_AMA_REPORT is set to ON in office parameter tables.

The AMA buffer subsystem generates AMAB102 when the system makes an AMA call entry. This subsystem generates the log only if the office parameter SPECIAL_AMA_REPORT is set to ON in office parameter tables. This report contains TOPS entry call data.

The AMA buffer subsystem generates AMAB103 when the system makes an AMA call entry. This subsystem generates the log only if the office parameter SPECIAL_AMA_REPORT is set to ON in office parameter tables. This report contains data associated with TOPS extension record code E0 (special billing).

The AMA buffer subsystem generates AMAB104 when the system makes an AMA call entry. This subsystem generates the log only if the office parameter SPECIAL_AMA_REPORT is set to ON in office parameter tables. This report contains data associated with TOPS extension record E1 (hotel).

The AMA buffer subsystem generates AMAB105 when the system makes an AMA call entry. This subsystem generates the log only if the office parameter SPECIAL_AMA_REPORT is set to ON in office parameter tables. This report contains data associated with TOPS extension record E2 (charge).

The AMA buffer subsystem generates AMAB106 when the system makes an AMA call entry. This subsystem generates the log only if the office parameter SPECIAL_AMA_REPORT is set to ON in office parameter tables. This report contains data associated with TOPS extension record E4 (charge adjustment).

The AMA buffer subsystem generates AMAB108 when the system makes an AMA call entry. This subsystem generates the log only if the office parameter SPECIAL_AMA_REPORT is set to ON in office parameter tables. This report contains data associated with the Auxiliary Operator Services System (AOSS).

The AMA buffer subsystem generates AMAB109 when the system makes an AMA call entry. This subsystem generates the log only if the office parameter

SPECIAL_AMA_REPORT is set to ON in office parameter tables. This report contains data associated with overseas calls placed through an operator.

The AMA buffer subsystem generates AMAB110 when the system makes an AMA call entry. This subsystem generates the log only if the office parameter SPECIAL_AMA_REPORT is set to ON in office parameter tables. This report contains data associated with TOPS extension record E5 (charge adjustments for calls on The AMA buffer subsystem generates109).

The AMA buffer subsystem generates AMAB111 when the system makes an AMA call entry. This subsystem generates the log only if the office parameter SPECIAL_AMA_REPORT is set to ON in office parameter tables. This report contains data associated with domestic (B6) and international (B7) enhanced 800 service AMAB.

The DIRP subsystem generates DIRP101. Log DIRP indicates conditions that prevent normal operation of DIRP and reports major DIRP events.

Extension registers

AMAENT2

Register AMAFREE

AMA free of charge (AMA FREE)

Register AMAFREE counts AMA calls that the system routes free of charge. A call can be free of charge because recording devices or units are not available, or because of a dead process.

This register does not apply to DMS-250. All values will be set to zero.

Office parameter, AMA_FAILURE_FREE CALL in table OFCENG is set to Y.

Register AMAFREE release history

Register AMAFREE was introduced in BCS20.

Associated registers

There are no associated registers.

Associated logs

The DIRP subsystem generates DIRP101. Log DIRP101 indicates conditions that prevent the normal operation of DIRP and reports major DIRP events.

OM group AMA (continued)

Extension registers

There are no extension registers.

Register AMAROUTE

AMA calls route to TOPS (AMAROUTE)

Register AMAROUTE increases for TOPS offices when no CAMA TOPS recording units (CTRU) are available to store call details. The AMA recording device receives an EM3 treatment application.

This register does not apply to DMS-250. Values will be set to zero.

Register AMAROUTE release history

Register AMAROUTE was introduced in BCS20.

Associated registers

Register EXT_EXTOVFL increases when a type of extension block is not available.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register AMASCRN

AMA screen (AMASCRN)

Register AMASCRN pegs the number of AMA records screened.

Operating company personnel could screen an AMA record for the following reasons:

- A call disconnects before a minimum billing interval expires.
- The switch only tandems a call from an incoming to an outgoing trunk.

Register AMASCRN release history

Feature AF7556 introduced register AMSCRN in release TL010 for the DMS-100 Wireless switch.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

OM group ANN

OM description

Announcements (ANN)

The OM group ANN provides information about traffic for recorded announcement machines. The OM group ANN contains two peg registers (ANNATT and ANNOVFL), three usage registers with a scan rate of 100 seconds (ANNTRU, ANNSBU, and ANNMBU) and one usage register with a scan rate of 10 seconds (ANNFTRU).

All types of DMS office have ANN.

Release history

The OM group ANN was introduced in BCS20.

TL10

Register ANNFTRU was introduced.

BCS33

The OMSHOW command on the ACTIVE class can convert registers ANNTRU and ANNSBU from CCS to deci-erlangs before the display of the registers.

BCS21

Software change to correct usage counts in deci-erlangs. The number of scans for each collection interval (15 min or 30 min) divides usage counts. The number of scans for each collection interval does not divide not the number of scans in 60 min.

BCS20

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

Registers

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

```
ANNATT  ANNOVFL ANNTRU  ANNSBU
ANNMBU  ANNFTRU
```

Group structure

The OM group ANN provides one tuple for each announcement. A tuple has five registers contained in group ANN.

Key field:
COMMON_LANGUAGE_NAME CLLI is the common-language location identifier for the announcement.

Info field:
ANN_OMINFO is the maximum number of calls to be attached at the same time to the announcement.

The fixed CLLI for ANN are as follows:

- ACTSTOPS Automatic-Coin Toll Service
- AOSSANN Auxiliary Operator Services System Announcement

Three tables must be entered with data: ANNS, ANNMEMS, and CNALDSPK.

Table ANNS contains the data for each announcement assigned in the switch.

The subscriber defines other CLLI.

Table ANNMEMS assigns tracks to announcements.

Table CNALDSPK identifies the trunk over which the announcement plays. The Calling Number Announcement (CNA) feature is optional. CNA can replace existing automatic number announcer circuits (ANAC).

Associated OM groups

The OM group OFZ provides information about office traffic by the intended call destination.

The OM group OTS provides information about office traffic by the accurate call destination.

Associated functional groups

There are no associated functional groups.

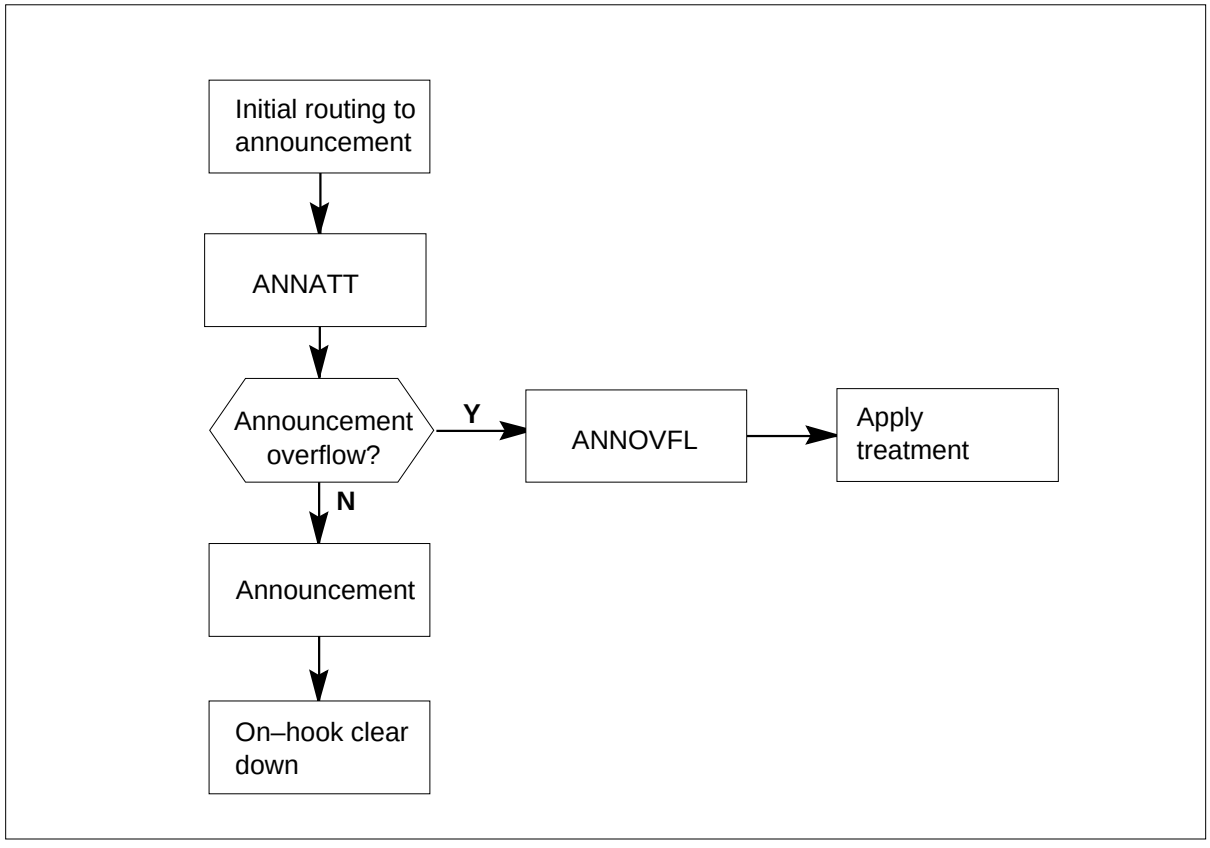
OM group ANN (continued)

Associated functionality codes

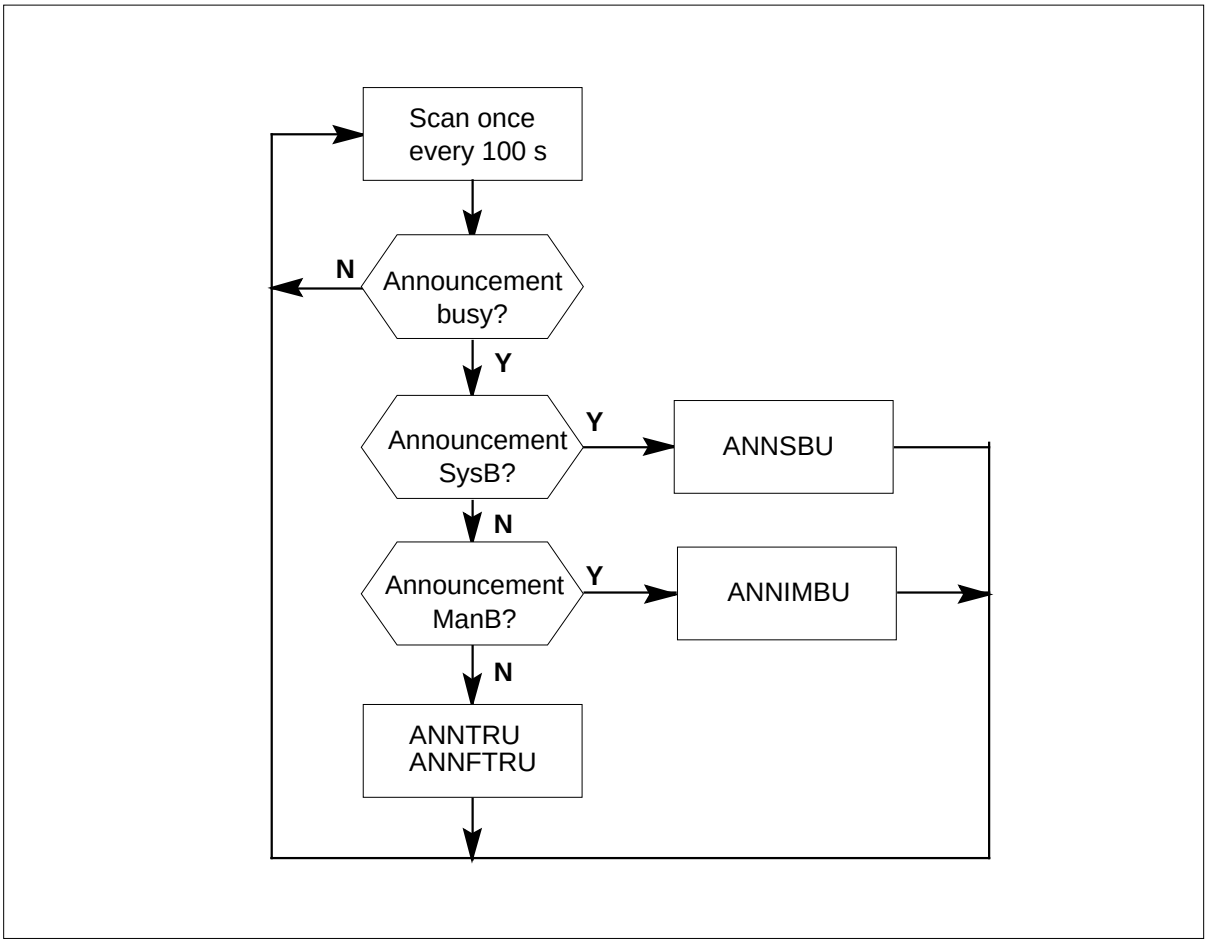
The associated functionality codes for OM group ANN appear in the following table.

Functionality	Code
Common Basic	NTX001AA
OMs in Erlangs	NTX664AA

OM group ANN registers



OM group ANN usage registers



Register ANNATT

Announcement attempts (ANNATT)

Register ANNATT counts calls that route to an announcement.

Register ANNATT release history

Register ANNATT was introduced in BCS20

Associated registers

Register OFZ_INANN counts calls that originate on a trunk and the system first routes to an announcement.

Register OFZ_ORIGANN counts calls that originate on a line and the system first routes to an announcement.

OM group ANN (continued)

Registers OFZ_INANN and OFZ_ORIGANN do not count calls that the system routes to an announcement after the system first routes the calls somewhere else.

The relationship between these registers is:

Σ (ANN_ANNATT) OFZ_INANN + OFZ_ORIGANN

ANN

Register OTS_ORGTRMT counts calls that originate on a line and the system connects to a tone or an announcement.

Register OTS_INCTRMT counts calls that originate on a trunk and the system connects to a tone or an announcement.

Register TONES_TONEATT counts attempts to connect to a tone generator.

The relationship between these registers is:

Σ (ANN_ANNATT) + Σ (TONES_TONEATT)

TONES TONES

OTS_ORGTRMT + OTS_INCTRMT

Associated logs

The line maintenance subsystem generates LINE 138 if the system routes a call to a treatment after the call is call processing busy.

The trunk maintenance subsystem generates TRK 138 if the system routes a call routes to a treatment after the call is call processing busy.

Register ANNMBU

Announcement manual busy usage (ANNMBU)

Register ANNMBU is a usage register. The scan rate is 100 s. Register ANNMBU records when an announcement is manual busy.

Each announcement has a minimum of one track. The system assigns each track one trunk circuit or channel. The system connects one announcement and one ANN tuple to each track. Table ANNMEMS defines the connections

between tracks and announcements. Register ANNMBU measures the following busy states:

- track manual busy
- track network management (NWM) busy

Register ANNMBU release history

ANNMBU was introduced in BCS20.

BCS21

Software change to correct usage counts in deci-erlangs.

BCS20

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

Associated registers

Register ANNTRU records if an announcement is traffic busy.

Register ANNSBU records if an announcement is system busy.

The relationship between these registers, for each tuple, is as follows:

TOTAL BUSY USE = ANNTRU + ANNSBU + ANNMBU

Associated logs

There are no associated logs.

Register ANNOVFL

Announcement overflow (ANNOVFL)

Register ANNOVFL counts calls that the system routes to a recorded announcement, but that does not connect to the announcement for two reasons. The maximum number of calls are connected to the announcement or the announcement is maintenance busy. Register ANNOVFL does not count the number of calls that overflow because of network block.

Register ANNOVFL release history

Register ANNOVFL was introduced in BCS20.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

OM group ANN (continued)

Register ANNSBU

Announcement system busy use (ANNSBU)

Register ANNSBU is a usage register. The scan rate is 100 s. Register ANNSBU records when an announcement is system busy.

Each announcement uses one or more tracks. Table ANNMEMS defines the connections between tracks and announcements. The busy states that ANNSBU measures are as follows:

- track system busy
- track peripheral module busy
- queued to be manual busy

Register ANNSBU release history

Register ANNSBU was introduced in BCS20.

BCS33

When office parameter OMINERLANGS is set to Y, the usage count converts from CCS to deci-erlangs before the usage count displays. The OMSHOW command on the ACTIVE class displays usage counts. The value held in the active registers does not alter and remains in CCS.

BCS21

Software change to correct usage counts in deci-erlangs.

BCS20

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

Associated registers

Register ANNTRU records if an announcement is traffic busy.

Register ANNMBU records if an announcement is manual busy.

The relationship between these registers, for each tuple, is as follows:

TOTAL BUSY USAGE = ANNTRU + ANNSBU + ANNMBU

Associated logs

The system generates TRK106 if a test on trunk equipment fails.

Register ANNTRU

Announcement traffic use (ANNTRU)

Register ANNTRU is a usage register. The scan rate is 100 s. Register ANNTRU records when an announcement is traffic busy.

Register ANNTRU release history

Register ANNTRU was introduced in BCS20.

BCS33

When office parameter OMINERLANGS is set to Y, the system converts the usage count from CCS to deci-erlangs before the display of the usage count. The OMSHOW command on the ACTIVE class displays the usage count. The value held in the active registers does not alter and remains in CCS.

BCS21

Software change to correct usage counts in deci-erlangs.

BCS20

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

Associated registers

Register ANNMBU records if an announcement is manual busy.

Register ANNSBU records if an announcement is system busy.

The relationship between these registers, in each tuple, is as follows:

TOTAL BUSY USE = ANNTRU + ANNSBU + ANNMBU

Associated logs

There are no associated logs.

Register ANNFTRU

Announcement fast traffic use (ANNFTRU)

Register ANNFTRU is a usage register. The scan rate is 10 s. Register ANNFTRU records when an announcement is traffic busy. This scan rate is needed because a typical broadcast announcement is 10 to 15 seconds long.

Register ANNFTRU release history

Register ANNFTRU was introduced in TL10.

Associated registers

Register ANNMBU records if an announcement is manual busy.

Register ANNSBU records if an announcement is system busy.

OM group ANN (end)

The relationship between these registers, in each tuple, is as follows:

TOTAL BUSY USE = ANNFTRU + ANNSBU + ANNMBU

Associated logs

There are no associated logs.

OM group AOSS

OM description

Auxiliary Operator Services System

AOSS provides information on the number of Auxiliary Operator Services System (AOSS) positions that are occupied, the work volume of the general operator positions, initial position seizures, the number of transfer and intercept calls, the number of calls waiting in the queue, queue deflections and abandons, trouble reports, traces, as well as AOSS position maintenance, diagnostics, and diagnostics failures.

Release history

OM group AOSS was introduced in BCS20.

Registers

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

AOSSOC	AOSSOCO	AOSSWV	AOSSWVO
AOSSIPS	AOSSIPSO	AOSSXFR1	AOSSXFR2
AOSSINT	AOSSCW	AOSSQDEF	AOSSABN
AOSSABN1	AOSSABN2	AOSSQOV	AOSSTRBL
AOSSTRCE	AOSSOD	AOSSD	AOSSDF

Group structure

OM group AOSS provides one tuple for each office.

Key field:
None

Info field:
None

Associated OM groups

EXT indicates the number of AOSS recording units that are available to process AOSS calls.

Associated functional groups

The TOPS Traffic Operator Position System functional group is associated with OM group AOSS.

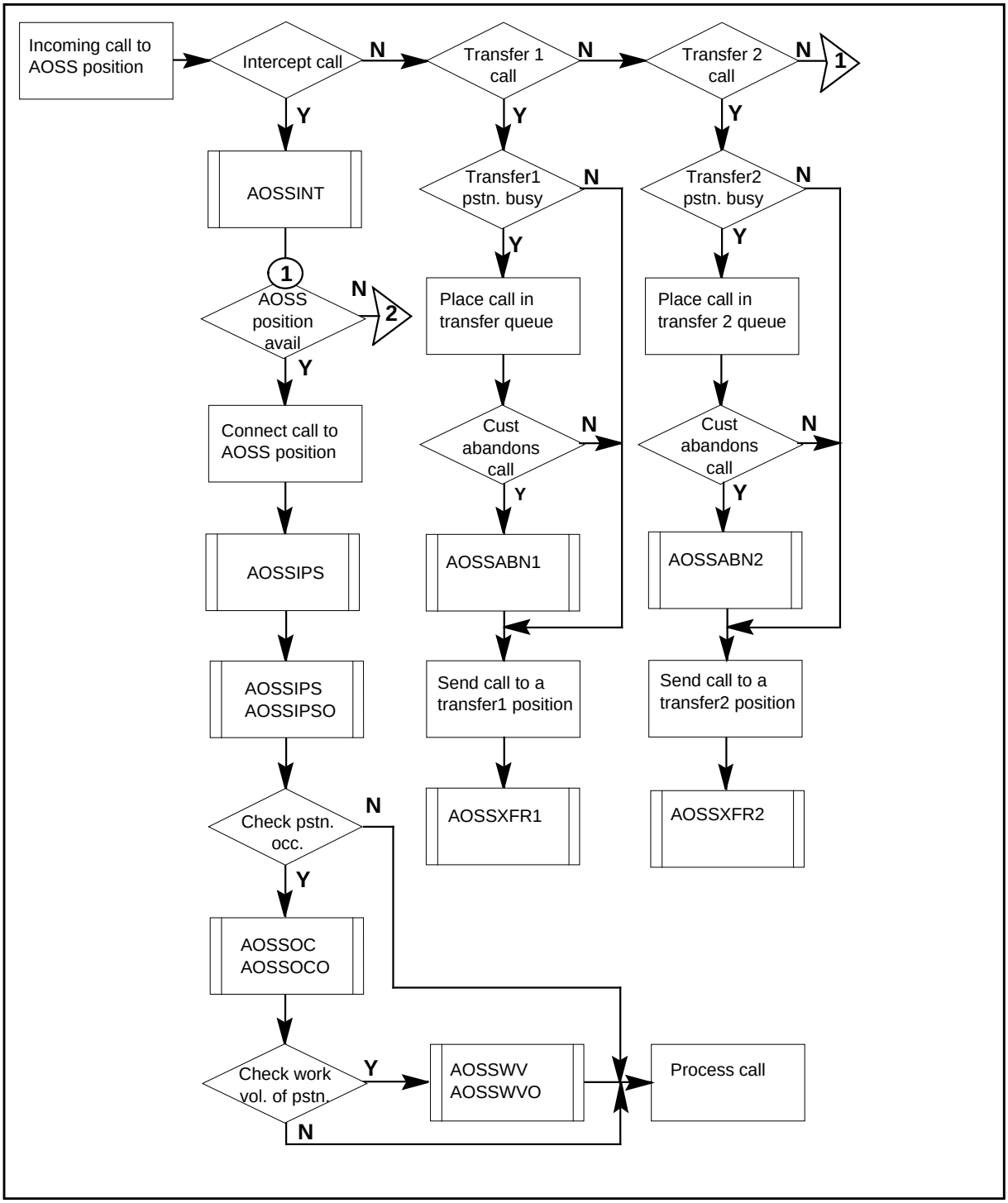
OM group AOSS (continued)

Associated functionality codes

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

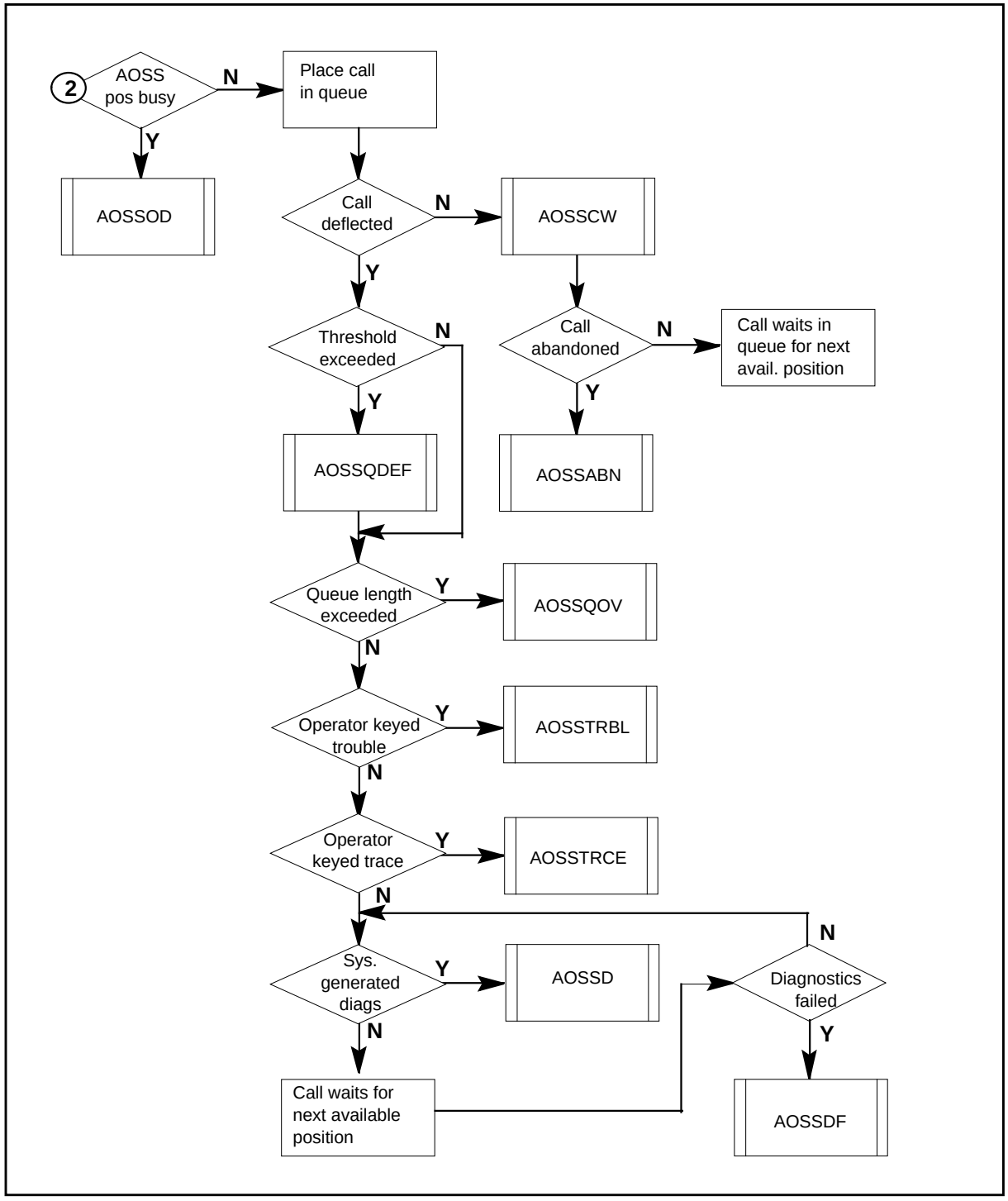
Functionality	Code
Auxiliary Operator Services System	NTX131AA

OM group AOSS registers



OM group AOSS (continued)

OM group AOSS registers (continued)



Register AOSSABN

AOSS calls waiting queue abandons

AOSSABN counts AOSS calls queued for attachment to an AOSS position that are abandoned by the subscriber.

Register AOSSABN release history

AOSSABN was introduced prior to BCS20.

Associated registers

None

Associated logs

None

Extension registers

None

Register AOSSABN1

AOSS calls waiting in transfer 1 queue abandoned

AOSSABN1 counts AOSS calls that are abandoned by the subscriber while queued for attachment to an AOSS transfer 1 position.

Use of this register does not increment the OM register AOSSABN.

Register AOSSABN1 release history

AOSSABN1 was introduced prior to BCS20.

Associated registers

AOSSABN2 counts AOSS calls that are abandoned by the subscriber while the call is queued for attachment to an AOSS transfer 2 position.

Associated logs

None

Extension registers

None

Register AOSSABN2

AOSS calls waiting in transfer 2 queue abandoned

OM group AOSS (continued)

AOSSABN2 counts AOSS calls that are abandoned by the subscriber while queued for attachment to an AOSS transfer 2 position.

Use of this register does not increment the OM register AOSSABN.

Register AOSSABN2 release history

AOSSABN2 was introduced prior to BCS20.

Associated registers

AOSSABN1 counts AOSS calls that are abandoned by the subscriber while the call is queued for attachment to an AOSS transfer 1 position.

Associated logs

None

Extension registers

None

Register AOSSCW

AOSS calls waiting queue usage

AOSSCW is a usage register. The scan rate is fast: 10 seconds. AOSSCW records the number of calls waiting in the queue for connection to an AOSS position.

Register AOSSCW release history

AOSSCW was introduced prior to BCS20.

Associated registers

None

Associated logs

None

Extension registers

None

Register AOSSD

AOSS position diagnostic

AOSSD counts system-initiated diagnostics on an AOSS position.

Register AOSSD release history

AOSSD was introduced prior to BCS20.

Associated registers

None

Associated logs

AOSS100 is generated by the AOSS subsystem when a data transmission error occurs during a connection between a digital modem and an AOSS position or device, which forces the digital modem to become system busy.

AOSS101 is generated by the AOSS subsystem when a reply from an AOSS device is not the expected reply, which forces the AOSS position to become system busy.

AOSS102 is generated by the AOSS subsystem when an AOSS device sends an unexpected message to the central control (CC), which forces the AOSS position to become system busy.

AOSS103 is generated by the AOSS subsystem when trouble is encountered during an AOSS call attempt, which forces the AOSS position to become system busy.

Extension registers

None

Register AOSSDF

AOSS position diagnostic failures

AOSSDF counts the failures of system-initiated diagnostics of an AOSS position.

Register AOSSDF release history

AOSSDF was introduced prior to BCS20.

Associated registers

None

Associated logs

AOSS100 is generated by the AOSS subsystem when a data transmission error occurs during a connection between a digital modem and an AOSS position or device, which forces the digital modem to become system busy.

OM group AOSS (continued)

AOSS101 is generated by the AOSS subsystem when a reply from an AOSS device is not the expected reply, which forces the AOSS position to become system busy.

AOSS102 is generated by the AOSS subsystem when an AOSS device sends an unexpected message to the central control (CC), which forces the AOSS position to become system busy.

AOSS103 is generated by the AOSS subsystem when trouble is encountered during an AOSS call attempt, which forces the AOSS position to become system busy.

Extension registers

None

Register AOSSINT

AOSS intercept calls

AOSSINT is incremented when an intercept call is attached to an AOSS position.

This register does not count operator-originated calls.

Register AOSSINT release history

AOSSINT was introduced prior to BCS20.

Associated registers

None

Associated logs

None

Extension registers

None

Register AOSSIPS

AOSS initial position seizures

AOSSIPS counts incoming calls that are attached to an AOSS position.

This register does not count operator-originated calls.

Register AOSSIPS release history

AOSSIPS was introduced prior to BCS.

Associated registers

None

Associated logs

None

Extension registers

AOSSIPSO

Register AOSSOC

AOSS position occupancy

AOSSOC is a usage register. The scan rate is fast: 10 seconds. AOSSOC records whether AOSS positions are handling incoming AOSS calls.

Register AOSSOC release history

AOSSOC was introduced prior BCS20.

Associated registers

None

Associated logs

None

Extension registers

AOSSOCO

Register AOSSOD

AOSS position maintenance

AOSSOD is a usage register. The scan rate is fast: 10 seconds. AOSSOD records when AOSS positions are out of service.

A position is out of service if it is manual busy, system busy, peripheral module busy, or installation busy.

Register AOSSOD release history

AOSSOD was introduced prior to BCS20.

OM group AOSS (continued)

Associated registers

None

Associated logs

None

Extension registers

None

Register AOSSQDEF

AOSS calls waiting queue deflections

AOSSQDEF counts call attempts to reach an AOSS operator that are deflected by the system when the queue overload threshold is exceeded.

An incoming call that is marked for transfer may be deflected. A call transferred from one operator to another is a recall and cannot be deflected.

If the call is a directory assistance call, it is routed to EMR5 treatment. If the call is an intercept call, it is routed to EMR6 treatment.

Register AOSSQDEF release history

AOSSQDEF was introduced prior to BCS20.

Associated registers

None

Associated logs

LINE 138 is generated by the line maintenance subsystem when a call is routed to a treatment after being call processing busy.

TRK 138 is generated by the trunk maintenance subsystem when a call is routed to a treatment after being call processing busy.

Extension registers

None

Register AOSSQOV

AOSS call waiting queue overflow

AOSSQOV counts call attempts to reach an AOSS operator that are deflected by the system when the assigned queue length is exceeded.

The queue length is assigned by using the office parameter AOSS_CALL_WAITING_Q_SIZE in table OFCENG.

Register AOSSQOV release history

AOSSQOV was introduced prior to BCS20.

Associated registers

None

Associated logs

LINE 138 is generated by the line maintenance subsystem when a call is routed to a treatment after being call processing busy.

TRK 138 is generated by the trunk maintenance subsystem when a call is routed to a treatment after being call processing busy.

Extension registers

None

Register AOSSTRBL

AOSS trouble reports

AOSSTRBL is incremented when an operator keys in the trouble report KPTBL+DIGITS+START. These trouble reports are received at any network maintenance input/output device (IOD).

Register AOSSTRBL release history

AOSSTRBL was introduced prior to BCS20.

Associated registers

None

Associated logs

AOSS106, 107, and 108 are generated by the AOSS subsystem when an operator at an AOSS position keys in a trouble report.

Extension registers

None

Register AOSSTRCE

AOSS trace

OM group AOSS (continued)

AOSSTRCE is incremented when an operator keys in the trouble report KPTRBL+DIGITS+START. A trace printout is initiated on both the traffic office and maintenance teletyprinters (TTY).

Register AOSSTRCE release history

AOSSTRCE was introduced prior to BCS20.

Associated registers

None

Associated logs

AOSS105 is generated by the AOSS subsystem when an operator at an AOSS position keys in a trouble report.

Extension registers

None

Register AOSSWV

AOSS position work volume

AOSSWV is incremented once for every second that a general operator position (not assistant, in-charge, or monitor) spends handling calls or is otherwise unavailable to handle a new call. The measurement is in call-seconds.

Register AOSSWV release history

AOSSWV was introduced prior to BCS20.

Associated registers

None

Associated logs

None

Extension register

AOSSWVO

Register AOSSXFR1

AOSS transfer initial position seizures 1

AOSSXFR1 is incremented when a call marked as transfer arrives at a transfer position. A call that is transferred from one operator to another is considered

a recall and is counted by the AOSSIPS register when it arrives at the first operator.

Register AOSSXFR1 release history

AOSSXFR1 was introduced prior to BCS20.

Associated registers

AOSSXFR2 is incremented when a call is transferred to a transfer position.

Associated logs

None

Extension registers

None

Register AOSSXFR2

AOSS transfer initial position seizures 2

AOSSXFR2 is incremented when a call is transferred to a transfer position.

Register AOSSXFR2 release history

AOSSXFR2 was introduced prior to BCS20.

Associated registers

AOSSXFR1 is incremented when a call marked as transfer arrives at a transfer position.

Associated logs

None

Extension registers

None

OM group AOSSVR

OM description

AOSS voice response management system (AOSSVR)

The OM group AOSSVR provides information on Auxiliary Operator Services System (AOSS) call actions that occur in offices that use audio response. The OM group AOSSVR counts the following call actions:

- auto-intercept starts
- auto-intercept automatic number identification failure (ANIF)
- auto-intercept route to operator
- auto-intercept post announcement cut-through to operator
- directory assistance (DA) post-announcement reconnects to operator
- intercept post announcement reconnects to operator
- transfer post announcement reconnects to transfer operator
- DA calls route to audio announcement
- intercept calls released to audio announcement
- attempts to release to audio that overflow
- attempts to release to audio that fail

Release history

OM group AOSSVR was introduced in BCS24.

Registers

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

```
AVRAI   AVRAIAF     AVRAIR0     AVRAICT
AVRDAR  AVRINTR     AVRXFR1R    AVRXFR2R
```

Group structure

OM group AOSSVR provides one tuple for each office.

Key field:
There is no key field

Info field:
There is no info field

The registers in this group increase if parameter AOSS_VOICE_RESPONSE in table OFCVAR is set to Y.

Associated OM groups

The OM group AVRARU provides information on audio response units in AOSS voice response offices.

The OM group TRMTCM-Register TCMOSVR increases if AVRAIAF or AVRAIRO does not occur.

Associated functional groups

Traffic Operator Position System (TOPS) is an associated functional group of OM group AOSSVR.

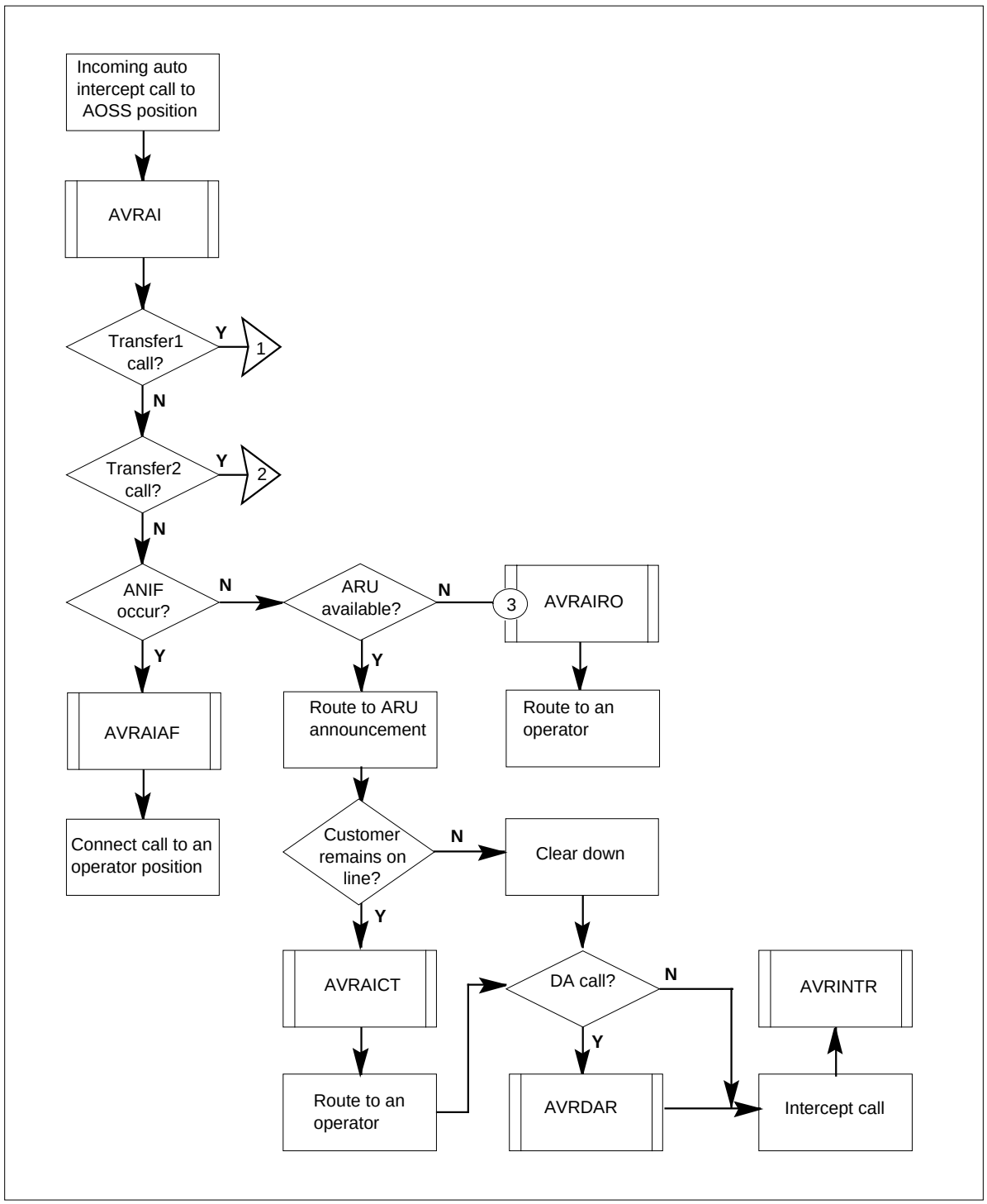
Associated functionality codes

The associated functionality codes of OM group AOSSVR appear in the following table.

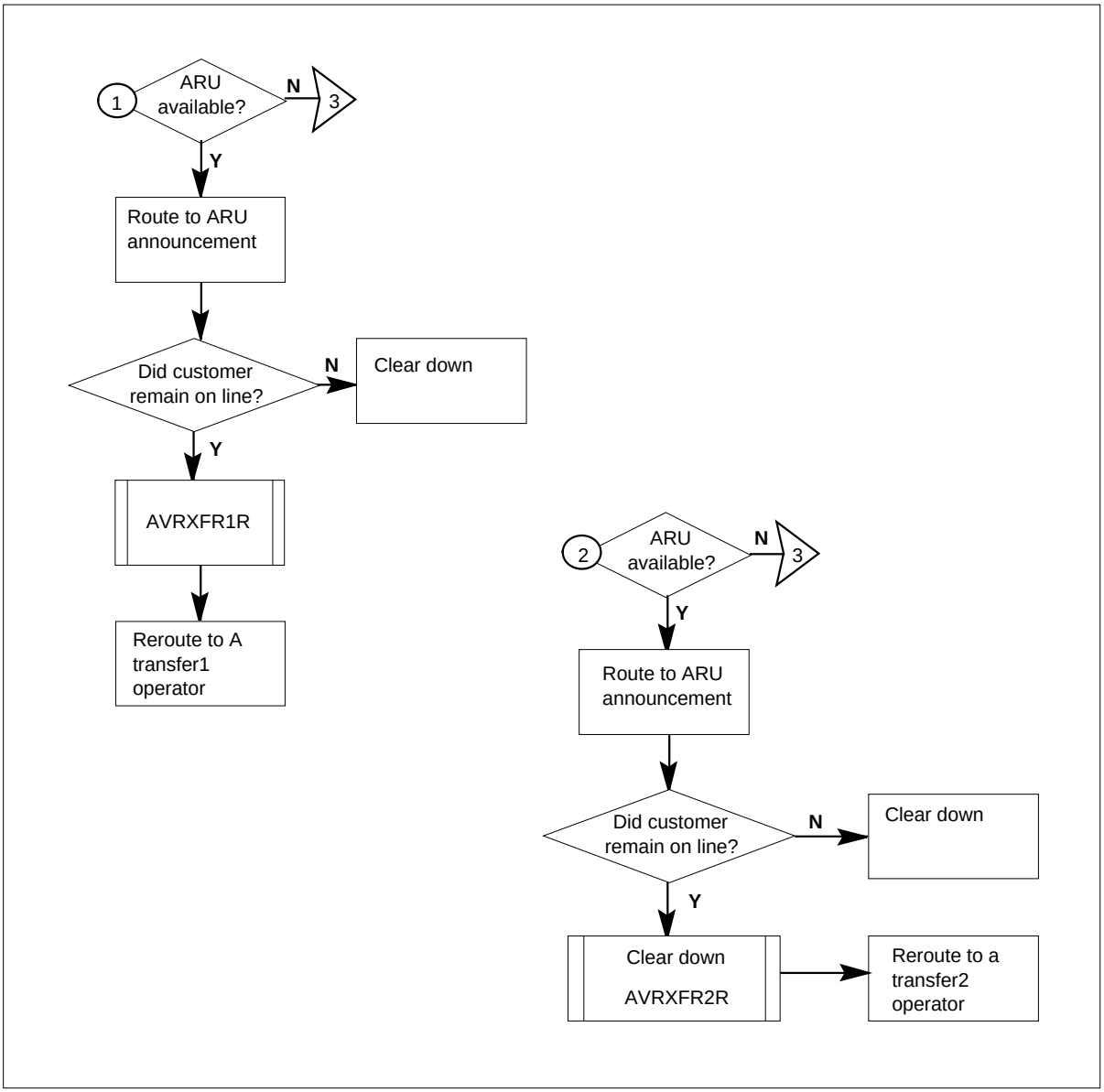
Functionality	Code
AOSS VR Call Handling	NTX720AA

OM group AOSSVR (continued)

OM group AOSSVR registers



OM group AOSSVR registers (continued)



Register AVRAI

AOSS auto intercept (AVRAI)

Register AVRAI increases when an auto-intercept call uses the Directory Assistance System (DAS) to initiate a search.

Register AVRAI release history

Register AVRAI was introduced in BCS24.

OM group AOSSVR (continued)

Associated registers

Register AVRAIAF increases when an automatic number identification failure (ANIF) occurs on an auto-intercept call. The system routes the call to an operator position.

Register AVRAIRO increases when the system routes an auto-intercept call to an operator.

Register TRMTCM _TCMOSVR increases if AVRAIAF or AVRAIRO do not occur. The system routes the call to operator service voice response (OSVR) treatment.

Associated logs

There are no associated logs.

Register AVRAIAF

AOSS auto intercept ANIF (AVRAIAF)

Register AVRAIAF increases when an automatic number identification failure (ANIF) occurs on an auto-intercept call. The system routes the call to an operator position.

A lack of dial pulse/multifrequency (DP/MF) receivers causes ANIF.

Register AVRAIAF release history

Register AVRAIAF was introduced in BCS24.

Associated registers

There are no associated registers.

Associated logs

The trunk maintenance subsystem generates TRK118 if a DP/MF reception trouble occurs.

Register AVRAICT

AOSS auto-intercept cut-through (AVRAICT)

Register AVRAICT increases when an auto-intercept call routes to an operator. To increase the register, the subscriber must remain on the line beyond the post-announcement timeout. The post-announcement timeout occurs after the end of the audio recording unit announcement cycle.

The value in this register is equal to or less than the value in AVRAI.

Register AVRAICT release history

Register AVRAICT was introduced in BCS24.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Register AVRAIRO

AOSS auto-intercept route to operator (AVRAIRO)

Register AVRAIRO increases when the system routes an auto-intercept call to an operator. The system routes an auto-intercept call to an operator when the database returns invalid announcement data or billing data. The system also routes an auto-intercept call to an operator when an audio recording unit (ARU) that provides the referenced announcement is not present.

The value in this register is equal to or less than the value in AVRAI. The contents of this register depend on the contents of the database and the availability of an ARU.

Register AVRAIRO release history

Register AVRAIRO was introduced in BCS24.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Register AVRDAR

AOSS directory assistance recall (AVRDAR)

Register AVRDAR increases when all of the following events occur:

- an operator handles a directory assistance call
- the operator releases the call to voice response (VR)
- the call reconnects to an announcement cycle.

Normally, the value in this register is less than or equal to AOSS OM AOSSIPS office parameter AOSS_VR_MAXIMUM_DA_RECALLS. If AOSS_VR_MAXIMUM_DA_RECALLS remains zero, the value in this

OM group AOSSVR (continued)

register is zero. The value in this register will tend to be higher when AOSS_VR_POST_ANN_TIMEOUT is low.

Register AVRDAR release history

Register AVRDAR was introduced in BCS24.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Register AVRINTR

AOSS INT recall (AVRINTR)

Register AVRINTR increases when all of the following events occur:

- an operator handles an intercept call
- the operator releases the call to VR
- the call reconnects to an operator because the subscriber remains on the line beyond the post-announcement timeout

The post-announcement timeout occurs after the end of the audio recording unit announcement cycle.

Normally, the value in this register is less than or equal to AOSS OM AOSSINT office parameter AOSS_VR_MAXIMUM_INT_RECALLS. If the value in AOSS_VR_MAXIMUM_INT RECALLS remains zero, the value in this register is zero. When the value of AOSS_VR_POST_ANN_TIMEOUT is low, the value in this register tends to be high.

Register AVRINTR release history

Register AVRINTR was introduced in BCS24.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Register AVRXFR1R

AOSS transfer 1 recall (AVRXFR1R)

Register AVRXFR1R increases when all of the following events occur:

- a transfer 1 operator handles a directory assistance or intercept call
- the operator releases the call to VR
- the call reconnects to a transfer 1 operator because the subscriber remains on the line after the audio recording unit announcement cycle

The value in this register is less than or equal to AOSS OM AOSSIPS office parameter AOSS_VR_MAXIMUM_INT_RECALLS or AOSS_VR_MAXIMUM_DA_RECALLS.

Register AVRXFR1R release history

Register AVRXFR1R was introduced in BCS24.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Register AVRXFR2R

AOSS transfer 2 recall (AVRXFR2R)

Register AVRXFR2R increases when all of the following events occur:

- a transfer 2 operator handles a directory assistance or intercept call
- the operator releases the call to VR
- the call reconnects to a transfer 2 operator because the subscriber remains on line beyond the post-announcement timeout

The post-announcement timeout occurs after the end of the audio recording unit announcement cycle.

The value in this register is less than or equal to AOSS OM AOSSIPS office parameter AOSS_VR_MAXIMUM_INT_RECALLS or AOSS_VR_MAXIMUM_DA_RECALLS. The value in this register remains zero if AOSS_VR_MAXIMUM_INT_RECALLS remains zero and AOSS_VR_MAXIMUM_DA_RECALLS also remains zero. When AOSS_VR_POST_ANN_TIMEOUT is low, the value in this register is high.

Register AVRXFR2R release history

Register AVRXFR2R was introduced in BCS24.

OM group AOSSVR (end)

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

OM group APOCCS

OM description

Application processor node system counts (APOCCS)

The OM group APOCCS measures the scheduler class on the application processor (AP) node.

Release history

The OM group APOCCS was introduced to BCS33.

Registers

The OM group APOCCS register appears on the MAP terminal as follows:

```
APCPOCC     APSCHED     APFORE  APMAINT
APBKG       APIDLE      APIO
```

Group structure

The OM group APOCCS provides one tuple for each sync-matched node.

Key field:
SMN_SYMB_NUM

Info field:
There is no info field

Associated OM groups

There are no associated OM groups.

Associated functional groups

The following are associated functional groups of OM group APOCCS:

- File Processor
- Line Trunk Server

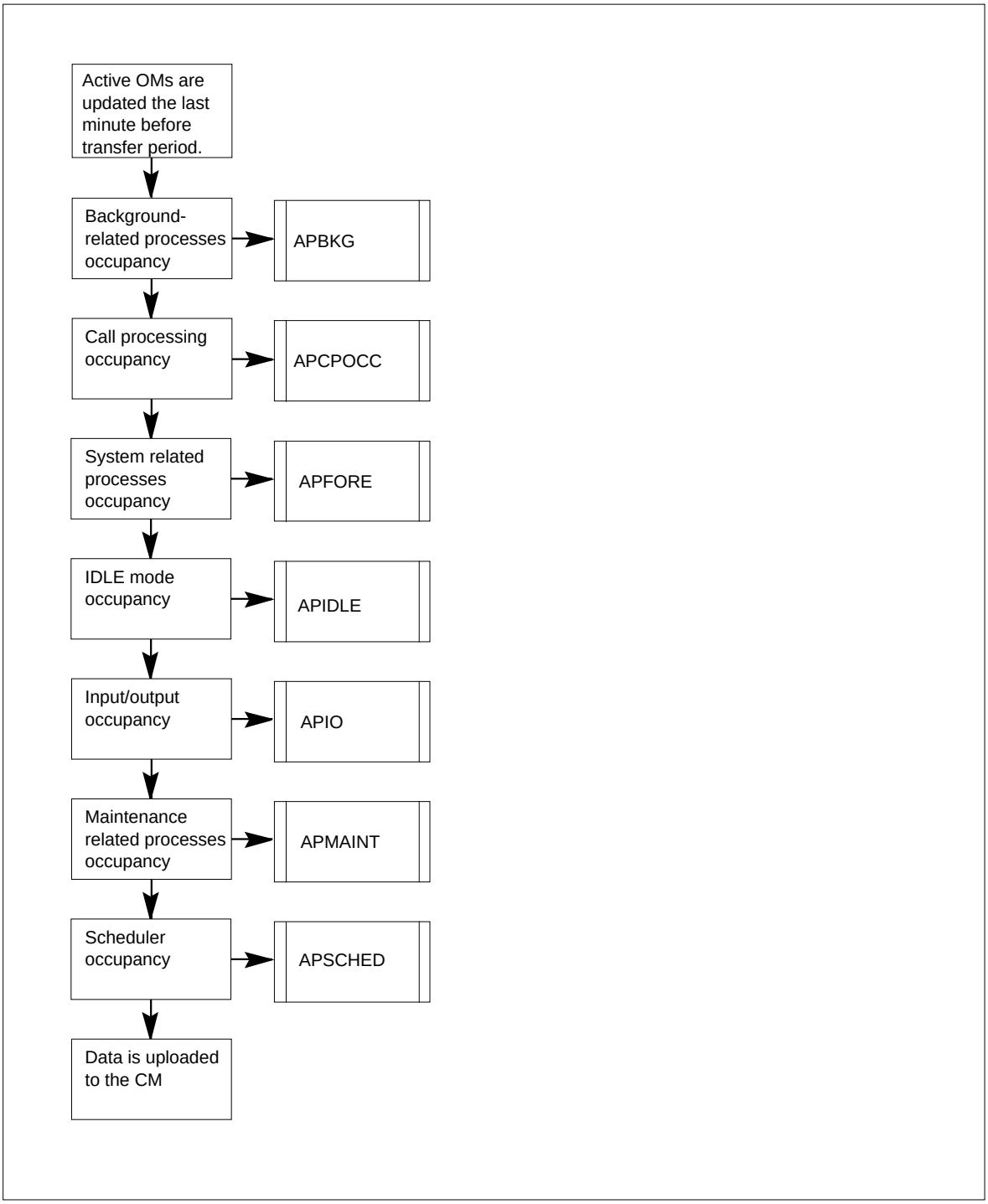
OM group APOCCS (continued)

Associated functionality codes

The associated functionality code of OM group APOCCS appears in the following table.

Functionality	Code
Application Processor Base	NTXF06AA

OM group APOCCS registers



OM group APOCCS (continued)

Register APBKG

AP node background process occupancy (APBKG)

Register APBKG increases the CPXFR process and measures the background-related processes occupancy.

Register APBKG release history

Register APBKG was introduced in BCS33.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Register APCPOCC

AP node call-processing occupancy (APCPOCC)

The CPXFR process increases register APCPOCC. This register measures call-processing occupancy.

Register APCPOCC release history

Register APCPOCC was introduced in BCS33.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Register APFORE

AP node system-related occupancy (APFORE)

The CPXFR process increases register APFORE. This register measures the system-related processes occupancy.

Register APFORE release history

Register APFORE was introduced in BCS33.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Register APIDLE

AP node idle occupancy (APIDLE)

The CPXFR process increases register APIDLE. This register measures the time the CPU spends in the IDLE state.

Register APIDLE release history

Register APIDLE was introduced in BCS33.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Register APIO

AP node I/O occupancy (APIO)

The CPXFR process increases register APIO. This register measures the time the CPU spends performing input/output (I/O) functions.

Register APIO release history

Register APIO was introduced in BCS33.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Register APMAINT

AP node maintenance occupancy (APMAINT)

The CPXFR process increases register APMAINT. This register measures the maintenance-related processes occupancy.

Register APMAINT release history

Register APMAINT was introduced in BCS33.

OM group APOCCS (end)

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Register APSCHED

AP node scheduler occupancy (APSCHED)

The CPXFR process increases register APSCHED. This register measures the scheduler occupancy.

Register APSCHED release history

Register APSCHED was introduced in BCS33.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

OM group APSYS

OM description

Application processor node system counts (APSYS)

The OM group APSYS counts basic hardware components of the application processor (AP), including:

- the processor base maintenance
- port maintenance
- as state changes in the duplex operation of the node

The APs are sync-matched nodes, and assume it to operate in synchronous mode. Although the AP remains in use while not in sync, the AP considers the simplex mode of operation an in-service trouble state. The amount of time the node spends in the simplex mode increases in the registers in this group. These registers measure the accuracy of the software that runs on the node and record details from the routine exercise (REX) tests.

Release history

The OM group APSYS was introduced in BCS33.

Registers

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

```
APSSYNC     APSDROP     APSSWACT    APMSWACT
APRSWACT    APTRMISM    APTRAP      APCPUFLT
APMEMFLT    APPRTFLT    APCPUERR    APMEMERR
APPRTERR    APSWERR     APREXFLT    APRCPUFL
APRMEMFL    APRPRTFL    APSSMPXU    APMSMPXU
APRSMPXU
```

Group structure

The OM group APSYS provides one tuple for each sync-matched node.

Key field:
SMN_SYMB_NUM

Info field:
There is no info field.

Associated OM groups

There are no associated OM groups.

OM group APSYS (continued)

Associated operating groups

The following operating groups associate with OM group APSYS:

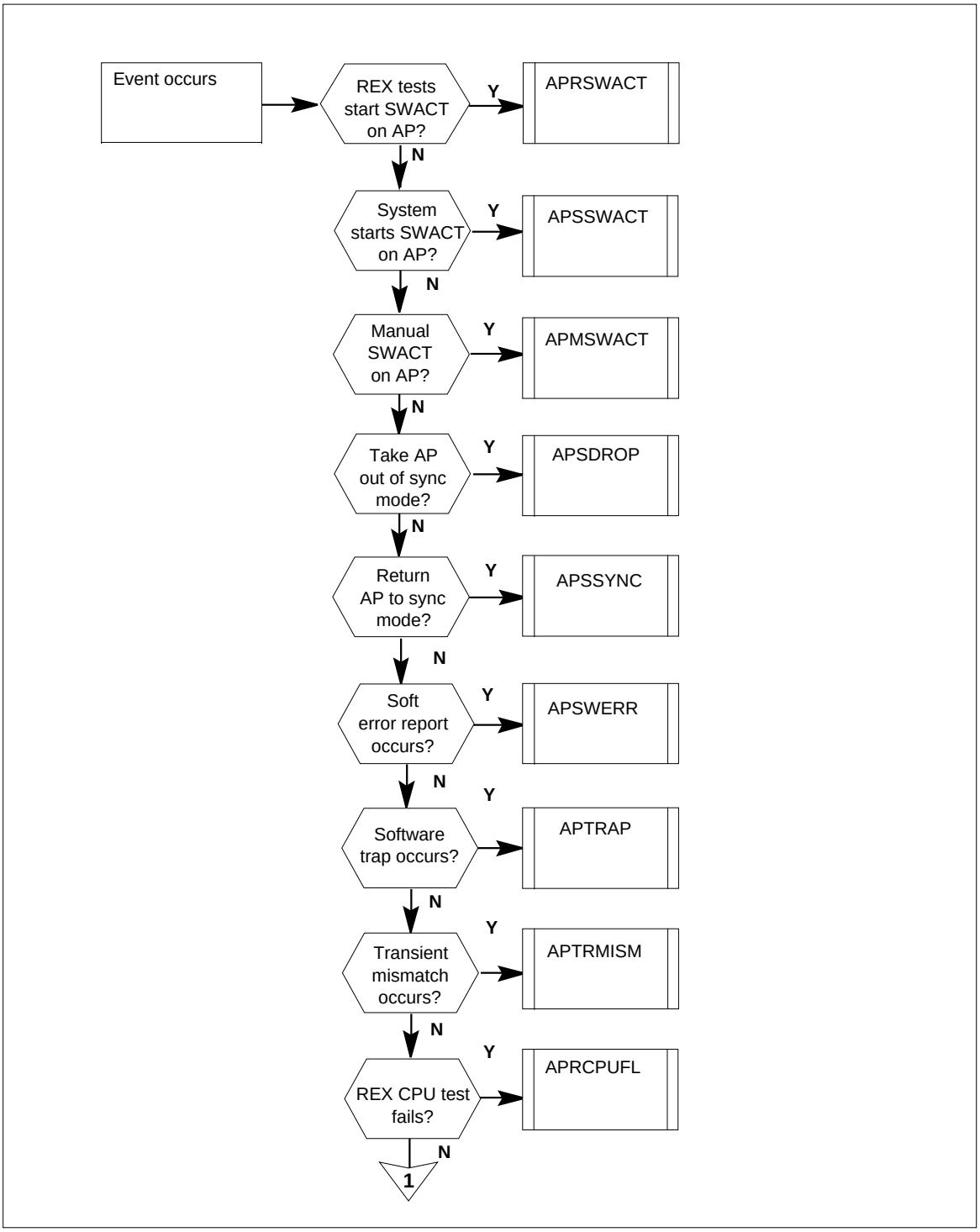
- File Processor
- Line Trunk Server

Associated functionality codes

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

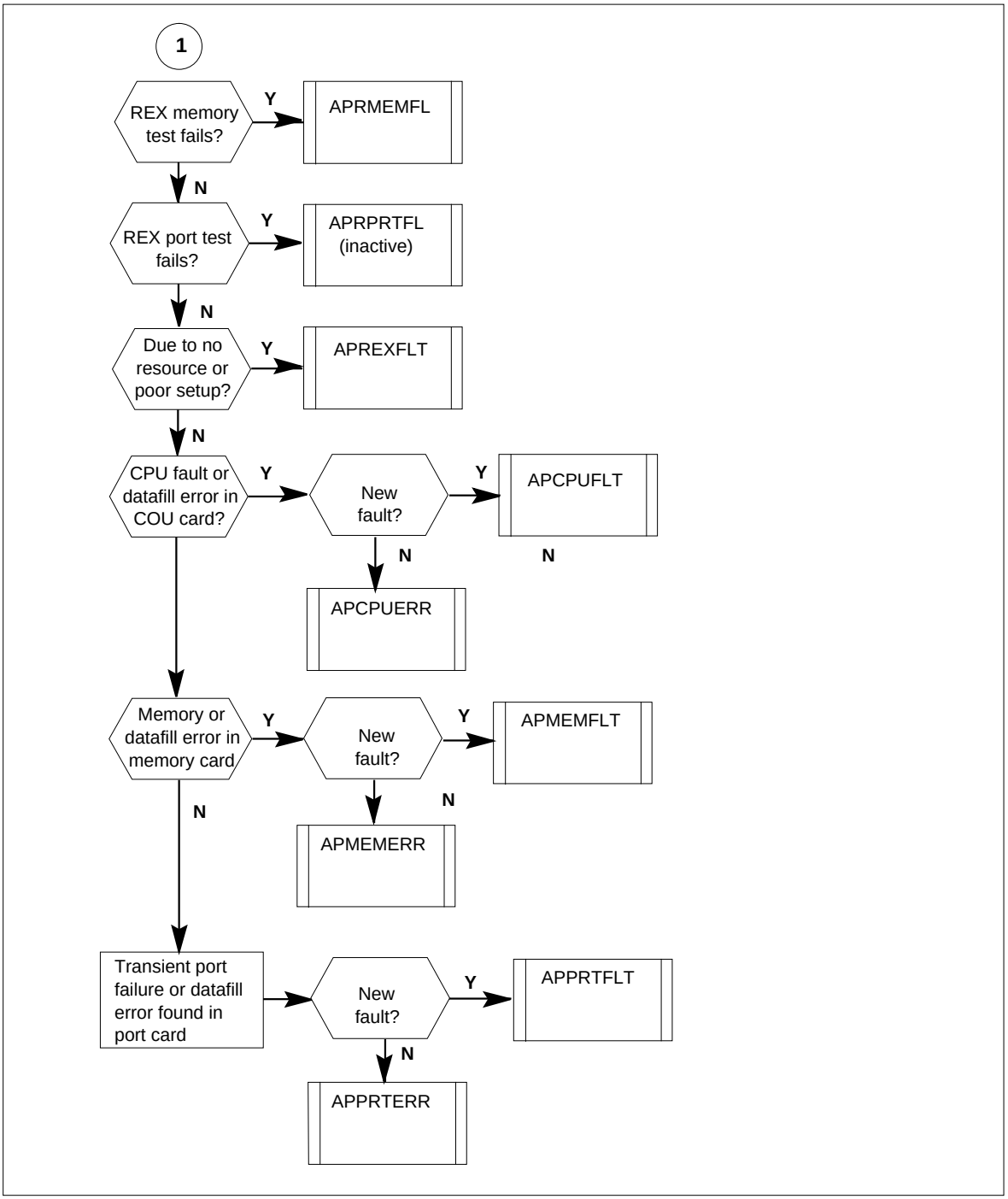
Functionality	Code
Application Processor Base	NTXF06AA

OM group APSYS registers

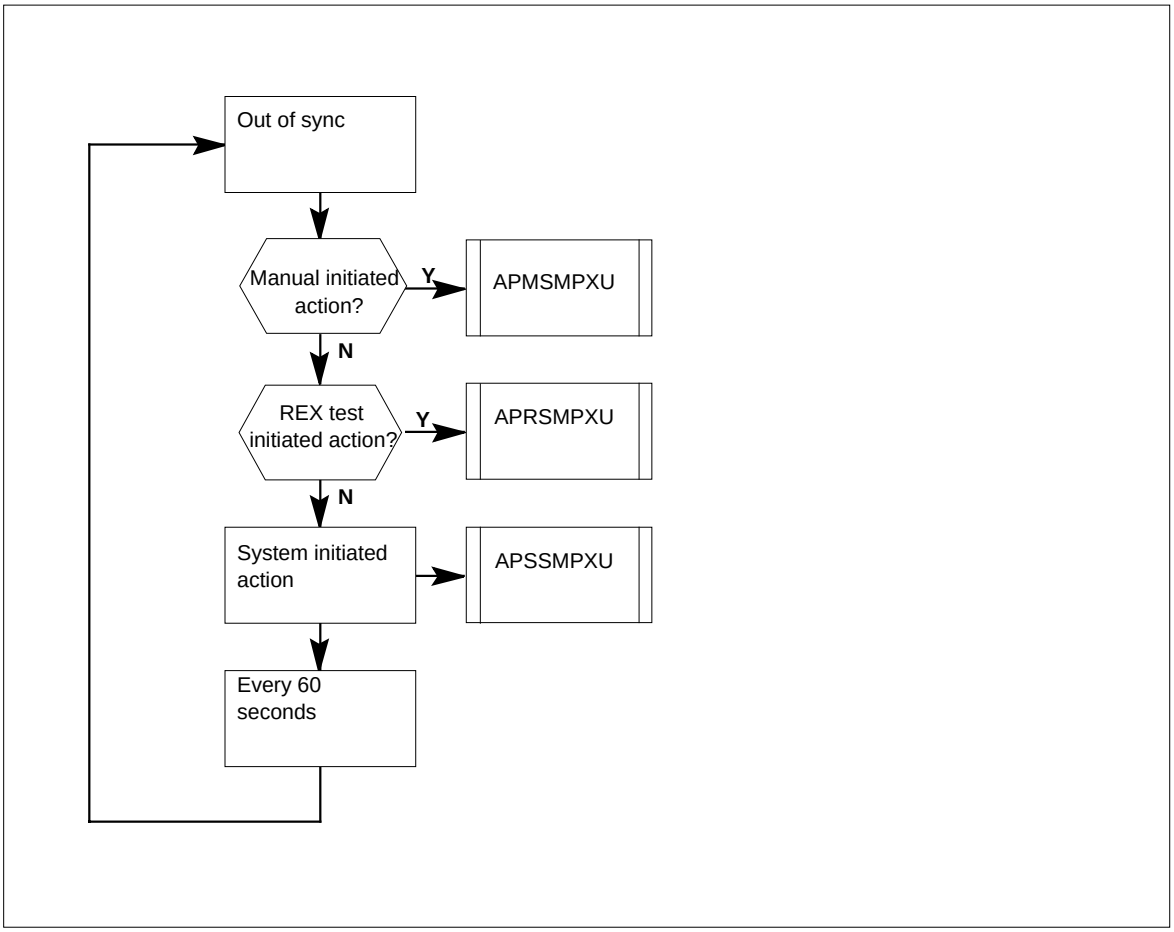


OM group APSYS (continued)

OM group APSYS registers



OM group APSYS use registers



Register APCPUERR

AP node CPU soft error (APCPUERR)

Register APCPUERR increases when the system finds a transient CPU fault or an entry error related to the CPU card.

Register APCPUERR release history

Register APCPUERR was introduced in BCS33.

Associated registers

There are no associated registers.

Associated logs

PM310

OM group APSYS (continued)

PM319

Register APCPUFLT

AP node CPU test fault (APCPUFLT)

Register APCPUFLT increases when a CPU test fails for a new reason.

Register APCPUFLT release history

Register APCPUFLT was introduced in BCS33.

Associated registers

There are no associated registers.

Associated logs

PM310

Register APMEMERR

AP node memory soft error (APMEMERR)

Register APMEMERR increases when the system finds a transient memory fault or an entry error related to a memory card.

Register APMEMERR release history

Register APMEMERR was introduced in BCS33.

Associated registers

There are no associated registers.

Associated logs

PM311

PM319

Register APMEMFLT

AP node memory test fault (APMEMFLT)

Register APMEMFLT increases when a memory test fails for a new reason.

Register APMEMFLT release history

Register APMEMFLT was introduced in BCS33.

Associated registers

There are no associated registers.

Associated logs

PM311

Register APMSMPXU

AP node manual simplex operation (APMSMXPU)

Register APMSMXPU measures the time the AP spends in a simplex mode of operation as a result of a manually initiated action.

Register APMSMPXU release history

Register APMSMPXU was introduced in BCS33.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Register APMSWACT

AP node manual activity change attempt (APMSWACT)

Register APMSWACT increases with every manual attempt to switch processor activity on the AP.

Register APMSWACT release history

Register APMSWACT was introduced in BCS33.

Associated registers

There are no associated registers.

Associated logs

PM501

Register APPRTERR

AP node memory soft error (APPRTERR)

Register APPRTERR increases when the system finds a transient port fault or an entry error related to a port card.

Register APPRTERR release history

Register APPRTERR was introduced in BCS33.

OM group APSYS (continued)

Associated registers

There are no associated registers.

Associated logs

PM312

PM319

Register APPRTFLT

AP node port test fault (APPRTFLT)

Register APPRTFLT increases when a port test fails for a new reason.

Register APPRTFLT release history

Register APPRTFLT was introduced in BCS33.

Associated registers

There are no associated registers.

Associated logs

PM312

Register APRCPUFL

AP node REX CPU class failed (APRCPUFL)

Register APRCPUFL increases when the REX CPU class test fails.

Register APRCPUFL release history

Register APRCPUFL was introduced in BCS33.

Associated registers

There are no associated registers.

Associated logs

PM900

Register APREXFLT

AP node REX test fault (APREXFLT)

Register APREXFLT increases when the system aborts the REX test because of a resource that is not available or because of a lack of proper setup.

Register APREXFLT release history

Register APREXFLT was introduced in BCS33.

Associated registers

There are no associated registers.

Associated logs

IEM900

Register APRMEMFL

AP node REX memory class failed (APRMEMFL)

Register APRMEMFL increases when the REX memory class test fails.

Register APRMEMFL release history

Register APRMEMFL was introduced in BCS33.

Associated registers

There are no associated registers.

Associated logs

IEM900

Register APRPRTFL

AP node REX port class failed (APRPRTFL)

Register APRPRTFL increases when the REX port class test fails.

This register is not activated.

Register APRPRTFL release history

Register APRPRTFL was introduced in BCS33.

Associated registers

There are no associated registers.

Associated logs

IEM900

Register APRSMPXU

AP node REX test simplex operation (APRSMPXU)

OM group APSYS (continued)

Register APRSMPXU measures the amount of time the AP spends in a simplex mode of operation as a result of an action initiated by a REX test.

Register APRSMPXU release history

Register APRSMPXU was introduced in BCS33.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Register APRSWACT

AP node REX test activity change attempt (APRSWACT)

Register APRSWACT increases when the REX test attempts to test switch processor activity on the AP.

Register APRSWACT release history

Register APRSWACT was introduced in BCS33.

Associated registers

There are no associated registers.

Associated logs

PM501

Register APSDROP

AP node system drop-of-sync attempt (APSDROP)

Register APSDROP increases when the system attempts to take the AP out of its synchronous mode of operation.

Register APSDROP release history

Register APSDROP was introduced in BCS33.

Associated registers

There are no associated registers.

Associated logs

These logs associate with register APSDROP:

- PM317
- PM318
- PM503

Register APSSMPXU

AP node manual simplex operation (APSSMPXU)

Register APSSMPXU measures the amount of time the AP spends in simplex mode of operation as a result of a system-initiated action.

Register APSSMPXU release history

Register APSSMPXU was introduced in BCS33.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Register APSSWACT

AP node system activity change attempt (APSSWACT)

Register APSSWACT increases when the system attempts to switch processor activity on the AP.

Register APSSWACT release history

Register APSSWACT was introduced in BCS33.

Associated registers

There are no associated registers.

Associated logs

There are no associated registers.

Register APSSYNC

AP node system sync attempt (APSSYNC)

Register APSSYNC increases when the system attempts to put the AP in synchronous mode of operation.

OM group APSYS (continued)

Register APSSYNC release history

Register APSSYNC was introduced in BCS33.

Associated registers

There are no associated registers.

Associated logs

PM503

Register APSWERR

AP node soft error (APSWERR)

Register APSWERR increases when a soft error report occurs.

Register APSWERR release history

Register APSWERR was introduced in BCS33.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Register APTRAP

AP node trap (APTRAP)

Register APTRAP increases when a software trap occurs.

Register APTRAP release history

Register APTRAP was introduced in BCS33.

Associated registers

There are no associated registers.

Associated logs

PM320

Register APTRMISM

AP node transient mismatch (APTRMISM)

Register APTRMISM increases when a transient mismatch occurs.

Register APTRMISM release history

Register APTRMISM was introduced in BCS33.

Associated registers

There are no associated registers.

Associated logs

The following logs associate with register APTRMISM:

- PM317
- PM318
- PM503

OM group AR

OM description

Automatic recall (AR)

The OM group AR monitors the use of the AR feature for an office. You can obtain this feature alone or as part of the universal access group. The OM group AR counts the following events:

- universal access attempts and denials
- feature activation, denials, and reactivation
- two-level activation
- lack of software resources
- denial announcement and tones
- immediate and delayed processing
- timeouts (These events are not counted on the DMS-100G switch.)
- originate, terminate, and resume scanning (These events are not counted on the DMS-100G switch.)
- selective call rejections (These events are not counted on the DMS-100G switch.)
- subscriber terminated requests (These events are not counted on the DMS-100G switch.)
- terminations that are not normal of one level and two-level activation of AR (These events are not counted on the DMS-100G switch.)
- operation code input that is not correct

Release history

The OM group AR was introduced in BCS27.

APC010

Added the AR disabling LCID (ARDSBLID) register.

GL04

The AR subset used for the DMS-100G switch was defined.

NA007

Register ARPVTALW was added for CMS AR Screening of Private Calls (CASOP).

NA002

Register ARPVTBLK was added.

BCS35

Registers ARDENY and ARUNIV were added for universal access.

BCS29

Registers ARARN and ARNIMED were added.

Registers

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

```
ARATT       ARFDEN      AROVFL      ARLTDA
ARSTDA      ARSTDT      ARIMED      ARDLAY
ARTIME      ARRSCN      ARSCR       ARDATT
ARPRCD      AROPTO      ARBDIN      ARABT
ARRACT      ARSTR       ARTSCN      AROSCN
ARARN       ARNIMED     ARUNIV      ARDENY
ARPVTBLK    ARPVTALW    ARDSBLID
```

The following OM group AR registers increase in this release:

- ARARN
- ARATT
- ARBDIN
- ARDENY
- ARDSBLID
- ARFDEN
- ARIMED
- ARLTDA
- ARNIMED
- AROVFL
- ARSTDA
- ARUNIV

Group structure

The OM group AR provides one tuple for each office.

OM group AR (continued)

Key field:
There is no key field.

Info field:
There is no info field.

For AR OM registers to increase, enter AR activation and deactivation codes in table IBNXLA for Residential Enhanced Service (RES) customer groups.

For AR OM registers to increase, enter AR activation codes in table IBNXLA for Residential Enhanced Service (RES) customer groups.

Associated OM groups

The OM group OTS_ORGFSET increases when AR is activated or deactivated. The OTS_ORGFSET appears in DMS-100 offices without TOPS.

Associated functional groups

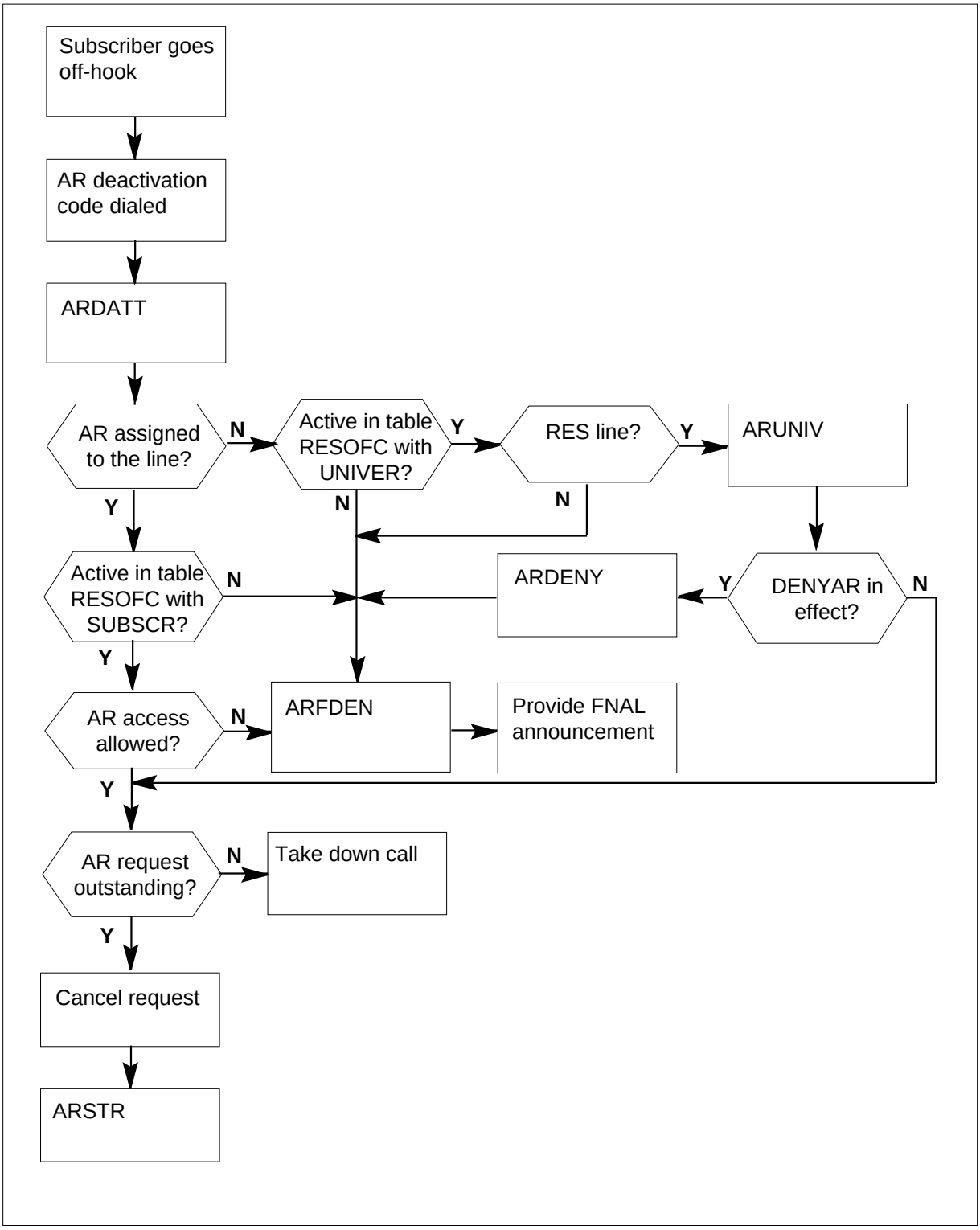
The CLASS/CMS functional group associates with OM group AR.

Associated functionality codes

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

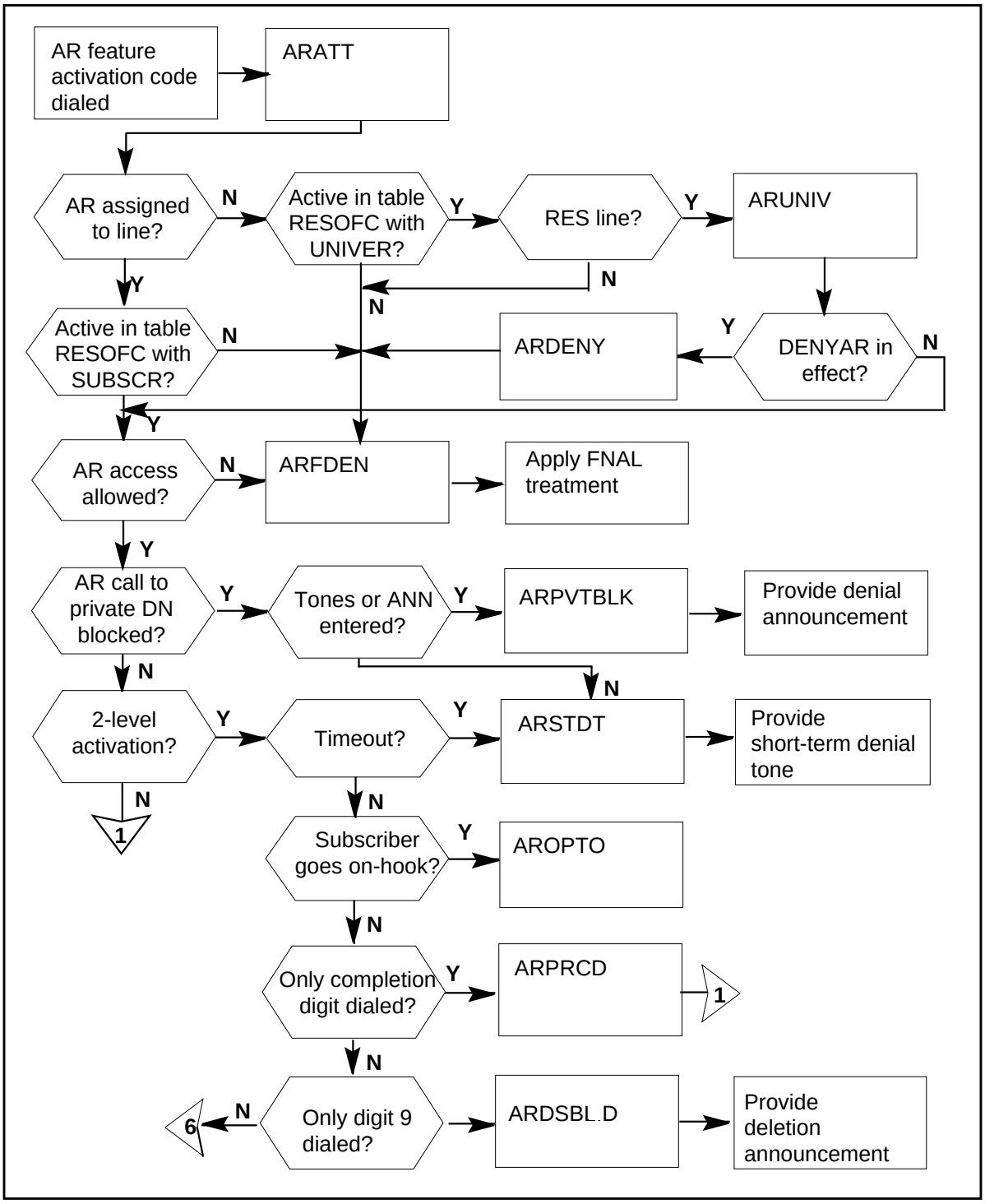
Functionality	Code
CLASS--Call Setup	NTXA00AA

OM group AR registers (AR/ACB not supported on the DMS-100G switch): deactivation

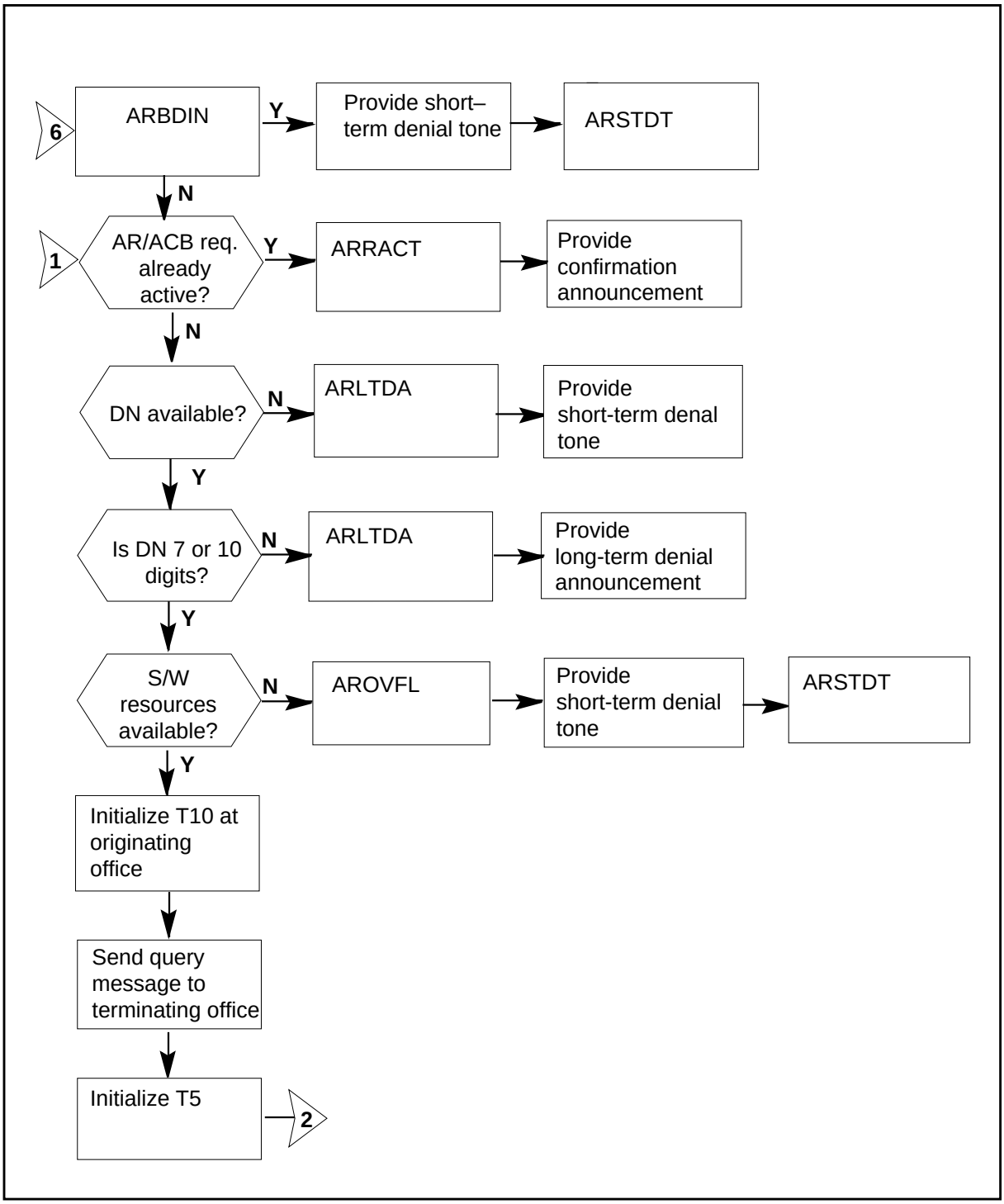


OM group AR (continued)

OM group AR registers: activation (AR/ACB are not supported on the DMS-100G switch) (continued)

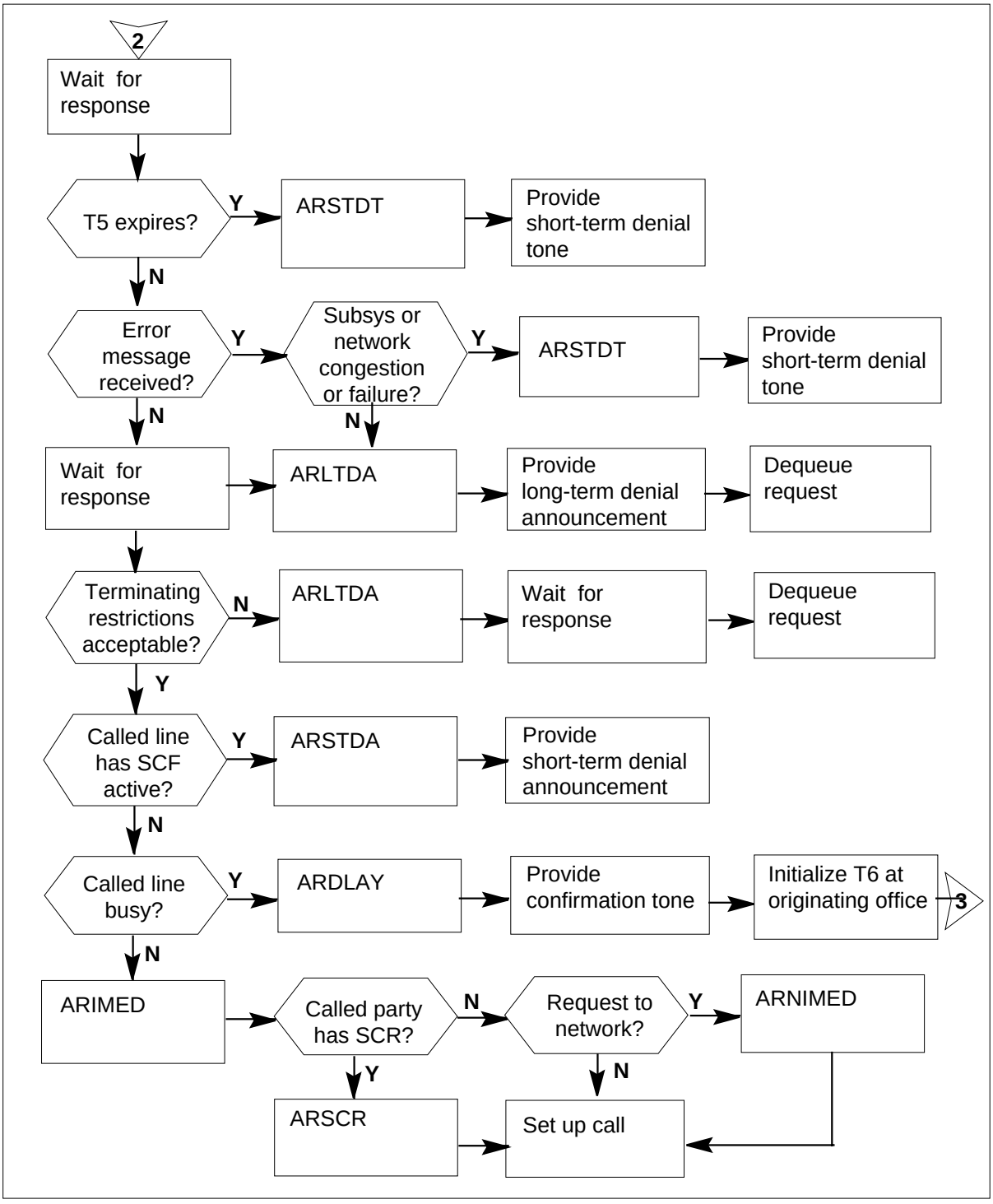


OM group AR registers: activation (AR/ACB are not supported on the DMS-100G switch) (continued)

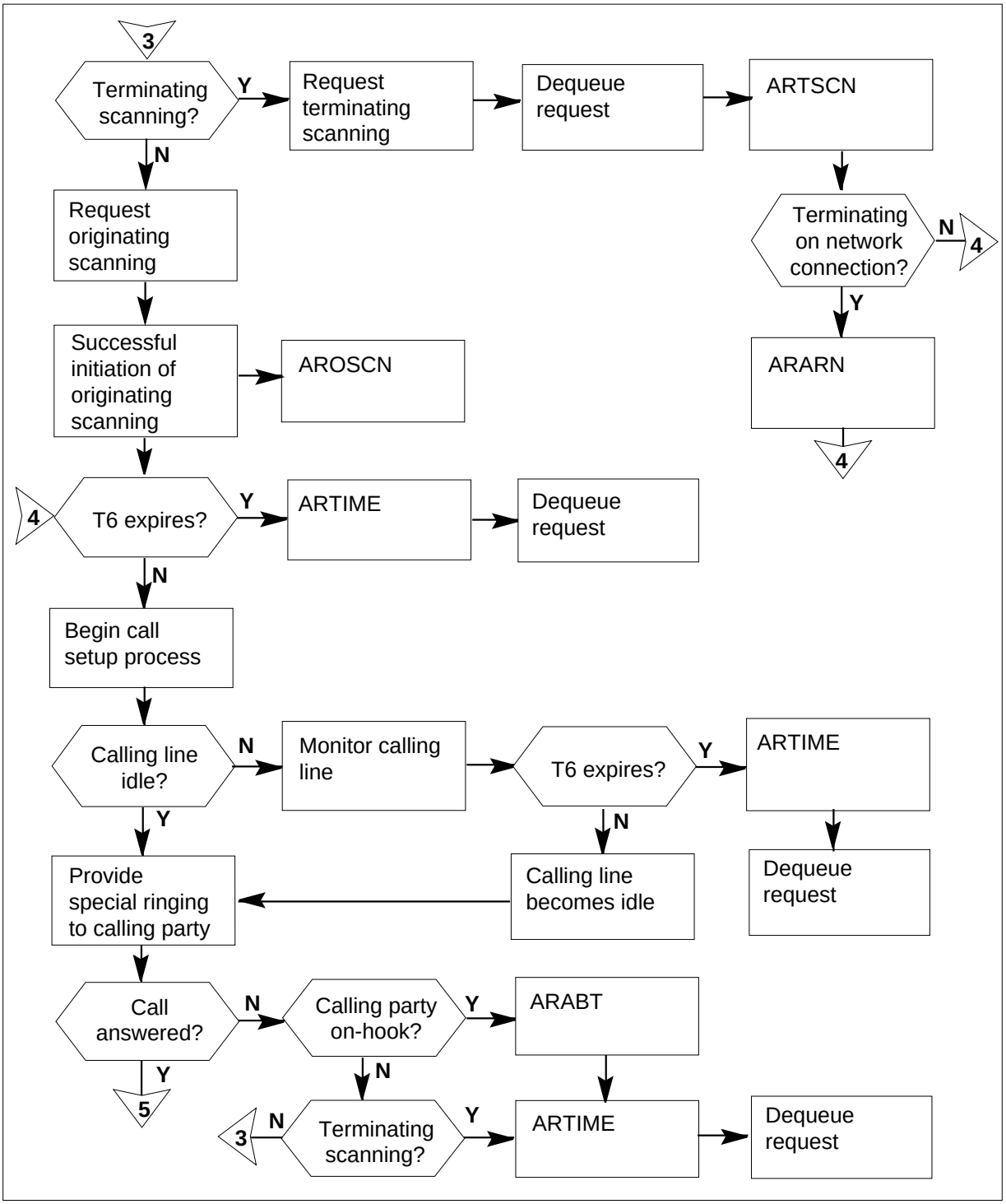


OM group AR (continued)

OM group AR registers: activation (AR/ACB not supported on the DMS-100G switch) (continued)

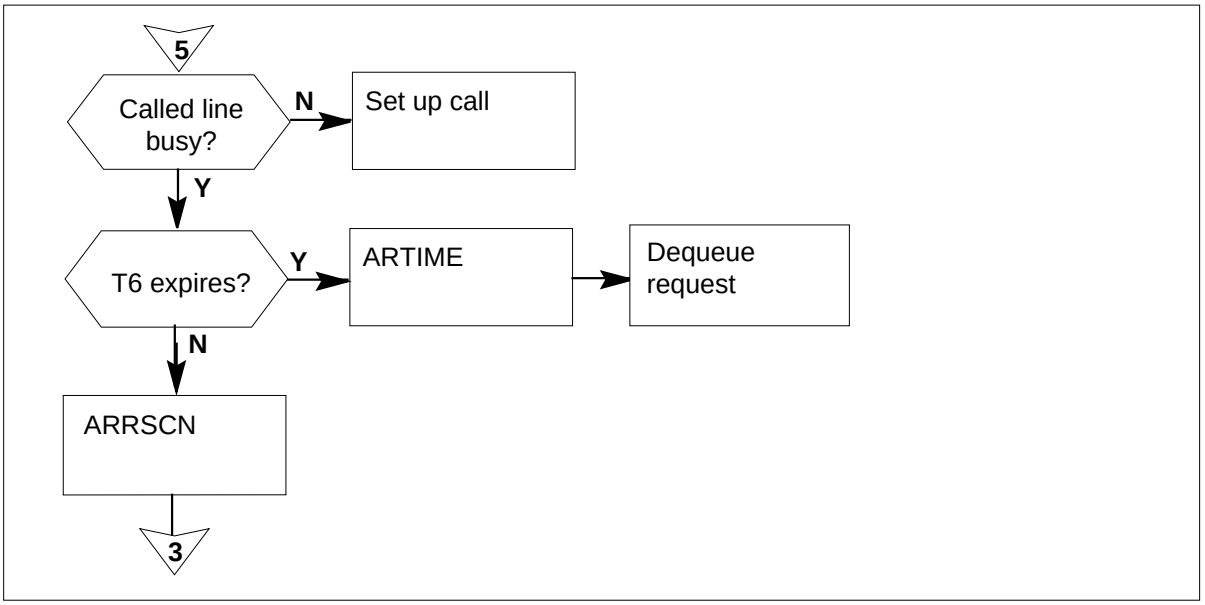


OM group AR registers: activation (AR/ACB not supported on the DMS-100G switch) (continued)



OM group AR (continued)

OM group AR registers: activation (AR/ACB not supported on the DMS-100G switch) (continued)



Register ARABT

AR abnormal termination (ARABT)

Register AR abnormal termination (ARABT) counts AR requests that terminate during delayed processing because of:

- interswitch protocol
- communications problems such as network congestion
- system errors

The call routes to SYFL treatment if a system error occurs. This register is not supported on the DMS-100G switch.

Register ARABT release history

Register ARABT was introduced in BCS27.

Associated registers

Register ARATT increases each time ARABT increases.

Associated logs

The system generates LINE138 when a call routes to SYFL treatment.

Extension registers

There are no extension registers.

Register ARARN

AR attempts terminating on a network (ARARN)

Register AR attempts terminating on a network (ARARN) counts call attempts made on a line with the AR line feature that terminate on a network.

Register ARARN release history

Register ARARN 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 ARATT

AR attempts (ARATT)

Register AR attempts (ARATT) increases when a user dials the AR feature activation code.

Register ARATT release history

Register ARATT was introduced in BCS27.

Associated registers

Register ARATT increases when ARRACT increases.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register ARBDIN

AR bad input (ARBDIN)

OM group AR (continued)

Register AR bad inpu (ARBDIN) counts two-level activations of AR that cannot be completed because:

- a subscriber enters a wrong number
- a timeout occurs

Register ARBDIN release history

Register ARBDIN 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 ARDATT

AR deactivation attempts (ARDATT)

Register AR deactivation attempts (ARATT) increases when a user dials the AR feature deactivation code. This register is not supported on the DMS-100G switch.

Register ARDATT release history

Register ARDATT 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 ARDENY

AR denial (ARDENY)

Register AR denial (ARDENY) counts the number of AR universal attempts that the system denied because the DENYAR option is in effect.

Register ARDENY release history

Register ARDENY was introduced in BCS27.

Associated registers

Register ARFDEN increases when ARDENY increases.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register ARDLAY

AR delay (ARDLAY)

Register AR delay (ARDLAY) counts the times processing delayed because the called line is busy when the user dials the AR feature activation code. This register is not supported on the DMS-100G switch.

Register ARDLAY release history

Register ARDLAY was introduced in BCS27.

Associated registers

Register ARATT increases when ARDLAY increases.

Associated logs

The system generates AMAB117 when ARDLAY increases and the following conditions are met:

- the office has the Bellcore format type of automatic message accounting (AMA)
- the line has the subscriber usage sensitive pricing (SUSP) option
- the system creates an AMA record

Extension registers

There are no extension registers.

Register ARDSBLID

AR disabling LCID (ARDSBLID)

Register ARDSBLID refers to the number of times that an AR subscriber disables the latest caller ID. Register ARDSBLID increases when an AR

OM group AR (continued)

subscriber presses operation code “9" to disable the latest incoming calling identification (LCID).

Register ARDSBLID release history

Introduced register ARDSBLID in APC010.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register ARFDEN

AR feature denied (ARFDEN)

Register AR feature denied (ARFDEN) increases when a user cannot activate AR because:

- the feature is not available on the line or in the office
- other features prevent the use of AR

For example, AR cannot activate on the second leg of a three-way call.

The call routes to negative acknowledgement (NACK) or feature not acknowledged (FNAL) treatment when ARFDEN increases.

Register ARFDEN release history

Register ARFDEN was introduced in BCS27.

Associated registers

Register ARATT increases when ARFDEN increases.

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 ARIMED

AR immediate (ARIMED)

Register AR immediate (ARIMED) increases when a subscriber dials the AR feature activation code and AR occurs immediately.

Register ARIMED release history

Register ARIMED was introduced in BCS27.

Associated registers

Register ARATT increases when ARIMED increases.

Register ARIMED increases when ARSCR increases.

Associated logs

The system generates AMAB117 when ARIMED increases if:

- the line has the subscriber usage-sensitive pricing (SUSP)
- the system creates an automatic message accounting (AMA) record

Extension registers

There are no extension registers.

Register ARLTDA

AR long-term denial announcement (ARLTDA)

Register AR long-term denial announcement (ARLTDA) increases when a call receives a long-term denial announcement following an attempt to activate AR.

Register ARLTDA release history

Register ARLTDA was introduced in BCS27.

Associated registers

Register ARATT increases when ARLTDA increases.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

OM group AR (continued)

Register ARNIMED

Immediately processed internodal AR requests (ARNIMED)

Register Immediately processed internodal AR requests (ARNIMED) increases when the system processes an internodal AR request. This register is not supported on the DMS-100G switch.

Register ARNIMED release history

Register ARNIMED was introduced in BCS27.

Associated registers

There are no associated registers.

Associated logs

The system generates an AMAB117

- whena Calling Number Delivery (CND) subscriber usage-sensitive pricing (SUSP) subscriber's set receives an AR request
- when the system produces an Automatic Message (AMA) record

Extension registers

There are no extension registers.

Register AROPTO

AR opt out (AROPTO)

Register AROPTO increases when a subscriber hangs up before two-level activation of AR is complete.

Register AROPTO release history

Register AROPTO 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 AROSCN

AR originating scanning (AROSCN)

Register AR originating scanning (AROSCN) increases when an AR request results in originating scanning. The AROSCN increases one time for each AR request. This register is not supported on the DMS-100G switch.

Register AROSCN release history

Register AROSCN 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 AROVFL

AR software resource overflow (AROVFL)

Register AROVFL increases when a call receives short-term denial tone and there are no software resources available to activate AR.

When AROVFL increases, the system routes the call to one of the following treatments:

- no software resource (NOSR)
- no service circuit (NOSC)
- network blockage, heavy traffic (NBLH)

Register AROVFL release history

Register AROVFL was introduced in BCS27.

Associated registers

Register ARATT increases when AROVFL increases.

Associated logs

The system generates a LINE138 when the system routes a call to NOSR, NOSC, or NBLH treatment.

Extension registers

There are no extension registers.

OM group AR (continued)

Register ARPRCD

AR proceed (ARPRCD)

Register ARPRCD increases when a subscriber dials the AR activation code. The register also increases when a subscriber dials 1 to proceed with two-level activation of an AR request.

Register ARPRCD release history

Register ARPRCD 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 ARPVTALW

Automatic Recall Private Allowed (ARPVTALW)

Register Automatic Recall Private Allowed (ARPVTALW) counts the number of AR-activated calls to a private number that CASOP allows. The CASOP allows calls through to a private number when:

- the carrier is the Local Exchange Carrier (LEC)
- the carrier is the Operating Telephone Company (OTC), which can be the LEC
- the carrier is an approved Equal Access (EA) carrier, specified in table OCCINFO

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

Register ARPVTALW release history

Register ARPVTALW was introduced in NA007.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Register Type

Register ARPVTALW is a peg type register.

Extension registers

There are no extension registers.

Register ARPVTBLK

AR private block (ARPVTBLK)

Register AR private block (ARPVTBLK) increases when the system blocks an AR activation code and terminates the AR activation code to treatment. This register is not supported on the DMS-100G switch.

Register ARPVTBLK release history

Register ARPVTBLK was introduced in NA02.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register ARRACT

AR reactivation (ARRACT)

Register AR reactivation (ARRACT) increases when a user dials the AR activation code for a call that has an AR or automatic call back (ACB) request. This register is not supported on the DMS-100G switch.

Register ARRACT release history

Register ARRACT was introduced in BCS27.

Associated registers

Register ARATT increases when ARRACT increases.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

OM group AR (continued)

Register ARRSCN

AR resume screening (ARRSCN)

Register AR resume screening (ARRSCN) increases when scanning resumes for AR. Scanning resumes for the originating office receives an indication that the called line is idle and then busy. This register is not supported on the DMS-100G switch.

Register ARRSCN release history

Register ARRSCN 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 ARSCR

AR selective call rejection (ARSCR)

Register AR selective call rejection (ARSCR) increases when the system uses AR against a line with the selective call rejection (SCR) option. The register increases when the system receives SCR indication in response to the initial AR query. This register is not supported on the DMS-100G switch.

Register ARSCR release history

Register ARSCR was introduced in BCS27.

Associated registers

Register ARIMED increases when ARSCR increases.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register ARSTDA

AR short-term denial announcement (ARSTDA)

Register AR short-term denial announcement (ARSTDA) increases when a caller receives a short-term denial announcement following an attempt to activate AR. The condition occurs if Call Forwarding is active on the line that is called. This register is not supported on the DMS-100G switch.

Register ARSTDA release history

Register ARSTDA was introduced in BCS27.

Associated registers

Register ARATT increases when ARSTDA increases.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register ARSTDT

AR short-term denial tone (ARSTDT)

Register AR short-term denial tone (ARSTDT) increases when a caller attempts to activate AR and receives short-term denial tone.

Register ARSTDT release history

Register ARSTDT was introduced in BCS27.

Associated registers

Register ARATT increases when ARSTDT increases.

Associated logs

The system generates LINE138 when the system routes a call to one of the following treatments:

- negative acknowledgement (NACK)
- no software resource (NOSR)
- no service circuit (NOSC)
- network blockage, heavy traffic (NBLH)
- feature not allowed (FNAL)
- SYFL

Extension registers

There are no extension registers.

OM group AR (continued)

Register ARSTR

AR subscriber-terminated requests (ARSTR)

Register AR subscriber-terminated requests (ARSTR) increases when a subscriber deactivates an AR request.

Register ARSTR release history

Register ARSTR 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 ARTIME

AR timeout (ARTIME)

Register AR timeout (ARTIME) counts AR requests that timeout during delayed processing. Timeout occurs when T10 or T6 expires, or when the maximum number of unanswered ringbacks occur.

The T6 is a duration time for ACB/AR at the originating switch that the system invokes if the called party is busy.

The T10 is an timer at the originating and the terminating switches. The switches control the total time a caller can stay in the queue for ACB/AR calls.

The T6 and T10 are entered in table RESOFC.

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

Register ARTIME release history

Register ARTIME was introduced in BCS27.

Associated registers

There are no associated registers.

Associated logs

The system generates AMAB117 when ARTIME increases if:

- the line has the subscriber usage-sensitive pricing (SUSP) option
- the system creates an automatic message accounting (AMA) record

Extension registers

There are no extension registers.

Register ARTSCN

AR terminating scanning (ARTSCN)

Register AR terminating scanning (ARTSCN) increases when an AR request receives confirmation of terminating scanning. This register increases once for each AR request.

Register ARTSCN release history

Register ARTSCN was introduced in BCS27.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

There are no associated registers.

Register ARUNIV

AR universal attempts (ARUNIV)

Register AR universal attempts (ARUNIV) counts each time a universal user dials the AR access code.

Register ARUNIV release history

Register ARUNIV was introduced in BCS27.

Associated registers

One of ARATT or ARDATT increases when ARUNIV increases.

Associated logs

There are no associated logs.

OM group AR (end)

Extension registers

There are no extension registers.

OM group ARAN

OM description

Automated Room and Authorization Number

This OM group allows hotel calls requiring room number or authorization number recording to be handled via an automated system, specifically the Automated Alternate Billing Service (AABS). Additionally, this feature will allow institution traffic (such as law firms and hospitals) to be prompted for an authorization number on 1+ dialed calls.

ARAN will provide automation via AABS for the following call types:

- 0+ hotel calls which are alternately billed and still require recording via a Hotel Billing Information Center (HOBIC) device, also including 01+ dialed overseas calls
- 1+ hotel calls, including 011+ dialed overseas calls
- 1+ institution calls, including 011+ dialed overseas calls

Release history

OM group ARAN was introduced in TOPS03.

Registers

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

```
>OMSHOW ARAN HOLDING

   ARANATT       ARANSUCC
       10              9
```

Group structure

OM group ARAN provides up to 2 tuples per office.

Key field:
None

Info field:
None

Associated OM groups

AABS

OM group ARAN (continued)

Associated functional groups

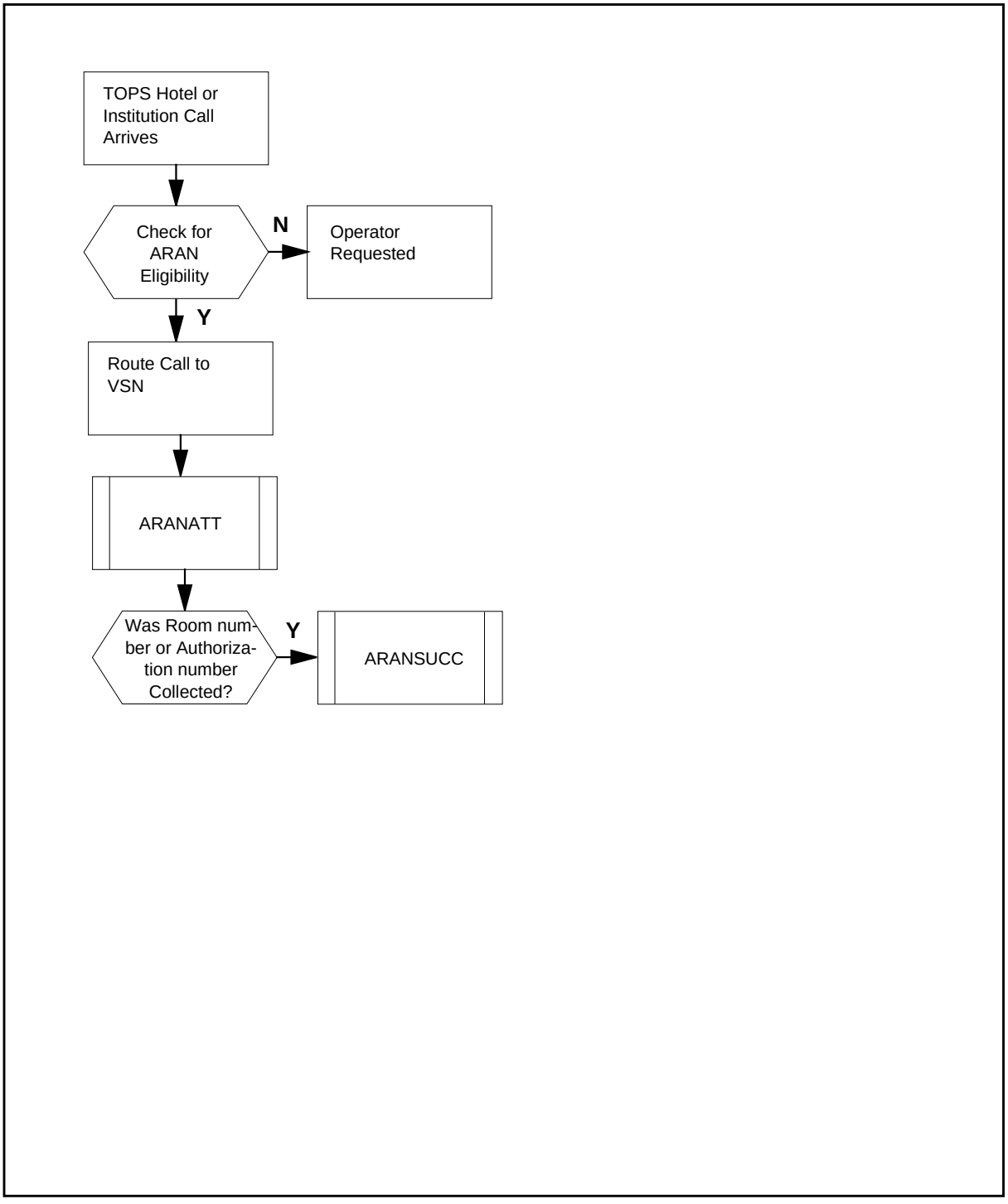
Functional group Alternate Billing Services (ABS0001) is associated with OM group AABS.

Associated functionality codes

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

Functionality	Code
Auto Room and Auth Number	ABS00009

OM group ARAN registers



OM group ARAN (end)

Register ARANATT

Register ARAN Attempt

Register ARANATT represents the number of ARAN calls that attempted automated service.

Register ARANATT release history

Register ARANATT was introduced in TOPS03.

Associated registers

ARANSUCC

Associated logs

None

Extension registers

None

Register ARANSUCC

Register ARAN Success

Register ARANSUCC represents the number of ARAN calls that automatically collected room or authorization numbers.

Register ARANSUCC release history

Register ARANSUCC was introduced in TOPS03.

Associated registers

ARANATT

Associated logs

None

Extension registers

None

OM group ARN

OM description

Automatic Recall with Name

OM group ARN provides information on the use of the ARN functionality. This group contains seven registers that measure occurrences during an ARN session in normal or error conditions.

Release history

NA012 introduced OM group ARN.

Registers

OM group ARN registers display on the MAP terminal as follows.

```
ARN

CLASS: ACTIVE
START: 1998/11/04 12:15:00 WED; STOP 1998/11/04 12:22:59 WED
SLOWSAMPLES:        5; FASTSAMPLES:       48;



         ARNATT         ARNCON          ARNDNERR
       ARNNABDN         ARNT1           ARNT2

0          2              2               1

           0              0               0
```

Group structure

OM group ARN

Key field: None

Info field: None

Related OM groups

None

OM group ARN (continued)

Related functional groups

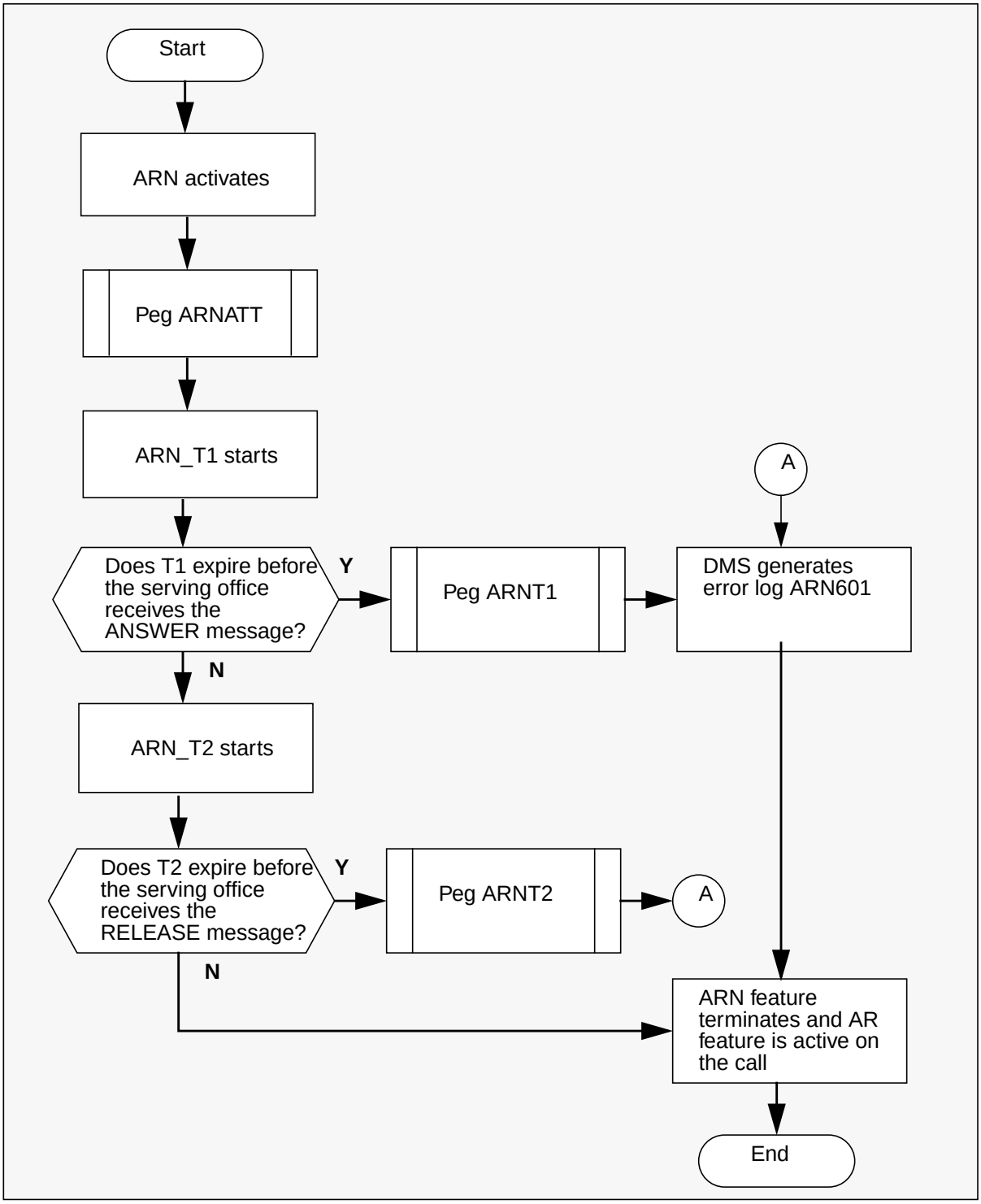
None

Related functionality codes

None

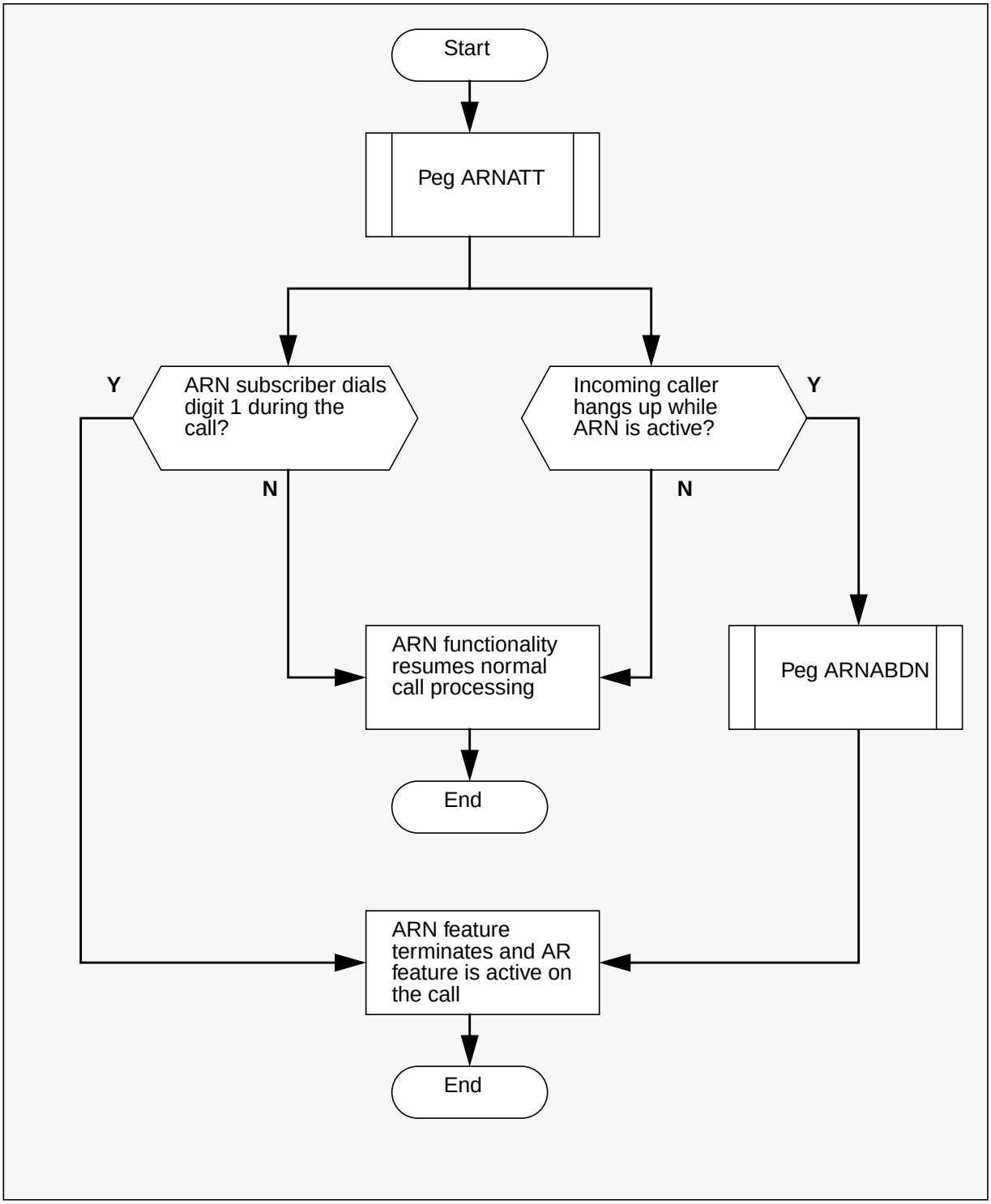
The following flowcharts describe OM interaction for timer events, end-user events, and connection events.

OM group ARN registers for timer events

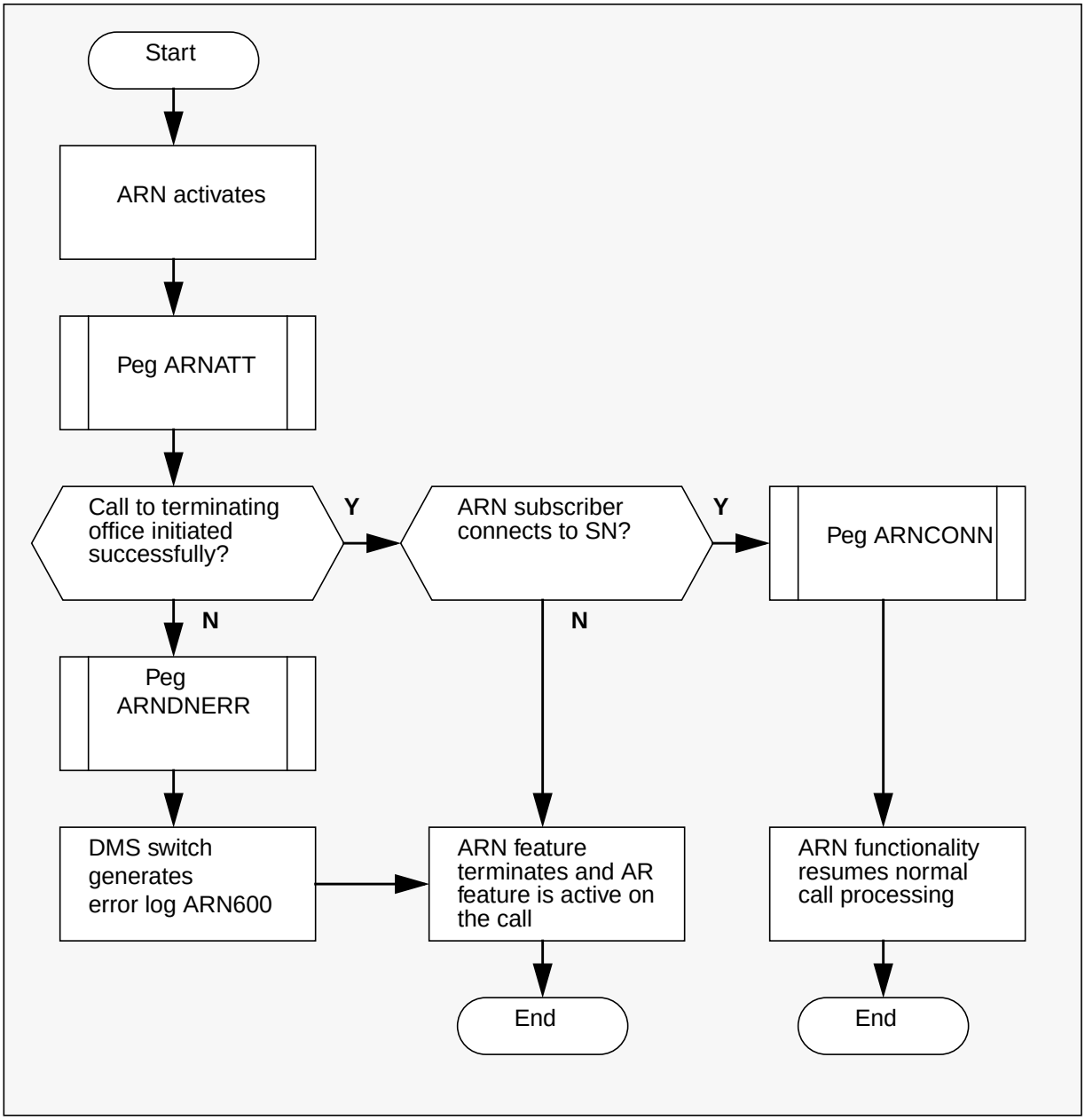


OM group ARN (continued)

OM group ARN registers for end-user events



OM group ARN registers for connection events



Register ARNATT

Register Automatic Recall with Name request Attempt (ARNATT) counts the activation attempts of the ARN feature. This register increases when an incoming call terminates on an ARN end user. An incoming call terminates when the line is busy while the end user is on a two-party call, and the switch activates the ARN feature.

OM group ARN (continued)

Register ARNATT release history

NA012 introduced register ARNATT.

Related registers

None

Related logs

None

Extension registers

None

Register ARNCON

Register Automatic Recall with Name Connected (ARNCON) increases when the ARN end user connects to the service node (SN).

Register ARNCON release history

NA012 introduced register ARNCON.

Related registers

None

Related logs

None

Extension registers

None

Register ARNDNERR

Register Automatic Recall with Name routing Directory Number Error (ARNDNERR) increases when the switch can not route the call to the SN.

Register ARNDNERR release history

NA012 introduced register ARNDNERR.

Related registers

None

Related logs

The switch generates log ARN600 when a call fails to route to the SN, or the call to the SN encounters an unsupported feature or agent.

Extension registers

None

Register ARNT1

Register Automatic Recall with Name Timer1 (ARNT1) increases when the T1 timer expires.

Register ARNT1release history

NA012 introduced register ARNT1.

Related registers

None

Related logs

The switch generates log ARN601 when the T1 or T2 timer expires, or ARN could not locate clone virtual identifiers (CVID) to route the call to the SN.

Extension registers

None

Register ARNT2

Register Automatic Recall with Name Timer2 (ARNT2) increases when the T2 timer expires.

Register ARNT2 release history

NA012 introduced register ARNT2.

Related registers

None

Related logs

The switch generates log ARN601 when the T1 or T2 timer expires, or ARN could not locate a CVID to route the call to the SN.

Extension registers

None

Register ARNABDN

Register Automatic Recall with Name Abandon increases when the calling party hangs up during an ARN session, but before the SN receives the RELEASE message.

OM group ARN (end)

Register ARNABDN release history

NA012 introduced register ARNABDN.

Related registers

None

Related logs

None

Extension registers

None

OM group ASUFBUS

OM description

Application-specific unit (ASU) frame transport bus (F-bus)(ASUFBUS)

The OM group ASUFBUS monitors transmit and receive activity between the F-buses and the ASU.

The OM group ASUFBUS contains 32 registers that count

- packets transmitted by an ASU on each F-bus
- packets received by an ASU on each F-bus
- transmit errors by an ASU on each F-bus
- receive errors by an ASU on each F-bus
- octets transmitted by an ASU on each F-bus
- octets received by an ASU on each F-bus
- times congestion turned on by an ASU for each F-bus
- high priority messages transmitted by an ASU on each F-bus
- messages that require enqueueing by an ASU on each F-bus

Release history

TL03

The OM group ASUFBUS was introduced in CSP03.

TL07

Ethernet link interface unit (ELIU) was added as a valid entry in the NCMNODE_INFO OM key.

TL11

Updated for high-speed links.

Registers

The following OM group ASUFBUS registers appear on the MAP terminal:

OM group ASUFBUS (continued)

FB0TXPK2	FB0TXPKT	FB0RXPK2	FB0RXPKT
FB1TXPK2	FB1TXPKT	FB1RXPK2	FB1RXPKT
FB0TXER2	FB0TXERR	FB0RXER2	FB0RXERR
FB1TXER2	FB1TXERR	FB1RXER2	FB1RXERR
FB0TXOC2	FB0TXOCT	FB0RXOC2	FB0RXOCT
FB1TXOC2	FB1TXOCT	FB1RXOC2	FB1RXOCT
FB0TXCON	FB0TXPRI	FB0TXEN2	FB0TXENQ
FB1TXCON	FB1TXPRI	FB1TXEN2	FB1TXENQ

Group structure

The OM group ASUFBUS

Key field:
There is no Key field

Info field:
pm_type is LIU7, HLIU, HSLR, SVR7, EIU, ELIU, FRIU, XLIU, APU, or VPU pm_number is an integer (0 to 999)

Associated OM groups

There are no associated OM groups.

Associated functional groups

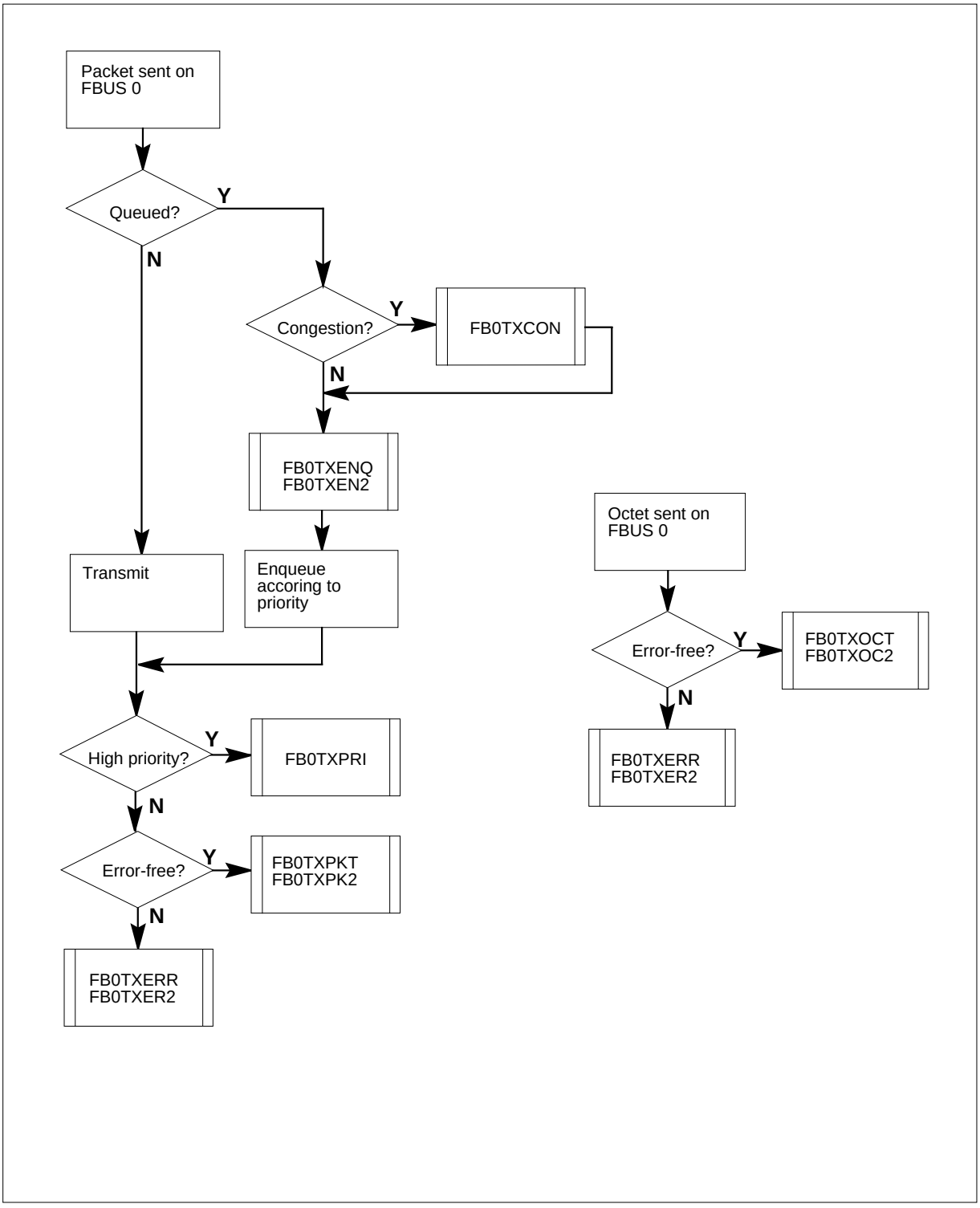
The SuperNode DMS switch associates with OM group ASUFBUS:

Associated functionality codes

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

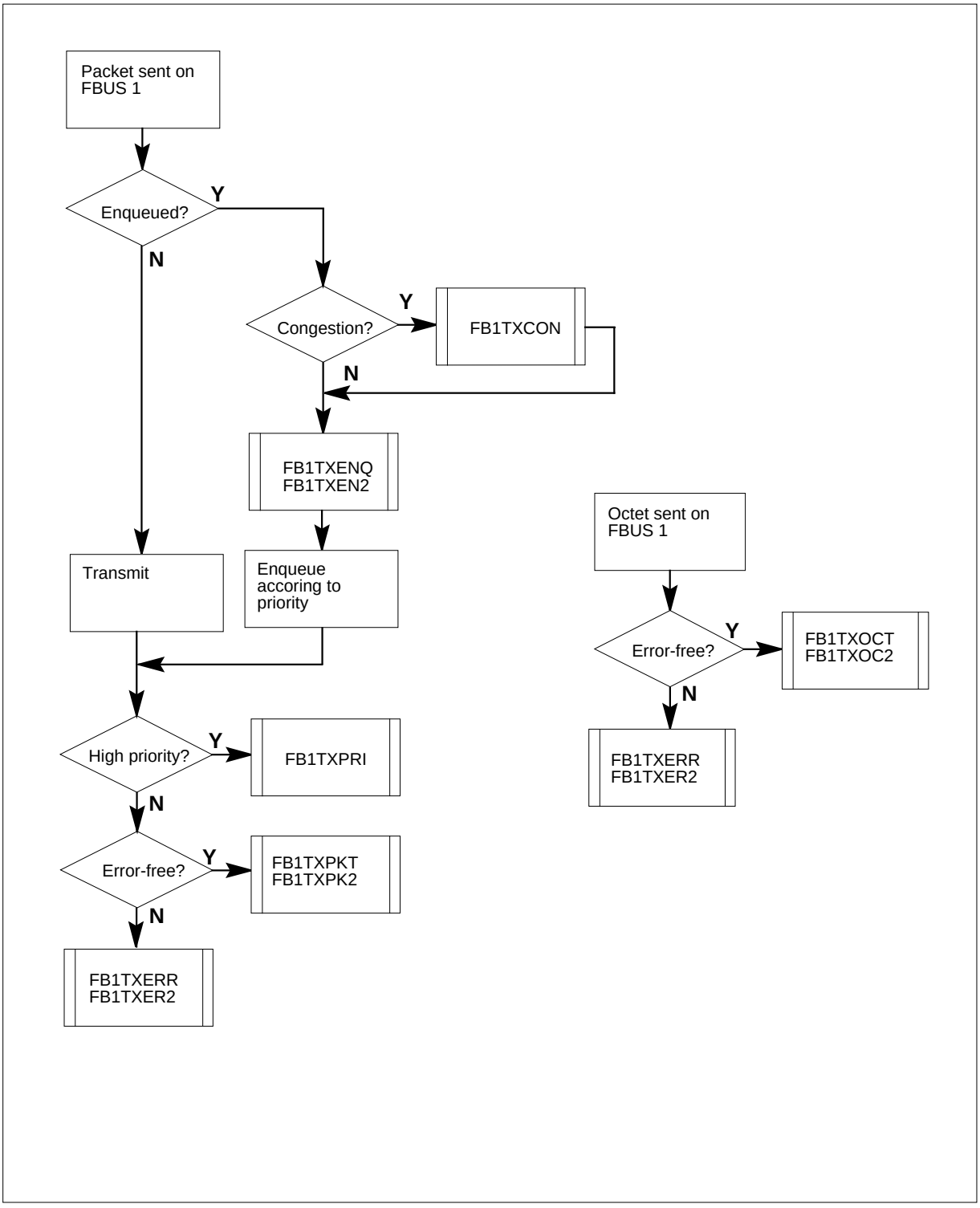
Functionality	Code
CM Common	NTX941AA
MS Common	NTX951AA

OM group ASUFBUS transmit registers on F-bus 0

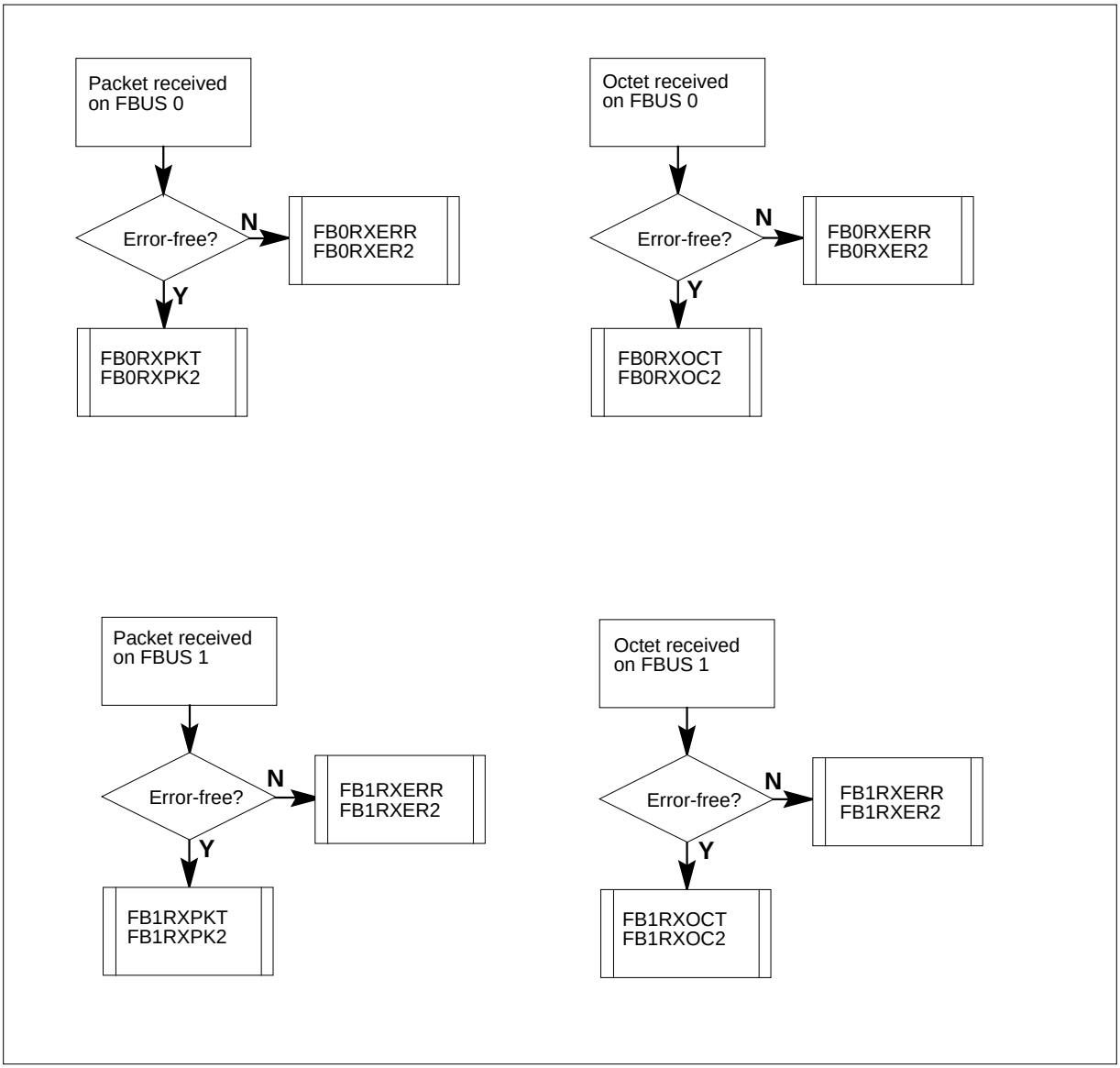


OM group ASUFBUS (continued)

OM group ASUFBUS transmit registers on F-bus 1



OM group ASUFBUS receive registers



Register FB0RXERR

F-bus 0 receive errors (FB0RXERR)

Register FB0RXERR counts the packets that the ASU was not able to receive from F-bus 0 due to an error.

Register FB0RXERR release history

Register FB0RXERR was introduced in CSP03.

OM group ASUFBUS (continued)

Associated registers

The extension register is FB0RXER2.

Associated logs

There are no associated logs.

Extension registers

FB0RXER2

Register FB0RXOCT

F-bus 0 receive octets (FB0RXOCT)

Register FB0RXOCT counts the octets (bytes) that the ASU receives from F-bus 0.

Register FB0RXOCT release history

Register FB0RXOCT was introduced in CSP03.

Associated registers

The extension register is FB0RXOC2.

Associated logs

There are no associated logs.

Extension registers

FB0RXOC2

Register FB0RXPKT

F-bus 0 receive packets (FB0RXPKT)

Register FB0RXPKT counts the packets that the ASU receives from F-bus 0.

Register FB0RXPKT release history

Register FB0RXPKT was introduced in CSP03.

Associated registers

The extension register is FB0RXPK2.

Associated logs

There are no associated logs.

Extension registers

FB0RXPK2

Register FB0TXCON

F-bus 0 transmit congestion (FB0TXCON)

Register FB0TXCON counts the times the system turns on congestion for F-bus 0.

Register FB0TXCON release history

Register FB0TXCON was introduced in CSP06.

Associated registers

The congestion register for F-bus 1 is FB1TXCON.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register FB0TXENQ

F-bus 0 transmit enqueueing (FB0TXENQ)

Register FB0TXENQ counts the messages on F-bus 0 that require enqueueing.

Register FB0TXENQ release history

Register FB0TXENQ was introduced in CSP06.

Associated registers

The queueing register for F-bus 1 is FB1TXENQ.

The extension register is FB0TXEN2.

Associated logs

There are no associated logs.

Extension registers

FB0TXEN2

Register FB0TXERR

F-bus 0 transmit errors (FB0TXERR)

Register FB0TXERR counts the packets that the ASU was not able to transmit to F-bus 0 due to an error.

OM group ASUFBUS (continued)

Register FB0TXERR release history

Register FB0TXERR was introduced in CSP03.

Associated registers

The extension register is FB0TXER2.

Associated logs

There are no associated logs.

Extension registers

FB0TXER2

Register FB0TXOCT

F-bus 0 transmit octets (FB0TXOCT)

Register FB0TXOCT counts the octets (bytes) that the ASU transmits to F-bus 0.

Register FB0TXOCT release history

Register FB0TXOCT was introduced in CSP03.

Associated registers

The extension register is FB0TXOC2.

Associated logs

There are no associated logs.

Extension registers

FB0TXOC2

Register FB0TXPKT

F-bus 0 transmit packets (FB0TXPKT)

Register FB0TXPKT counts the packets that the ASU transmits to F-bus 0.

Register FB0TXPKT release history

Register FB0TXPKT was introduced in CSP03.

Associated registers

The extension register is FB0TXPK2.

Associated logs

There are no associated logs.

Extension registers

FB0TXPK2

Register FB0TXPRI

F-bus 0 transmit priority (FB0TXPRI)

Register FB0TXPRI counts the high priority messages that the ASU transmits on F-bus 0.

Register FB0TXPRI release history

Register FB0TXPRI was introduced in CSP06.

Associated registers

The high priority register for F-bus 1 is FB1TXPRI.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register FB1RXERR

F-bus 1 receive errors (FB1RXERR)

Register FB1RXERR counts the packets that the ASU was not able to receive from F-bus 1 due to an error.

Register FB1RXERR release history

Register FB1RXERR was introduced in CSP03.

Associated registers

The extension register is FB1RXER2.

Associated logs

There are no associated logs.

Extension registers

FB1RXER2

Register FB1RXOCT

F-bus 1 receive octets (FB1RXOCT)

OM group ASUFBUS (continued)

Register FB1RXOCT counts the octets (bytes) that the ASU received from F-bus 1.

Register FB1RXOCT release history

Register FB1RXOCT was introduced in CSP03.

Associated registers

The extension register is FB1RXOC2.

Associated logs

There are no associated logs.

Extension registers

FB1RXOC2

Register FB1RXPKT

F-bus 1 receive packets (FB1RXPKT)

Register FB1RXPKT counts the packets that the ASU received from F-bus 1.

Register FB1RXPKT release history

Register FB1RXPKT was introduced in CSP03.

Associated registers

The extension register is FB1RXPK2.

Associated logs

There are no associated logs.

Extension registers

FB1RXPK2

Register FB1TXCON

F-bus 1 transmit congestion (FB1TXCON)

Register FB1TXCON counts the times the system turns on congestion for F-bus 1.

Register FB1TXCON release history

Register FB1TXCON was introduced in CSP06.

Associated registers

The congestion register for F-bus 0 is FB0TXCON.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register FB1TXENQ

F-bus 1 transmit enqueueing (FB1TXENQ)

Register FB1TXENQ counts the messages on F-bus 1 that require enqueueing.

Register FB1TXENQ release history

Register FB1TXENQ was introduced in CSP06.

Associated registers

The queueing register for F-bus 0 is FB0TXENQ.

The extension register is FB1TXEN2.

Associated logs

There are no associated logs.

Extension registers

FB1TXEN2

Register FB1TXERR

F-bus 1 transmit errors (FB1TXERR)

Register FB1TXERR counts the packets that the ASU was not able to transmit to F-bus 1 due to an error.

Register FB1TXERR release history

Register FB1TXERR was introduced in CSP03.

Associated registers

The extension register is FB1TXER2.

Associated logs

There are no associated logs.

Extension registers

FB1TXER2

OM group ASUFBUS (continued)

Register FB1TXOCT

F-bus 1 transmit octets (FB1TXOCT)

Register FB1TXOCT counts the octets (bytes) that the ASU transmits from the ASU to F-bus 1.

Register FB1TXOCT release history

Register FB1TXOCT was introduced in CSP03.

Associated registers

The extension register is FB1TXOC2.

Associated logs

There are no associated logs.

Extension registers

FB1TXOC2

Register FB1TXPKT

F-bus 1 transmit packets (FB1TXPKT)

Register FB1TXPKT counts the packets that the ASU transmits to F-bus 1.

Register FB1TXPKT release history

Register FB1TXPKT was introduced in CSP03.

Associated registers

The extension register is FB1TXPK2.

Associated logs

There are no associated logs.

Extension registers

FB1TXPK2

Register FB1TXPRI

F-bus 1 transmit priority (FB1TXPRI)

Register FB1TXPRI counts the high priority messages that the ASU transmits on F-bus 1.

Register FB1TXPRI release history

Register FB1TXPRI was introduced in CSP06.

Associated registers

The high priority register for F-bus 0 is FB0TXPRI.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

OM group ASUMEMUT

OM description

Application specific unit (ASU) memory utilization (ASUMEMUT)

Operational measurement (OM) group ASUMEMUT monitors the use of data store and program store for an ASU.

The ASUMEMUT contains four registers that count:

- total Data Store memory
- free Data Store memory
- total Program Store memory
- free Program Store memory

Note: OM group ASUMEMUT deals with static data (memory use) and must not increase by way of table OMACC. Any accumulation class on this OM group returns invalid values.

Release history

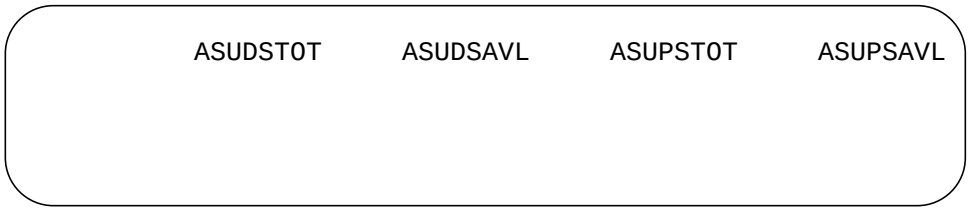
The OM group ASUMEMUT was introduced in CSP03.

TL11

Updated for high-speed links.

Registers

The following OM group ASUMEMUT registers appear on the MAP terminal:



Group structure

The OM group ASUMEMUT

Key field:
There is no Key field.

Info field:
pm_type is LIU7, HLIU, HSLR, SVR7, EIU, XLIU, APU, or VPU
pm_number is an integer (1-999)

Associated OM groups

There are no associated OM groups.

Associated functional groups

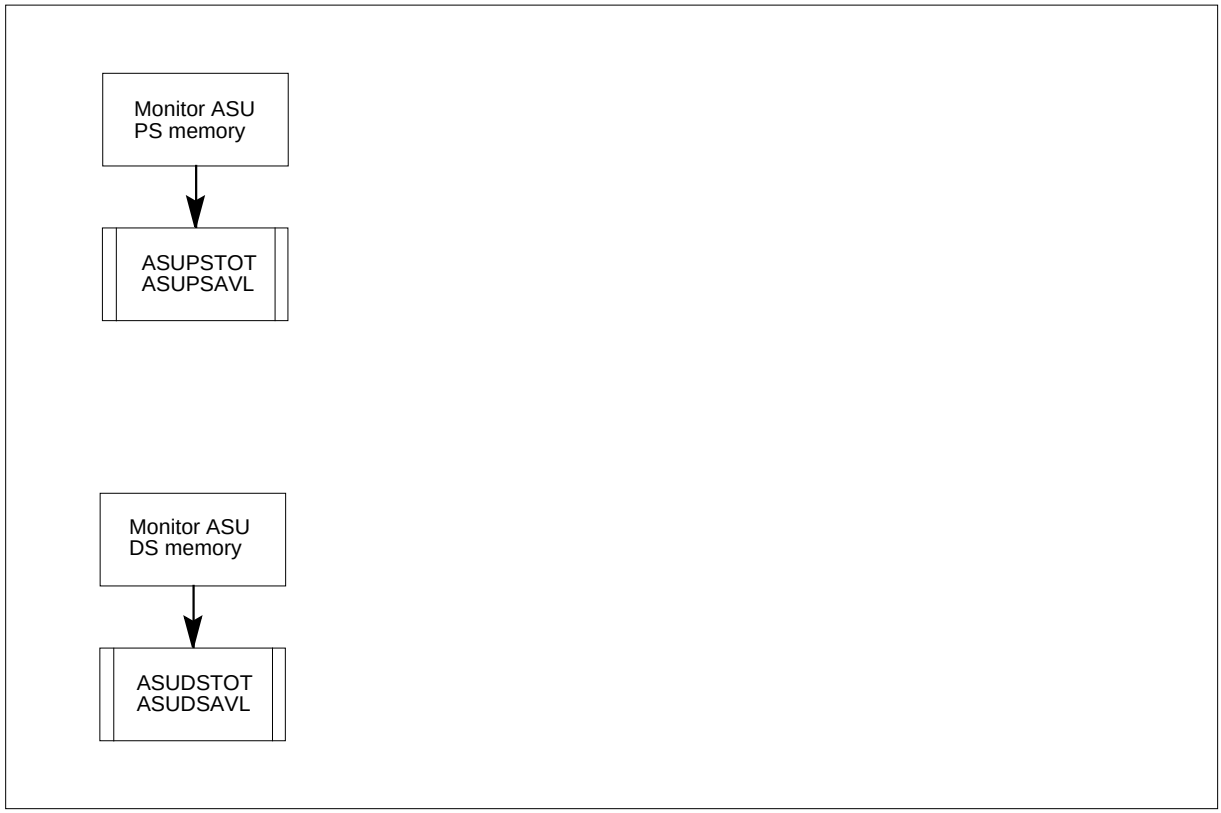
Functional group SuperNode DMS switch associates with OM group ASUMEMUT:

Associated functionality codes

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

Functionality	Code
CM Common	NTX941AA
MS Common	NTX951AA

OM group ASUMEMUT registers



OM group ASUMEMUT (continued)

Register ASUDSTOT

Total Data Store memory (ASUDSTOT)

Register ASUDSTOT contains the number of Kbytes of DS memory.

Register ASUDSTOT release history

Register ASUDSTOT was introduced in CSP03.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Register ASUDSAVL

Free Data Store memory (ASUDSAVL)

Register ASUDSAVL contains the number of Kbytes of DS memory available for use.

Register ASUDSAVL release history

Register ASUDSAVL was introduced in CSP03.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Register ASUPSTOT

Total Program Store memory (ASUPSTOT)

Register ASUPSTOT contains the number of Kbytes of PS memory.

Register ASUPSTOT release history

Register ASUPSTOT was introduced in CSP03.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Register ASUPSAVL

Free Program Store memory (ASUPSAVL)

Register ASUPSAVL contains the number of Kbytes of PS memory available for use.

Register ASUPSAVL release history

Register ASUPSAVL was introduced in CSP03.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

OM group ATRK-Canada only

OM description

Analog call management services trunks

Analog call management services trunks (ATRK) counts errors that occur after a transaction capability application part (TCAP) calling line identification (CLID) message has been matched to a per-trunk signaling (PTS) trunk.

Release history

The OM group ATRK-Canada only was introduced in BCS29.

Registers

The OM group ATRK-Canada only registers display on the MAP terminal as follows:

ATRKOUT	ATRKEXP	ATRKOVR	ATRKDIG
ATRKSUCC	ATRKNOC		

Group structure

The OM group ATRK-Canada only provides one tuple for each trunk group.

Key field:
Trunk group CLLI

Info field:
OM2TRKINFO consists of three parts. These parts include trunk direction, number of trunk circuits in the group, and number of working trunk circuits.

Associated OM groups

ACMS provides information on the error conditions and resource shortfalls specified for the stored program control-call management services (SPC-CMS) software.

Associated functional groups

The Stored Program Control-Call Management Services (SPC-CMS) functional group associates with the OM group ATRK-Canada only.

OM group ATRK-Canada only (continued)

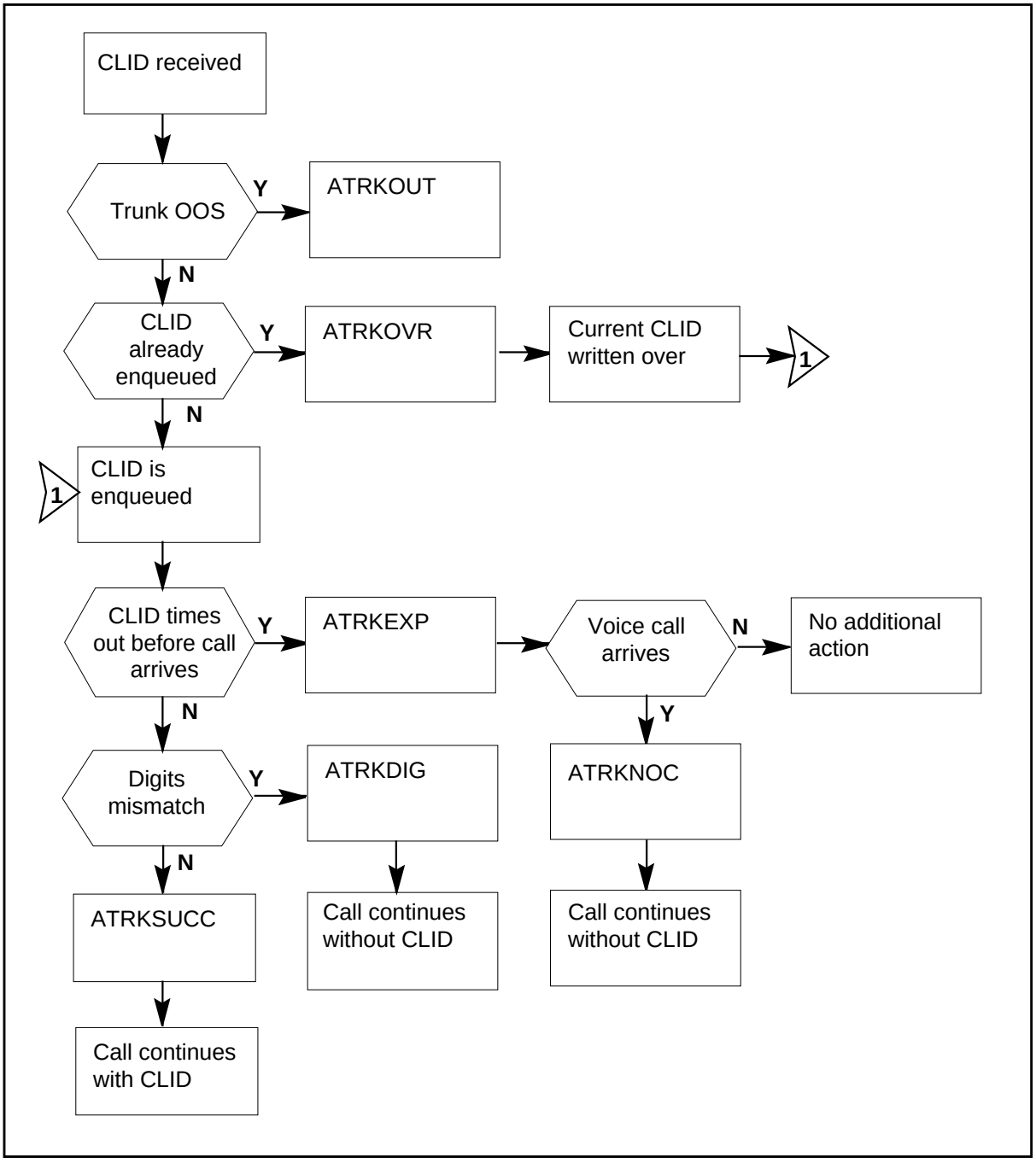
Associated functionality codes

The functionality codes that associate with the OM group ATRK-Canada only appear in the following table.

Functionality	Code
CMS NAC Interface	NTXE21AA

OM group ATRK-Canada only (continued)

OM group ATRK-Canada only registers: CLID received



OM group ATRK-Canada only registers: no CLID received

Register ATRKDIG

ATRK digit mismatch

ATRK digit mismatch (ATRKDIG) increased when the last four digits of the called number in the TCAP CLID message did not match. These four digits do not match the last four digits of the called number that the enhanced stored program control (ESPC) switch outpulses.

When the voice call arrives on the associated PTS trunk, the voice call continues without CLID.

Register ATRKDIG release history

Register ATRKDIG was introduced in BCS29.

Associated registers

There are no associated registers.

OM group ATRK-Canada only (continued)

Associated logs

ACMS104 generates when the last four digits of the called number in the TCAP CLID message do not match. These four digits do not match the last four digits of the called number the ESPC switch outpulses.

Extension registers

There are no extension registers.

Register ATRKEXP

ATRK calling line identification expired

ATRK calling line identification expired (ATRKEXP) increments when an incoming call does not remove from a queue CLID data enqueued against a trunk circuit. This incoming call must occur within the time period specified in office parameter SPCCLITIMEOUT in table OFCENG.

If the voice call arrives after the CLID data expires, the following actions occur. The call continues without CLID and register ATRKNOC counts this call.

Register ATRKEXP release history

Register ATRKEXP was introduced in BCS29.

Associated registers

Register ATRKNOC increments when the system does not find a TCAP CLID message enqueued against a stored program control trunk. The system first searches for the enqueued message when the system receives a call on the trunk.

Associated logs

The system generates log ACMS102 when the condition that follows occurs. An incoming call does not remove the CLID data enqueued against a trunk circuit from a queue in a set time period. The office parameter SPCCLITIMEOUT sets the time period.

Extension registers

There are no extension registers.

Register ATRKNOC

ATRK no calling line identification

The ATRK no calling line identification (ATRKNOC) increments if the system does not find a TCAP CLID message enqueued against a stored program

control trunk. This system action occurs when the system receives a call on the trunk.

The call continues without CLID data.

Register ATRKNOC release history

Register ATRKNOC 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 ATRKOUT

ATRK trunk out of service

ATRK trunk out of service (ATRKOUT) counts TCAP calling line identification messages received for a trunk. The state of the trunks precludes a call routing over the trunk. No CLID data is enqueued against this trunk.

The following trunk states prevent a CLID message from being enqueued:

- offline
- manual busy
- peripheral module busy
- remote busy
- system busy
- carrier failure
- deloaded
- seized

Register ATRKOUT release history

Register ATRKOUT was introduced in BCS29.

Associated registers

There are no extension registers.

OM group ATRK-Canada only (continued)

Associated logs

The system generates log ACMS101 when the system receives a TCAP CLID message for a trunk. The trunk is a trunk with a state that does not allow a call to route over the trunk.

Extension registers

There are no extension registers.

Register ATRKOVR

Calling line identification overwrite

Register ATRKOVR increments when a CLID message is enqueued against a trunk circuit. This trunk circuit is a trunk circuit that already has CLID data enqueued against the trunk unit.

The system loses the earlier enqueued CLID message when information overwrites the message in the new TCAP CLID message.

The next incoming voice call on the associated PTS trunk removes the new CLID data from a queue.

Register ATRKOVR release history

Register ATRKOVR was introduced in BCS29.

Associated registers

There are no associated registers.

Associated logs

ACMS103 generates when a CLID message is enqueued against a trunk circuit that already has CLID data enqueued.

Extension registers

There are no extension registers.

Register ATRKSUCC

ATRK successfully attached CLID data

The ATRK successfully attached CLID data (ATRKSUCC) increases when a voice call on a PTS trunk correctly attaches CLID data.

When the CLID data attaches to the call, the call continues.

Register ATRKSUCC release history

Register ATRKSUCC 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.

OM group ATTAMA

OM description

AT&T automatic message accounting (ATTAMA)

Register ATTAMA counts the different types of calls that pass through an office. Three separate registers count originating, billable, and nonbillable calls. Other registers in ATTAMA break down calls by call class and call disposition.

The ATTAMA OM group counts the following call classes:

- station paid
- directory assistance (DA) 411
- DA 555-1212
- tracer, transfer, and time change
- long duration
- short supervisory transitions (SST)
- other (three-way, call forward, study)

Short supervisory transitions (SST) are on-off-on switchhook transitions with less than the minimum call duration. Office parameter MINIMUM_CHARGE_DURATION in table OFCENG defines the minimum call duration.

The ATTAMA OM group counts the following call dispositions:

- call records for answered calls
- lost records for answered calls
- estimated disconnect calls
- lost answer message calls

Counts in registers for SSTs can indicate false call attempts. Lost automatic message accounting (AMA) record counts can indicate that not enough AMA resources are present.

Release history

OM group ATTAMA was introduced in BCS20.

SN07 (DMS)

Extension OM group ATTAMA2 added by feature A00002766. Extension OM group ATTAMA2 is controlled by SOC code BAS00023.

OM group ATTAMA (continued)

Registers

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

```
AMORIGS     AMTRMT      AMNOTRMT    AMANS
AMRCSTPD    AMLTSTPD    AMEDSTPD    AMNASTPD
AMRC411     AMLT411     AMED411     AMNA411
AMRC555     AMLT555     AMED555     AMNA555
AMRCTRCR    AMLTTRCR    AMRCOTHR    AMLTOTHR
AMEDOTHR    AMNAOTHR    AMRCLONG    AMLTLONG
AMUNANS     AMRCSST     AMSST       AMDA555
AMDA411
```

Group structure

The OM group ATTAMA provides one tuple for each office.

Key field:
There is no key field.

Info field:
There is no info field.

The FORMAT in table CRSFMT must be set to BCFMT.

The following options in table AMAOPTS affect the counts in ATTAMA registers:

- DA411, CHG411, DA555, CHG555, UNANS_TOLL, SST, LONG_CALL, TRACER, TIMECHANGE, UNANS_LOCAL, CALL_FWD, and TWC

Associated OM groups

The OM group ATTLAMA provides call disposition counts for message rate, INWATS, and OUTWATS calls.

Associated functional groups

The following functional groups associate with OM group ATTAMA:

- MDC Meridian Digital Centrex
- POTS Plain ordinary telephone service

OM group ATTAMA (continued)

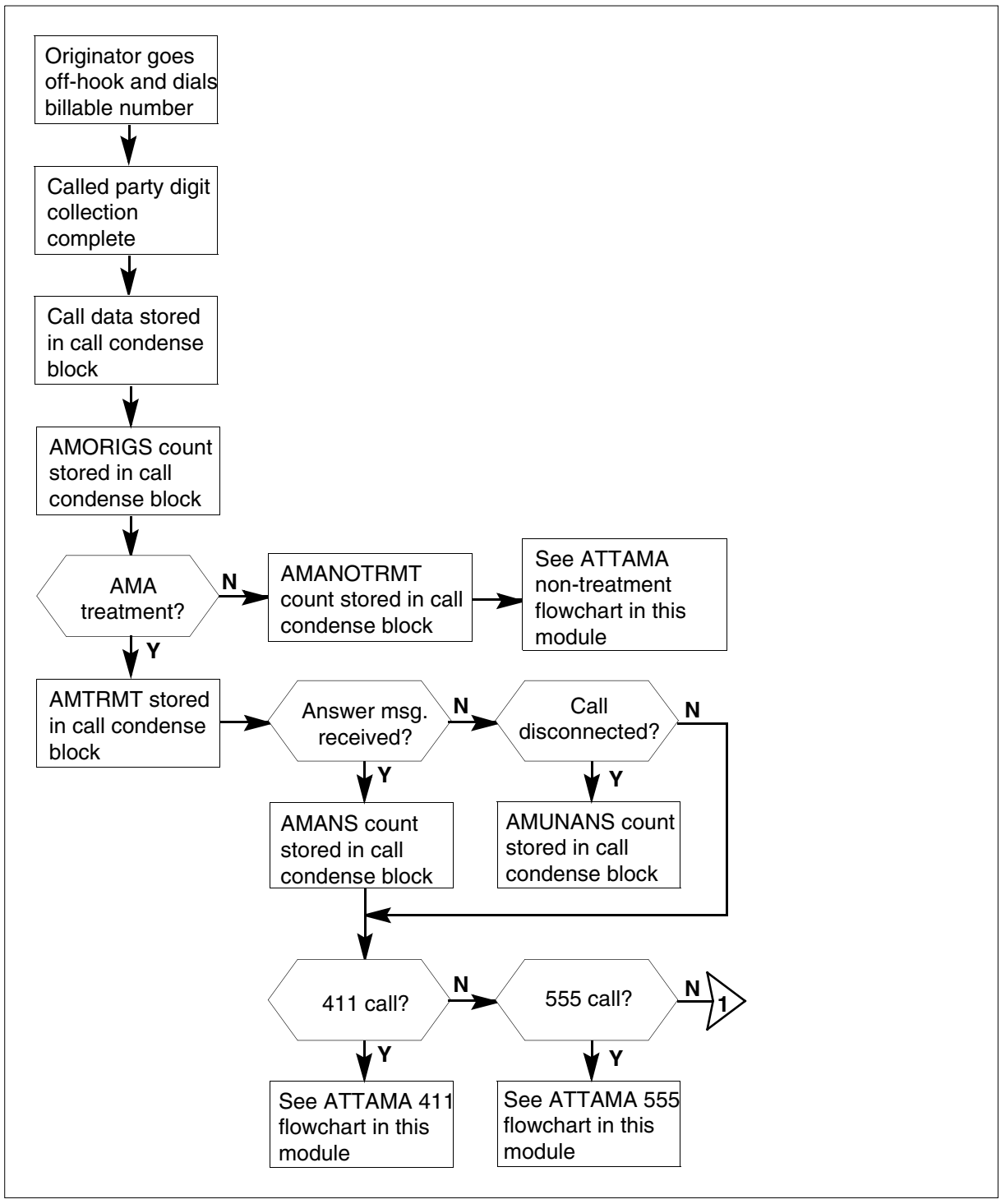
Associated functionality codes

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

Functionality	Code
Bellcore CAMA Format	NTX098AA
Bellcore LAMA Format	NTX159AA

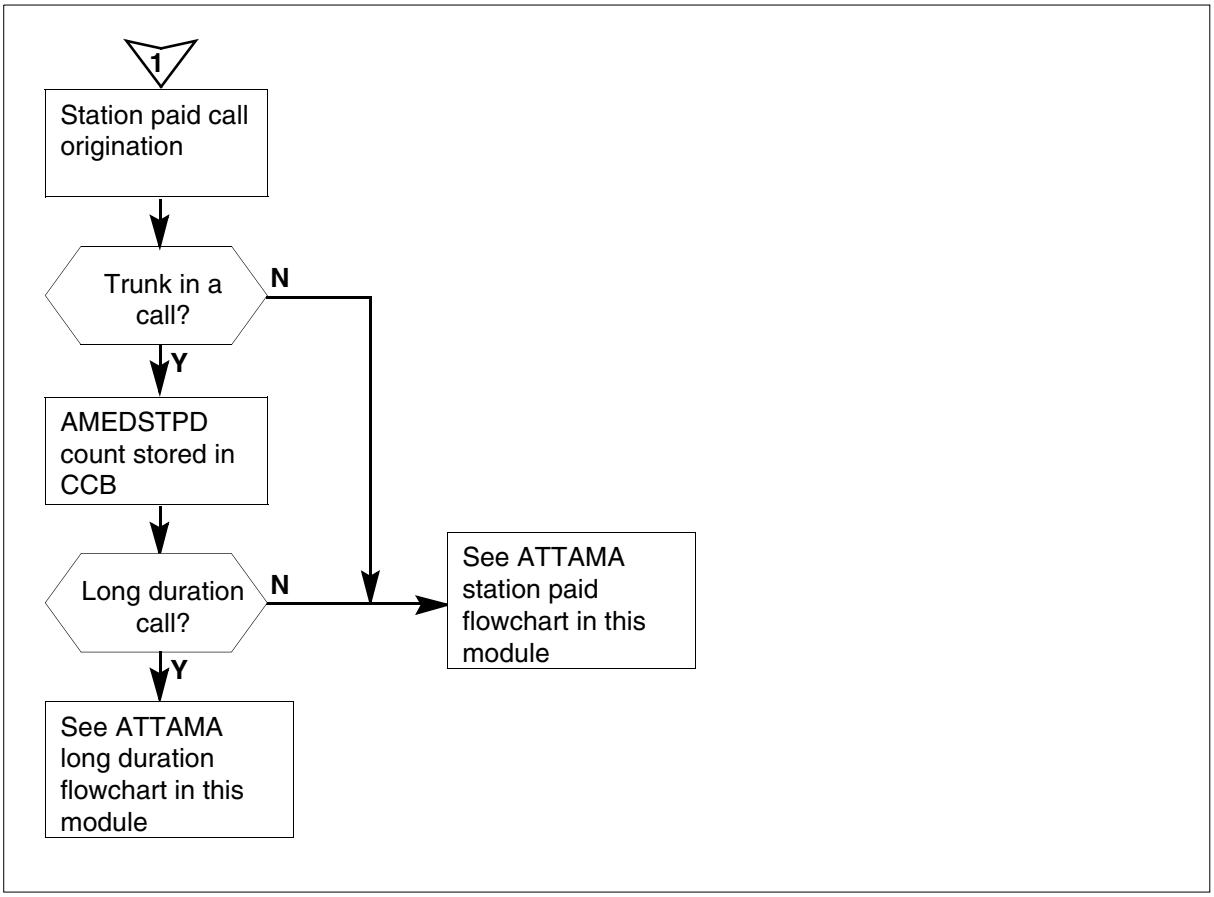
OM group ATTAMA (continued)

OM group ATTAMA registers



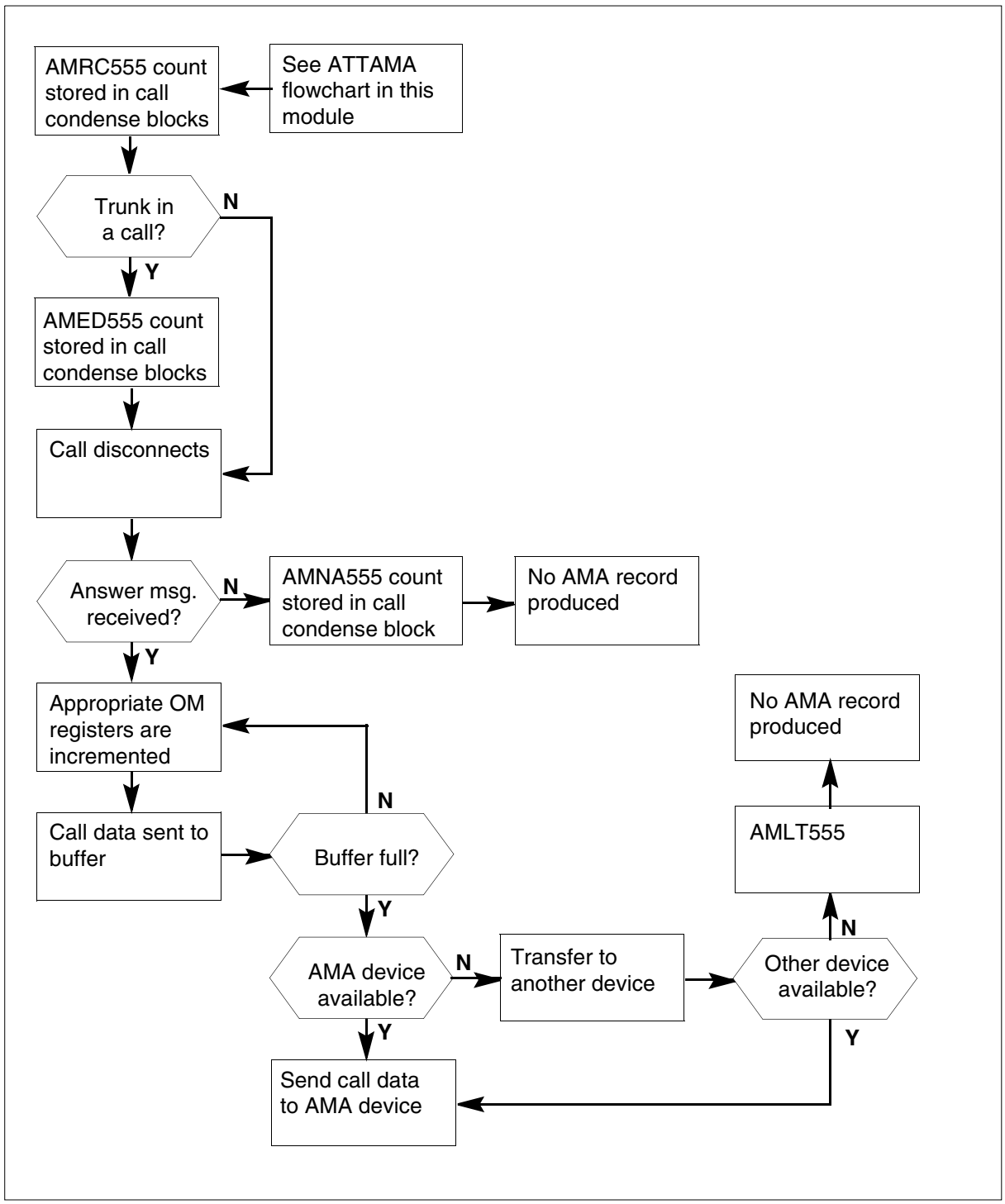
OM group ATTAMA (continued)

OM group ATTAMA registers (continued)

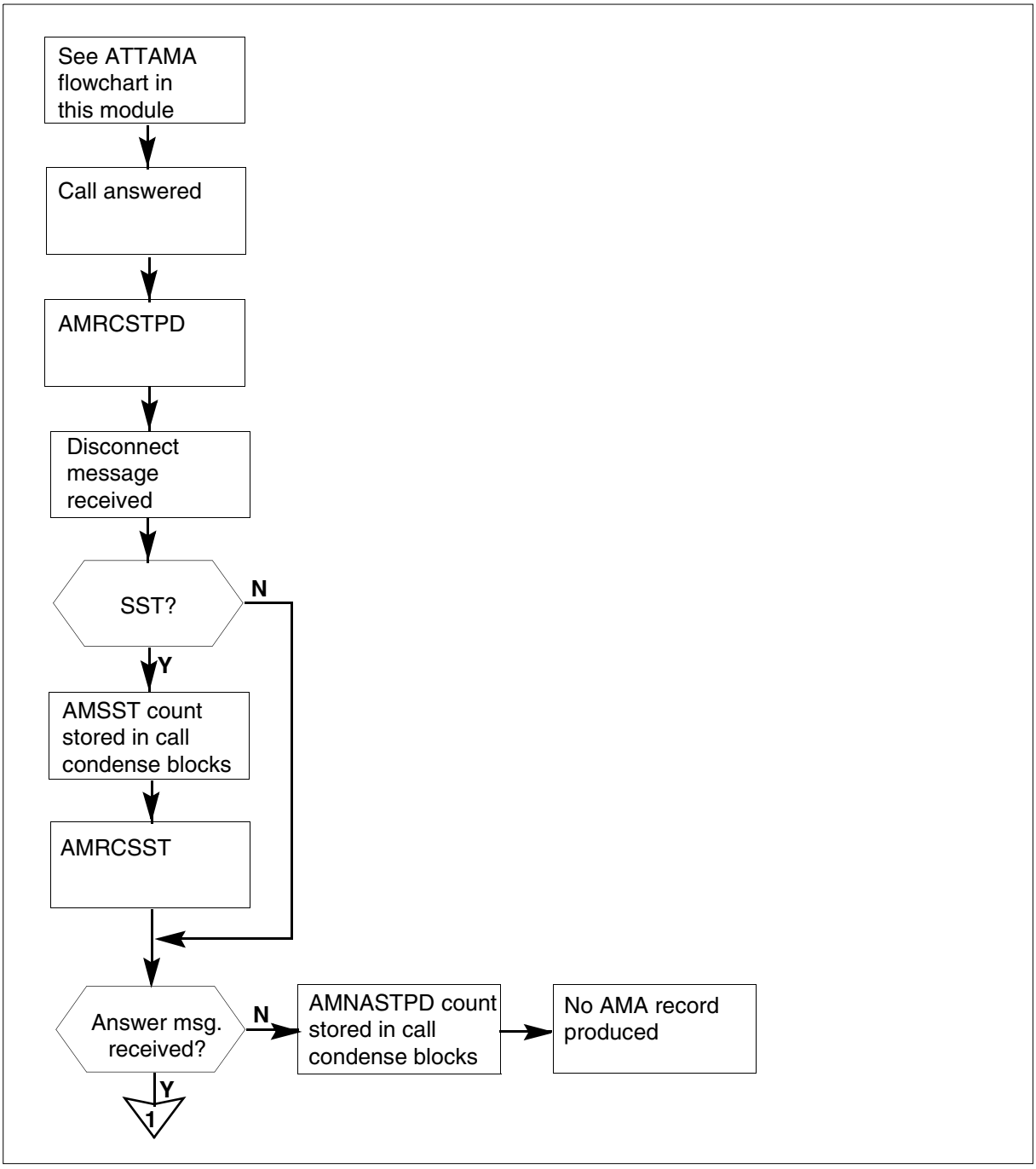


OM group ATTAMA (continued)

OM group ATTAMA registers: 555

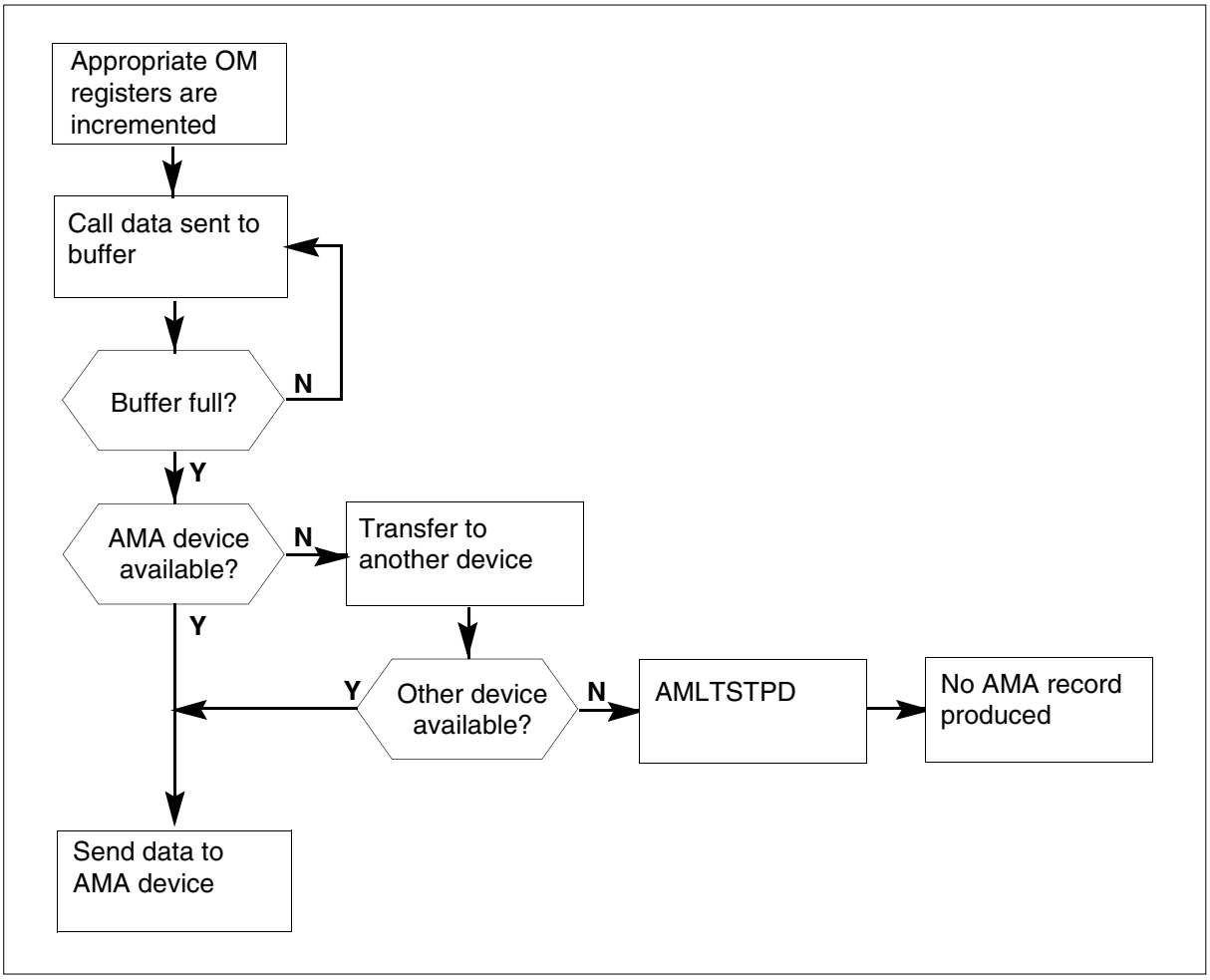


OM group ATTAMA registers: station paid



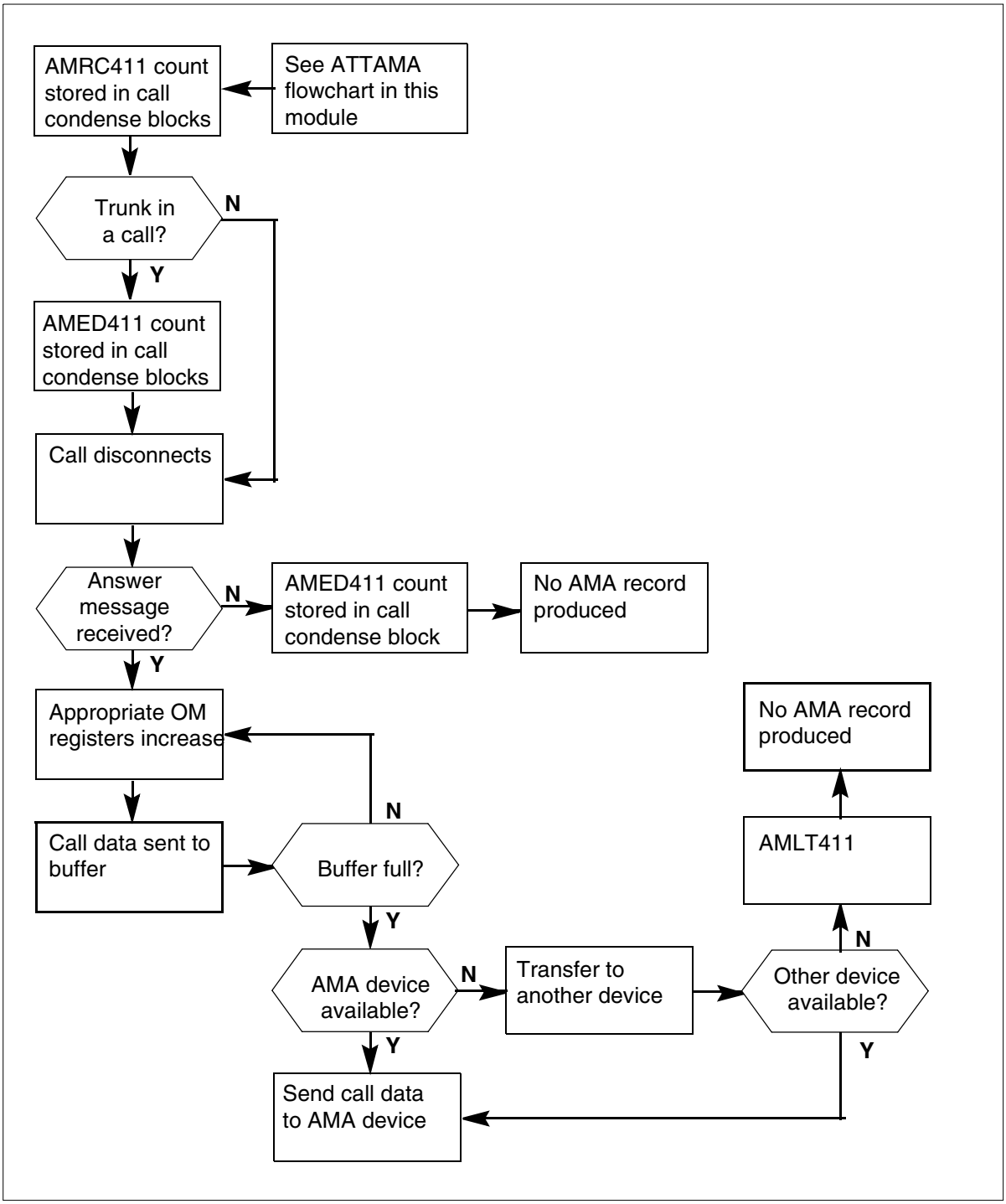
OM group ATTAMA (continued)

OM group ATTAMA registers: station paid (continued)



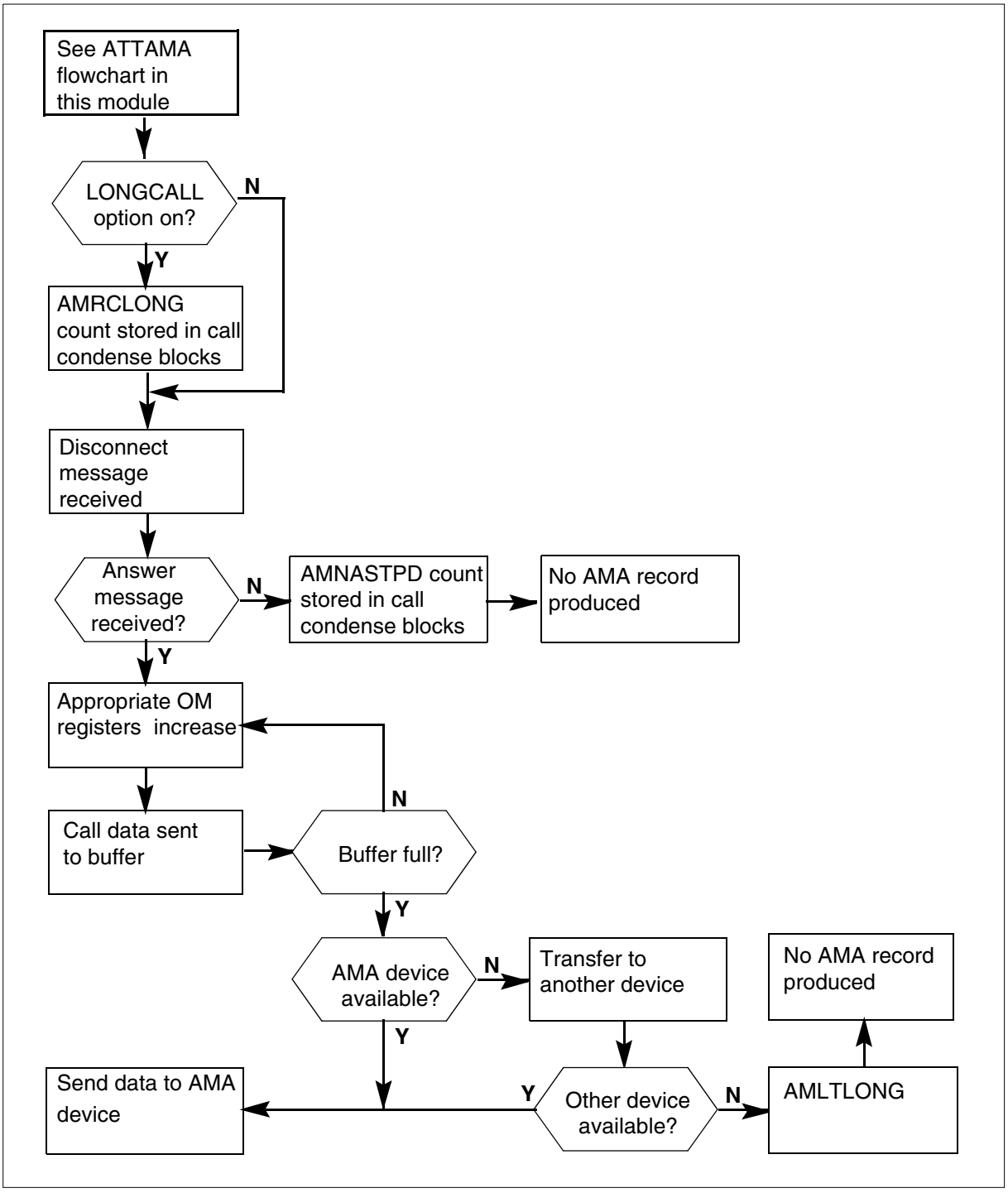
OM group ATTAMA (continued)

OM group ATTAMA registers: 411

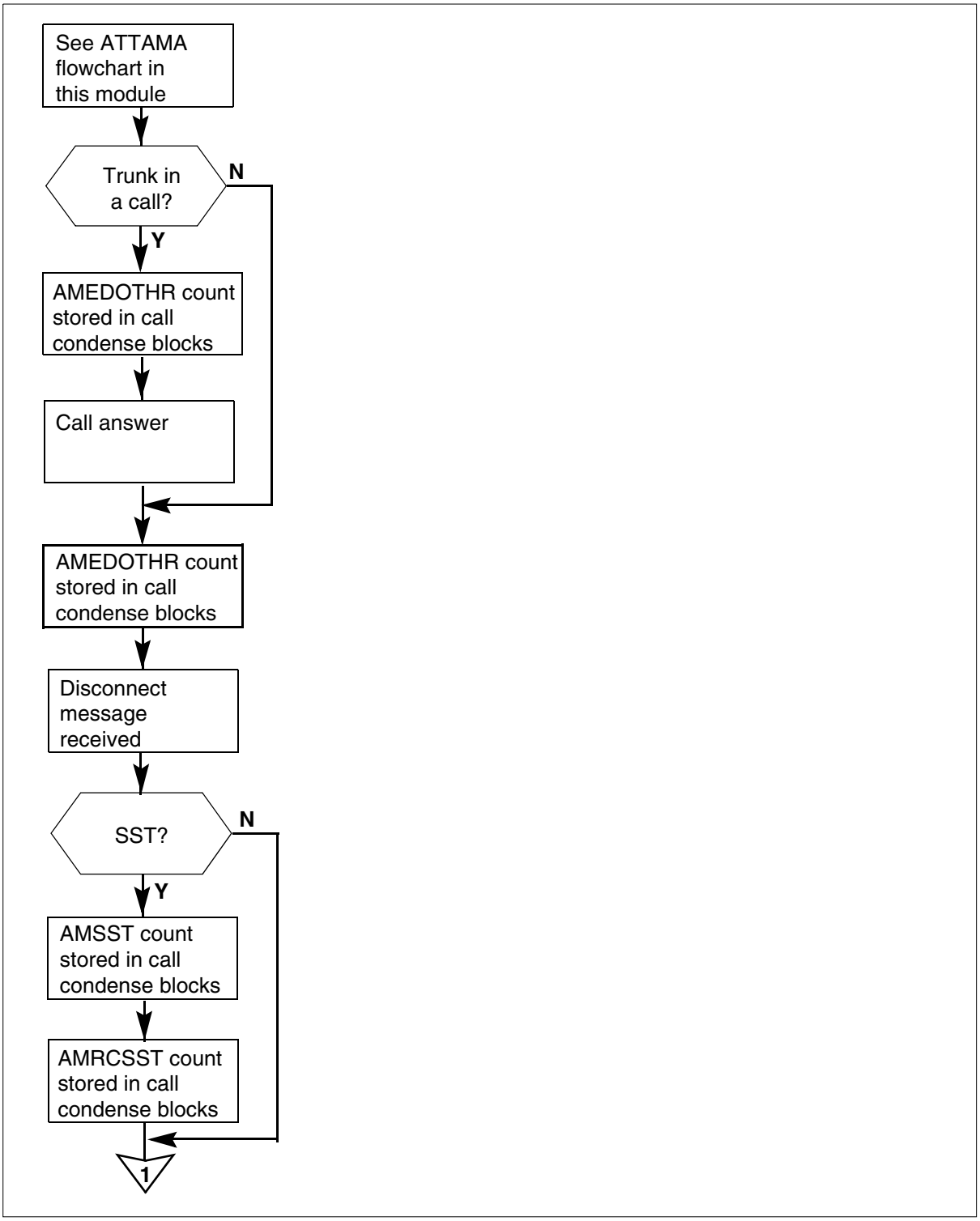


OM group ATTAMA (continued)

OM group ATTAMA registers: long duration

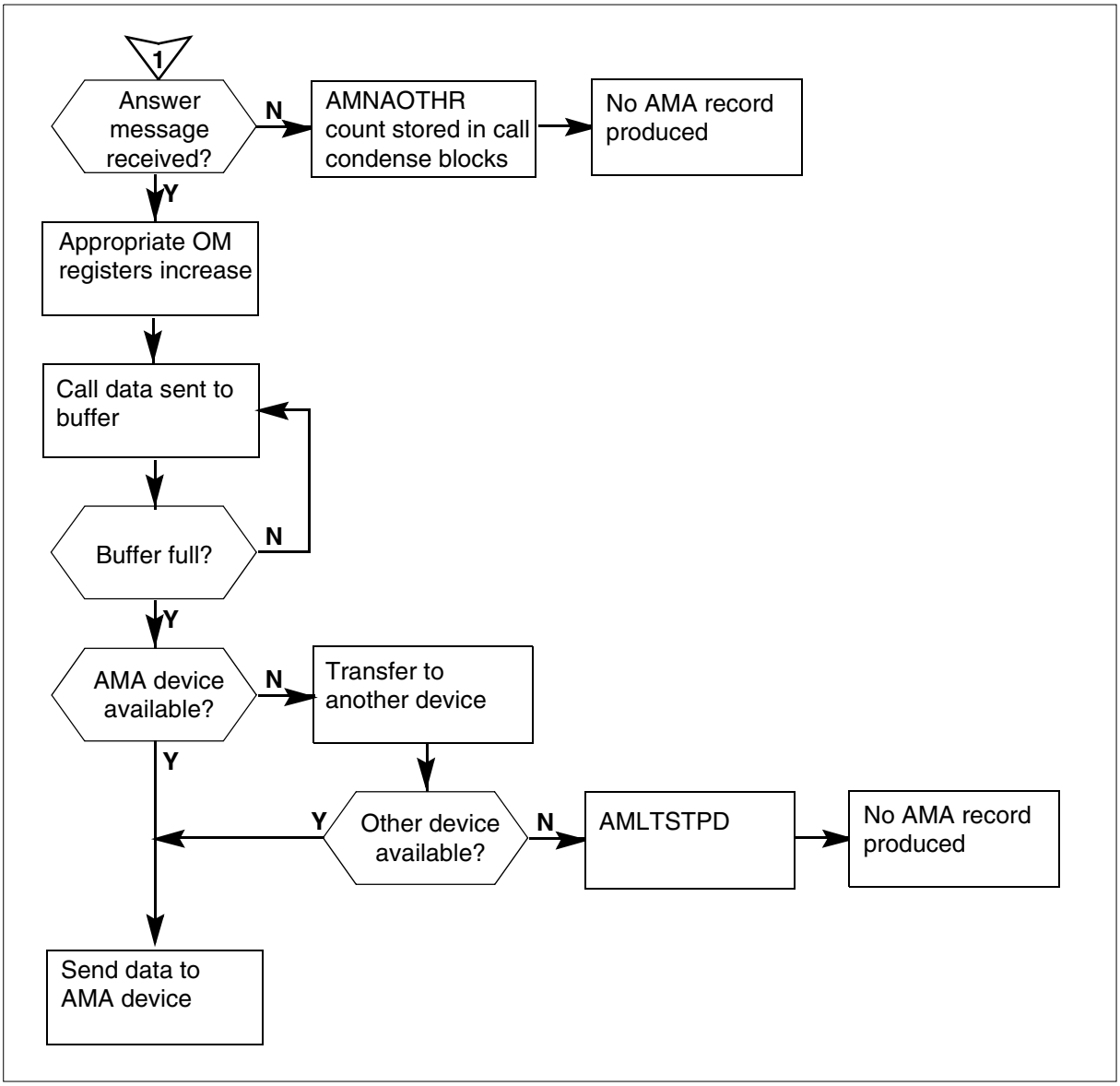


OM group ATTAMA registers: non-treatment



OM group ATTAMA (continued)

OM group ATTAMA registers: non-treatment (continued)



Register AMANS

Answered incoming billable calls (AMANS)

The AMANS counts incoming billable calls that receive answer messages.

Register AMANS release history

Register AMANS was introduced in BCS20.

Associated registers

In offices with feature package NTX098AA Bellcore CAMA Format:

AMANS = AMRCSTPD + AMRC411 + AMRC555 +
ATTAMA_AMLTSTPD + AMLT411 + AMLT555

In offices with feature package NTX159AA Bellcore LAMA Format:

AMANS = AMRCSTPD + AMRC411 + AMRC555 + AMLTSTPD +
AMLT411 + ATTAMA_AMLT555 + ATTLAMA_ AMRCMR +
ATTLAMA_AMRCIWAT + ATTLAMA_AMRCOWAT +
ATTLAMA_AMLTMR + ATTLAMA_AMLTIWAT +
ATTLAMA_AMLTOWAT

Associated logs

The AMA subsystem generates AMAB117 when the system must deliver calling information.

Extension register

AMANS2

Register AMDA411

Billable directory assistance 411 calls (AMDA411)

Register AMDA411 counts billable directory assistance (DA) 411 calls after digit collection.

Register AMDA411 increases only when the DA411 and CHG411 options in table AMAOPT are ON.

Register AMDA411 release history

Register AMDA411 was introduced in BCS20.

Associated registers

AMDA411 = AMRC411 + AMED411 + AMNA411 + AMLT411

Associated logs

The AMA subsystem generates AMAB117 when the system must deliver calling information.

Extension registers

There are no extension registers.

OM group ATTAMA (continued)

Register AMDA555

Billable directory assistance 555-1212 calls (AMDA555)

Register AMDA555 counts billable directory assistance 555-1212 calls after digit collection.

Register AMDA555 does not include numbering plan area (NPA) 555-1212 calls. Register AMDA555 increases only when the DA 555 and CHG 555 options in table AMAOPTS are ON.

Register AMDA555 release history

Register AMDA555 was introduced in BCS20.

Associated registers

AMDA555 = AMRC555 + AMED555 + AMNA555 + AMLT555

Associated logs

The AMA subsystem generates AMAB117 when the system must deliver calling information.

Extension registers

There are no extension registers.

Register AMED411

Answered directory assistance 411 calls with an estimated disconnect time (AMED411)

Register AMED411 counts answered directory assistance (DA) 411 calls that have an estimated disconnect time. Register AMED411 increases only when options DA411 and CHG411 in table AMAOPTS are ON.

Register AMED411 counts estimated disconnect calls when the system receives an origination on a trunk involved in a call. The condition occurs when one or both parties disconnect during a warm restart, and the system loses the disconnect message.

Register AMED411 release history

Register AMED411 was introduced in BCS20.

Associated registers

There are no associated registers.

Associated logs

The AMA subsystem generates AMAB117 when the system must deliver calling information.

Extension registers

There are no extension registers.

Register AMED555

Answered directory assistance 555-1212 billable with estimated disconnect time (AMED555)

Register AMED555 counts answered directory assistance (DA) 555-1212 calls that have an estimated disconnect time. Register AMED555 increases only when options DA555 and CHG555 in table AMAOPTS are ON.

Register AMED555 counts estimated disconnect calls when the system receives an origination on a trunk involved in a call. The condition occurs when one or both parties disconnect during a warm restart, and the system loses the disconnect message.

Register AMED555 release history

Register AMED555 was introduced in BCS20.

Associated registers

There are no associated registers.

Associated logs

The AMA subsystem generates AMAB117 when the system must deliver calling information.

Extension registers

There are no extension registers.

Register AMEDOTHR

Three-way calling, call forwarding, and study calls with estimated disconnect times (AMEDOTHR)

OM group ATTAMA (continued)

Register AMEDOTHR increases when a user makes non-billable call, including the following call types:

- directory assistance (DA) 411 calls made when option DA411 is ON and CHG411 is OFFdirectory assistance (DA) 411 calls made when DA555 is ON and CHG555 is OFF in table AMAOPTS
- directory assistance (DA) 411 calls made when DA555 is ON and CHG555 is OFF in table AMAOPTS
- calls that generate records for analysis, and not for billing
- three-port conference calls when option TWC in table AMAOPTS is ON
- calls when the subscriber deactivates the Call Forwarding feature and the call forward option in table AMAOPTS is ON

Register AMEDOTHR does not count Meridian Digital Centrex (MDC) six-port conference calls.

Register AMEDOTHR counts estimated disconnect calls when the system receives origination on a trunk involved in a call. The condition occurs when one or both parties disconnect during a warm restart, and the system loses the disconnect message.

Register AMEDOTHR release history

Register AMEDOTHR was introduced in BCS20.

Associated registers

There are no associated registers.

Associated logs

The AMA subsystem generates an AMAB117 when the system must deliver calling information.

Extension registers

There are no extension registers.

Register AMEDSTPD

Answered station-paid calls with an estimated disconnect time (AMEDSTPD)

Register AMEDSTPD counts answered station-paid calls that have an estimated disconnect time.

Register AMEDSTPD counts estimated disconnect calls when the system receives an origination on a trunk involved in a call. The condition occurs

when one or both parties disconnect during a warm restart, and the system loses the disconnect message.

Register AMEDSTPD release history

Register AMEDSTPD was introduced in BCS20.

Associated registers

There are no associated registers.

Associated logs

The automatic message accounting (AMA) subsystem generates an AMAB117 when the system must deliver calling information.

Extension registers

There are no extension registers.

Register AMLTLONG

Lost A and B long-duration records (AMLTONG)

Register AMLTLONG counts A and B long-duration call records that the system loses. The system loses call records when

- a tape unit is not available for a record output to the device independent recording package (DIRP) buffer
- a software recording unit is not available for a call record

Recognition and continuation records are A and B records. Recognition and continuation records indicate that a long-duration call is in progress. The long-duration call audit (LONGCALL) produces long-duration call records every 24 hours.

Disconnect records (C and D records) indicate that a long-duration call is complete. The C and D records are treated the same as station paid records.

Register AMLTLONG release history

Register AMLTLONG was introduced in BCS20.

Associated registers

There are no associated registers.

Associated logs

The automatic message accounting (AMA) subsystem generates AMAB117 when the system must deliver calling information.

OM group ATTAMA (continued)

Extension registers

There are no extension registers.

Register AMLT411

Lost directory assistance 411 billable call records (AMLT411)

Register AMLT411 counts directory assistance (DA) 411 billable call records that the system loses. The AMLT411 register increases when options DA411 and CHG411 are set to ON in table AMAOPTS.

The system loses call records

- when a tape unit is not available for a record output to the device independent recording package (DIRP) buffer
- when a software recording unit is not available for a call record

Register AMLT411 release history

Register AMLT411 was introduced in BCS20.

Associated registers

There are no associated registers.

Associated logs

The AMA subsystem generates AMAB117 when the system must deliver calling information.

Extension registers

There are no extension registers.

Register AMLT555

Lost DA 555-1212 billable call records (AMLT555)

Register AMLT555 counts DA 555-1212 call records that the system loses.

The AMLT555 count excludes numbering plan area (NPA)-555-1212 calls. The system loses call records when

- a tape unit is not available for a record output to the DIRP buffer
- a software recording unit is not available for a call record

Register AMLT555 release history

Register AMLT555 was introduced in BCS20.

Associated registers

There are no associated registers.

Associated logs

The AMA subsystem generates AMAB117 when the system must deliver calling information.

Extension registers

There are no extension registers.

Register AMLTOTHR

Lost three-way calling use, call forwarding use, study and short supervisory transition records (AMLTOTHR)

Register AMLTOTHR counts lost records for non-billable calls including the following types:

- directory assistance (DA) 411 calls made when option DA411 is ON and CHG411 is OFF
- directory assistance (DA) 411 calls made when DA555 is ON and CHG555 in table AMAOPTS is OFF
- calls that generate records for analysis not for billing
- three-port conference calls when option TWC in table AMAOPTS is ON
- calls when the customer deactivates the Call Forwarding feature and the call forward option in table AMAOPTS is ON
- short supervisory transitions (SST) calls

The system loses call records

- when a tape unit is not available for a record output to the DIRP buffer
- when a software recording unit is not available for a call record

Register AMLTOTHR release history

Register AMLTOTHR was introduced in BCS20.

Associated registers

There are no associated registers.

Associated logs

The AMA subsystem generates AMAB117 when the system must deliver calling information.

OM group ATTAMA (continued)

Extension registers

There are no extension registers.

Register AMLTSTPD

Lost records for answered station-paid calls (AMLTSTPD)

Register AMLTSTPD counts call records for answered station-paid calls that the system loses.

The system loses call records

- when a tape unit is not available for a record output to the DIRP buffer
- when a software recording unit is not available for a call record

Register AMLTSTPD release history

Register AMLTSTPD was introduced in BCS20.

Associated registers

There are no associated registers.

Associated logs

The AMA subsystem generates AMAB117 when the system must deliver calling information.

Extension registers

There are no extension registers.

Register AMLTTRCR

Lost tracer, transfer, and time change records (AMLTTRCR)

Register AMLTTRCR counts tracer, transfer, and time change records that the system loses.

Tracer records are administrative AMA records that contain ATTAMA and ATTLAMA registers in offices with feature package NTX159AA Bellcore LAMA Format.

The system produces:

- a periodic OM tracer when the TRACER option in table AMAOPTS is ON
- a transfer record when AMA tapes are mounted or removed
- a time change record when the TIMECHANGE option in table AMAOPTS is ON

Register AMLTTRCR release history

Register AMLTTRCR was introduced in BCS20.

Associated registers

There are no associated registers.

Associated logs

The AMA subsystem generates AMAB117 when the system must deliver calling information.

Extension registers

There are no extension registers.

Register AMNAOTHR

Three-way calling, call forwarding, and study calls with lost answer message (AMNAOTHR)

Register AMNAOTHR counts non-billable calls that lost the answer message. The AMNAOTHR register counts the following call types:

- directory assistance (DA) 411 calls made when option DA411 is ON and CHG411 is OFF
- directory assistance DA555 is ON and CHG555 is OFF in table AMAOPTS
- calls that generate records for analysis, not for billing
- three-port conference calls when option TWC in table AMAOPTS is ON
- calls when the subscriber deactivates the Call Forwarding feature and the call forward option is ON in table AMAOPTS

The system loses an answer message when the AMA recording office receives a disconnect message from an answered call before the system receives an answer message first. Under these conditions the system produces no AMA record.

Register AMNAOTHR release history

Register AMNAOTHR was introduced in BCS20.

Associated registers

There are no associated registers.

OM group ATTAMA (continued)

Associated logs

The AMA subsystem generates AMAB117 when the system must deliver calling information.

Extension registers

There are no extension registers.

Register AMNA411

Answered directory assistance 411 billable calls with lost answer messages (AMNA411)

Register AMNA411 counts answered directory assistance (DA) 411 calls with a lost answer message. The AMNA411 register increases when options DA411 and CHG411 in table AMAOPTS are ON.

The system loses an answer message when the AMA recording office receives a disconnect message from an answered call before the office receives an answer message. Under these conditions the system does not produce an AMA record.

Register AMNA411 release history

Register AMNA411 was introduced in BCS20.

Associated registers

There are no associated registers.

Associated logs

The AMA subsystem generates AMAB117 when the system must deliver calling information.

Extension registers

There are no extension registers.

Register AMNA555

Answered directory assistance 555-1212 billable calls with lost answer messages (AMNA555)

Register AMNA555 counts directory assistance (DA) 555-1212 calls with a lost answer message. The AMNA555 register increases only when options DA555 and CHG555 are set to ON in table AMAOPTS.

The system loses an answer message when the AMA recording office receives a disconnect message from an answered call. When the system receives the

disconnect message, the system does not receive an answer message. Under these conditions, the system does not produce an AMA record.

Register AMNA555 release history

Register AMNA555 was introduced in BCS20.

Associated registers

There are no associated registers.

Associated logs

The AMA subsystem generates an AMAB117 when the system must deliver calling information.

Extension registers

There are no extension registers.

Register AMNASTPD

Answered station-paid calls with lost answer message (AMNASTPD)

Register AMNASTPD counts answered station-paid calls that lost the answer message.

The system loses an answer message when the AMA recording office receives a disconnect message from an answered call. The system receives the disconnect message before the system receives an answer message. Under these conditions, the system does not produce an AMA record.

Register AMNASTPD release history

Register AMNASTPD was introduced in BCS20.

Associated registers

There are no associated registers.

Associated logs

The AMA subsystem generates an AMAB117 when the system must deliver calling information.

Extension registers

There are no extension registers.

Register AMNOTRMT

Incoming non-AMTRMT calls (AMNOTRMT)

OM group ATTAMA (continued)

Register AMNOTRMT counts incoming non-billable (AMTRMT) calls, after called party digit collection.

Register AMNOTRMT release history

Register AMNOTRMT was introduced in BCS20.

Associated registers

AMNOTRMT = AMRCOTHR + AMEDOTHR + AMNAOTHR + AMLTOTHR

Associated logs

The AMA subsystem generates AMAB117 when the system must deliver calling information.

Extension registers

There are no extension registers.

Register AMORIGS

Intertoll and centralized AMA call originations (AMORIGS)

Register AMORIGS counts intertoll and centralized AMA (CAMA) call originations, after called party digit collection. Register AMORIGS does not count calls that do not complete digit collection and calls that abort before digit collection.

Offices with feature package NTX159AA Bellcore LAMA Format include line call originations.

Register AMORIGS release history

Register AMORIGS was introduced in BCS20.

Associated registers

There are no associated registers.

Associated logs

The AMA subsystem generates AMAB117 when the system must deliver calling information.

Extension registers

There are no extension registers.

Register AMRCLONG

The A and B long-duration call records (AMRCLONG)

Register AMRCLONG counts long-duration call records. Register AMRCLONG increases when the long-duration call audit (LONGCALL) option in table AMAOPTS is ON.

The LONGCALL produces long-duration call records every 24 hours. Recognition and continuation (A and B) records indicate that a long-duration call is in progress.

Disconnect (C and D) records indicate that a long duration call is complete. The C and D records are treated the same as station-paid records.

Register AMRCLONG release history

Register AMRCLONG was introduced in BCS20.

Associated registers

There are no associated registers.

Associated logs

The AMA subsystem generates AMAB117 when the system must deliver calling information.

Extension registers

There are no extension registers.

Register AMRC411

Call records for answered directory assistance 411 calls (AMRC411)

Register AMRC411 counts call records for billable answered directory assistance (DA) 411 calls. The AMRC411 register increases only when options DA411 and CHG411 are ON in table AMAOPTS.

Register AMRC411 release history

Register AMRC411 was introduced in BCS20.

Associated registers

There are no associated registers.

Associated logs

The AMA subsystem generates AMAB117 when the system must deliver calling information.

Extension registers

There are no extension registers.

OM group ATTAMA (continued)

Register AMRC555

Call records for answered directory assistance 555-1212 calls (AMRC555)

Register AMRC555 counts call records for billable directory assistance (DA) 555-1212 calls. The AMRC555 register does not count numbering plan area (NPA) 555-1212 calls. The AMRC555 register increases only when options DA555 and CHG555 in table AMAOPTS are ON.

Register AMRC555 release history

Register AMRC555 was introduced in BCS20.

Associated registers

There are no associated registers.

Associated logs

The AMA subsystem generates AMAB117 when the system must deliver calling information.

Extension registers

There are no extension registers.

Register AMRCOTHR

Records that are put on file (AMRCOTHR)

Register AMRCOTHR counts records that the system generates for non-billable calls. Register AMRCOTHR counts the following call types:

- directory assistance (DA) 411 calls made when option DA411 is ON and CHG411 is OFF
- directory assistance (DA) 411 calls made when DA555 is ON and CHG555 is OFF in table AMAOPTS
- calls that generate records for analysis not for billing
- three-port conference calls when option TWC in table AMAOPTS is ON
- calls when the customer deactivates the Call Forwarding feature and the call forward option in table AMAOPTS is ON
- short supervisory transitions (SST) calls

Register AMRCOTHR release history

Register AMRCOTHR was introduced in BCS20.

Associated registers

There are no associated registers.

Associated logs

The AMA subsystem generates AMAB117 when the system must deliver calling information.

Extension registers

There are no extension registers.

Register AMRCSST

The AMA short supervisory transition records (AMRCSST)

Register AMRCSST counts short supervisory transition (SST) records that the system produces for output on the AMA file. Register AMRCSST increases only when the SST option in table AMAOPTS is ON.

The SSTs are on-off-on switchhook transitions with less than the minimum call duration. Parameter MINIMUM_CHARGE_DURATION in table OFCENG defines minimum call duration.

Register AMRCSST release history

Register AMRCSST was introduced in BCS20.

Associated registers

There are no associated registers.

Associated logs

The AMA subsystem generates AMAB117 when the system must deliver calling information.

Extension registers

There are no extension registers.

Register AMRCSTPD

Answered station-paid call records (AMRCSTPD)

Register AMRCSTPD counts answered station-paid call records for billing. Register AMRCSTPD does not count short supervisory transition (SST) records and A and B long-duration records.

Register AMRCSTPD release history

Register AMRCSTPD was introduced in BCS20.

Associated registers

There are no associated registers.

OM group ATTAMA (continued)

Associated logs

The AMA subsystem generates AMAB117 when the system must deliver calling information.

Extension registers

There are no extension registers.

Register AMRCTRCR

Tracer, transfer, and time change records (AMRCTRCR)

Register AMRCTRCR counts tracer, transfer, and time change records.

Tracer records are administrative AMA records that contain ATTAMA and ATTLAMA registers in offices with feature package NTX159AA Bellcore LAMA Format.

The system produces:

- the periodic OM tracer when the option TRACER in table AMAOPTS is ON
- a transfer record when you mount or remove AMA tapes
- a time change record only when the option TIMECHANGE in table AMAOPTS is ON

Register AMRCTRCR release history

Register AMRCTRCR was introduced in BCS20.

Associated registers

There are no associated registers.

Associated logs

The AMA subsystem generates AMAB117 when the system must deliver calling information.

Extension registers

There are no extension registers.

Register AMSST

The AMF short supervisory transitions (AMSST)

Register AMSST counts calls on which a minimum of one short supervisory transition (SST) occurs.

Register AMSST increases only when the SST option in table AMAOPTS is ON.

The SSTs are on-off-on switchhook transitions with less than the minimum call duration. Parameter MIMINUM_CHARGE_DURATION in table OFCENG defines minimum call duration.

Register AMSST release history

Register AMSST was introduced in BCS20.

Associated registers

There are no associated registers.

Associated logs

The AMA subsystem generates AMAB117 when the system must deliver calling information.

Extension registers

There are no extension registers.

Register AMTRMT

Incoming billable calls (AMTRMT)

Register AMTRMT counts incoming billable calls after called-party digit collection, including all charged directory assistance (DA) calls.

The AMA treatment applies to the following types of calls that the system records for billing and counts in AMATRMT:

- normal toll calls, for example, incoming calls on centralized AMA (CAMA) trunks
- toll calls and message rate calls from lines, if feature package NTX159AA Bellcore LAMA Format is present
- directory assistance calls that the system charges when AMA options DA555 and CHG555 are ON. DA 555-1212 calls (excluding numbering plan area [NPA] 555-1212 calls, which are station-paid calls) are examples of these calls
- DA411 calls when AMA options DA411 and CHG411 are ON

A different office can bill an incoming call on a CAMA trunk. The AMTRMT includes these calls and counts them early in the call process.

OM group ATTAMA (continued)

Register AMTRMT release history

Register AMTRMT was introduced in BCS20.

Associated registers

In offices with feature package NTX098AA Bellcore CAMA Format:

AMTRMT = AMRCSTPD + AMEDSTPD + AMNASTPD + AMLTSTPD + AMRC411 + AMED411 + AMNA411 + AMLT411 + AMRC555 + AMED555 + AMNA555 + AMLT555.

In offices with feature package NTX159AA Bellcore LAMA Format:

AMTRMT = AMRCSTPD + AMEDSTPD + AMNASTPD + AMLTSTPD + AMRC411 + AMED411 + AMNA411 + AMLT411 + AMRC555 + AMED555 + AMNA555 + AMLT555 + ATTLAMA_AMRCMR + ATTLAMA_AMEDMR + ATTLAMA_AMNAMR + ATTLAMA_AMLTMR + ATTLAMA_AMRCIWAT + ATTLAMA_AMEDIWAT + ATTLAMA_AMNAIWAT + ATTLAMA_AMLTIWAT + ATTLAMA_AMRCOWAT + ATTLAMA_AMEDOWAT + ATTLAMA_AMNAOWAT + ATTLAMA_AMLTOWAT

Associated logs

The AMA subsystem generates AMAB117 when the system must deliver calling information.

Extension registers

There are no extension registers.

Register AMUNANS

Unanswered AMTRMT call (AMUNANS)

Register AMUNANS increases when a call disconnects and the system receives no answer message.

For offices with feature package NTX159AA Bellcore LAMA Format, AMUNANS increases if options UNANSTOLL and UNASLOCAL in table AMAOPTS are ON.

Register AMUNANS release history

Register AMUNANS was introduced in BCS20.

Associated registers

There are no associated registers.

OM group ATTAMA (end)

Associated logs

The AMA subsystem generates AMAB117 when the system must deliver calling information.

Extension register

AMUNANS2

OM group ATTLAMA

OM description

AT&T local automatic message accounting (ATTLAMA)

The OM group (ATTLAMA) provides information on different types of calls that pass through an office. Registers count message rate, inward wide-area telephone service (INWATS) calls, and outward wide-area telephone service (OUTWATS) calls. Registers provide the counts according to the disposition of these services.

The ATTLAMA counts the following call dispositions:

- call records for answered calls
- lost records for answered calls
- estimated disconnect calls
- lost answer message calls

Release history

The OM group ATTLAMA was introduced in BCS20.

Registers

The OM group ATTLAMA registers display on the MAP terminal as follows:

```
AMRCMR      AMLTMR      AMEDMR      AMNAMR
AMRCIWAT    AMLTIWAT    AMEDIWAT    AMNAIWAT
AMRCOWAT    AMLTOWAT    AMEDOWAT    AMNAOWAT
```

Group structure

OM group ATTLAMA provides one tuple for each office.

Key field:
There is no Key field

Info field:
There is no Info field

You must set FORMAT in table CRSFMT to BCFMT.

Options INWATS and OUTWATS in table AMAOPTS must be ON for registers to increase.

OM group ATTLAMA (continued)

Associated OM groups

The OM group ATTAMA provides call disposition counts for the following calls:

- station paid
- directory assistance
- tracer
- transfer
- time change
- long-duration
- other calls in an office

Associated functional groups

The following working groups associate with OM group ATTLAMA:

- MDC
- POTS

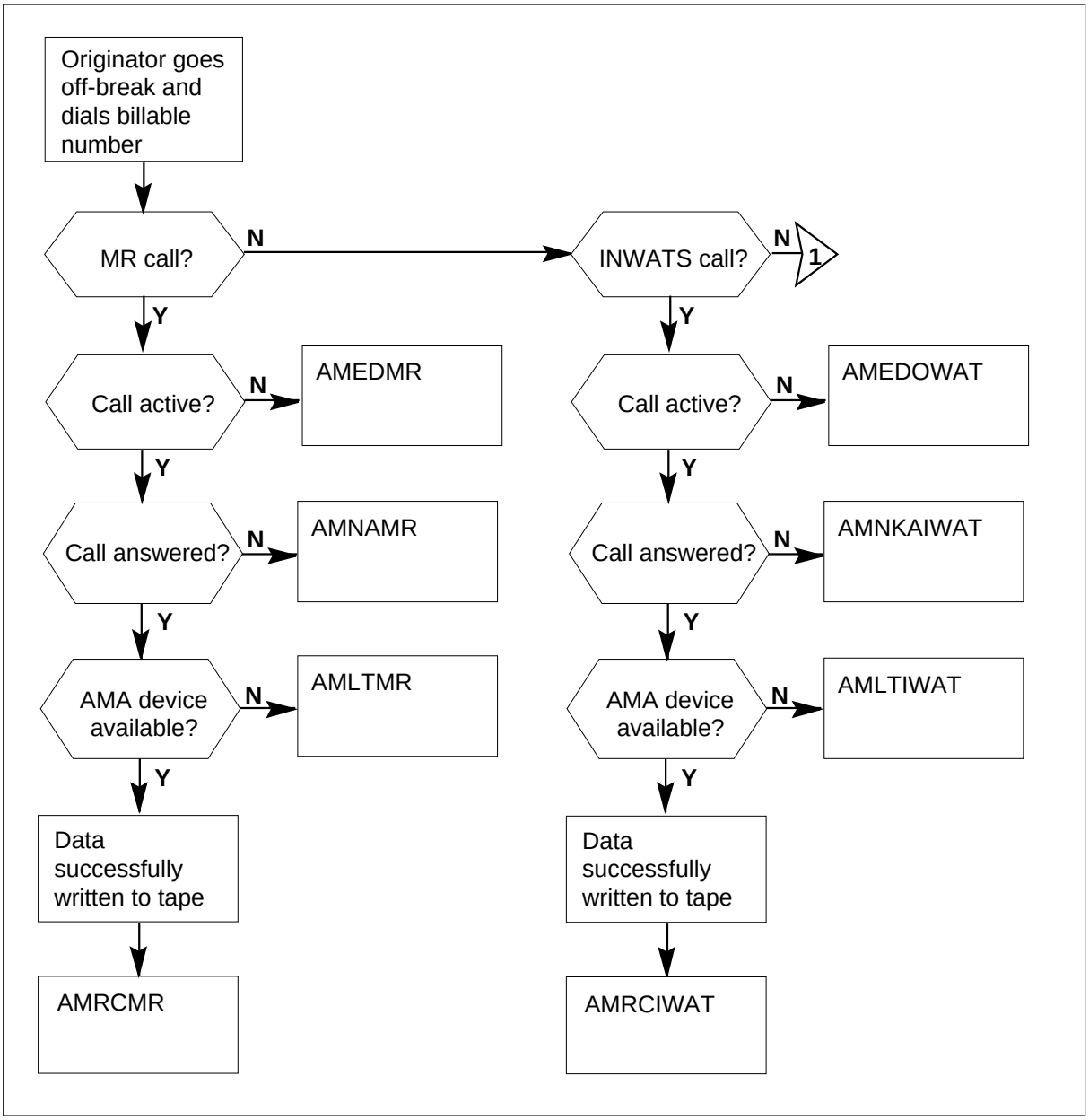
Associated functionality codes

The functionality codes that associate with OM group ATTLAMA appear in the following table.

Functionality	Code
Bellcore LAMA Format	NTX159AA

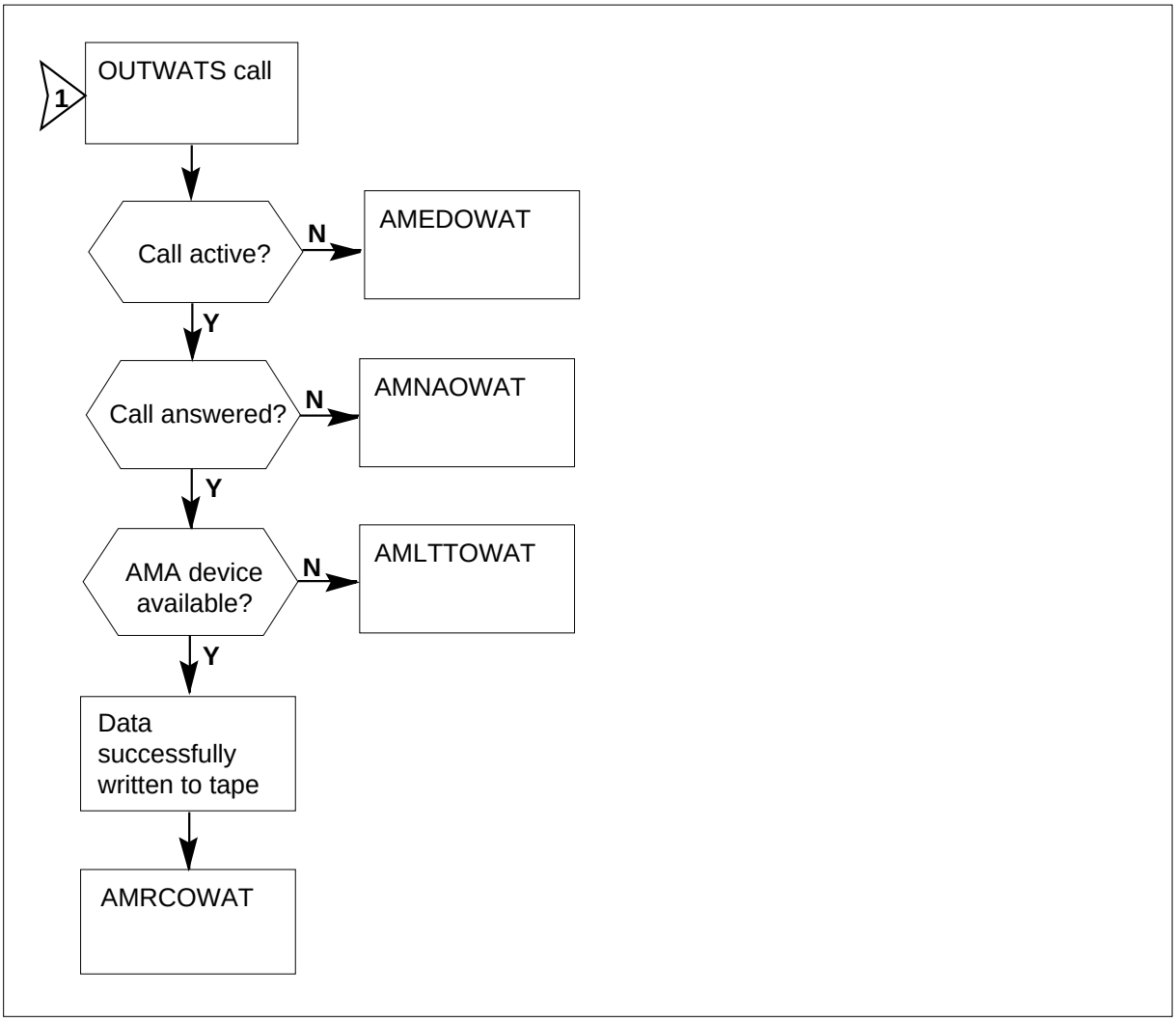
OM group ATTLAMA (continued)

OM group ATTLAMA registers



OM group ATTLAMA (continued)

OM group ATTLAMA registers (continued)



Register AMEDIWAT

INWATS call with an estimated disconnect time (AMEDIWAT)

Register AMEDIWAT counts originations that the system receives on active INWATS calls. A warm restart causes originations active INWATS calls receive. Originations often occur because of a warm restart during disconnect.

Option INWATS in table AMAOPTS must be set to ON for register AMEDIWAT to increase.

Register AMEDIWAT release history

Register AMEDIWAT 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 AMEDMR

Message rate calls with an estimated disconnect time (AMEDMR)

AMEDMR counts originations that the system receives on active multi-unit message rate calls. Originations often occur because of a warm restart during disconnect.

Register AMEDMR release history

Register AMEDMR 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 AMEDOWAT

OUTWATS calls with estimated disconnect time (AMEDOWAT)

Register AMEDOWAT counts originations that the system receives on active OUTWATS calls. Originations often occur because of a warm restart during disconnect.

You must set the option OUTWATS in table AMAOPTS to ON for register OUTWATS to increase.

Register AMEDOWAT release history

AMEDOWAT was introduced in BCS20.

Associated registers

There are no associated registers.

OM group ATTLAMA (continued)

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register AMLTIWAT

Lost INWATS calls (ALMTIWAT)

Register AMLTIWAT counts INWATS calls that the system loses for one of the following reasons:

- an attempt to record the call without an automatic message accounting (AMA) tape occurs
- a failure to get a BC_LAMA_UNIT occurs

Office parameter NUM_OF_BC_LAMA REC_UNITS in table OFCENG controls the supply of recording units.

Option INWATS in table AMAOPTS must be set to ON for register ALMTIWAT to increase.

Register AMLTIWAT release history

Register AMLTIWAT was introduced in BCS20.

Associated registers

Register EXT_EXTOVFL counts calls that cannot be completed because there are not enough specific types of recording units.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register AMLTMR

Lost message rate calls (AMLTMR)

Register AMLTMR counts multi-unit message rate calls that the system loses for one of the following reasons:

- an attempt to record the call without an automatic message accounting (AMA) tape occurs
- failure to get a BC_LAMA_REC_UNIT occurs

Office parameter NUM_OF_OF_BC_LAMA_UNITS in table OFCENG controls the supply of recording units.

Register AMLTMR release history

Register AMLTMR was introduced in BCS20.

Associated registers

Register EXT_EXTOVFL counts calls that cannot be completed because not enough specific types of recording units are present.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register AMLTOWAT

Lost OUTWATS calls (ALMTOWAT)

Register AMLTOWAT increases when the system loses an OUTWATS call for one of the following reasons:

- an automatic message accounting (AMA) tape to record the call is not available
- a BC_LAMA_UNIT is not available

Office parameter NUM_OF_BC_LAMA_UNITS in table OFCENG controls the supply of recording units.

Option OUTWATS in table AMAOPTS must be set to ON for register AMLTOWAT OUTWATS increases this register.

Register AMLTOWAT release history

Register AMLTOWAT was introduced in BCS20.

Associated registers

Register EXT_EXTOVFL counts calls that cannot be completed because not enough types of recording units are present.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

OM group ATTLAMA (continued)

Register AMNAIWAT

No answer INWATS calls (AMNAIWAT)

AMNAIWAT counts answered INWATS calls that disconnect without receiving an answer message. A warm restart during answer often disconnects INWATS calls.

You must set the option INWATS in table AMAOPTS to ON, for register AMNAIWAT to increase.

Register AMNAIWAT release history

Register AMNAIWAT 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 AMNAMR

No answer message rate calls (AMNAMR)

Register AMNAMR counts answered multi-unit message rate calls that disconnect without receiving an answer message. A warm restart during answer often disconnects INWATS calls.

Register AMNAMR release history

Register AMNAMR 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 AMNAOWAT

No answer OUTWATS calls (AMNAOWAT)

Register AMNAOWAT counts answered OUTWATS calls that disconnect without receiving an answer message. A warm restart during answer often disconnects OUTWATS calls.

You must set the option OUTWATS in table AMAOPTS to ON for register AMNAOWAT to increase.

Register AMNAOWAT release history

Register AMNAOWAT 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 AMRCIWAT

Recorded INWATS calls (AMRCIWAT)

Recorded INWATS calls (AMRCIWAT) counts INWATS calls that the system writes to the automatic message accounting (AMA) tape.

You must set option INWATS in table AMAOPTS to ON for the AMRCIWAT to increase.

Register AMRCIWAT release history

Register AMRCIWAT 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 AMRCMR

Recorded message rate calls (AMRCMR)

OM group ATTLAMA (end)

Register AMRCMR counts multi-unit message rate calls that the system writes to the automatic message accounting (AMA) tape.

Register AMRCMR release history

AMRCMR 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 AMRCOWAT

Recorded OUTWATS calls (AMRCOWAT)

Register AMRCOWAT increases when the system writes on OUTWATS call to the automatic message accounting (AMA) tape.

You must set the option OUTWATS in table AMAOPTS to ON for register AMRCOWAT to increase.

Register AMRCOWAT release history

Register AMRCOWAT 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.

OM group AUTSPID

OM description

This OM group measures usage data associated with the AUTSPID feature. Currently, this measurement occurs for each XPM only for North American ISDN BRIFS sets.

The OM group associated with the Automated SPID feature (AUTSPID) records the following parameters:

- number of valid Automated SPID requests received (ATSPDREQ)
- number of successful Automated SPID requests (SUCCREQS)

In addition, the AUTSPID OM group records the following AUTOMATED SPID failures:

- number of Automated SPID failures due to a SPID being unavailable on the interface (SPDUNVAL)
- number of Automated SPID failures due to no initializing LTID or terminal service profile (TSP) provisioned on the interface (NO_TSP)
- number of Automated SPID failures due to unnecessary Automated SPID requests (UNSPDREQ)

Note: The system tags as a UNSPDREQ attempt any subsequent AUTSPID request by an LTID that someone has initialized already by means of an AUTSPID.

Release history

OM group AUTSPID was introduced in NA009.

Registers

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

```
ATSPDREQ
SUCCREQS
SPDUNVL
NO_TSP
UNSPDREQ
```

Group structure

OM group AUTSPID's structure consists of two fields.

Key field:
AUTSPID

OM group AUTSPID (continued)

Info field:

An example of the information field associated with each XPM is shown as the sequential entry of each XPM followed by its name and number.

Table shows example content of the Info field of an OM group AUTSPID.

Example of Info field in om group AUTSPID report

Entry number	PM name	PM number
23	LGC	11
24	SMA	2

Associated OM groups

There are no associated OM groups.

Associated functional groups

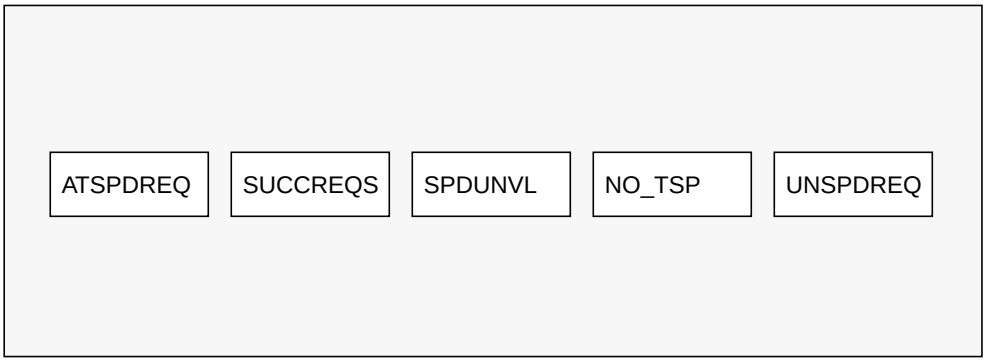
The following functional groups are associated with OM group AUTSPID:

- ISDN BRI
- LTC
- LGC
- SMA
- RCC
- RCC2
- ESMU
- SMA2

Associated functionality codes

There are no associated functionality codes.

OM group AUTSPID registers



Register ATSPDREQ

Register Automated SPID Requests Received

The ATSPDREQ register keeps a peg count on the number of valid Automated SPID requests received on an XPM basis. The system defines a valid request as (01010101010101).

Register ATSPDREQ release history

Register ATSPDREQ was introduced in NA009.

Associated registers

None

Associated logs

None

Extension registers

None

Register SUCCREQS

Register Successful Automated SPID Requests

The SUCCREQS register keeps a peg count of the number of Automated SPID requests that are successfully processed and a SPID sent to the requesting LTID.

Register SUCCREQS release history

Register SUCCREQS was introduced in NA009.

Associated registers

None

OM group AUTSPID (continued)

Associated logs

None

Extension registers

None

Register SPDUNVL

Register SPID Unavailable

The SPDUNVL register keeps a peg count of the number of Automated SPID requests failures due to a SPID not being available on the interface. Typically, this is the case where all the SPIDS are in use and a new request comes in from the interface.

Register SPDUNVL release history

Register SPDUNVL was introduced in NA009.

Associated registers

None

Associated logs

None

Extension registers

None

Register NO_TSP

Register No TSP Provisioned

The NO_TSP register keeps a peg count of the number of Automated SPID requests failures due to an initializing BRAFS LTID not being provisioned on the interface.

Register NO_TSP release history

Register NO_TSP was introduced in NA009.

Associated registers

None

Associated logs

None

Extension registers

None

Register UNSPDREQ

Register Unnecessary Automated SPID Request

The UNSPDREQ register keeps a peg count of the number of Automated SPID requests that are not necessary. An Automated SPID defines UNSPDREQ as a request to have the following rejection criteria:

- The number of Auto-SPID requests per terminal exceeds three attempts per ten minute period.
- The switch is already processing a parameter download request.
- The switch is already processing a layer three request.
- The switch is already processing an Auto-SPID request.

Register UNSPDREQ release history

Register UNSPDREQ was introduced in NA009.

Associated registers

None

Associated logs

None

Extension registers

None

OM group AVRARU

OM description

Auxiliary operator services system voice response audio response units

The OM group AVRARU provides information on audio response units in Auxiliary Operator Services System (AOSS) voice response offices. The AOSS voice response offices provide directory assistance and intercept announcements to subscribers.

Registers count the following:

- auto-intercept originations
- auto-intercept ANIF
- auto-intercept route to operator
- auto-intercept post-announcement cut-through to operator
- directory assistance post-announcement reconnects to operator
- intercept post-announcement reconnects to operator
- transfer post-announcement reconnects to transfer operator
- directory assistance calls routed to audio announcement
- intercept calls released to audio announcement
- attempts to release to audio that overflow
- failed attempts to release to audio

Release history

The OM group AVRARU was introduced in BCS24.

Registers

The OM group AVRARU registers display on the MAP terminal as follows:

```
AVRARUD AVRARUI AVRARU0V     AVRARUFL
```

Group structure

The OM group AVRARU provides one register for each office.

Key field:
There is no Key field

Info field:
There is no Info field

You must set the office parameter AOSS_VOICE_RESPONSE in table OFCVAR to Y (yes) for registers in this group to increase.

Associated OM groups

The OM group TRMTCM counts calls that the system routes to a treatment because of a customer action.

Associated functional groups

The working group TOPS associates with OM group AVRARU.

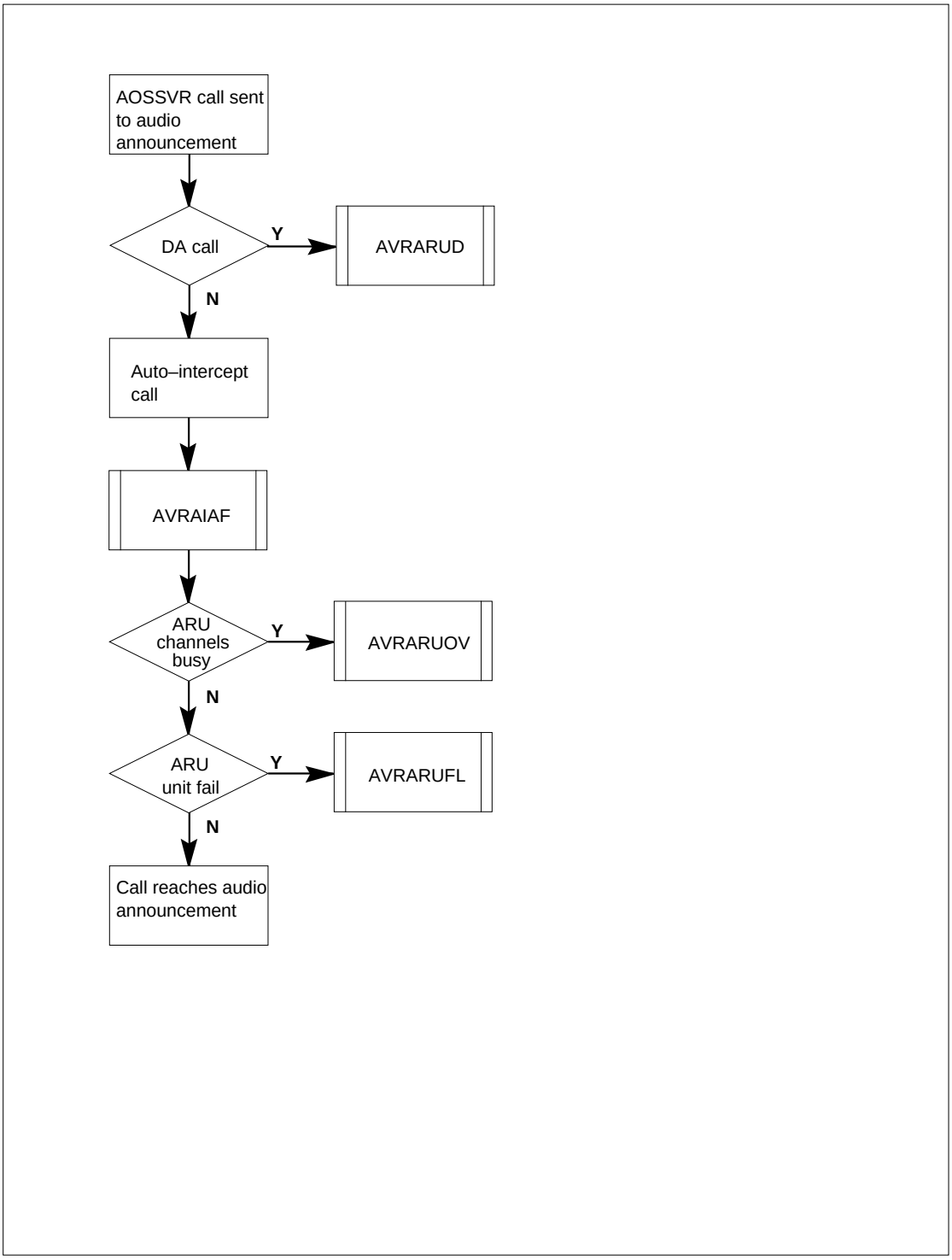
Associated functionality codes

Functionality codes that associate with OM group AVRARU appear in the following table.

Functionality	Code
AOSS VR Call Handling	NTX720AA
Auxiliary Operator Services System	NTX131AA

OM group AVRARU (continued)

OM group AVRARU registers



Register AVRARUD

Auxiliary operator services system voice response directory assistance calls (AVRARUD)

Register AVRARUD counts AOSS directory assistance calls that the system routes to a voice response audio announcement.

Register AVRARUD release history

Register AVRARUD was introduced in BCS24.

Associated registers

Register TRMTCM_TCMOSVR counts calls for DMS-100 local, DMS-200 toll, and DMS-100/200 local toll with feature AC0074 AOSS Voice Response Extended Call Handling. Register TRMTCM_TCMOSVR counts calls that the system routes to the operator services voice response treatment for one of the following reasons:

- On a directory assistance operator number identification (ONI) call, the operator enters the calling number at the AOSS console. The operator searches for the requested directory number and connects the subscriber to the audio response unit (ARU) for voice response.
- On a directory assistance automatic number identification (ANI) call, ANI equipment provides the calling number to the DMS. The operator searches for the requested directory number and connects the subscriber to the ARU for voice response.
- On an operator-handled intercept call, the operator collects the called number. The operator initiates a search for a possible new number and connects the subscriber to the ARU for voice response.

Associated logs

There are no associated logs.

Register AVRARUFL

Auxiliary operator services system audio response unit failures (AVARUFL)

AVRARUFL counts AOSS calls that the system routes to an audio announcement and connects to an audio response unit (ARU) channel but fails to produce the requested announcement.

Register AVRARUFL release history

Register AVRARUFL was introduced in BCS24.

OM group AVRARU (continued)

Associated registers

Register TRMTCM_TCMOSVR counts calls for DMS-100 local, DMS-200 toll, and DMS100/200 local toll with feature AC0074 AOSS Voice Response Extended Call Handling. Register TRMTCM_TCMOSVR counts calls that the system routes to the operator services voice response treatment for one of the following reasons:

- On a directory assistance operator number identification (ONI) call, the operator enters the calling number at the AOSS console. The operator searches for the requested directory number and connects the subscriber to the audio response unit (ARU) for voice response.
- On a directory assistance automatic number identification (ANI) call, ANI equipment provides the calling number to the DMS. The operator searches for the requested directory number and connects the subscriber to the ARU for voice response.
- On an operator-handled intercept call, the operator collects the called number. The operator initiates a search for a possible new number and connects the subscriber to the ARU for voice response.

Associated logs

There are no associated logs.

Register AVRARUI

Auxiliary operator services system voice response intercept calls (AVRARUI)

Register AVRARUI counts AOSS voice response intercept calls that the system routes to an AOSS voice response audio announcement.

The count in register AVRARUI is equal to or less than the count that the system records in register AVRAI.

Register AVRARUI release history

Register AVRARUI was introduced in BCS24.

Associated registers

Register TRMTCM_TCMOSVR counts calls for DMS-100 local, DMS-200 toll, and DMS100/200 local toll with feature AC0074 AOSS Voice Response Extended Call Handling. Register TRMTCM_TCMOSVR counts calls that the system routes to the operator services voice response treatment for one of the following reasons:

- On a directory assistance operator number identification (ONI) call, the operator enters the calling number at the AOSS console. The operator

searches for the requested directory number and connects the subscriber to the audio response unit (ARU) for voice response.

- On a directory assistance automatic number identification (ANI) call, ANI equipment provides the calling number to the DMS. The operator searches for the requested directory number and connects the subscriber to the ARU for voice response.
- On an operator-handled intercept call, the operator collects the called number. The operator initiates a search for a possible new number connects the subscriber to the ARU for voice response.

Associated logs

There are no associated logs.

Register AVRARUOV

Auxiliary operator services system audio response unit overflows (AVRARUOV)

Register AVRARUOV increases when the system routes an AOSS call to an audio announcement but cannot complete because all audio response unit (ARU) channels are busy.

Register AVRARUOV release history

Register AVRARUOV was introduced in BCS24.

Associated registers

Register TRMTCM_TCMOSVR counts calls for DMS-100 local, DMS-200 toll, and DMS100/200 local toll with feature AC0074 AOSS Voice Response Extended Call Handling. Register TRMTCM_TCMOSVR counts calls that the system routes to the operator services voice response treatment for one of the following reasons:

- On a directory assistance operator number identification (ONI) call, the operator enters the calling number at the AOSS console. The operator searches for the requested directory number and connects the subscriber to the audio response unit (ARU) for voice response.
- On a directory assistance automatic number identification (ANI) call, ANI equipment provides the calling number to the DMS. The operator searches for the requested directory number and connects the subscriber to the ARU for voice response.
- On an operator-handled intercept call, the operator collects the called number. The operator initiates a search for a possible new number and connects the subscriber to the ARU for voice response.

OM group AVRARU (end)

Associated logs

There are no associated logs.

OM group BCAPCG

OM description

Bearer capability per customer group (BCAPCG)

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

The OM group BCAPCG increases when the call originator does not succeed in reaching the desired call appearance(s) because the BC is incompatible.

The system routes the originator to CALL_NOT_ACCEPTED (CNAC) treatment.

Release history

The OM group BCAPCG was introduced in BCS23.

Registers

The OM group BCAPCG registers display on the MAP terminal as follows:

```
CGWRNGBC
```

Group structure

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

Key field:
IBNG_INDEX in table CUSTHEAD.

Info field:
OMIBNGINFO is the name of the customer group entered in table CUSTHEAD.

Translations require table CUSTHEAD. Table CUSTHEAD lists information for each customer group. The information consists of

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

Associated OM groups

The OM group TRMTCU2_TCUCNAC counts the use of call treatment CALL_NOT_ACCEPTED (CNAC). The originator of a call receives call

OM group BCAPCG (continued)

treatment CNAC when the BC of the originator and the terminator are not compatible.

The OM group BCAPOF counts calls that have bearer capability match problems between the originator and the called party for each office. The OM group BCAPOF counts calls that use a synonym directory number to reach the intended destination.

Associated functional groups

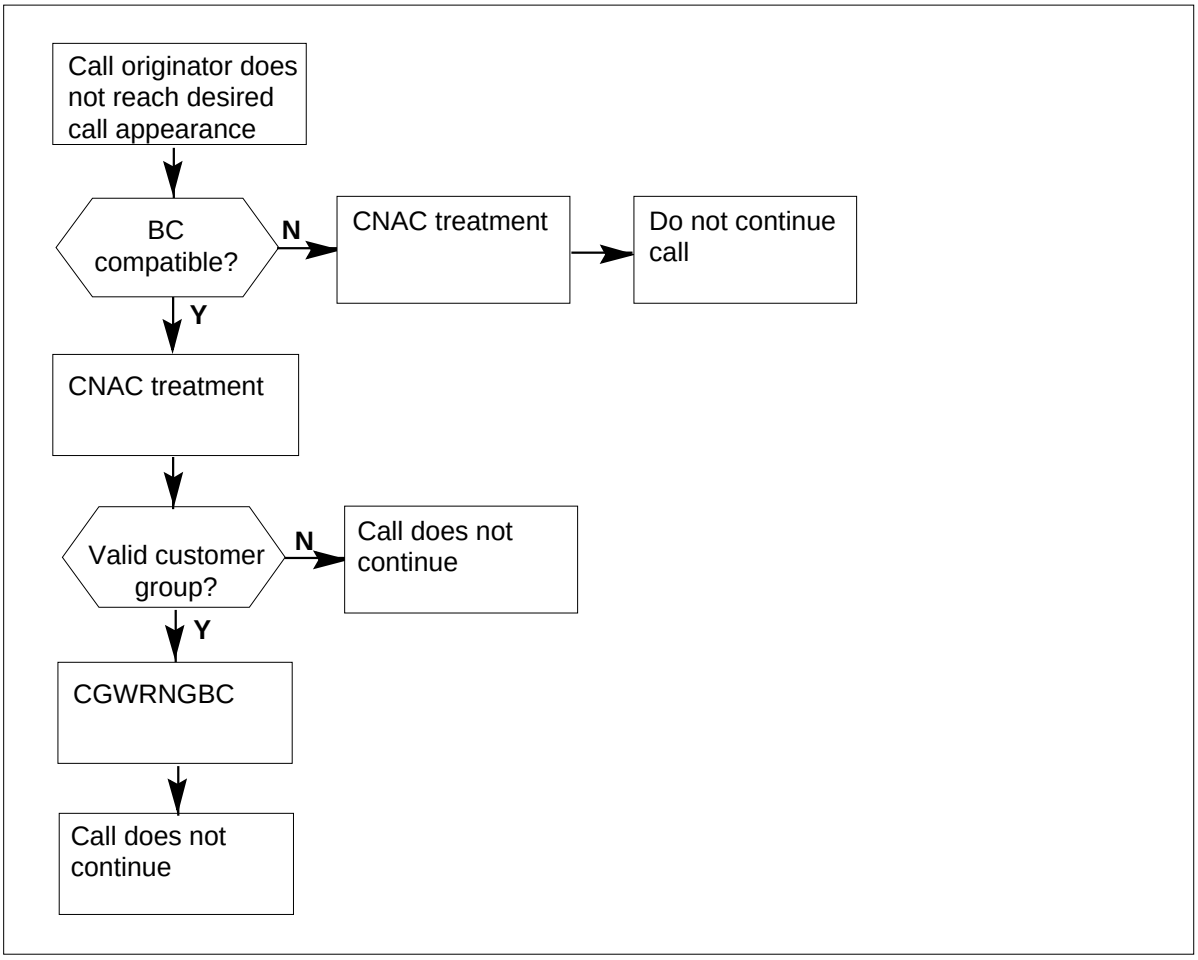
The integrated services digital network (ISDN) working group associates with OM group BCAPCG.

Associated functionality codes

The functionality codes that associate with OM group BCAPCG appear in the following table:

Functionality	Code
ISDN Base Access	NTX750AB

OM group BCAPCG registers



Register CGWRNGBC

Customer group with wrong bearer capability (CGWRNGBC)

Register CGWRNGBC counts calls that do not complete because the BC of the call originator and the BC of the called party are not compatible. The call originator belongs to a particular customer group.

Register CGWRNGBC does not increase if the originator is a POTS station.

Register CGWRNGBC release history

Register CGWRNGBC was introduced in BCS23.

Associated registers

There are no associated registers.

OM group BCAPCG (end)

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

OM group BCAPOF

OM description

Bearer capability per office (BCAPOF)

BCAPOF collects operational measurements that relate to bearer capabilities (BC) for each office. These registers count calls that do not reach the intended call appearance(s) because of BC incompatibility. These registers count also counts calls that use a synonym directory number to reach the intended terminator(s).

The originator receives CALL_NOT_ACCEPTED (CNAC) treatment.

Release history

The OM group BCAPOF was introduced in BCS23.

Registers

The OM group BCAPOF registers display on the MAP terminal as follows:

```
OFWRNGBC     OFSYNDN
```

Group structure

The OM group BCAPOF 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 TRMTCU2_TCUCNAC counts the use of CNAC call treatment that the originator of a call receives. The originator of a call receives CNAC call treatment when the BC of the originator and the terminator are not compatible.

The OM group BCAPCG counts calls that have BC match problems between the originator and the called party for each customer group.

Associated functional groups

The Integrated services digital network (ISDN) working group associates with OM group BCAPOF

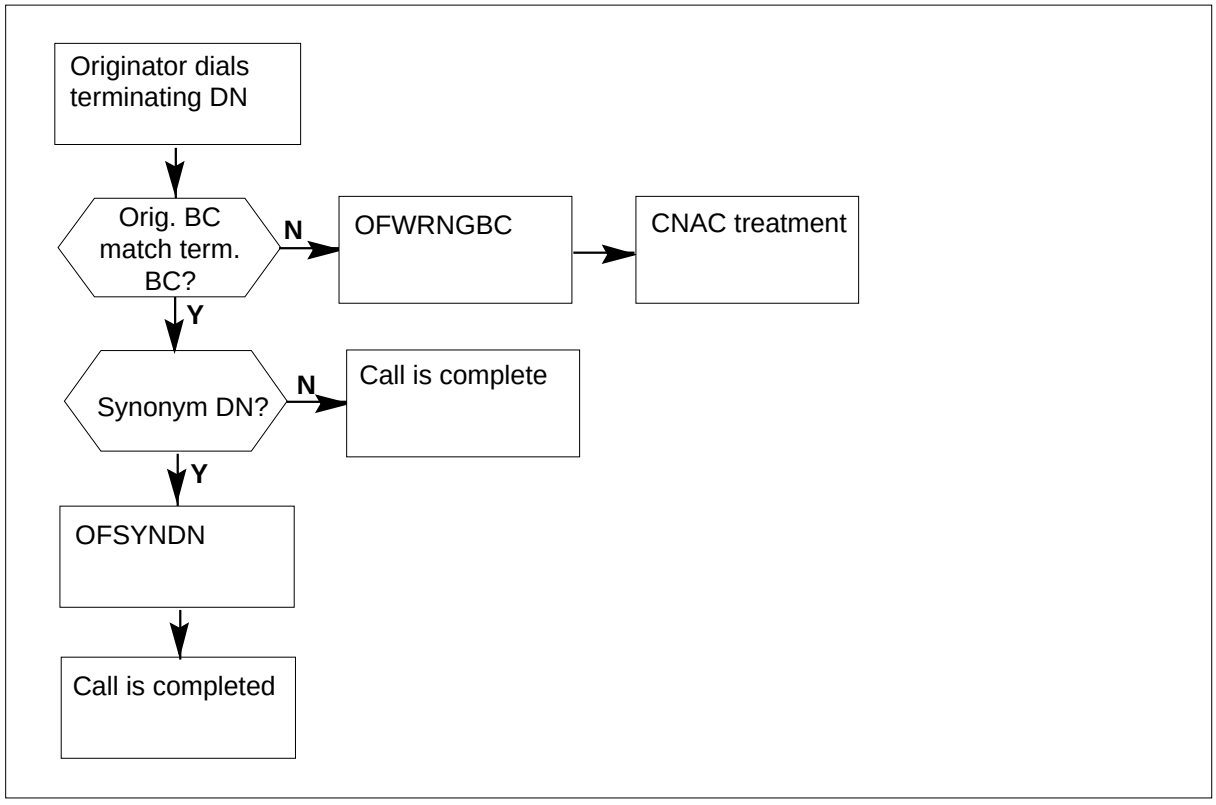
OM group BCAPOF (continued)

Associated functionality codes

The functionality codes that associate with OM group BCAPOF appear in the following table.

Functionality	Code
ISDN Base Access	NTX750AB

OM group BCAPOF registers



Register OFSYNDN

Originating party uses a synonym directory number (OFSYNDN)

Register OFSYNDN counts calls that use a synonym directory number.

Register OFSYNDN release history

Register OFSYNDN 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 OFWRNGBC

Originating party with wrong bearer capability (OFWRNGBC)

Register OFWRNGBC counts calls that are not completed because the BC of the call originator and the call terminator are not compatible.

Register OFWRNGBC release history

Register OFWRNGBC 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 BCLID

OM description

Bulk calling line identification (BCLID)

The OM group BCLID provides information about BCLID calls on an office-wide basis.

The OM group BCLID contains six registers that count:

- BCLID messages with a complete calling directory number that the system sends to customer premises equipment (CPE)
- BCLID messages with an out-of-area indication that the system sends to customer premises equipment (CPE)
- BCLID messages with a private directory number indication that the system sends to customer premises equipment (CPE)

Release history

The OM group BCLID was introduced in BCS31.

Registers

The OM group BCLID registers display on the MAP terminal as follows:

```
BCLDCLDN    BCLDCLD2    BCLDOOA     BCLDOOA2
BCLDPRIV    BCLDPRI2
```

Group structure

The OM group BCLID 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 BCLIDO provides information about bulk calling line identification calls on a BCLID group basis.

Associated functional groups

The following functional groups associate with OM group BCLID:

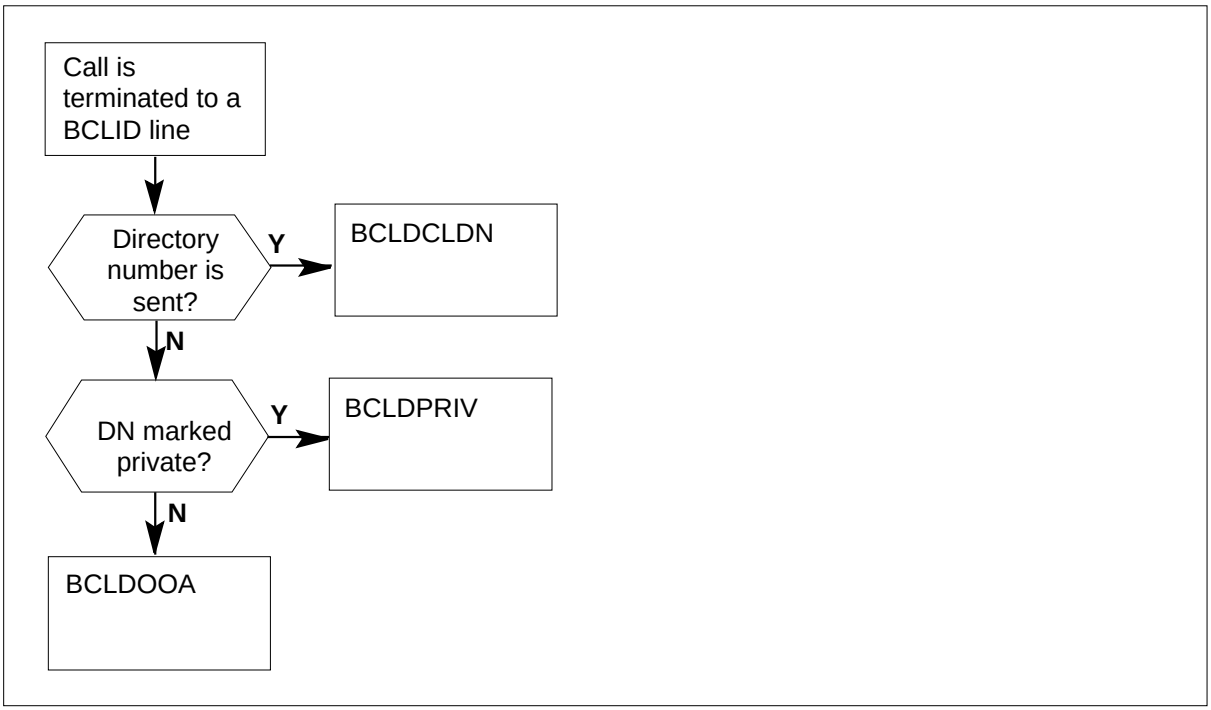
- LTC - Line Trunk Controller
- LGC - Line Group Controller
- RCC - Remote Cluster Controller

Associated functionality codes

The functionality codes that associate with OM group BCLID appear in the following table.

Functionality	Code
CLASS Bulk Calling Line Identification	NTXF55AA

OM group BCLID registers



Register BCLDCLDN

Calling directory number delivered (BCLDCLDN)

OM group BCLID (continued)

Register BCLDCLDN counts BCLID messages with a complete directory number (DN) that the system sends to the customer premises equipment (CPE).

The system sends BCLID messages with a complete directory number:

- for calls to lines or trunks from a line not entered to have a private DN
- for calls to lines or trunks from a line outside the BCLID group of the terminating line or trunk

Register BCLDCLDN release history

Register BCLDCLDN was introduced in BCS31.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

BCLDCLD2

Register BCLDOOA

Out-of-area indication delivered

Register BCLDOOA counts BCLID messages with an out-of-area indication that the system sends to the customer premises equipment (CDE).

The system sends BCLID messages with out-of-area indication for the following calls:

- calls from an incoming trunk that does not provide call setup information
- calls involving a TOPS position
- calls from an attendant console to a BCLID subscriber

Register BCLDOOA release history

Register BCLDOOA was introduced in BCS31.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

BCLDOOA2

Register BCLDPRIV

Private directory number indication delivered

Private directory number indication delivered (BCLDPRIV) counts BCLID messages with a private directory number (DN) indication. BCLDPRIV counts BCLID messages with a private DN indication that are sent to the customer premises equipment.

BCLID messages with a private DN indication are sent:

- if the presentation indicator in the Initial Address Message (IAM) of an ISUP trunk to BCLID line call indicates that the DN cannot appear.
- if the SUPPRESS option is entered in table DNATTRS against the calling line
- if the calling number delivery blocking (CNDB) feature activates on the calling line

Register BCLDPRIV release history

BCLDPRIV was introduced in BCS31.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

BCLDPR12

OM group BCLIDNL

OM description

BCLID no links (BCLIDNL)

The OM group BCLIDNL records the number of BCLID messages not sent to the customer premises equipment (CPE) due to a lack of in-service BCLID data links for each BCLID group. BCLID records the number of BCLID messages for each BCLID group.

Release history

The OM group BCLIDNL was introduced in BCS33.

Registers

The OM group BCLIDNL registers display on the MAP terminal as follows:

```
BCLDNOLK
```

Group structure

The OM group BCLIDNL provides one tuple per office.

Key field:
BCLIDGRP_INDEX_RANGE

Info field:
There is no Info field

Table BCLIDGRP contains an entry of each group that has an associated count.

Associated OM groups

The OM group BCLIDO counts the number of messages not sent to the BCLID group because of link overflow.

Associated functional groups

The Bulk Calling Line Identification (BCLID) functional group associates with OM group BCLIDNL.

Associated functionality codes

The functionality codes that associate with OM group BCLIDNL appear in the following table.

Functionality	Code
CLASS Bulk Calling Line Identification	NTXF55AA

OM group BCLIDNL registers

Register BCLDNOLK

BCLID no links (BCLDNOLK)

Register BCLDNOLK increases each time a BCLID message cannot be sent to the CPE because in-service BCLID data links are not present. The register that associates with the specified BCLID group increases.

Register BCLDNOLK release history

Register BCLDNOLK was introduced in BCS33.

OM group BCLIDNL (end)

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

OM group BCLIDO

OM description

Bulk calling line identification data link overload (BCLIDO)

The OM group BCLIDO provides information about bulk calling line identification (BCLID) calls on a BCLID group basis.

The OM group BCLID contains one register that counts BCLID messages that cannot be sent to the customer premises equipment (CPE) because of overloaded data links.

Release history

The OM group BCLIDO is introduced in BCS31.

Registers

The OM group BCLIDO registers display on the MAP terminal as follows:

```
BCLDOVLD
```

Group structure

The OM group BCLIDO provides one tuple for each BCLID group number.

Key field:
an integer in the range 0 to 4095 represents the BCLID group number

Info field
There are no info fields.

Associated OM groups

The OM group BCLID provides information about bulk calling line identification calls.

Associated functional groups

The following functional groups that associate with the OM group BCLIDO:

- LTC - Line Trunk Controller
- LGC - Line Group Controller
- RCC - Remote Cluster Controller

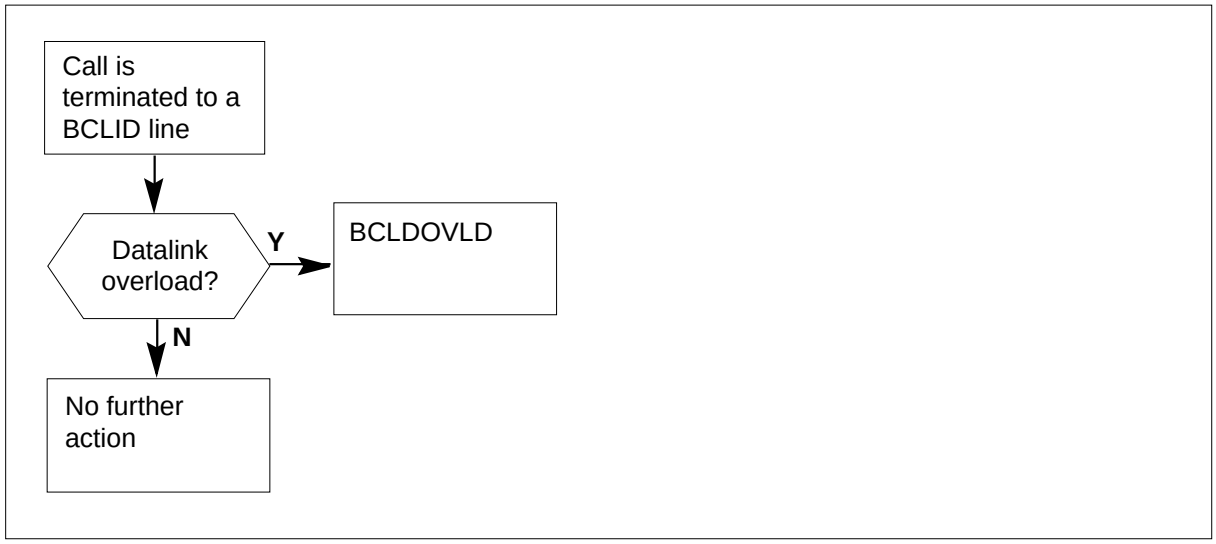
OM group BCLIDO (continued)

Associated functionality codes

The functionality codes that associate with OM group BCLIDO appear in the following table.

Functionality	Code
CLASS Bulk Calling Line Identification	NTXF55AA

OM group BCLIDO registers



Register BCLDOVLD

Data link overload (BCLDOVLD)

Register BCLDOVLD counts BCLID messages that cannot be sent to the customer premises equipment (CPE) because of overloaded data links.

Register BCLDOVLD release history

Register BCLDOVLD is introduced in BCS31.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

OM group BLUEBOX

OM description

Bluebox fraud detection group (BLUEBOX)

The BLUEBOX counts activities that indicate the use of a blue box. A blue box device places long distance calls through a route with low or no cost.

The OM group BLUEBOX tests for, records, and disposes of false calls in a DMS-200 office. This feature detects false multifrequency (MF) signaling over centralized automatic message accounting (CAMA) and SuperCAMA trunks. This feature does not detect false MF signaling over traffic operator position system (TOPS) trunks. The system activates a blue box test when an office detects a wink that is not expected on an incoming trunk. The system connects the call to a reserved multifrequency receiver to test the call. If the call is fraudulent, the system generates an AMA record. The call can continue or is cut. The call is cut if the MAP terminal specifies the CUT option when the blue box fraud detection feature activates.

Three registers in BLUEBOX count:

- winks that indicate false calls
- correct attachments of MF receivers for suspect calls
- false calls

Release history

The OM group BLUEBOX was introduced in BCS20.

Registers

The MAP terminal displays the OM group BLUEBOX registers as follows:

```
BBWINKS     BBATTACH    BBDETECT
```

Group structure

The OM group BLUEBOX provides one tuple for each DMS-200 office.

Key field:
There is no key field.

Info field:
There is no info field.

OM group BLUEBOX (continued)

The BLUEBOX increases when the bluebox fraud detection feature activates from the MAP terminal.

Associated OM groups

Special tone receivers (STRs) in a DMS-250 office detect blue box fraud events, which the OM group BLUEBUSTR counts.

Associated functional groups

The functional groups associated with OM group BLUEBOX are the following:

- DMS 200
- CAMA
- CLASS

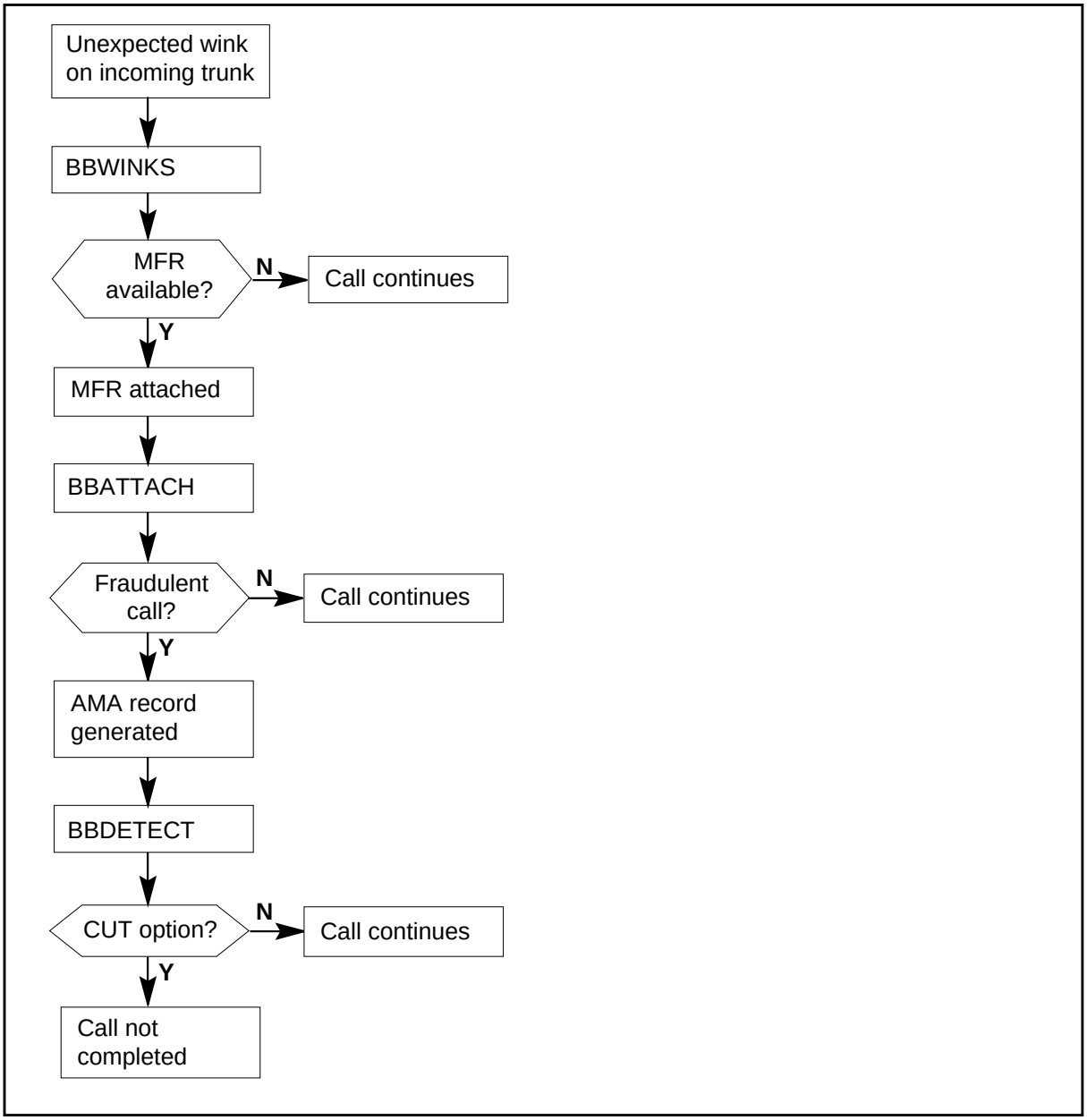
Associated functionality codes

The following table lists the functionality codes associated with OM group BLUEBOX.

Functionality	Code
CLASS: Central Automatic Message Accounting (CAMA)	NTX044AA
CLASS: Bluebox Fraud Detection	NTX185AA
CLASS: Local Features I	NTX901AA

OM group BLUEBOX (continued)

OM group BLUEBOX registers



Register BBATTACH

Bluebox attachment (BBATTACH)

Register BBATTACH counts calls that attach to a multifrequency receiver reserved for bluebox fraud detection. The system attaches calls to the receiver when a wink that is not expected occurs on an incoming trunk.

Register BBATTACH release history

Register BBATTACH was introduced in BCS20.

Associated registers

The values in BBATTACH and BBWINKS can differ for any of the following reasons:

- there are no multifrequency (MF) receivers available for a suspect call
- the system attaches the suspect call to a receiver before a wink that is not expected occurs
- the network path cannot establish

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register BBDETECT

Bluebox detect (BBDETECT)

Register BBDETECT counts the false calls that the blue box fraud detection feature detects.

Register BBDETECT release history

Register BBDETECT was introduced in BCS20.

Associated registers

There are no associated registers.

Associated logs

The system generates log TRK153 when the system detects a fraudulent call.

Extension registers

There are no extension registers.

Register BBWINKS

Bluebox winks (BBWINKS)

Register BBWINKS counts winks that are not expected. Register BBWINKS counts winks that indicate possible bluebox activity on incoming trunks. A wink that is not expected activates a blue box fraud detection test. The system attaches a reserved multifrequency (MF) receiver for the suspect call.

OM group BLUEBOX (end)

Register BBWINKS release history

Register BBWINKS was introduced in BCS20.

Associated registers

Register BBATTACH counts attachments to a multifrequency (MF) receiver after a wink that is not expected occurs.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

OM group BRSTAT

OM description

BRISC occupancy status (BRSTAT)

The OM group BRSTAT uses the Bell-Northern Research reduced instruction set computer (BRISC) to provide data on CPU usage (occupancy) for Super Node Offices. BRSTAT generates data when it creates a value. This value represents the ratio of real time spent on a CPU function to the time allocated for that function. The system updates the usage registers in OM group BRSTAT every minute to reflect this ratio.

BRSTAT registers provide the following information:

- ratio of the AUXCP scheduler class usage to the value in AUXCP_CPU_SHARE office parameter
- ratio of the background scheduler class usage to its usage allocation
- average call process capacity since the last OM transfer
- call problem ratio observed over the last OM transfer period
- ratio of Network Operations System file transfer scheduler class usage to its usage allocation
- ratio of operating system overhead on the BRISC core to a specification for operating system overhead at capacity
- ratio of guaranteed terminal (GTERM) scheduler class usage on the BRISC core to the value in parameter GUARANTEED_TERMINAL_CPU_SHARE
- the number of times the switch was idle, that is, the IDLE scheduler class runs during the OM transfer period
- ratio of maintenance scheduler class usage on the BRISC core to its usage allocation
- ratio of network maintenance (NETM) scheduler class usage on the BRISC core to its usage allocation.
- ratio of OM scheduler class usage on the BRISC core to its specified usage allocation
- ratio of scheduling overhead on the BRISC core to the specification for scheduling overhead at capacity
- ratio of SuperNode internet protocol scheduler class usage on the BRISC core to its usage allocation

OM group BRSTAT (continued)

The Support Operating System (SOS) scheduler uses scheduler classes to allocate CPU time to simultaneous processes. A scheduler class is a group of processes that perform like or related functions.

The OM group BRSTAT can measure call processing capacity and can engineer a BRISC SuperNode core.

All BRSTAT holding register values are percent utilizations. These percent utilizations are for the last OM transfer period, except for registers BRSIDLE and BRSCMPLX. Register BRSIDLE increases for each one-minute scan in which the IDLE scheduler class runs during the transfer period. Register BRSCMPLX indicates the call mix complexity for the last transfer period.

The BRSTAT accumulating registers accumulate the values from the holding registers during the collection period. For example, you assume:

- the OM transfer period is set to 30 min
- the OM group BRSTAT has accumulated for 60 min
- the accumulating register BRSCAP reads 100

To determine the number of transfer periods during the accumulation period, divide 60 min by the 30 min transfer period (60/30 = 2).

To determine the average usage during the accumulation period, divide the value of register BRSCAP by the number of transfer periods.

100%/2 = 50%

Use the same method to calculate the average percent usages from the following registers:

- BRSSCHED
- BRSFORE
- BRSMAINT
- BRSDNC
- BRSOM
- BRSGETERM
- BRSBKG
- BRSAUXCP
- BRSNETM

To calculate the average complexity for the accumulation period, divide register BRSCMPLX by the number of OM transfers during the period.

Release history

The OM group BRSTAT was introduced in BCS34.

BCS36

Register BRSSNIP was added.

Registers

The OM group BRSTAT registers display on the MAP terminal as follows:

```
BRSCAP      BRSCMPLX    BRSSCHED    BRSFORE
BRSMAINT    BRSDNC      BRSOM       BRSGTERM
BRSBKG      BRSIDLE     BRSAUXCP    BRSNETM
BRSSNIP
```

Group structure

The OM group BRSTAT provides one tuple per office.

Key field:
There is no key field.

Info field:
There is no info field.

Register BRSAUXCP depends on the value of parameter AUXCP_CPU_SHARE in table OFCENG. This parameter represents the percentage of CPU time guaranteed for the AUXCP scheduler class.

Register BRSGTERM depends on the value of parameter GUARANTEED_TERMINAL_CPU_SHARE in table OFCENG. This parameter represents the percentage of CPU time guaranteed for the GTERM scheduler class.

Associated OM groups

The OM group NCMCPUST measures CPU usage for processes that run on non-computing module SOS-based nodes.

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

OM group BRSTAT (continued)

The OM group ENETOCC measures CPU usage for processes that run on the enhanced network.

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

The OM group CPUSTAT measures CPU usage of processes that run on a non-BRISC SuperNode core.

Associated functional groups

The functional group BRISC SuperNode core that associates with OM group BRSTAT.

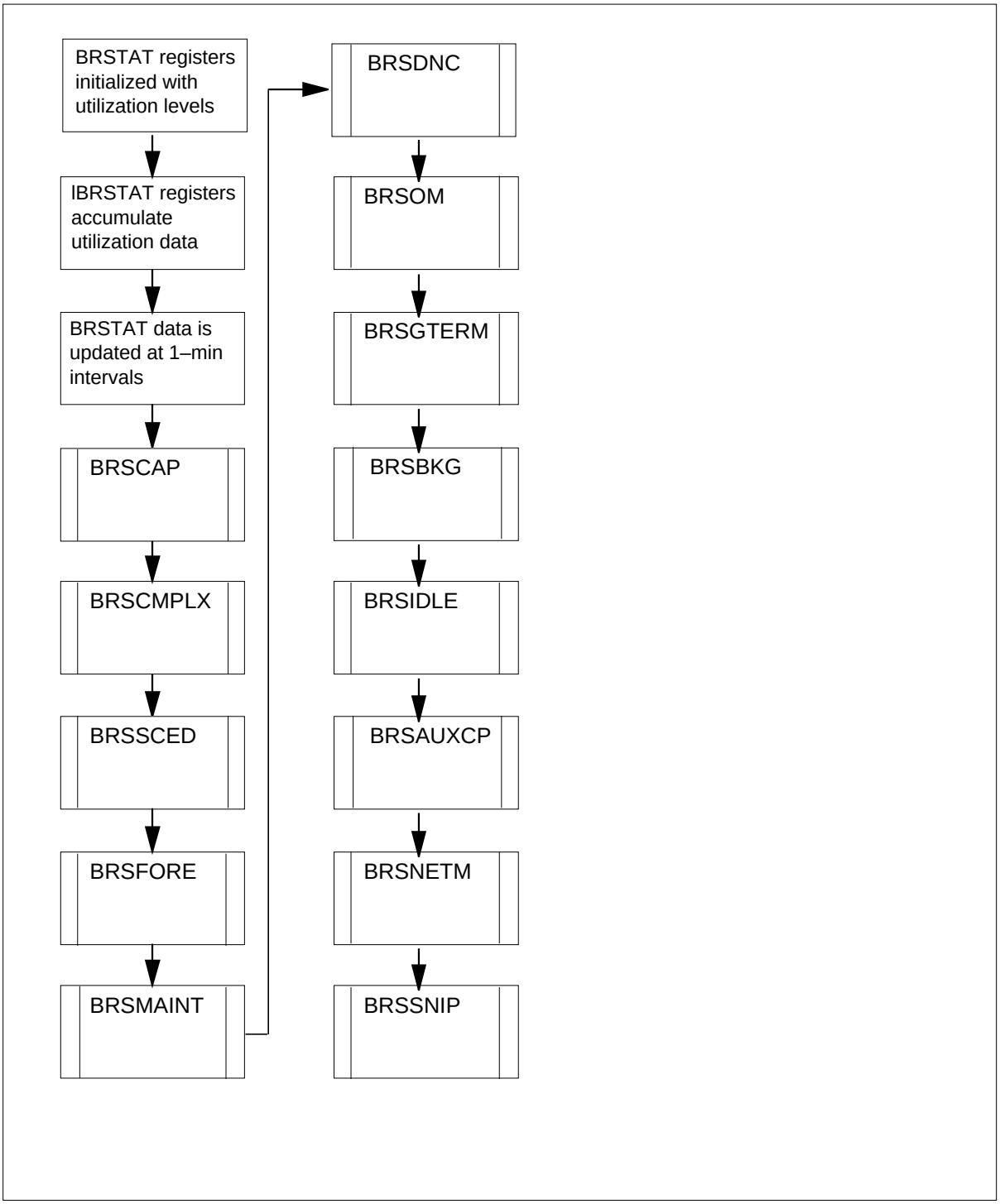
Associated functionality codes

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

Functionality	Code
Common Basic	NTX001AA

OM group BRSTAT (continued)

OM group BRSTAT registers



OM group BRSTAT (continued)

Register BRSAUXCP

BRISC auxiliary call processing class (BRSAUXCP)

Register BRSAUXCP records a value that compares the percentage of AUXCP scheduler class utilization on the BRISC core to the value in parameter AUXCP_CPU_SHARE. The system updates register BRSAUXCP every minute. The updated BRSAUXCP reflects the average usage of the AUXCP scheduler class from the last OM transfer period.

A value of 100 indicates that the percentage use of the AUXCP scheduler class matches the value in parameter AUXCP_CPU_SHARE. This value can exceed 100.

Register BRSAUXCP release history

Register BRSAUXCP was introduced in BCS34.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Register BRSBKG

BRISC background class (BRSBKG)

Register BRSBKG records a value that compares the percentage of background scheduler class utilization on the BRISC core to its given usage allocation. BRXBKG is updated every minute. The updated BRXBKG reflects the average use of the background scheduler class from the last OM transfer period.

The system allocates 3% of the CPU to the background scheduler class. A value of 100 indicates that the background scheduler class uses 3% of the CPU. This value can exceed 100.

Register BRSBKG release history

Register BRSBKG was introduced in BCS34.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Register BRSCAP

BRISC call capacity (BRSCAP)

The system updates register BRSCAP every minute. The updated BRSCAP reflects the average call processing capacity observed since the last OM transfer.

Register BRSCAP indicates the percentage of call processing capacity. This percentage is used within the engineering recommendation for which grade-of-service specifications are guaranteed.

Register BRSCAP release history

Register BRSCAP was introduced in BCS34.

Associated registers

The call capacity is based on the call complexity mix. Register BRSCOMPLX gives the call complexity mix. You must take into consideration the complexity factor when you compare capacity measurements.

Associated logs

There are no associated logs.

Register BRSCMPLX

BRISC call complexity ratio (BRSCMPLX)

The system updates register BRSCMPLX every minute. The updated BRSCMPLX reflects the observed complexity ratio of the current call mix on the switch for the last minute. The values in this register represent the call complexity from the last OM period. Refer to the group description for more details on how to calculate ratios over an OM period.

The complexity ratio compares the complexity of the current call mix on the switch to the standard office. A plain ordinary telephone service (POTS) model represents the standard office. The Series 50 BRISC processor carries 1.2 million calls per hour, which field ENGCATMP (engineerable call attempts per hour) lists. The Series 50 BRISC processor carries 1.2 million calls per hour when the processor uses the CPSTAT tool at the MAP.

A value of 100 indicates that the complexity of the call mix over the last OM period matches the complexity of a standard office. If this register reports a value of less than 100, the switch is running a less complex call mix. A value of more than 100 indicates that the switch will achieve a lower maximum call rate. A more complex call mix causes this lower maximum call rate.

OM group BRSTAT (continued)

Register BRSCMPLX release history

Register BRSCMPLX was introduced in BCS34.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Register BRSDNC

BRISC network operating system file transfer class (BRSDNC)

Register BRSDNC records a value. This value compares the percentage of Network Operating System file transfer (NOSFT) scheduler class utilization on the BRISC core to its usage allocation. The system updates register BRSDNC every minute. The updated BRSDNC reflects the average use of the NOSFT scheduler class from the last OM transfer period.

The system allocates 3% of the CPU to the NOSFT scheduler class. A value of 100 indicates that the NOSFT scheduler class uses 3% of the CPU. This value can exceed 100.

Register BRSDNC release history

Register BRSDNC was introduced in BCS34.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Register BRSFORE

BRISC foreground usage (BRSFORE)

Register BRSFORE records a value. This value compares the percentage of operating system overhead on the BRISC core to a given specification for operating system overhead at capacity. The system updates BRSFORE every minute. The updated BRSFORE reflects the average operating system overhead from the last OM transfer period.

The expected operating system overhead at capacity on a BRISC core is 1% of the CPU. A value of 100 indicates that the operating system overhead uses 1% of the CPU. This value can exceed 100.

Register BRSFORE release history

Register BRSFORE was introduced in BCS34.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Register BRSGTERM

BRISC guaranteed terminal class (BRSGTERM)

Register BRSGTERM records a value. This value compares the percentage of guaranteed terminal (GTERM) scheduler class utilization on the BRISC core to the value in parameter GUARANTEED_TERMINAL_CPU_SHARE. The system updates register BRSGTERM every minute. The updated BRSGTERM reflects the average use of the GTERM scheduler class from the last OM transfer period.

A value of 100 indicates that the percentage use of the GTERM scheduler class matches the value in parameter GUARANTEED_TERMINAL_CPU_SHARE. This value can exceed 100.

Register BRSGTERM release history

Register BRSGTERM was introduced in BCS34.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Register BRSIDLE

BRISC idle periods (BRSIDLE)

Register BRSIDLE increases when the switch is idle and the IDLE scheduler class runs during the OM transfer period.

The system updates register BRSIDLE every minute. If an IDLE scheduler class runs during the last minute BRSIDLE increases by one. This update indicates idle time during the last minute. This update does not compute the amount of capacity this idle time represents.

OM group BRSTAT (continued)

The values for this register range from zero to the number of minutes set for the OM transfer period. If the OM transfer period is set to 30 min, the range is 0 to 30 for use of the IDLE scheduler class.

Register BRSIDLE release history

Register BRSIDLE was introduced in BCS34.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Register BRSMAINT

BRISC maintenance class (BRSMAINT)

Register BRSMAINT records a value. Register BRSMAINT compares the percentage of maintenance scheduler class utilization on the BRISC core to its given allocation for usage. The system updates register BRSMAINT every minute. The updated BRSMAINT reflects the average use of the maintenance scheduler class from the last OM transfer period.

The maintenance scheduler class is allocated 8% of the CPU. A value of 100 indicates that the maintenance scheduler class uses 8% of the CPU. This value can exceed 100.

Register BRSMAINT release history

Register BRSMAINT was introduced in BCS34.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Register BRSNETM

Register BRSNETM records a value. The BRSNETM compares the percentage of network maintenance (NETM) scheduler class utilization on the BRISC core to its usage allocation. The system updates register BRSNETM every minute. The updated BRSNETM reflects the average use of the NETM scheduler class from the last OM transfer period.

The NETM scheduler class is allocated either 0% or 20% of the CPU. A value of 100 indicates that the NETM scheduler class usage is the same as that currently allocated for this class (0% or 20%). This value can exceed 100.

Register BRSNETM release history

Register BRSNETM was introduced in BCS34.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Register BRSOM

BRISC operational measurements class (BRSOM)

Register BRSOM records a value. The BRSOM compares the percentage of OM scheduler class utilization on the BRISC core to its usage allocation. The system updates register BRSOM every minute. The updated BRSOM reflects the average use of the OM scheduler class from the last OM transfer period.

The OM scheduler class is allocated 3% of the CPU. A value of 100 indicates that the OM scheduler class uses 3% of the CPU. This value can exceed 100.

Register BRSOM release history

Register BRSOM was introduced in BCS34.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Register BRSSCHED

BRISC scheduler overhead (BRSSCHED)

Register BRSSCHED records a value. The BRSSCHED compares the percentage of scheduling overhead on the BRISC core to a given specification for scheduling overhead at capacity. The system updates register BRSSCHED every minute. The updated BRSSCHED reflects the average scheduling overhead from the last OM transfer period.

OM group BRSTAT (end)

The expected scheduling overhead at capacity on a BRISC core is 4% of the CPU. A value of 100 indicates that the scheduling overhead uses 4% of the CPU. This value can exceed 100.

Register BRSSCHED release history

Register BRSSCHED is introduced in BCS34.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Register BRSSNIP

BRISC CPU status of SuperNode internet protocol (SNIP) class (BRSSNIP)

Register BRSSNIP records a value. The BRSSNIP compares the percentage of SNIP scheduler class utilization on the BRISC core to its usage allocation. BRSSNIP is updated every minute. The updated BRSSNIP reflects the average use of the SNIP scheduler class from the last OM transfer period.

The system allocates 0% or 3% of the CPU to the SNIP scheduler class. A value of 100 indicates that the SNIP scheduler class usage is the same as that currently allocated for this class (0% or 3%). This value can exceed 100.

Register BRSSNIP release history

Register BRSSNIP was introduced in BCS36.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

OM group BCTPOOL

OM description

Bearer Channel Tamdeming Resource Pool

The following peg registers count:

- errors and faults in the IOCs
- device errors the that system detects on P-side links

The following usage registers record:

- system busy links
- manual busy links
- system busy links
- manual busy links

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

SN06 (DMS)

OM group BCTPOOL was introduced in NA017, but not documented until SN06 (DMS).

Registers

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

BCTRSRVA	BCTRSRVS	BCTRQSTA	BCTRQSTS

Group structure

OM group BCTPOOL provides one tuple per BCT Resource Pool.

Key field:

XPM_NO, the XPM_NO (0 - 255) of the BCT Resource Pool, used with the BCT PM_TYPE as a key into table SERVSINV.

OM group BCTPOOL (continued)

Info field:
None

Associated OM groups

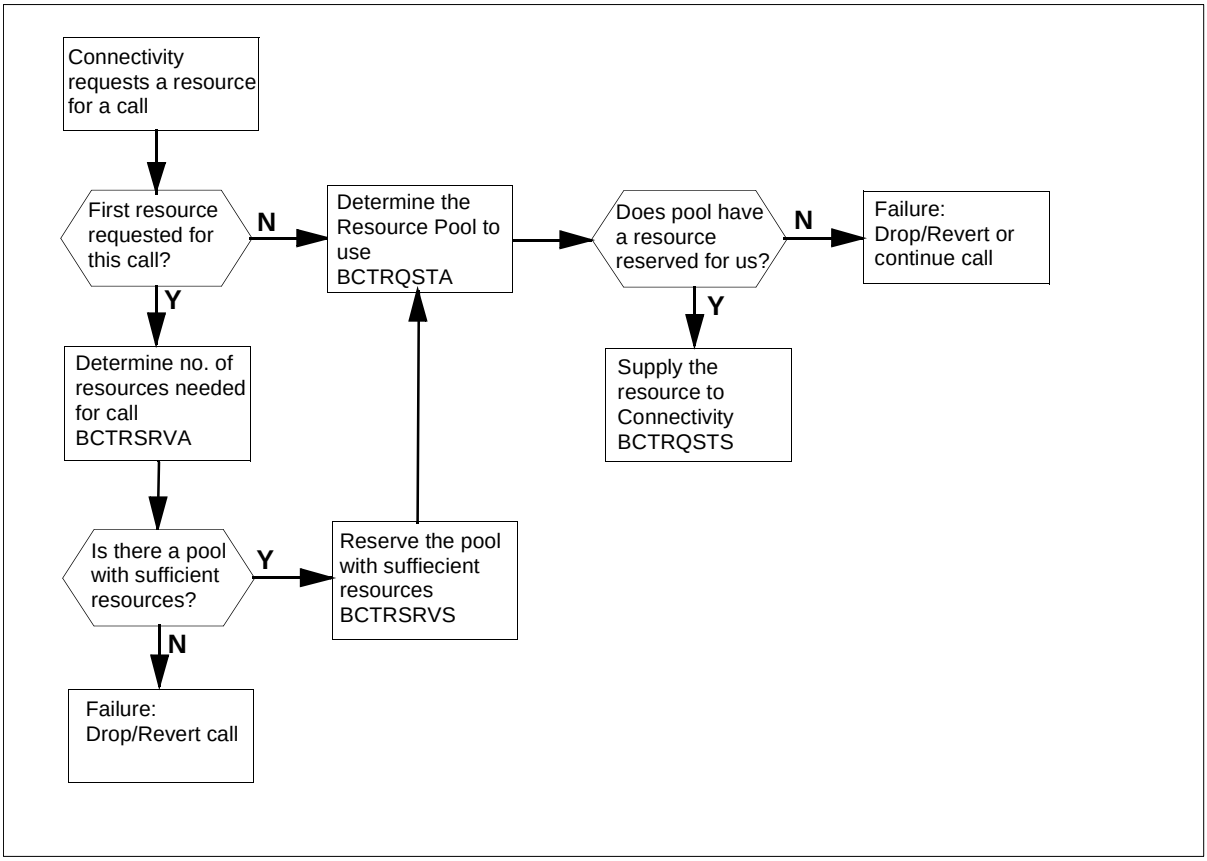
The OM group BCTTANDM displays information on the attempts and successes of tandeming calls.

Associated functional groups

None

Associated functionality codes

OM group BCTPOOL registers



Register BCTRSRVA

BCT Pool Reservation Attempts

BCTRSRVA is a peg register which counts the number of attempts made to reserve resources from a BCT Resource Pool.

Register BCTRSRVA release history

BCTRSRVA was introduced in SN03.

Associated registers

BCTRSRVS: Indicates the number of successful reservations of BCT resources from the pool.

Associated logs

None

Register BCTRSRVS

BCT Pool Reservation Successes

BCTRSRVS is a peg register which counts the number of times that resources were successfully reserved from a BCT Resource Pool.

Register BCTRSRVS release history

BCTRSRVS was introduced in SN03.

Associated registers

BCTRSRVA: Indicates the number of attempts made to reserve resources from a BCT Resource Pool.

Associated logs

None

Register BCTRQSTA

BCT Resource Pool Resource Request Attempts

BCTRQSTA is a peg register which counts the number of attempts made to request a resource from a BCT Resource Pool.

Register BCTRQSTA release history

BCTRQSTA was introduced in SN03.

Associated registers

BCTRQSTS: Indicates the number of times a resource was successfully requested from a BCT Resource Pool.

OM group BCTPOOL (end)

Associated logs

None

Register BCTRQSTS

BCT Resource Pool Resource Request Successes

BCTRQSTS is a peg register which counts the number of times a resource was successfully requested from a Resource Pool.

Register BCTRQSTS release history

BCTRQSTS was introduced in SN03.

Associated registers

BCTRQSTA: Indicates the number pof times a resource was requested froma BCT Resource Pool.

Associated logs

None

OM group BCTTANDM

OM description

Bearer Channel Tamdeming Tandemed Calls

Release history

SN06 (DMS)

OM group BCTTANDM was introduced in NA017, but not documented until SN06 (DMS).

Registers

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

```
BCTTNDMA          BCTTNDMS
```

Group structure

OM group BCTTANDM provides one tuple.

Key field:
None

Info field:
None

Associated OM groups

BCTPOOL keeps track of the number of times resources were reserved/requested on a per pool basis.

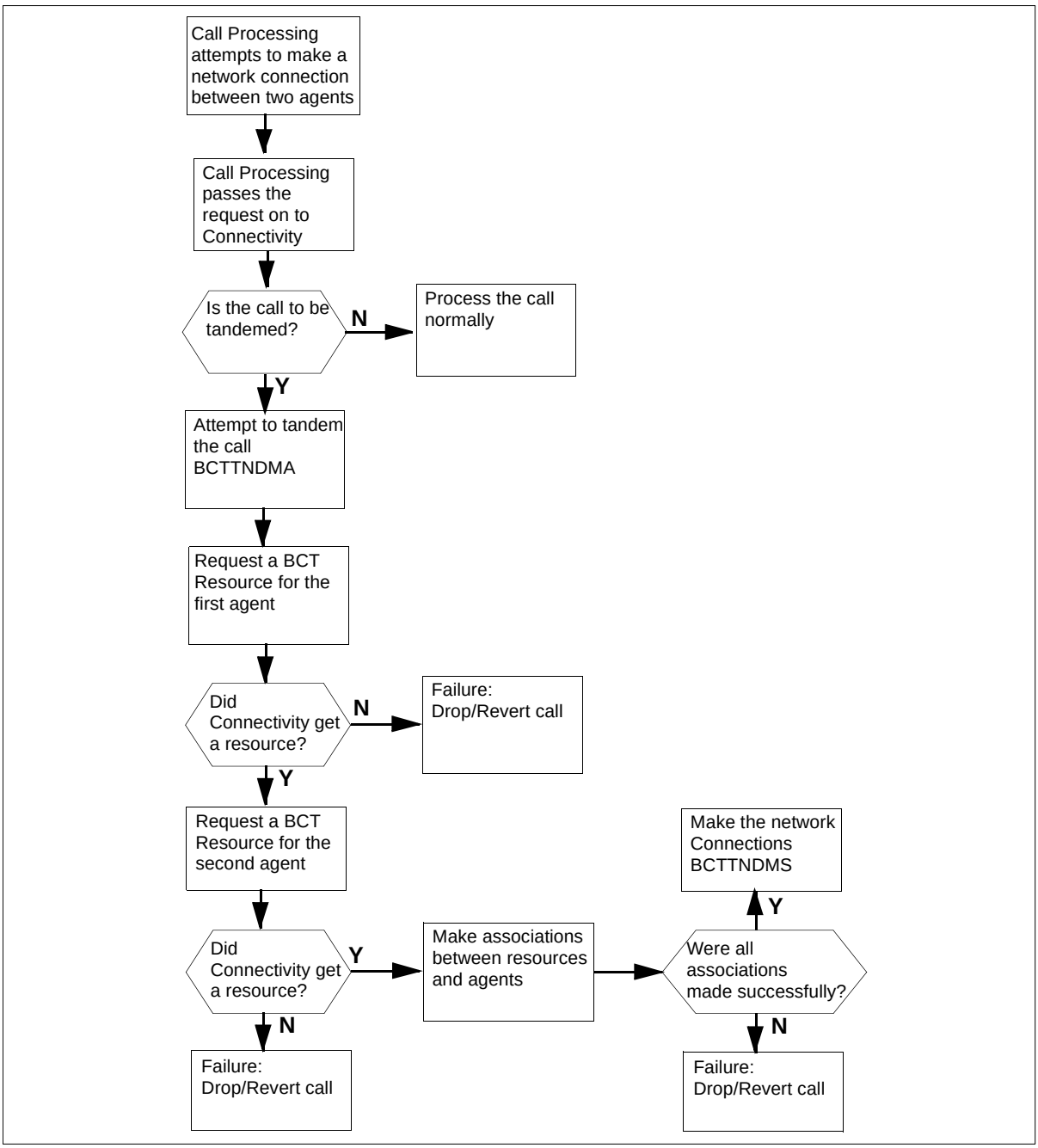
Associated functional groups

None

Associated functionality codes

OM group BCTTANDM (continued)

OM group BCTTANDM registers



Register BCTTNDMA

BCT Tandeming Attempts

BCTTNDMA is a peg register which counts the number of calls that are attempted to be tandemed.

Register BCTTNDMA release history

BCTTNDMA was introduced in SN03.

Associated registers

BCTTNDMS: Indicates the number of calls that are successfully tamdemed.

Associated logs

None

Register BCTTNDMS

BCT Tandeming Successes

BCTTNDMS is a peg register which counts the number of calls that are successfully tandemed.

Register BCTTNDMS release history

BCTTNDMS was introduced in SN03.

Associated registers

BCTTNDMA: Indicates the number of calls that were attempted to be tandemed.

Associated logs

None

OM group C6LINK

OM description

CCIS6 signaling link (C6LINK)

The OM group C6LINK counts traffic-related and maintenance-related activities on a signaling link.

The signaling terminal (ST) starts the signaling link synchronization and proving procedures. If the link does not synchronize, signaling link management attempts to restore the link. Signaling link management attempts to replace the reserve voice frequency link (VFL) for the active VFL for 3 min. After 3 min, signaling link management abandons the restoration procedure and the system diagnoses the ST. If the system does not synchronize the link, the complete procedure begins again. If the system synchronizes the link, the system informs the signaling traffic management and proving procedures start. If the procedures are successful, the system routes signaling traffic through the link.

Traffic-related registers count the amount and type of data the signaling link carries. The system counts traffic measurements in the signaling terminal. The system transfers traffic measurements to the central control complex (CC) during the OM transfer process.

The maintenance-related registers consist of peg and usage registers. The peg and usage registers provide information on why and how long the signaling link is out of service.

Release history

The OM group C6LINK was introduced before BCS20.

Registers

The OM group C6LINK registers display on the MAP terminal as follows:

```
IAMOUT      IAMINC      ANSOUT      ANSINC
TOTOGSU     TOTINSU     TOTOGMUM    TOTINMUM
DSOGSU      DSINSU      DSOGMSG     DSINMSG
BFROVLD     BFROVFL     RACU        SACU
FLROOSTI    FLRLT3      MANOOSTI    EMR
EMRTIME     PSCRCD      FEPRO
```

Group structure

The OM group C6LINK provides one tuple for each signaling link.

OM group C6LINK (continued)

Key field:
The key field is the LINK_CLLI. It is the common language

location identifier (CLLI) for the CCIS6 signaling link.

Info field:
There is no info field.

Associated OM groups

The OM group C6VFL counts activities for each voice frequency link.

Associated functional groups

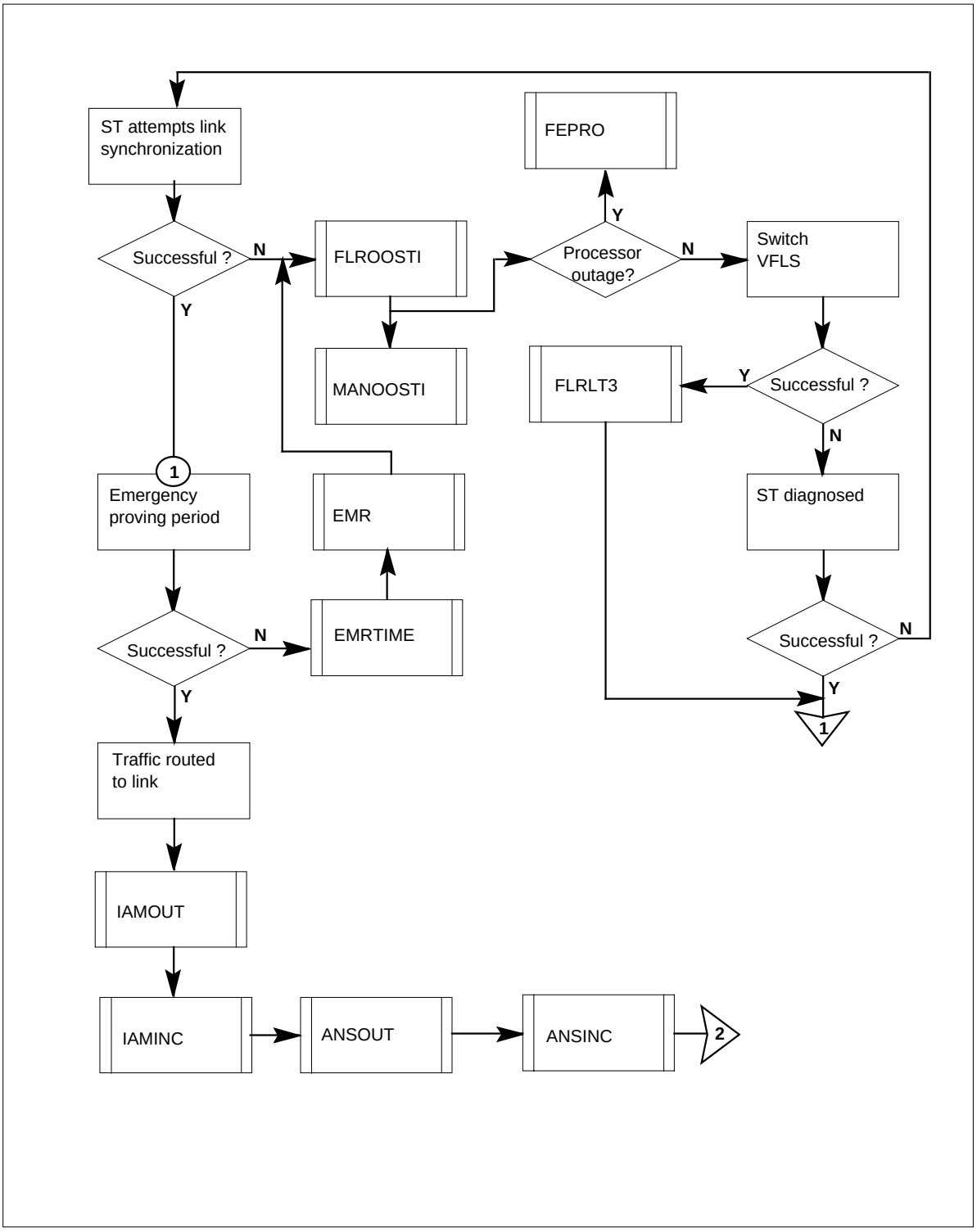
The functional group CCIS6 associates with OM group C6LINK.

Associated functionality codes

The associated functionality codes for OM group C6LINK appear in the following table.

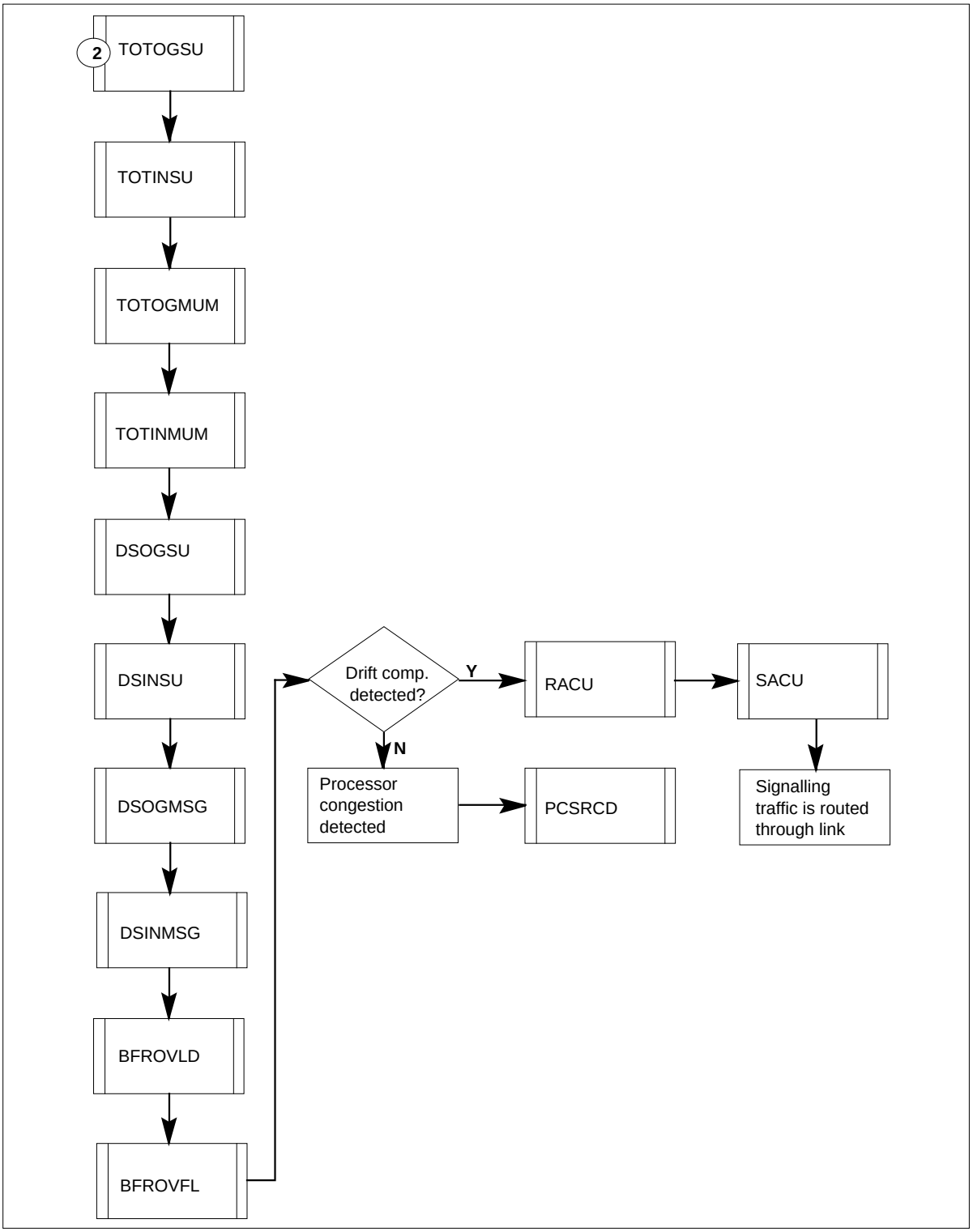
Functionality	Code
CCIS Banded Signaling	NTX204AA

OM group C6LINK registers



OM group C6LINK (continued)

OM group C6LINK registers (continued)



Register ANSINC

Answer signals incoming (ANSINC)

Register ANSINC counts incoming answer signals (ANS) on the link.

Register ANSINC release history

Register ANSINC was introduced before BCS20.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Register ANSOUT

Answer signals outgoing (ANSOUT)

Register ANSOUT counts outgoing answer signals (ANS) on the link. Register ANSOUT only counts ANSs used for call setup. Register ANSOUT does not count ANSs used for direct signaling.

Register ANSOUT release history

Register ANSOUT was introduced before BCS20.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Register BFROVFL

Buffer overflow (BFROVFL)

Register BFROVFL counts terminal buffer overflow messages on the link.

Terminal buffer overflow occurs when:

- the terminal report buffer is full of pending messages
- the system receives an incoming message for which there is no room

Register BFROVFL release history

Register BFROVFL was introduced before BCS20.

OM group C6LINK (continued)

Associated registers

There are no associated registers.

Associated logs

Logs CCIS300 and CCIS320 accompany this register.

The system generates CCIS300 when the system returns queries to the office. The system generates a CCIS320 when a reply to a Mechanized Credit Card Service (MCCS) query returns with an overload indicator greater than zero.

Register BFROVLD

Buffer overload (BFROVLD)

Register BFROVLD counts terminal buffer overload conditions on the link.

Terminal buffer overload occurs when the number of pending incoming and outgoing messages fill the buffer to a preset threshold.

Register BFROVLD release history

Register BFROVLD was introduced before BCS20

Associated registers

There are no associated registers.

Associated logs

Log CCIS124 accompanies this register.

Register DSINMSG

Direct signaling incoming messages (DSINMSG)

Register DSINMSG counts incoming messages that are part of direct signaling messages on the link.

Register DSINMSG release history

Register DSINMSG was introduced before BCS20.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Register DSINSU

Direct signaling incoming signal units (DSINSU)

Register DSINSU counts incoming signal units that are part of direct signaling messages on the link.

Register DSINSU release history

Register DSINSU was introduced before BCS20.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Register DSOGMSG

Direct signaling outgoing messages (DSOGMSG)

Register DSOGMSG counts outgoing messages that are part of direct signaling messages on the link.

Register DSOGMSG release history

Register DSOGMSG was introduced before BCS20.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Register DSOGSU

Direct signaling outgoing signal units (DSOGSU)

Register DSOGSU counts outgoing signal units that are part of direct signaling messages on the link.

Register DSOGSU release history

Register DSOGSU was introduced before BCS20.

Associated registers

There are no associated registers.

OM group C6LINK (continued)

Associated logs

There are no associated logs.

Register EMR

Emergency restarts (EMR)

Register EMR counts emergency restarts on the link.

Register EMR release history

Register EMR was introduced before BCS20.

Associated registers

There are no associated registers.

Associated logs

Log CCIS130 accompanies this register.

Register EMRTIME

Emergency restart time (EMRTIME)

Register EMRTIME is a usage register. The scan rate is 10 s. Register EMRTIME records whether the link is in an emergency restart state.

Register EMRTIME release history

Register EMRTIME was introduced before BCS20.

Associated registers

There are no associated registers.

Associated logs

Logs CCIS130 and CCIS131 accompany this register.

Register FEPRO

Far-end processor outages (FEPRO)

Register FEPRO increases when the link receives signal units that indicate a far-end processor outage.

Register FEPRO release history

Register FEPRO was introduced before BCS20.

Associated registers

There are no associated registers.

Associated logs

Log CCIS104 accompanies this register.

Register FLRLT3

Failures less than 3 (FLRLT3)

Register FLRLT3 counts link failures that last less than three min.

Register FLRLT3 release history

Register FLRLT3 was introduced before BCS20.

Associated registers

There are no associated registers.

Associated logs

There are no associated registers.

Register FLROOSTI

Failure out-of-service time (FLROOSTI)

Register FLROOSTI is a usage register. The scan rate is 10 s. Register FLROOSTI records whether the link is out-of-service because of a link failure. A link failure can result from loss of synchronization, modem failure, or link system-busy.

Register FLROOSTI release history

Register FLROOSTI was introduced before BCS20.

Associated registers

There are no associated registers.

Associated logs

Logs CCIS101, CCIS102, and CCIS108 can accompany this register.

Register IAMINC

Initial address messages incoming (IAMINC)

Register IAMINC counts incoming initial address messages (IAM) on the link.

Register IAMINC release history

Register IAMINC was introduced before BCS20.

OM group C6LINK (continued)

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Register IAMOUT

Initial address messages outgoing (IAMOUT)

Register IAMOUT counts outgoing initial address messages (IAM) on the link. The system only counts IAMs used for a common channel interoffice signaling (CCIS) call setup. The system does not count IAMS used for direct signaling.

Register IAMOUT release history

Register IAMOUT was introduced before BCS20.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Register MANOOSTI

Maintenance out-of-service time (MANOOSTI)

Register MANOOSTI is a usage register. The scan rate is 10 s. Register MANOOSTI records whether a link is out-of-service because of manual near- or far-end maintenance.

Register MANOOSTI release history

Register MANOOSTI was introduced before BCS20.

Associated registers

There are no associated registers.

Associated logs

Logs CCIS108 and CCIS120 can accompany this register.

Register PSCRCD

Processor signaling congestion received (PSCRCD)

Register PSCRCD counts processing signaling congestion (PSC) signal units that the link receives.

Register PSCRCD release history

Register PSCRCD was introduced before BCS20.

Associated registers

There are no associated registers.

Associated logs

Log CCIS124 accompanies this register.

Register RACU

Repeated acknowledgment control units (RACU)

Register RACU counts the repeated acknowledgment control units that the link receives.

The system counts register RACU in the siginaling terminal (ST). The central control complex (CCC) retrieves this register.

Register RACU release history

Register RACU was introduced before BCS20.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Register SACU

Skipped acknowledgment control units (SACU)

Register SACU counts skipped acknowledgment control units (SACU) that the link receives.

The system counts register SACU in the signaling terminal (ST). The central control complex (CCC) retrieves this register.

Register SACU release history

Register SACU was introduced before BCS20.

OM group C6LINK (continued)

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Register TOTINMUM

Total incoming multi-unit messages (TOTINMUM)

Register TOTINMUM counts multi-unit messages (MUM) that the link receives.

Register TOTINMUM release history

Register TOTINMUM was introduced before BCS20.

Associated registers

Register TOTINMUM = IAMINC + DSINMSG + other incoming MUMs.

Associated logs

There are no associated logs.

Register TOTINSU

Total incoming signal units (TOTINSU)

Register TOTINSU counts incoming entered signal units on the link.

Register TOTINSU release history

Register TOTINSU was introduced before BCS20.

Associated registers

Register TOTINSU = ANSINC + DSINCU + other data incoming SUs.

Associated logs

There are no associated logs.

Register TOTOGMUM

Total outgoing multi-unit messages (TOTOGMUM)

Register TOTOGMUM counts outgoing multi-unit messages (MUM) that the link transmits.

Register TOTOGMUM release history

Register TOTOGMUM was introduced before BCS20.

Associated registers

Register TOTOGMUM = IAMINC + DSINMSG + other outgoing MUMs.

Associated logs

There are no associated logs.

Register TOTOGSU

Total outgoing signal units (TOTOGSU)

Register TOTOGSU counts outgoing entered signal units on the link.

Register TOTOGSU release history

Register TOTOGSU was introduced before BCS20.

Associated registers

Register TOTOGSU = ANSINC + DSINSU + other incoming entered signal units.

Associated logs

There are no associated logs.

OM group C6VFL

OM description

CCIS6 voice frequency link (C6VFL)

The OM group C6VFL counts activities for each voice frequency link (VFL). A signaling link consists of two VFLs and a signaling terminal. The CCIS6 has two VFL groups that associate with every signaling link. These registers determine the characteristics of the error rate of a specified data link (VFL) that associate with the signaling link.

The signaling terminal (ST) starts the signaling link synchronization and proving procedures. If the system does not synchronize the link, signaling link management attempts to restore the link. Signaling link management attempts to replace the reserve for the active VFL for 3 min. The request for the replacement can be automatically or manually initiated, and can come from the far or the near end. After 3 min, link management abandons the restoration procedure and terminal maintenance diagnoses the ST. The procedure begins again if the link does not synchronize. If the system synchronizes the link, the system informs signaling traffic management. The proving procedures start. If the procedures are successful, the system routes signaling traffic through the link.

Release history

The OM group C6VFL was introduced before BCS20.

Registers

The OM group C6VFL registers display on the MAP terminal as follows:

```
INVLDSU     SUIE        RERQ        CTRTIME
NECOV       FECOV       MANNECOV    MANFECOV
```

Group structure

The OM group C6VFL one tuple per VFL.

Key field:

The key field is the VFL_CLLI, the common language location identifier for the CCIS6 signaling link. VFL must have its own trunk group.

Info field:

The information field is VFL_ETKN, LINK_CLLI, VFLNO.

The VFL_ETKN field identifies the trunk language name of the VFL. The LINK_CLLI identifies the CLLI of the VFL's signaling link. The VFLNO identifies the VFL within the signaling link (either 0 or 1).

Associated OM groups

The OM group C6LINK counts traffic-related and maintenance-related activities on a signaling link.

Associated functional groups

The functional group CCIS6 associates with OM group C6VFL.

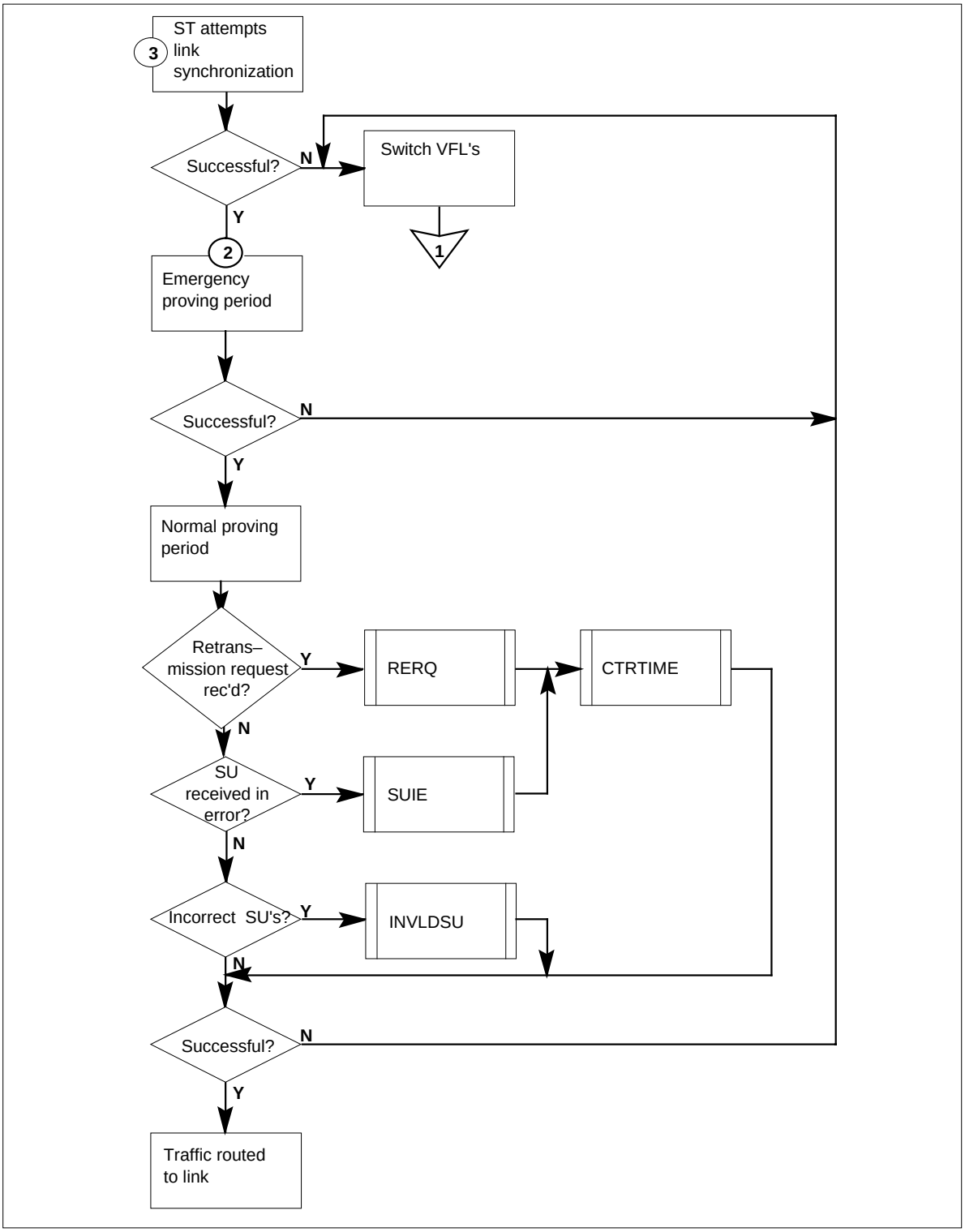
Associated functionality codes

The associated functionality codes for OM group C6VFL appear in the following table.

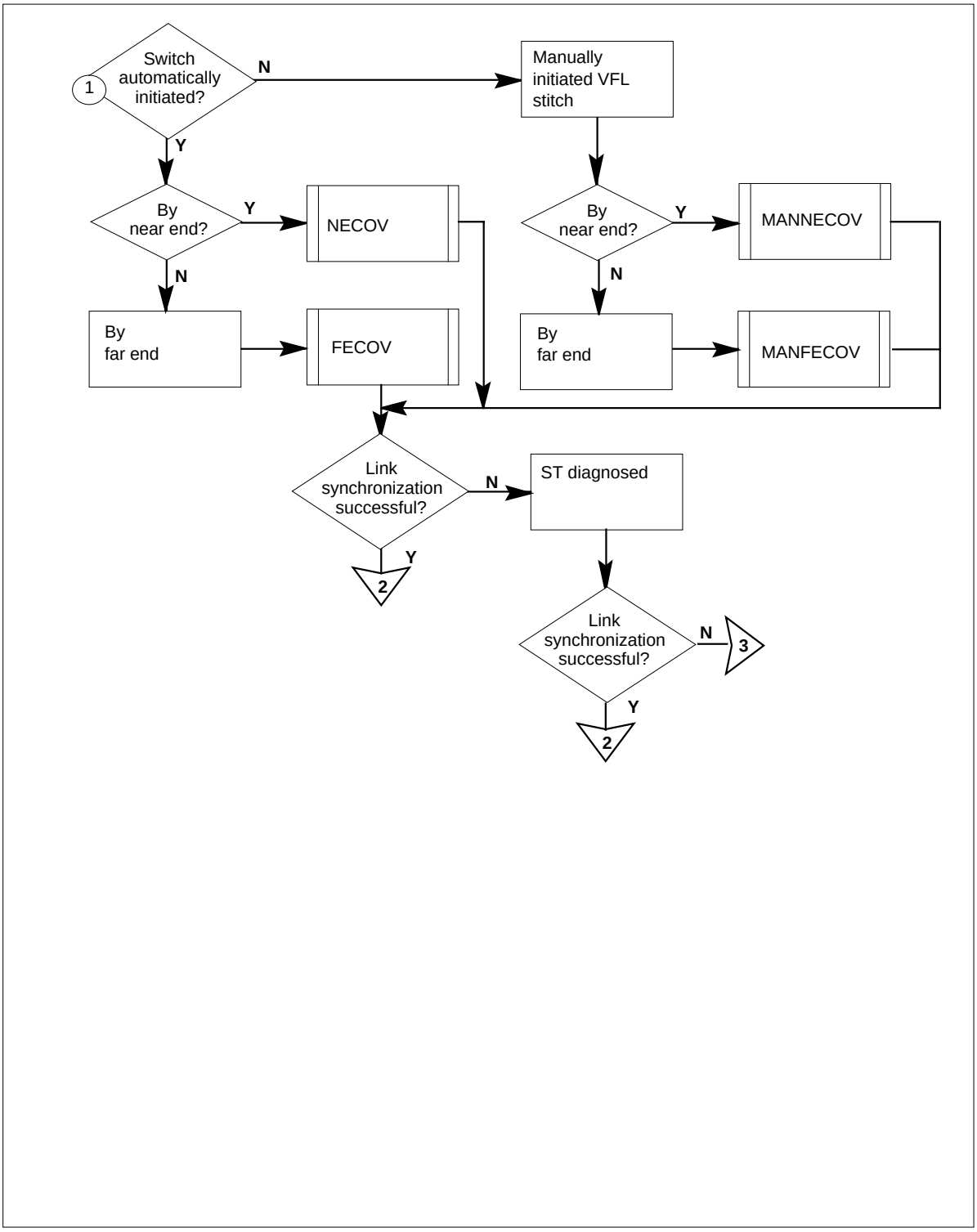
Functionality	Code
CCIS Banded Signaling	NTX204AA

OM group C6VFL (continued)

OM group C6VFL registers



OM group C6VFL registers (continued)



OM group C6VFL (continued)

Register CTRTIME

Count register time (CTRTIME)

Register CTRTIME is a usage register. The scan rate is 10 s. Register CTRTIME records whether the SUIE and RERQ registers are active.

This register indicates the error rate of the voice frequency link (VFL). This register measures the time the specified VFL connects to a signaling terminal to form a signaling link.

Register CTRTIME release history

Register CTRTIME was introduced before BCS20.

Associated registers

Register SUIE counts signal units that the system receives in error. Register RERQ counts transmission requests that the system receives.

Associated logs

There are no associated logs.

Register FECOV

Far end changeovers (FECOV)

Register FECOV counts far-end automatically initiated changeovers for each voice frequency link (VFL).

Register FECOV release history

Register FECOV was introduced before BCS20.

Associated registers

There are no associated registers.

Associated logs

The system generates CCIS101 when register FECOV increases.

Register INVLDSU

Incorrect signal unit (INVLDSU)

Register INVLDSU counts signal units received from the signaling link that the signaling terminal (ST) is unable to decode. The system counts this register in the ST and transfers the register to the central control complex (CC) during the OM transfer procedure.

Register INVLDSU release history

Register INVLDSU was introduced before BCS20.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Register MANFECOV

Manual far-end changeovers (MANFECOV)

Register MANFECOV counts far-end manually initiated changeovers for each voice frequency link (VFL).

Register MANFECOV release history

Register MANFECOV was introduced before BCS20.

Associated registers

Register MANFECOV + MANOOSTI = number of occurrences of a manual out-of-service state caused by a far-end request.

Associated logs

The system generates CCIS22 when MANFECOV increases.

Register MANNECOV

Manual near-end changeovers (MANNECOV)

Register MANNECOV counts near-end manually initiated changeovers for each voice frequency link (VFL).

Register MANNECOV release history

Register MANNECOV was introduced before BCS20.

Associated registers

Register MANNECOV + C6LINK_MANOOSTI = number of occurrences of a manual out-of-service state caused by a near-end request.

Associated logs

The system generates log CCIS120 when MANNECOV increases.

Register NECOV

Near-end changeovers (NECOV)

OM group C6VFL (continued)

Register NECOV counts near-end automatic initiated changeovers for each voice frequency link (VFL).

Register NECOV release history

Register NECOV was introduced before BCS20.

Associated registers

There are no associated logs.

Associated logs

The system generates log CCIS101 when NECOV increases.

Register RERQ

Retransmission requests (RERQ)

Register RERQ counts retransmission requests that the voice frequency link (VFL) receives. The system counts this register in the signaling terminal (ST). The system transfers this register to the central control complex (CCC) during the OM transfer procedure.

Register RERQ release history

Register RERQ was introduced before BCS20.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Register SUIE

Signal units in error (SUIE)

Register SUIE counts signal units that the system receives on the voice frequency link (VFL) in error. The system counts this register in the signaling terminal (ST). The system transfers this register to the central control complex (CCC) during the OM transfer procedure.

Register SUIE release history

Register SUIE was introduced before BCS20.

Associated registers

There are no associated registers.

OM group C6VFL (end)

Associated logs

There are no associated logs.

OM group C7DCIS6

OM description

Global title translation results for C7DCIS6

The OM group C7DCIS6 counts successful and failed global title translations. The C7DC1S6 counts global title translations of common channel interface system 6 (CCIS6) direct signaling messages at a DMS CCS7 STP. The C7DCIS6 uses DCIS6. The system makes measurements for each link.

A CCS7 SCCP message contains a destination common channel interface system 6 (DCIS6) message. A CCS7 STP handles the DCIS6. The CCS7 STP performs a global title translation on the message, if necessary. The CCS7 STP then routes the message to its destination.

The OM group C7DCIS6 applies to NYNEX STPs only.

Release history

The OM group C7DCIS6 was introduced in BCS27.

Registers

The OM group C7DCIS6 registers display on the MAP terminal as follows:

```
C7D6GTT     C7D6GTT2    C7D6FAIL
```

Group structure

The OM group C7DCIS6 provides one tuple for each CCS7 link as in table C7LINK.

Key field:
COMMON_LANGUAGE_NAME in table C7LINK

Info field:
C7LINK_OMINFO in table C7LINK

Associated OM groups

There are no associated OM groups.

Associated functional groups

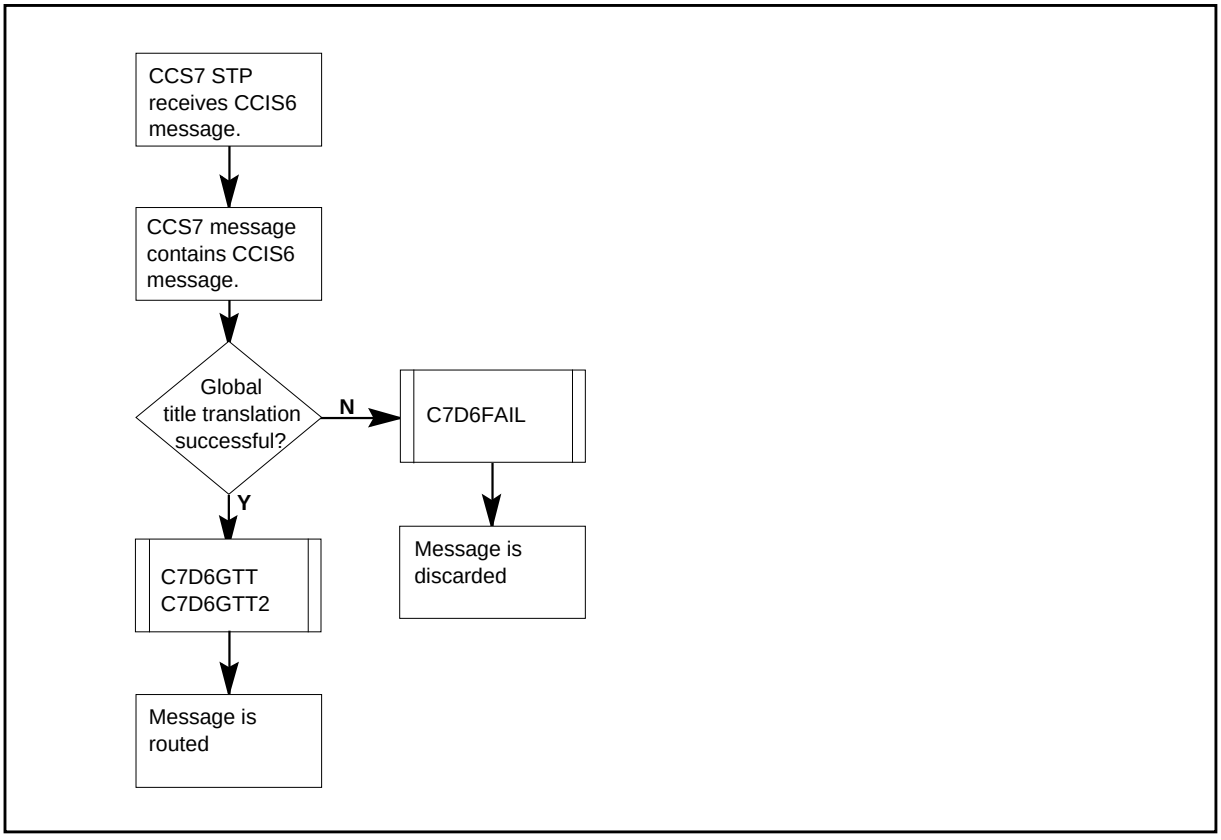
There are no associated functional groups.

Associated functionality codes

The associated functionality codes for OM group C7DCIS6 appear in the following table.

Functionality	Code
DCIS6 Translations	NTX834AA

OM group C7DCIS6 registers



Register C7D6FAIL

C7DCIS6 failures (C7D6FAIL)

Register C7D6FAIL counts the number of failed C7DCIS6 translations on a C7 link.

OM group C7DCIS6 (end)

Register C7D6FAIL release history

Register C7D6FAIL was introduced in BCS27.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Register C7D6GTT

C7DCIS6 global title translations (C7D6GTT)

Register C7D6GTT counts the number of successful C7DCIS6 translations on a C7 link.

Register C7D6GTT release history

Register C7D6GTT was introduced in BCS27.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

C7D6GTT2

OM group C7GTLNK

OM description

SCCP global title OMs per link

The operational measurement (OM) group C7GTLNK captures operational information about global title translations (GTT) OMs uploaded from the link. When the GTT OMs are uploaded, C7GTLNK places each OM in its own register corresponding to the correct link.

OM group C7GTLNK consists of seven registers. These registers monitor the following:

- number of GTTs performed
- number of failed GTTs that encountered errors in the called party address (CDPA)
- number of hop counter problems
- number of message signal units (MSU) sampled that experience handling delays more than 95% of the time with and without GTT

Release history

OM group C7GTLNK was introduced in TL10.

Registers

The following OM group C7GTLNK registers display on the MAP terminal as follows:

```
C7GTT      C7GTT2      C7RFNTN      C7RFNTA
C7HOPERR   C795GTT     C795NGTT
```

Group structure

Key field:
C7_LINKSET_NUMBER {0 TO max_c7_linksets +1}

Info field:
C7LINK_OMINFO {0 to 15}

Associated OM groups

C7SCCP

OM group C7GTLNK (continued)

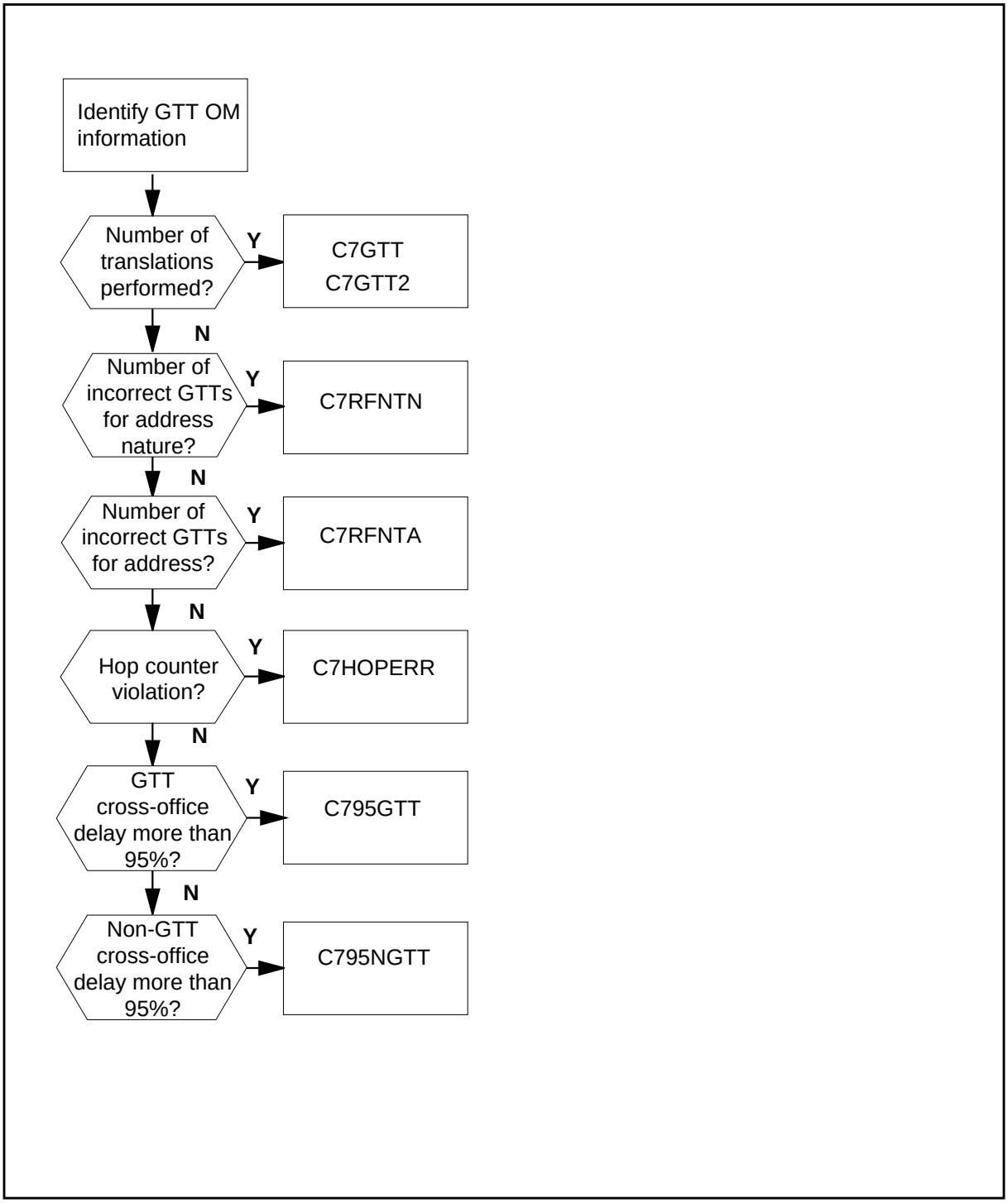
Associated functional groups

None

Associated functionality codes

N/A

OM group C7GTLNK registers



OM group C7GTLNK (continued)

Register C7GTT

Register number of translations performed

Register C7GTT counts the number of GTTs performed per link.

Register C7GTT release history

Register C7GTT was introduced in TL10.

Associated registers

None

Associated logs

None

Extension registers

C7GTT2

Register C7RFNTN

Register routing failures for no translation of address nature

Register C7RFNTN counts the number of GTTs per link that resulted in error and could not be routed. The routing failed because an invalid field value in the CDPA exists.

Register C7RFNTN release history

Register C7RFNTN was introduced in TL10.

Associated registers

None

Associated logs

CCS241

Extension registers

None

Register C7RFNTA

Register routing failures for no translation of address

Register C7RFNTA counts the number of GTTs per link that resulted in error and could not be routed. The routing failed because an invalid field value in the called party address (CDPA) exists.

Register C7RFNTA release history

Register C7RFNTA was introduced in TL10.

Associated registers

None

Associated logs

CCS241

Extension registers

None

Register C7HOPERR

Register hop counter violations

Register C7HOPERR counts the number of messages per link that have an signaling connection control part (SCCP) hop counter violation.

Register C7HOPERR release history

Register C7HOPERR was introduced in TL10.

Associated registers

None

Associated logs

CCS241

Extension registers

None

Register C795GTT

Register for MSUs with GTT that have delays greater than 95%

Register C795GTT counts the number of message signal unit (MSU) tests per link that require global title translation (GTT) and experience handling delays more than 95% of the time.

Register C795GTT release history

Register C795GTT was introduced in TL10.

Associated registers

None

OM group C7GTLNK (end)

Associated logs

N/A

Extension registers

None

Register C795NGTT

Register for MSUs without GTT that have delays greater than 95%

Register C795NGTT counts the number of MSU tests per link that do not require global title translation (GTT) and experience handling delays more than 95% of the time.

Register C795NGTT release history

Register C795NGTT was introduced in TL10.

Associated registers

None

Associated logs

N/A

Extension registers

None

OM group C7GTWSCR

OM description

C7 gateway screening (C7GTWSCR)

The C7GTWSCR counts messages discarded at a DMS STP by C7 gateway screening because the messages are written by users that are not authorized. A gateway signaling transfer point (STP) allows one Common Channeling Signaling 7 (CCS7) network access to another network's resources, such as authorized databases. CCS7 gateway screens incoming messages to a CCS7 network. The CCS7 screens based on the message transfer part (MTP) or the signal connection control part (SCCP) portions of a message, or both.

Registers in the OM group C7GTWSCR count the total number of screening failures. Registers in this group make separate counts of discards for each screening function. The registers increase the following causes:

- screening error in a message unit
- disallowed address
- disallowed originating point codes
- disallowed destination point codes
- incorrect service indicator, message priority, calling party address, affected point code, and incorrect subsystem status tests
- incorrect destination field
- incorrect translation type
- disallowed PC/SSN in a called party address
- incorrect called-party address (CDPA) routing indication, SSN, SCCP message type, and incorrect linkset group.

The system temporarily stores Operational measurement (OM) data in CCS7 link interface units (LIU7), high-speed link interface units (HLIU) and high-speed link routers (HSLR). The system sends the OM data to the computing module (CM) one minute before the active-to-holding OM transfer, or when the buffers are full.

Release history

The OM group C7GTWSCR was introduced in BCS27.

BCS30

Registers MSURJH01 and MSURJNIC added.

OM group C7GTWSCR (continued)

TL11

Updated for high-speed links.

Registers

The OM group C7GTWSCR registers display on the MAP terminal as follows:

```
MSUDSCRD    MSUDSCR2    MSUSCRER    MSURJTM
MSURJOPC    MSURJDPC    MSURJSI     MSURJPRI
MSURJCPA    MSURJAPC    MSURJPCS    MSURJDST
MSURJTT     MSURJDSN    MSURJH01    MSURJNIC
```

Group structure

The OM group C7GTWSCR provides one tuple for each gateway linkset for each originating network, to a maximum of 1000.

Key field:
C7_LINKSET_NUMBER

Info field:
C7GTWSCR_OMINFO

The system reports tuples in the order that the linkset//operator number identification (ONI) pairs are allocated.

Associated OM groups

There are no OM associated groups.

Associated functional groups

The following functional groups associate with OM group C7GTWSCR:

- CCS7
- STP

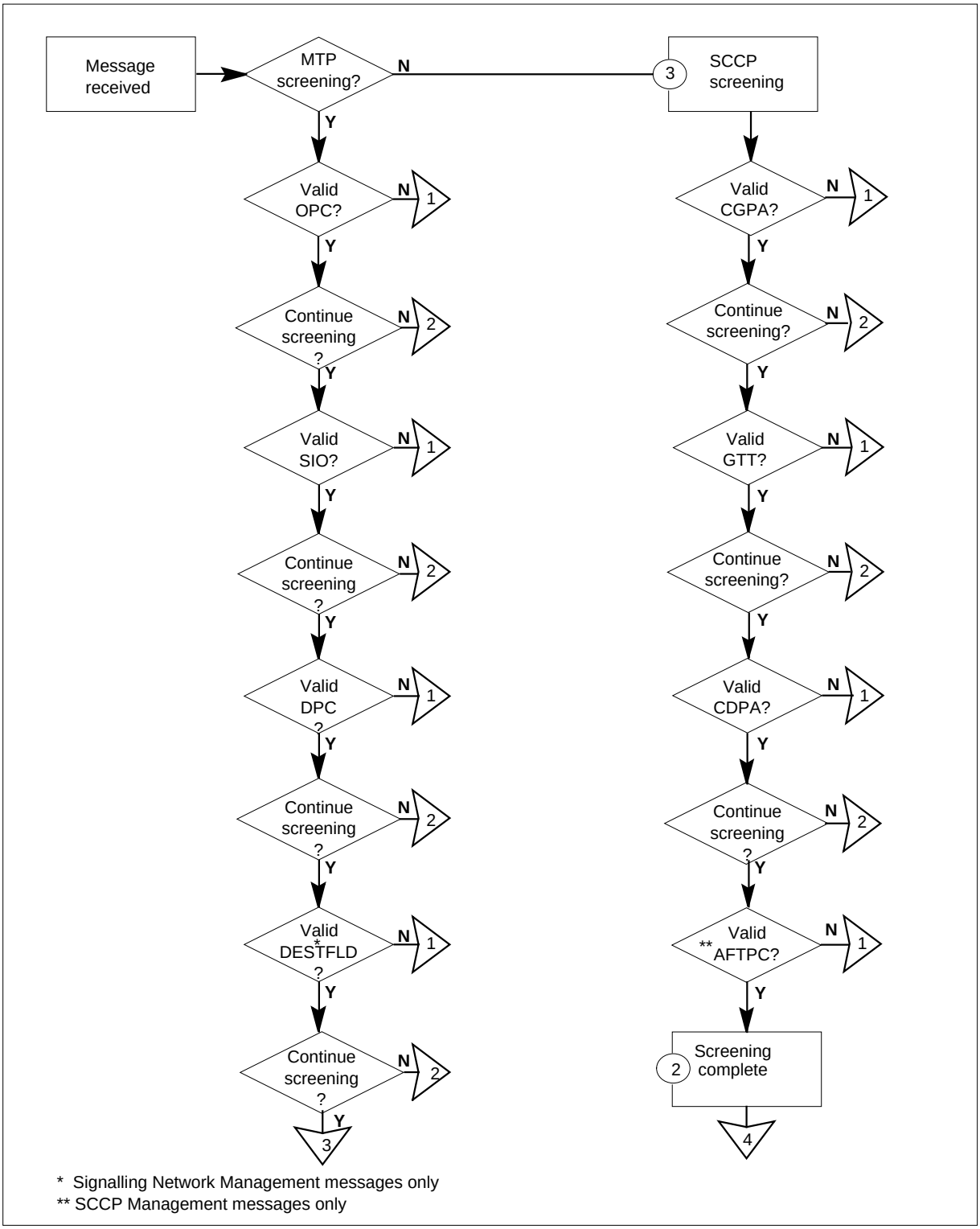
Associated functionality codes

The associated functionality codes for OM group C7GTWSCR appear in the following table.

Functionality	Code
STP-Gateway Message Screening	NTX840AA

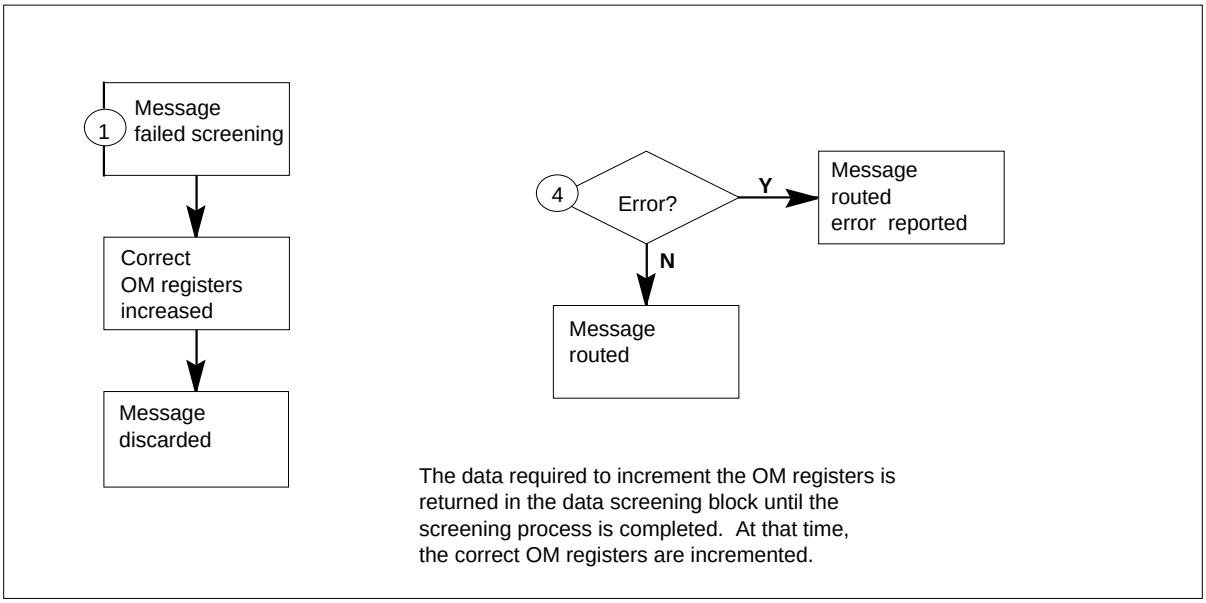
OM group C7GTWSCR (continued)

OM group C7GTWSCR registers



OM group C7GTWSCR (continued)

OM group C7GTWSCR registers (continued)



Register MSUDSCRD

Message signal units discarded (MSUDSCRD)

Register MSUDSCRD counts message signal units (MSU) that the system discards because of gateway screening failures.

Register MSUDSCRD release history

Register MSUDSCRD was introduced in BCS27.

Associated registers

Register MSURJTM counts testing and maintenance MSUs that are discarded because of a disallowed address.

Register MSUSCRER counts MSUs that cause an error in a screening function.

Register MSURJOPC counts MSUs that are discarded because of a disallowed origination point code.

Register MSURJDPC counts MSUs that are discarded because of a disallowed destination point code.

Register MSURJSI counts MSUs that are discarded because of an invalid service indicator.

Register MSURJPRI counts MSUs that are discarded because of an invalid message priority.

Register MSURJCPA counts MSUs that are discarded because of an invalid calling party address (CGPA), subsystem number (SSN), CDPA routing indicator or linkset group.

Register MSURJAPC counts MSUs that are discarded because of an invalid affected PC/SSN.

Register MSURJPCS counts subsystem status test (SST) messages that are discarded because of an invalid affected PC/SSN.

Register MSURJDST counts MTP network management (NWM) messages that are discarded because of an invalid destination field.

Register MSURJTT counts SCCP MSUs that are discarded because of an invalid translation type.

Register MSURJDSN counts SCCP MSUs that are discarded because of a disallowed PC/SSN in the called party address.

Register MSURJH01 counts MSUs that are discarded because of an invalid H0 or H1 codes.

Register MSURJNIC counts MSUs that are discarded because of an invalid network indicator field in the service information octet.

MSUDSCRD + MSUDSCR2 x 65536 = MSUSCRER + MSURJTM + MSURJOPC + MSURJDPC + MSURJSI + MSURJPRI + MSURJCPA + MSURJAPC + MSURJPCS + MSURJDST + MSURJTT + MSURJDSN + MSURJH01 + MSURJNIC

Associated logs

The system generates log CCS500 when the MSUs that gateway screening functions discard exceed the threshold value for MSUs. The threshold value for MSUs is entered in table C7GTWLKS.

The system generates log CCS502 each time a gateway screening function discards a message. The log report includes the date, time, and reason for discard.

Extension registers

MSUDSCR2

OM group C7GTWSCR (continued)

Register MSURJAPC

Message signal units rejected, caused by incorrect PC/SSN.

Register MSURJAPC counts MSUs that the system discards because of an affected PC/SSN that are not correct.

Register MSURJAPC release history

Register MSURJAPC was introduced in BCS27.

Associated registers

Register MSUDSCRD counts MSUs that are discarded because of gateway screening failures.

Register MSUSCRER counts MSUs that cause an error in a screening function.

Register MSURJTM counts testing and maintenance MSUs that are discarded because of a disallowed address.

Register MSURJOPC counts MSUs that are discarded because of a disallowed origination point code.

Register MSURJDPC counts MSUs that are discarded because of a disallowed destination point code.

Register MSURJSI counts MSUs that are discarded because of an invalid service indicator.

Register MSURJPRI counts MSUs that are discarded because of an invalid message priority.

Register MSURJCPA counts MSUs that are discarded because of an invalid CGPA, SSN, CDPA routing indicator or linkset group.

Register MSURJPCS counts SST messages that are discarded because of an invalid affected PC/SSN.

Register MSURJDST counts MTP NWM messages that are discarded because of an invalid destination field.

Register MSURJTT counts SCCP MSUs that are discarded because of an invalid translation type.

Register MSURJDSN counts SCCP MSUs that are discarded because of a disallowed PC/SSN in the called party address.

Register MSURJH01 counts MSUs that are discarded because of an invalid H0 or H1 codes.

Register MSURJNIC counts MSUs that are discarded because of an invalid network indicator field in the service information octet.

MSUDSCRD + MSUDSCR2 x 65536 = MSUSCRER + MSURJTM + MSURJOPC + MSURJDPC + MSURJSI + MSURJPRI + MSURJCPA + MSURJAPC + MSURJPCS + MSURJDST + MSURJTT + MSURJDSN + MSURJH01 + MSURJNIC

Associated logs

The system generates CCS502 each time a gateway screening function discards a message. The log report includes the date, time, and reason for discard.

Register MSURJCPA

Message signal units rejected because of an invalid calling party address (CGPA).

Register MSURJCPA counts MSUs discarded because of an invalid CGPA or an invalid linkset group.

Register MSURJCPA release history

Register MSURJCPA was introduced in BCS27.

Associated registers

Register MSUDSCRD counts MSUs that are discarded because of gateway screening failures.

Register MSUSCRER counts MSUs that cause an error in a screening function.

Register MSURJTM counts testing and maintenance MSUs that are discarded because of a disallowed address.

Register MSURJOPC counts MSUs that are discarded because of a disallowed origination point code.

Register MSURJDPC counts MSUs that are discarded because of a disallowed destination point code.

OM group C7GTWSCR (continued)

Register MSURJSI counts MSUs that are discarded because of an invalid service indicator.

Register MSURJPRI counts MSUs that are discarded because of an invalid message priority.

Register MSURJAPC counts MSUs that are discarded because of an invalid affected PC/SSN.

Register MSURJPCS counts SST messages that are discarded because of an invalid affected PC/SSN.

Register MSURJDST counts MTP NWM messages that are discarded because of an invalid destination field.

Register MSURJTT counts SCCP MSUs that are discarded because of an invalid translation type.

Register MSURJDSN counts SCCP MSUs that are discarded because of a disallowed PC/SSN in the called party address.

Register MSURJH01 counts MSUs that are discarded because of an invalid H0 or H1 codes.

Register MSURJNIC counts MSUs that are discarded because of an invalid network indicator field in the service information octet.

MSUDSCRD + MSUDSCR2 x 65536 = MSUSCRER + MSURJTM + MSURJOPC + MSURJDPC + MSURJSI + MSURJPRI + MSURJCPA + MSURJAPC + MSURJPCS + MSURJDST + MSURJTT + MSURJDSN + MSURJH01 + MSURJNIC

Associated logs

The system generates CCS502 each time a gateway screening function discards a message. The log report includes the date, time, and reason for discard.

Register MSURJDPC

Message signal units rejected, caused by a disallowed destination point code (MSURJDPC)

MSURJDPC counts MSUs that are discarded because of a disallowed destination point code.

Register MSURJDPC release history

Register MSURJDPC was introduced in BCS27.

Associated registers

Register MSUDSCRD counts MSUs that are discarded because of gateway screening failures.

Register MSUSCRER counts MSUs that cause an error in a screening function.

Register MSURJTM counts testing and maintenance MSUs that are discarded because of a disallowed address.

Register MSURJOPC counts MSUs that are discarded because of a disallowed origination point code.

Register MSURJSI counts MSUs that are discarded because of an invalid service indicator.

Register MSURJPRI counts MSUs that are discarded because of an invalid message priority.

Register MSURJCPA counts MSUs that are discarded because of an invalid CGPA, SSN, CDPA routing indicator or linkset group.

Register MSURJAPC counts MSUs that are discarded because of an invalid affected PC/SSN.

Register MSURJPCS counts SST messages that are discarded because of an invalid affected PC/SSN.

Register MSURJDST counts MTP NWM messages that are discarded because of an invalid destination field.

Register MSURJTT counts SCCP MSUs that are discarded because of an invalid translation type.

Register MSURJDSN counts SCCP MSUs that are discarded because of a disallowed PC/SSN in the called party address.

Register MSURJH01 counts MSUs that are discarded because of an invalid H0 or H1 codes.

Register MSURJNIC counts MSUs that are discarded because of an invalid network indicator field in the service information octet.

OM group C7GTWSCR (continued)

MSUDSCRD + MSUDSCR2 x 65536 = MSUSCRER + MSURJTM + MSURJOPC + MSURJDPC + MSURJSI + MSURJPRI + MSURJCPA + MSURJAPC + MSURJPCS + MSURJDST + MSURJTT + MSURJDSN + MSURJH01 + MSURJNIC

Associated logs

The system generates CCS502 each time a gateway screening function discards a message. The log includes the date, time, and reason for discard.

Register MSURJDSN

SCCP MSUs rejected, caused by a disallowed point code and subsystem in the called party address (MSURJDSN)

Register MSURJDSN counts SCCP MSUs that the system discards because of a point code and subsystem (PC/SSN) in the called party address that are not allowed.

Register MSURJDSN release history

Register MSURJDSN was introduced in BCS27.

Associated registers

Register MSUDSCRD counts MSUs that are discarded due to gateway screening failures.

Register MSUSCRER counts MSUs that cause an error in a screening function.

Register MSURJTM counts testing and maintenance MSUs that are discarded because of a disallowed address.

Register MSURJOPC counts MSUs that are discarded because of a disallowed origination point code.

Register MSURJDPC counts MSUs that are discarded because of a disallowed destination point code.

Register MSURJSI counts MSUs that are discarded because of an invalid service indicator.

Register MSURJPRI counts MSUs that are discarded because of an invalid message priority.

Register MSURJCPA counts MSUs that are discarded because of an invalid CGPA, SSN, CDPA routing indicator or linkset group.

Register MSURJAPC counts MSUs that are discarded because of an invalid affected PC/SSN.

Register MSURJPCS counts SST messages that are discarded because of an invalid affected PC/SSN.

Register MSURJDST counts MTP NWM messages that are discarded because of an invalid destination field.

Register MSURJTT counts SCCP MSUs that are discarded because of an invalid translation type.

Register MSURJH01 counts MSUs that are discarded because of an invalid H0 or H1 codes.

Register MSURJNIC counts MSUs that are discarded because of an invalid network indicator field in the service information octet.

MSUDSCRD + MSUDSCR2 x 65536 = MSUSCRER + MSURJTM + MSURJOPC + MSURJDPC + MSURJSI + MSURJPRI + MSURJCPA + MSURJAPC + MSURJPCS + MSURJDST + MSURJTT + MSURJDSN + MSURJH01 + MSURJNIC

Associated logs

The system generates log CCS502 each time a gateway screening function discards a message. The log report includes the date, time, and reason for discard.

Register MSURJDST

MTP NWM messages rejected, caused by an incorrect destination field.

Register MSURJDST counts MTP NWM messages that the system discards because of a destination field that is not correct.

Register MSURJDST release history

Register MSURJDST was introduced in BCS27.

Associated registers

Register MSUDSCRD counts MSUs that are discarded because of gateway screening failures.

Register MSUSCRER counts MSUs that cause an error in a screening function.

OM group C7GTWSCR (continued)

Register MSURJTM counts testing and maintenance MSUs that are discarded because of a disallowed address.

Register MSURJOPC counts MSUs that are discarded because of a disallowed origination point code.

Register MSURJDPC counts MSUs that are discarded because of a disallowed destination point code.

Register MSURJSI counts MSUs that are discarded because of an invalid service indicator.

Register MSURJPRI counts MSUs that are discarded because of an invalid message priority.

Register MSURJCPA counts MSUs that are discarded because of an invalid CGPA, SSN, CDPA routing indicator or linkset group.

Register MSURJAPC counts MSUs that are discarded because of an invalid affected PC/SSN.

Register MSURJPCS counts SST messages that are discarded because of an invalid affected PC/SSN.

Register MSURJTT counts SCCP MSUs that are discarded because of an invalid translation type.

Register MSURJDSN counts SCCP MSUs that are discarded because of a disallowed PC/SSN in the called party address.

Register MSURJH01 counts MSUs that are discarded because of an invalid H0 or H1 codes.

Register MSURJNIC counts MSUs that are discarded because of an invalid network indicator field in the service information octet.

MSUDSCRD + MSUDSCR2 x 65536 = MSUSCRER + MSURJTM + MSURJOPC + MSURJDPC + MSURJSI + MSURJPRI + MSURJCPA + MSURJAPC + MSURJPCS + MSURJDST + MSURJTT + MSURJDSN + MSURJH01 + MSURJNIC

Associated logs

The system generates CCS502 each time a gateway screening function discards a message. The log report includes the date, time, and reason for discard.

Register MSURJH01

Message signal units discarded, caused by incorrect H0 and H1 codes

Register MSURJH01 counts MSUs that the system discards because of an H0 and H1 codes that is not correct.

Register MSURJH01 release history

Register MSURJH01 was introduced in BCS30.

Associated registers

Register MSUDSCRD counts MSUs that are discarded because of gateway screening failures.

Register MSUSCRER counts MSUs that cause an error in a screening function.

Register MSURJTM counts testing and maintenance MSUs that are discarded because of a disallowed address.

Register MSURJOPC counts MSUs that are discarded because of a disallowed origination point code.

Register MSURJDPC counts MSUs that are discarded because of a disallowed destination point code.

Register MSURJSI counts MSUs that are discarded because of an invalid service indicator.

Register MSURJPRI counts MSUs that are discarded because of an invalid message priority.

Register MSURJCPA counts MSUs that are discarded because of an invalid CGPA, SSN, CDPA routing indicator or linkset group.

Register MSURJAPC counts MSUs that are discarded because of an invalid affected PC/SSN.

Register MSURJPCS counts SST messages that are discarded because of an invalid affected PC/SSN.

Register MSURJTT counts SCCP MSUs that are discarded because of an invalid translation type.

OM group C7GTWSCR (continued)

Register MSURJDSN counts SCCP MSUs that are discarded because of a disallowed PC/SSN in the called party address.

Register MSURJDST counts MTP NWM messages that are discarded because of an invalid destination field.

Register MSURJNIC counts MSUs that are discarded because of an invalid network indicator field in the service information octet.

MSUDSCRD + MSUDSCR2 x 65536 = MSUSCRER + MSURJTM + MSURJOPC + MSURJDPC + MSURJSI + MSURJPRI + MSURJCPA + MSURJAPC + MSURJPCS + MSURJDST + MSURJTT + MSURJDSN + MSURJH01 + MSURJNIC

Associated logs

The system generates CCS502 each time a gateway screening function discards a message. The log report includes the date, time, and reason for discard.

Register MSURJNIC

Message signal units discarded, caused by incorrect network indicator field

Register MSURJNIC counts MSUs that the system discards because of a network indicator field in the service information octet that is not correct.

Register MSURJNIC release history

Register MSURJNIC was introduced in BCS30.

Associated registers

Register MSUDSCRD counts MSUs that are discarded because of gateway screening failures.

Register MSUSCRER counts MSUs that cause an error in a screening function.

Register MSURJTM counts testing and maintenance MSUs that are discarded because of a disallowed address.

Register MSURJOPC counts MSUs that are discarded because of a disallowed origination point code.

Register MSURJDPC counts MSUs that are discarded because of a disallowed destination point code.

Register MSURJSI counts MSUs that are discarded because of an invalid service indicator.

Register MSURJPRI counts MSUs that are discarded because of an invalid message priority.

Register MSURJCPA counts MSUs that are discarded because of an invalid CGPA, SSN, CDPA routing indicator or linkset group.

Register MSURJAPC counts MSUs that are discarded because of an invalid affected PC/SSN.

Register MSURJPCS counts SST messages that are discarded because of an invalid affected PC/SSN.

Register MSURJTT counts SCCP MSUs that are discarded because of an invalid translation type.

Register MSURJDSN counts SCCP MSUs that are discarded because of a disallowed PC/SSN in the called party address.

Register MSURJH01 counts MSUs that are discarded because of an invalid H0 or H1 codes.

Register MSURJDST counts MTP network management messages that are discarded because of an invalid destination field.

MSUDSCRD + MSUDSCR2 x 65536 = MSUSCRER + MSURJTM + MSURJOPC + MSURJDPC + MSURJSI + MSURJPRI + MSURJCPA + MSURJAPC + MSURJPCS + MSURJDST + MSURJTT + MSURJDSN + MSURJH01 + MSURJNIC

Associated logs

The system generates CCS502 each time a gateway screening function discards a message. The log report includes the date, time, and reason for discard.

Register MSURJOPC

Message signal units rejected, caused by a disallowed origination point code.

Register MSURJOPC counts MSUs that the system discards because of an origination point code that is not allowed.

OM group C7GTWSCR (continued)

Register MSURJOPC release history

Register MSURJOPC was introduced in BCS27.

Associated registers

Register MSUDSCRD counts MSUs that are discarded because of gateway screening failures.

Register MSUSCRER counts MSUs that cause an error in a screening function.

Register MSURJTM counts testing and maintenance MSUs that are discarded because of a disallowed address.

Register MSURJDPC counts MSUs that are discarded because of a disallowed destination point code.

Register MSURJSI counts MSUs that are discarded because of an invalid service indicator.

Register MSURJPRI counts MSUs that are discarded because of an invalid message priority.

Register MSURJCPA counts MSUs that are discarded because of an invalid CGPA, SSN, CDPA routing indicator or linkset group.

Register MSURJAPC counts MSUs that are discarded because of an invalid affected PC/SSN.

Register MSURJPCS counts SST messages that are discarded because of an invalid affected PC/SSN.

Register MSURJDST counts MTP NWM messages that are discarded because of an invalid destination field.

Register MSURJTT counts SCCP MSUs that are discarded because of an invalid translation type.

Register MSURJDSN counts SCCP MSUs that are discarded because of a disallowed PC/SSN in the called party address.

Register MSURJH01 counts MSUs that are discarded because of an invalid H0 or H1 codes.

Register MSURJNIC counts MSUs that are discarded because of an invalid network indicator field in the service information octet.

MSUDSCRD + MSUDSCR2 x 65536 = MSUSCRER + MSURJTM + MSURJOPC + MSURJDPC + MSURJSI + MSURJPRI + MSURJCPA + MSURJAPC + MSURJPCS + MSURJDST + MSURJTT + MSURJDSN + MSURJH01 + MSURJNIC

Associated logs

The system generates CCS502 each time a gateway screening function discards a message. The log report includes the date, time, and reason for discard.

Register MSURJPCS

Subsystem status test messages rejected, caused by an incorrect affected point code and subsystem (MSURJPCS)

Register MSURJPCS counts subsystem status test (SST) messages that the system discards because of an affected point code and subsystem (PC/SSN) that are not correct.

Register MSURJPCS release history

Register MSURJPCS was introduced in BCS27.

Associated registers

Register MSUDSCRD counts MSUs that are discarded because of gateway screening failures.

Register MSUSCRER counts MSUs that cause an error in a screening function.

Register MSURJTM counts testing and maintenance MSUs that are discarded because of a disallowed address.

Register MSURJOPC counts MSUs that are discarded because of a disallowed origination point code.

Register MSURJDPC counts MSUs that are discarded because of a disallowed destination point code.

Register MSURJSI counts MSUs that are discarded because of an invalid service indicator.

Register MSURJPRI counts MSUs that are discarded because of an invalid message priority.

OM group C7GTWSCR (continued)

Register MSURJCPA counts MSUs that are discarded because of an invalid CGPA, SSN, CDPA routing indicator or linkset group.

Register MSURJAPC counts MSUs that are discarded because of an invalid affected PC/SSN.

Register MSURJDST counts MTP NWM messages that are discarded because of an invalid destination field.

Register MSURJTT counts SCCP MSUs that are discarded because of an invalid translation type.

Register MSURJDSN counts SCCP MSUs that are discarded because of a disallowed PC/SSN in the called party address.

Register MSURJH01 counts MSUs that are discarded because of an invalid H0 or H1 codes.

Register MSURJNIC counts MSUs that are discarded because of an invalid network indicator field in the service information octet.

MSUDSCRD + MSUDSCR2 x 65536 = MSUSCRER + MSURJTM + MSURJOPC + MSURJDPC + MSURJSI + MSURJPRI + MSURJCPA + MSURJAPC + MSURJPCS + MSURJDST + MSURJTT + MSURJDSN + MSURJH01 + MSURJNIC

Associated logs

The system generates CCS502 each time a gateway screening function discards a message. The log report includes the date, time, and reason for discard.

Register MSURJPRI

Message signal units rejected, caused by an incorrect message priority

Register MSURJPRI counts MSUs that the system discards because of a message priority that is not correct.

Register MSURJPRI release history

Register MSURJPRI was introduced in BCS27.

Associated registers

Register MSUDSCRD counts MSUs that are discarded because of gateway screening failures.

Register MSUSCRER counts MSUs that cause an error in a screening function.

Register MSURJTM counts testing and maintenance MSUs that are discarded because of a disallowed address.

Register MSURJOPC counts MSUs that are discarded because of a disallowed origination point code.

Register MSURJDPC counts MSUs that are discarded because of a disallowed destination point code.

Register MSURJSI counts MSUs that are discarded because of an invalid service indicator.

Register MSURJCPA counts MSUs that are discarded because of an invalid CGPA, SSN, CDPA routing indicator or linkset group.

Register MSURJAPC counts MSUs that are discarded because of an invalid affected PC/SSN.

Register MSURJPCS counts SST messages that are discarded because of an invalid affected PC/SSN.

Register MSURJDST counts MTP NWM messages that are discarded because of an invalid destination field.

Register MSURJTT counts SCCP MSUs that are discarded because of an invalid translation type.

Register MSURJDSN counts SCCP MSUs that are discarded because of a disallowed PC/SSN in the called party address.

Register MSURJH01 counts MSUs that are discarded because of an invalid H0 or H1 codes.

Register MSURJNIC counts MSUs that are discarded because of an invalid network indicator field in the service information octet.

MSUDSCRD + MSUDSCR2 x 65536 = MSUSCRER + MSURJTM + MSURJOPC + MSURJDPC + MSURJSI + MSURJPRI + MSURJCPA + MSURJAPC + MSURJPCS + MSURJDST + MSURJTT + MSURJDSN + MSURJH01 + MSURJNIC

OM group C7GTWSCR (continued)

Associated logs

The system generates CCS502 each time a gateway screening function discards a message. The log report includes the date, time, and reason for discard.

Register MSURJSI

Message signal units rejected, caused by an invalid service indicator (MSURJSI)

Register MSURJSI counts MSUs that the system discards because of a service indicator that is not correct.

Register MSURJSI release history

Register MSURJSI was introduced in BCS27.

Associated registers

Register MSUDSCRD counts MSUs that are discarded because of gateway screening failures.

Register MSUSCRER counts MSUs that cause an error in a screening function.

Register MSURJTM counts testing and maintenance MSUs that are discarded because of a disallowed address.

Register MSURJOPC counts MSUs that are discarded because of a disallowed origination point code.

Register MSURJDPC counts MSUs that are discarded because of a disallowed destination point code.

Register MSURJPRI counts MSUs that are discarded because of an invalid message priority.

Register MSURJCPA counts MSUs that are discarded because of an invalid CGPA, SSN, CDPA routing indicator or linkset group.

Register MSURJAPC counts MSUs that are discarded because of an invalid affected PC/SSN.

Register MSURJPCS counts SST messages that are discarded because of an invalid affected PC/SSN.

Register MSURJDST counts MTP NWM messages that are discarded because of an invalid destination field.

Register MSURJTT counts SCCP MSUs that are discarded because of an invalid translation type.

Register MSURJDSN counts SCCP MSUs that are discarded because of a disallowed PC/SSN in the called party address.

Register MSURJH01 counts MSUs that are discarded because of an invalid H0 or H1 codes.

Register MSURJNIC counts MSUs that are discarded because of an invalid network indicator field in the service information octet.

MSUDSCRD + MSUDSCR2 x 65536 = MSUSCRER + MSURJTM + MSURJOPC + MSURJDPC + MSURJSI + MSURJPRI + MSURJCPA + MSURJAPC + MSURJPCS + MSURJDST + MSURJTT + MSURJDSN + MSURJH01 + MSURJNIC

Associated logs

The system generates CCS502 each time a gateway screening function discards a message. The log report includes the date, time, and reason for discard.

Register MSURJTM

Testing and maintenance message signal units rejected

Register MSURJTM counts testing and maintenance MSUs that the system discards because of an address that is not allowed.

Register MSURJTM release history

Register MSURJTM was introduced in BCS27.

Associated registers

Register MSUDSCRD counts MSUs that are discarded because of gateway screening failures.

Register MSUSCRER counts MSUs that cause an error in a screening function.

Register MSURJOPC counts MSUs that are discarded because of a disallowed origination point code.

OM group C7GTWSCR (continued)

Register MSURJDPC counts MSUs that are discarded because of a disallowed destination point code.

Register MSURJSI counts MSUs that are discarded because of an invalid service indicator.

Register MSURJPRI counts MSUs that are discarded because of an invalid message priority.

Register MSURJCPA counts MSUs that are discarded because of an invalid CGPA, SSN, CDPA routing indicator or linkset group.

Register MSURJAPC counts MSUs that are discarded because of an invalid affected PC/SSN.

Register MSURJPCS counts SST messages that are discarded because of an invalid affected PC/SSN.

Register MSURJDST counts MTP NWM messages that are discarded because of an invalid destination field.

Register MSURJTT counts SCCP MSUs that are discarded because of an invalid translation type.

Register MSURJDSN counts SCCP MSUs that are discarded because of a disallowed PC/SSN in the called party address.

Register MSURJH01 counts MSUs that are discarded because of an invalid H0 or H1 codes.

Register MSURJNIC counts MSUs that are discarded because of an invalid network indicator field in the service information octet.

MSUDSCRD + MSUDSCR2 x 65536 = MSUSCRER + MSURJTM + MSURJOPC + MSURJDPC + MSURJSI + MSURJPRI + MSURJCPA + MSURJAPC + MSURJPCS + MSURJDST + MSURJTT + MSURJDSN + MSURJH01 + MSURJNIC

Associated logs

The system generates CCS50S each time a gateway screening function discards a message. The log report includes the date, time, and reason for discard.

Register MSURJTT

SCCP MSUs caused by an incorrect translation type (MSURJTT)

Register MSURJTT counts SCCP MSUs that the system discards because of a translation type that is not correct.

Register MSURJTT release history

Register MSURJTT was introduced in BCS27.

Associated registers

Register MSUDSCRD counts MSUs that are discarded because of gateway screening failures.

Register MSUSCRER counts MSUs that cause an error in a screening function.

Register MSURJTM counts testing and maintenance MSUs that are discarded because of a disallowed address.

Register MSURJOPC counts MSUs that are discarded because of a disallowed origination point code.

Register MSURJDPC counts MSUs that are discarded because of a disallowed destination point code.

Register MSURJSI counts MSUs that are discarded because of an invalid service indicator.

Register MSURJPRI counts MSUs that are discarded because of an invalid message priority.

Register MSURJCPA counts MSUs that are discarded because of an invalid CGPA, SSN, CDPA routing indicator or linkset group.

Register MSURJAPC counts MSUs that are discarded because of an invalid affected PC/SSN.

Register MSURJPCS counts SST messages that are discarded because of an invalid affected PC/SSN.

Register MSURJDST counts MTP NWM messages that are discarded because of an invalid destination field.

OM group C7GTWSCR (continued)

Register MSURJDSN counts SCCP MSUs that are discarded because of a disallowed PC/SSN in the called party address.

Register MSURJH01 counts MSUs that are discarded because of an invalid H0 or H1 codes.

Register MSURJNIC counts MSUs that are discarded because of an invalid network indicator field in the service information octet.

MSUDSCRD + MSUDSCR2 x 65536 = MSUSCRER + MSURJTM + MSURJOPC + MSURJDPC + MSURJSI + MSURJPRI + MSURJCPA + MSURJAPC + MSURJPCS + MSURJDST + MSURJTT + MSURJDSN + MSURJH01 + MSURJNIC

Associated logs

The system generates CCS502 each time a gateway screening function discards a message. The log report includes the date, time, and reason for discard.

Register MSUSCRER

Message signal unit screening errors (MSUSCRER)

Register MSUSCRER MSUs that cause an error in a screening function.

Register MSUSCRER release history

Register MSUSCRER was introduced in BCS27.

Associated registers

Register MSUDSCRD counts MSUs that the system discards because of gateway screening failures.

Register MSURJTM counts testing and maintenance MSUs that the system rejects because of an address that is not allowed.

Register MSURJOPC counts MSUs that the system discards because of an origination point code that is not allowed.

Register MSURJDPC counts MSUs that the system discards because of a destination point code that is not allowed.

Register MSURJSI counts MSUs that the system discards because of a service indicator that is not correct.

Register MSURJPRI counts MSUs that the system discards because of a message priority that is not correct.

Register MSURJCPA counts MSUs that are discarded because of an invalid CGPA, SSN, CDPA routing indicator or linkset group.

Register MSURJAPC counts MSUs that the system discards because of an affected point code and subsystem (PC/SSN) that are not correct.

Register MSURJPCS counts SSTs messages that the system discards because of an affected point code and subsystem (PC/SSN) that are not correct.

Register MSURJDST counts MTPs network management (NWM) messages that the system discards because of a destination field that is not correct.

Register MSURJTT counts SCCPs message signal units that the system discards because of a translation type that is not correct.

Register MSURJDSN counts SCCPs message signal units that the system discards because of a translation type that is not correct.

Register MSURJH01 counts MSUs that the system discards because of an H0 and H1 code that is not correct.

Register MSURJNIC counts MSUs that the system discards because of a network indicator field in the service information octet that is not correct.

MSUDSCRD + MSUDSCR2 x 65536 = MSUSCRER + MSURJTM + MSURJOPC + MSURJDPC + MSURJSI + MSURJPRI + MSURJCPA + MSURJAPC + MSURJPCS + MSURJDST + MSURJTT + MSURJDSN + MSURJH01 + MSURJNIC

Associated logs

The system generates CCS503 generates each time a gateway screening function fails because of an error. The log report includes the date, time, and the screening function in which the error occurs.

OM group C7GWSCCP

OM description

CCS7 gateway signaling connection control part (C7GWSCCP)

The OM group C7GWSCCP monitors the performance and use of the CCS7 international gateway signaling connection control part (SCCP).

The OM group C7GWSCCP contains three registers that count:

- incoming SCCP messages that the system discards because of an overload in the message switch and buffer for CCS7 (MSB7)
- messages that the central control process

Release history

The OM group C7GWSCCP was introduced in BCS31.

Registers

The OM group C7GWSCCP registers appear on the MAP terminal as follows:

```
C7THROWN     C7MSGCC      C7MSGCC2
```

Group structure

The OM group C7GWSCCP provides one tuple per office

Key field:
There is no key field

Info field:
There is no key field

Associated OM groups

The OM group C7SCCP provides information on the performance and use of the CCS7 SCCP.

Associated functional groups

The following functional groups associate with OM group C7GWSCCP:

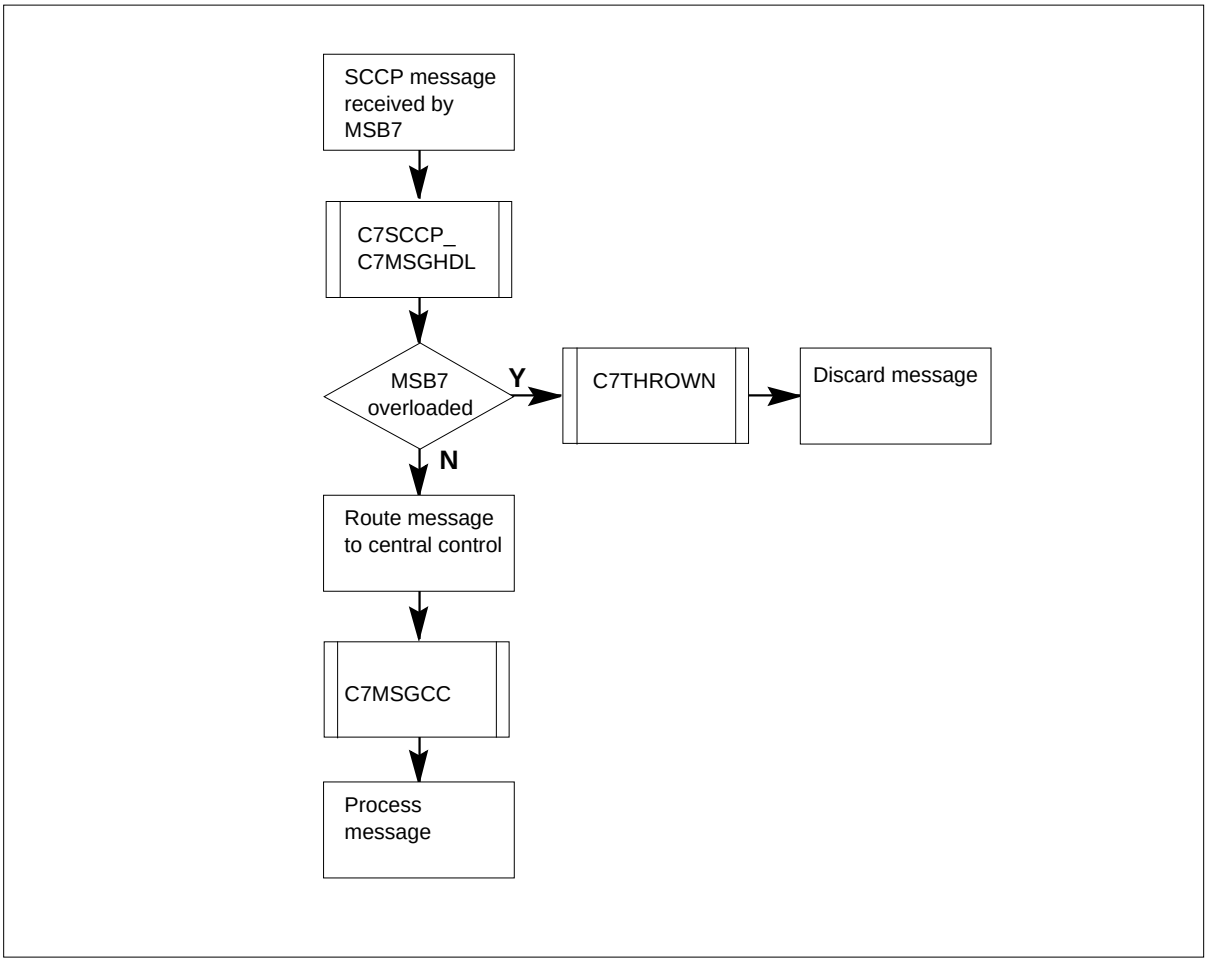
- DMS-300
- MSB7-Message switch and buffer for CCS7

Associated functionality codes

The functionality codes associated with OM group C7GWSCCP appear in the following table.

Functionality	Code
Signaling Connection Part (MSB7)-DMS300	NTXK51AA

OM group C7GWSCCP registers



Register C7THROWN

Messages discarded (C7THROWN)

OM group C7GWSCCP (end)

Register C7THROWN counts incoming SCCP messages the system discards because of an overload in the message switch and buffer for CCS7 (MSB7).

Register C7THROWN release history

Register C7THROWN was introduced in BCS31.

Associated registers

Register C7SCCP_C7MSGHDL counts SCCP messages that the international gateway SCCP switch handle.

Register C7MSGCC counts SCCP messages that the central control process.

C7SCCP_C7MSGHDL = C7THROWN + C7MSGCC

Associated logs

There are no associated logs.

Register C7MSGCC

Messages processed by central control (C7MSGCC)

Register C7MSGCC counts SCCP messages that the central control process.

Register C7MSGCC release history

Register C7MSGCC was introduced in BCS31.

Associated registers

Register C7SCCP_C7MSGHDL counts SCCP messages that the international gateway SCCP switch handle.

Register C7THROWN counts incoming SCCP messages the system discards because of an overload in the message switch and buffer (MSB7).

C7SCCP_C7MSGHDL = C7THROWN + C7MSGCC

Associated logs

There are no associated logs.

Extension registers

C7MSGCC2

OM group C7HSLAL1

OM description

CCS7 High-speed Link Signaling ATM Adaptation Layer Events Group 1

C7HSLAL1 provides information related to the operation of the CCS7 high-speed link asynchronous transfer mode (ATM) adaptation layer.

Release history

OM group C7HSLAL1 was introduced in TL10.

Registers

The following OM group C7HSLAL1 registers display on the MAP terminal:

```
C7SSPT1     C7SSPT2     C7SSPRT1    C7SSPRT2
C7SSPOT1    C7SSPOT2    C7SPORT1    C7SPORT2
C7SPR1      C7SPR2      C7SPOR1     C7SPOR2
C7STPT1     C7STPT2     C7STPR1     C7STPR2
C7STPOT1    C7STPOT2    C7STPOR1    C7STPOR2
```

Group structure

OM group C7HSLAL1 provides a tuple for each key.

Key field:
C7_LINKSET_NUMBER. Number in the range 0 to 254 is used as an index into table C7LKSET.

Info field:
C7LINK_OMINFO. The Info field has a two-part key: CLLI and C7_SIGLINK_CODE. CLLI is the common language location identifer of the linkset that owns the link. The C7_SIGLINK_CODE is a number from 0 to 15 that identifies the link in the linkset.

Associated OM groups

C7HSLAL2 provides information on CCS7 high-speed link ATM adaptation layer operations.

C7HSLATM provides information on CCS7 high-speed link ATM layer events.

C7HSLCAR provides information on CCS7 high-speed link digital carriers.

OM group C7HSLAL1 (continued)

C7LINK1 counts failures and recoveries of a CCS7 link.

C7LINK2 provides information on calls and congestion for a CCS7 link.

C7LINK3 monitors traffic and performance of message signal units on a CCS7 link.

C7LKSET provides CCS7 linkset performance information.

Associated functional groups

The following functional groups are associated with OM group C7HSLAL1:

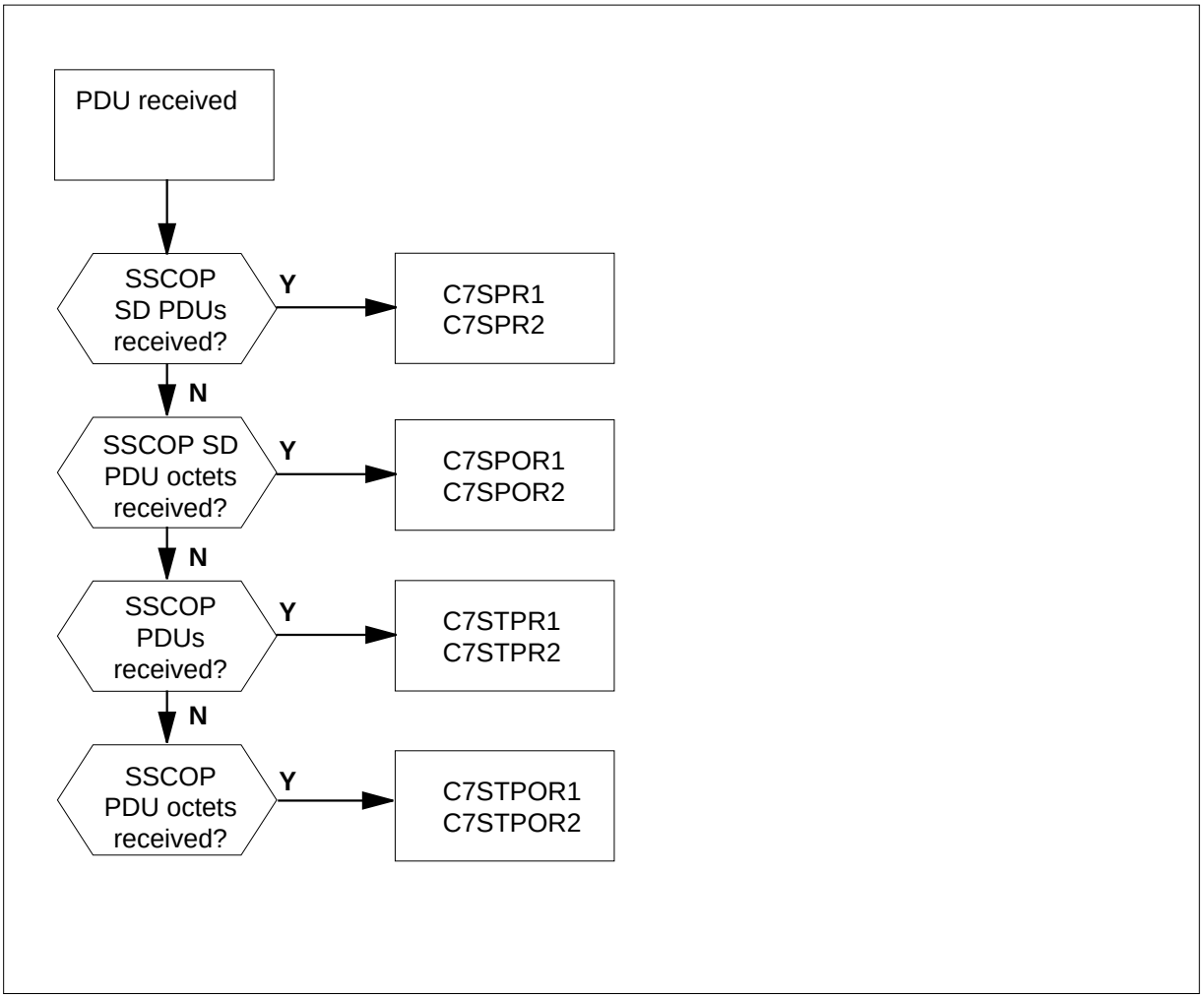
- Common Channel Signaling 7 (CCS7)

Associated functionality codes

The functionality codes associated with OM group C7HSLAL1 are shown in the following table.

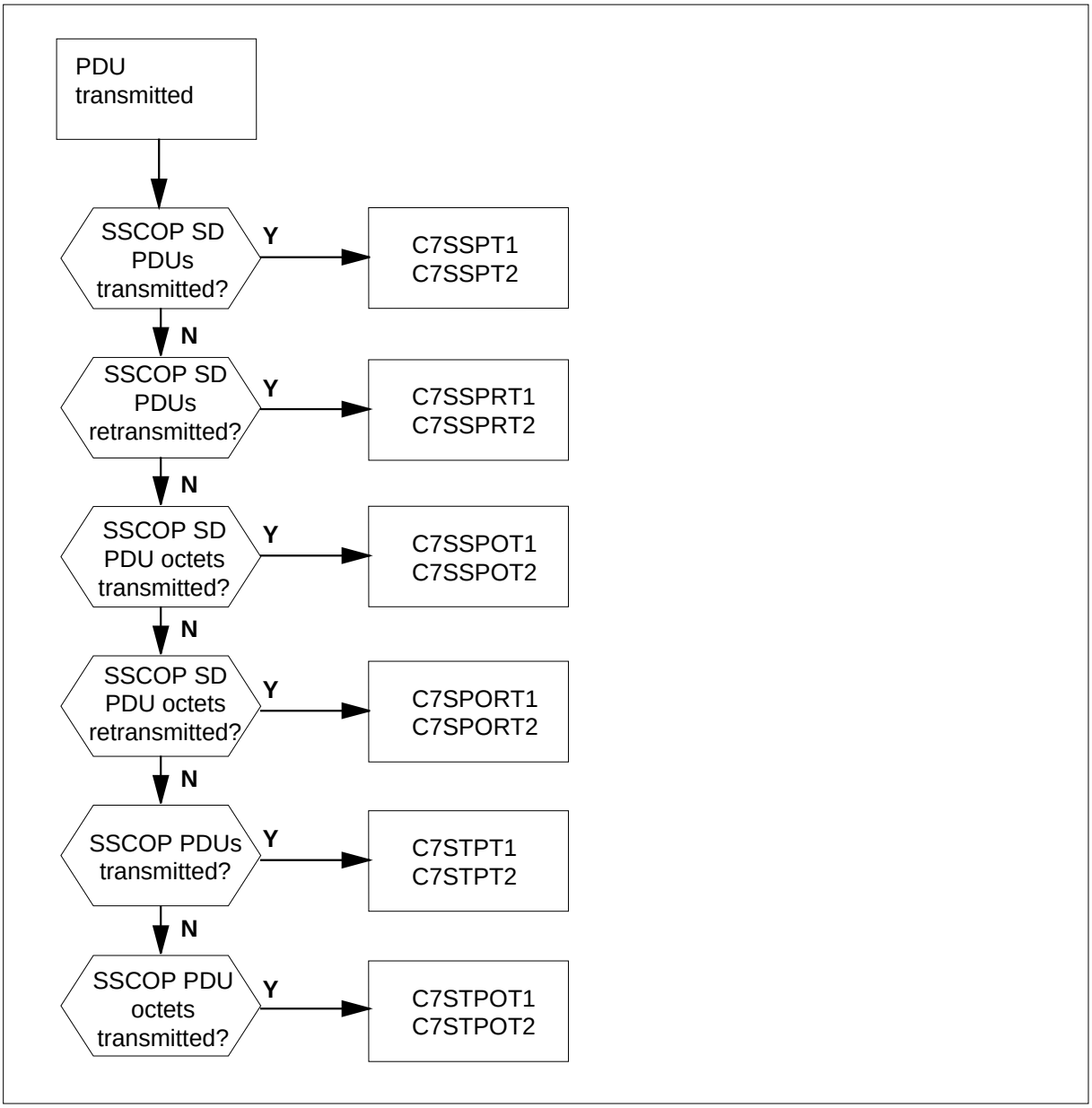
Functionality	Code
TEL CCS7 Base	TEL00008

OM group C7HSLAL1 SSCOP PDU received



OM group C7HSLAL1 (continued)

OM group C7HSLAL1 SCCOP PDU transmitted



Register C7SSPT1

SSCOP SD PDUs Transmitted

Register C7SSPT1 counts the number of transmitted Service Specific Connection Oriented Protocol (SSCOP) sequence data (SD) packet data units (PDU).

Register C7SSPT1 release history

Register C7SSPT1 was introduced in TL10.

Associated registers

None

Associated logs

None

Extension registers

C7SSPT2

Register C7SSPRT1

SSCOP SD PDUs Retransmitted

Register C7SSPRT1 counts the number of retransmitted SSCOP SD PDUs.

Register C7SSPRT1 release history

Register C7SSPRT1 was introduced in TL10.

Associated registers

None

Associated logs

None

Extension registers

C7SSPRT2

Register C7SSPOT1

SSCOP SD PDU Octets Transmitted

Register C7SSPOT1 counts the number of transmitted SSCOP SD PDU octets.

Register C7SSPOT1 release history

Register C7SSPOT1 was introduced in TL10.

Associated registers

None

Associated logs

None

OM group C7HSLAL1 (continued)

Extension registers

C7SSPOT2

Register C7SPORT1

SSCOP SD PDU Octets Retransmitted

Register C7SPORT1 counts the number of retransmitted SSCOP SD PDU octets.

Register C7SPORT1 release history

Register C7SPORT1 was introduced in TL10.

Associated registers

None

Associated logs

None

Extension registers

C7SPORT2

Register C7SPR1

SSCOP SD PDUs Received

Register C7SPR1 counts the number of received SSCOP SD PDUs.

Register C7SPR1 release history

Register C7SPR1 was introduced in TL10.

Associated registers

None

Associated logs

None

Extension registers

C7SPR2

Register C7SPOR1

SSCOP SD PDU Octets Received

Register C7SPOR1 counts the number of received SSCOP SD PDU octets.

Register C7SPOR1 release history

Register C7SPOR1 was introduced in TL10.

Associated registers

None

Associated logs

None

Extension registers

C7SPOR2

Register C7STPT1

Total SSCOP PDUs Transmitted

Register C7STPT1 counts the total number of transmitted SSCOP PDUs.

Register C7STPT1 release history

Register C7STPT1 was introduced in TL10.

Associated registers

None

Associated logs

None

Extension registers

C7STPT2

Register C7STPR1

Total SSCOP PDUs Received

C7STPR1 counts the total number of received SSCOP PDUs.

Register C7STPR1 release history

Register C7STPR1 was introduced in TL10.

Associated registers

None

Associated logs

None

OM group C7HSLAL1 (end)

Extension registers

C7STPR2

Register C7STPOT1

Total SSCOP PDU Octets Transmitted

Register C7STPOT1 counts the total number of transmitted SSCOP PDU octets.

Register C7STPOT1 release history

Register C7STPOT1 was introduced in TL10.

Associated registers

None

Associated logs

None

Extension registers

C7STPOT2

Register C7STPOR1

Total SSCOP PDU Octets Received

Register C7STPOR1 counts the total number of received SSCOP PDU octets.

Register C7STPOR1 release history

Register C7STPOR1 was introduced in TL10.

Associated registers

None

Associated logs

None

Extension registers

C7STPOR2

OM group C7HSLAL2

OM description

CCS7 High-speed Link Signaling ATM Adaptation Layer Events Group 2

C7HSLAL2 provides information on CCS7 high-speed link asynchronous transfer mode (ATM) adaptation layer operations.

Release history

OM group C7HSLAL2 was introduced in TL10.

Registers

The following OM group C7HSLAL2 registers display on the MAP terminal as follows:

```
C7SCSEC     C7SCDIS     C7SCIFL     C7SCRRSY
C7HTSCSC    C7SEPSEC    C7USPDUR    C7ISPDUR
C7SPRLEE    C7HTSEPC    C7SPDURR    C7HTSPRR
C7SDISS     C7SDISS2    C7LOCE      C7CDLOC
C7CDFEPO    C7CDLPO
```

Group structure

OM group C7HSLAL2 provides a tuple for each key.

Key field:

C7_LINKSET_NUMBER. Number in the range 0 to 254, used as an index into table C7LKSET.

Info field:

C7LINK_OMINFO. The Info field has a two-part key: CLLI and C7_SIGLINK_CODE. CLLI is the common language location identifer (CLLI) of the linkset that owns the link. The C7_SIGLINK_CODE is a number from 0 to 15 that identifies the link in the linkset.

Associated OM groups

C7HSLAL1 provides information on CCS7 high-speed link ATM adaptation layer operations.

C7HSLATM provides information on CCS7 high-speed link ATM layer events.

C7HSLCAR provides information on CCS7 high-speed link digital carriers.

C7LINK1 counts failures and recoveries of a CCS7 link.

OM group C7HSLAL2 (continued)

C7LINK2 provides information on calls and congestion for a CCS7 link.

C7LINK3 monitors traffic and performance of message signal units on a CCS7 link.

C7LKSET provides CCS7 linkset performance information.

Associated functional groups

The following functional groups are associated with OM group C7HSLAL2:

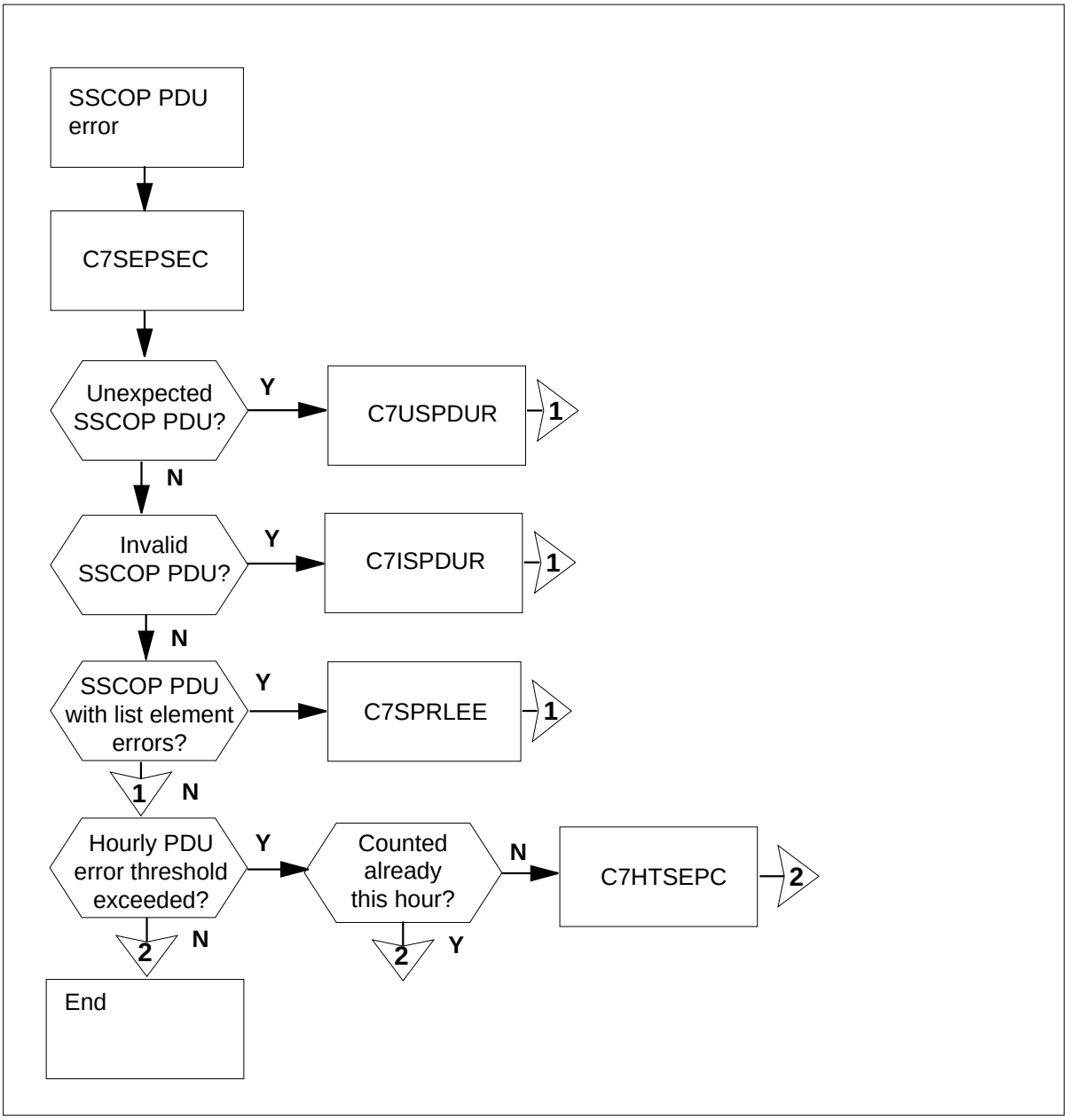
- Common Channel Signaling 7 (CCS7)

Associated functionality codes

The functionality codes associated with OM group C7HSLAL2 are shown in the following table.

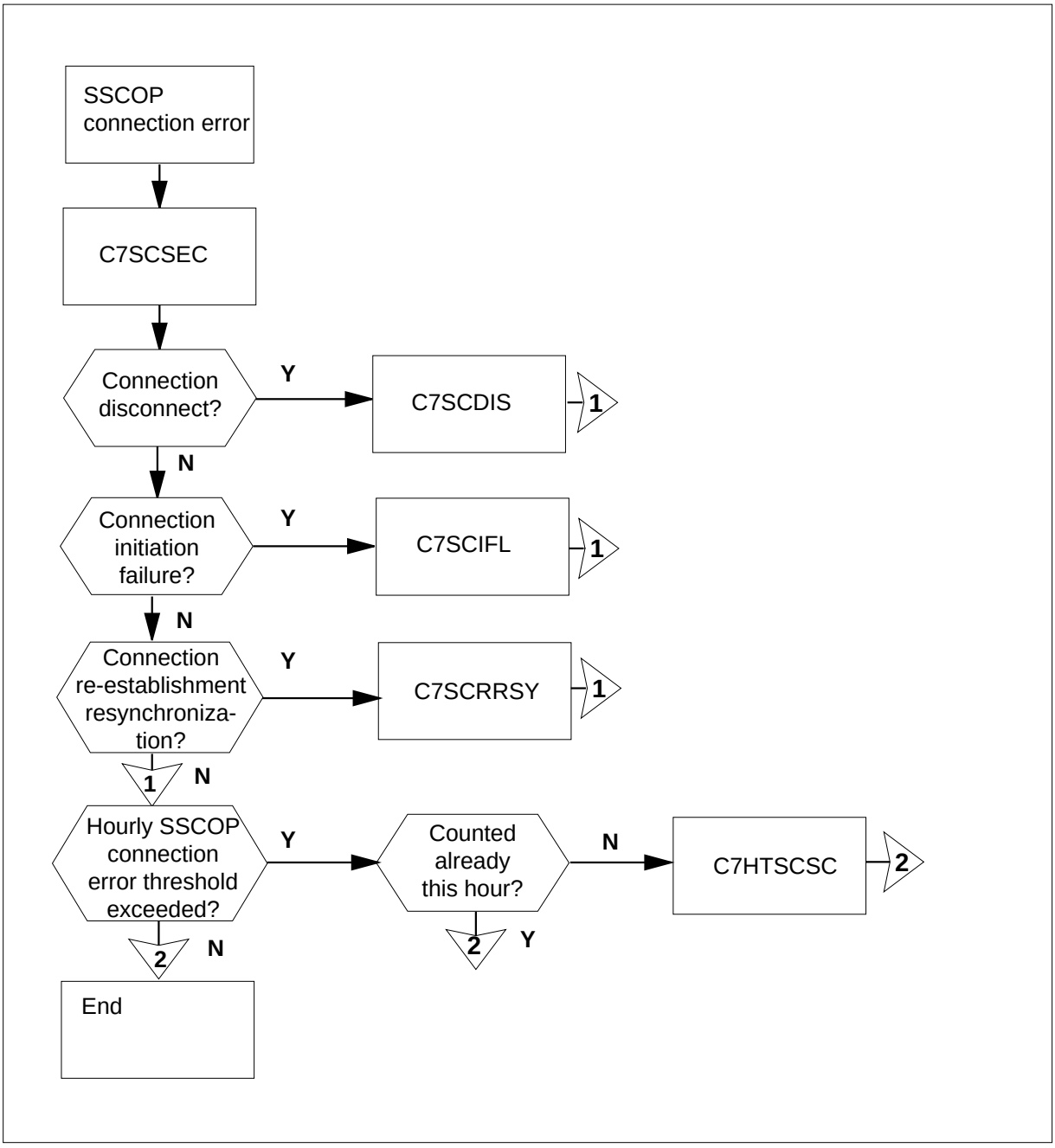
Functionality	Code
TEL CCS7 Base	TEL00008

OM group C7HSLAL2 registers: SSCOP PDU error

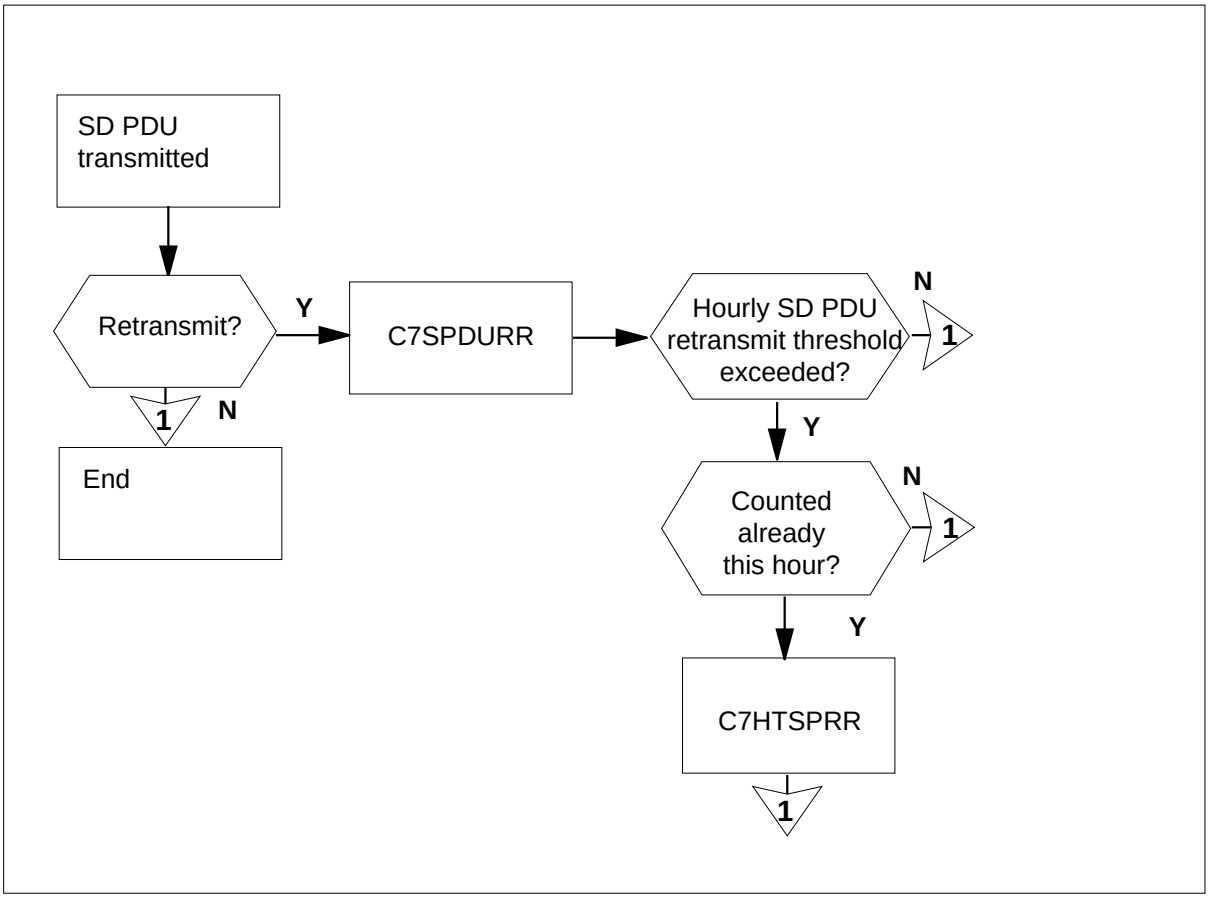


OM group C7HSLAL2 (continued)

OM group C7HSLAL2 registers: SSCOP connection error

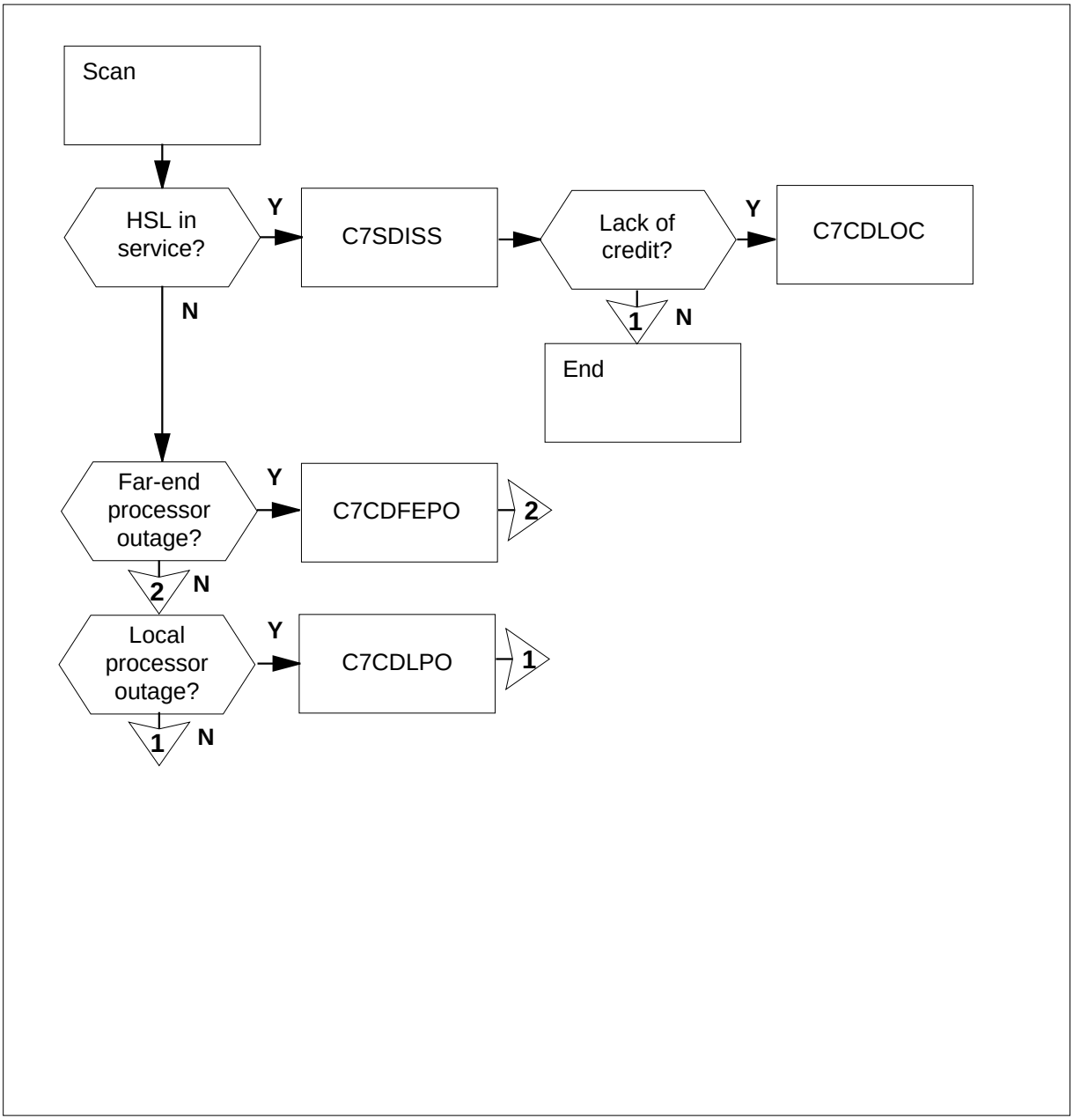


OM group C7HSLAL2 registers: SD PDU transmitted

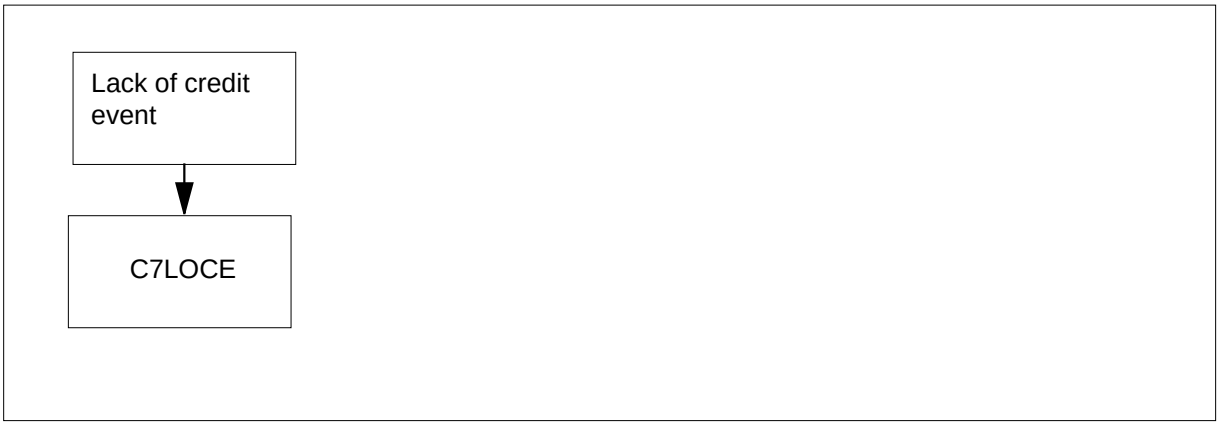


OM group C7HSLAL2 (continued)

OM group C7HSLAL2 registers: Scan



OM group C7HSLAL2 registers: Lack of credit event



Register C7SCSEC

SSCOP Connection Sum-of-errors Counter

Register C7SCSEC counts Service Specific Connection Oriented Protocol (SSCOP) connection errors.

Register C7SCSEC release history

Register C7SCSEC was introduced in TL10.

Associated registers

None

Associated logs

CCS120 provides detailed information on links exceeding the hourly performance threshold.

Extension registers

None

Register C7SCDIS

SSCOP Connection Disconnect

Register C7SCDIS counts lost SSCOP connections.

Register C7SCDIS release history

Register C7SCDIS was introduced in TL10.

Associated registers

None

OM group C7HSLAL2 (continued)

Associated logs

CCS120 provides detailed information on links exceeding the hourly performance threshold.

Extension registers

None

Register C7SCIFL

SSCOP Connection Initiation Failure

Register C7SCIFL counts SSCOP connection initiation failures.

Register C7SCIFL release history

Register C7SCIFL was introduced in TL10.

Associated registers

None

Associated logs

CCS120 provides detailed information on links exceeding the hourly performance threshold.

Extension registers

None

Register C7SCRRSY

SSCOP Connection Re-establishment/Resynchronization

Register C7SCRRSY counts SSCOP connection re-establishments and resynchronizations.

Register C7SCRRSY release history

Register C7SCRRSY was introduced in TL10.

Associated registers

None

Associated logs

CCS120 provides detailed information on links exceeding the hourly performance threshold.

Extension registers

None

Register C7HTSCSC

Hourly Marginal Performance Thresholds Exceeded for SSCOP Connection Sum-of-errors Counter.

Register C7HTSCSC counts the number of instances in which the total SSCOP connections exceed the hourly marginal performance threshold. The threshold is datafilled in table OFCVAR, parameter C7_SSCOP.CON_SLMPR_THRESHOLD.

Register C7HTSCSC release history

Register C7HTSCSC was introduced in TL10.

Associated registers

None

Associated logs

CCS120 provides detailed information on links exceeding the hourly performance threshold.

Extension registers

None

Register C7SEPSEC

SSCOP Errored PDUs Sum-of-errors Counter

Register C7SEPSEC counts errored packet data units (PDU).

Register C7SEPSEC release history

Register C7SEPSEC was introduced in TL10.

Associated registers

None

Associated logs

CCS120 provides detailed information on links exceeding the hourly performance threshold.

Extension registers

None

Register C7USPDUR

Unexpected SSCOP PDUs Received

OM group C7HSLAL2 (continued)

Register C7USPDUR counts the number of unexpected SSCOP PDUs received.

Register C7USPDUR release history

Register C7USPDUR was introduced in TL10.

Associated registers

None

Associated logs

CCS120 provides detailed information on links exceeding the hourly performance threshold.

Extension registers

None

Register C7ISPDUR

Invalid SSCOP PDUs Received

Register C7ISPDUR counts the number of invalid SSCOP PDUs received.

Register C7ISPDUR release history

Register C7ISPDUR was introduced in TL10.

Associated registers

None

Associated logs

CCS120 provides detailed information on links exceeding the hourly performance threshold.

Extension registers

None

Register C7SPRLEE

SSCOP PDUs Received with List Element Errors

Register C7SPRLEE counts the number of SSCOP PDUs received with list element errors.

Register C7SPRLEE release history

Register C7SPRLEE was introduced in TL10.

Associated registers

None

Associated logs

CCS120 provides detailed information on links exceeding the hourly performance threshold.

Extension registers

None

Register C7HTSEPC

Hourly Marginal Performance Thresholds Exceeded for SSCOP Errored PDUs Sum-of-errors Counter

Register C7HTSEPC counts the number of times that the total SSCOP errored PDUs exceed the hourly marginal performance threshold. The threshold is datafilled in table OFCVAR, parameter C7_PDU_ESTOR_SLMPR_THRESHOLD.

Register C7HTSEPC release history

Register C7HTSEPC was introduced in TL10.

Associated registers

None

Associated logs

None

Extension registers

None

Register C7SPDURR

SSCOP SD PDUs Transmitted Requiring Retransmission

Register C7SPDURR counts the number of transmitted SSCOP SD PDUs that require retranmission.

Register C7SPDURR release history

Register C7SPDURR was introduced in TL10.

Associated registers

None

OM group C7HSLAL2 (continued)

Associated logs

CCS120 provides detailed information on links exceeding the hourly performance threshold.

Extension registers

None

Register C7HTSPRR

Hourly Marginal Performance Thresholds Exceeded for SSCOP SD PDUs Transmitted Requiring Retransmission

Register C7HTSPRR counts the number of times that the total transmitted SSCOP SD PDUs requiring retransmission have exceeded the hourly marginal performance threshold. The threshold is datafilled in table OFCVAR, parameter C7_SSCOP_RETIANS_SLMPR_THRESHOLD.

Register C7HTSPRR release history

Register C7HTSPRR was introduced in TL10.

Associated registers

None

Associated logs

None

Extension registers

None

Register C7SDISS

Duration in the In-service State

Register C7SDISS counts the duration of in-service states.

Register C7SDISS release history

Register C7SDISS was introduced in TL10.

Associated registers

None

Associated logs

None

Extension registers

C7SDISS2

Register C7LOCE

Lack of Credit Events

Register C7LOCE counts the number of lack-of-credit events.

Register C7LOCE release history

Register C7LOCE was introduced in TL10.

Associated registers

None

Associated logs

None

Extension registers

None

Register C7CDLOC

Cumulative Duration of Lack of Credit

Register C7CDLOC counts the cumulative duration of lack-of-credit events, in units of centiseconds.

Register C7CDLOC release history

Register C7CDLOC was introduced in TL10.

Associated registers

None

Associated logs

None

Extension registers

None

Register C7CDFEPO

Cumulative Duration of Far-end Processor Outage

Register C7CDFEPO release history

Register C7CDFEPO was introduced in TL10.

OM group C7HSLAL2 (end)

Register C7CDFEPO counts the cumulative duration of far-end processor outages in units of centiseconds.

Associated registers

None

Associated logs

None

Extension registers

None

Register C7CDLPO

Cumulative Duration of Local Processor Outage

Register C7CDLPO counts the cumulative duration of local processor outages in units of centiseconds.

Register C7CDFEPO release history

Register C7CDLPO was introduced in TL10.

Associated registers

None

Associated logs

None

Extension registers

None

OM group C7HSLATM

OM description

CCS7 High-speed Link ATM Layer Events

C7HSLATM provides information on CCS7 high-speed link asynchronous transfer mode (ATM) layer operations.

Release history

OM group C7HSLATM was introduced in TL10.

Registers

The following OM group C7HSLATM registers display on the MAP terminal as follows:

```
C7RCNDCV    C7RCNDC2    C7TCNDCV    C7TCNDC2
C7RCAUI     C7RCAUI2    C7TCAUI     C7TCAUI2
C7DISHEC    C7OCDAN     C7DISPE
```

Group structure

OM group C7HSLATM provides a tuple for each key.

Key field:

C7_LINKSET_NUMBER. Number in the range 0 to 254, used as an index into table C7LKSET.

Info field:

C7LINK_OMINFO. The Info field has a two-part key: CLLI and C7_SIGLINK_CODE. CLLI is the common language location identifer (CLLI) of the linkset that owns the link. The C7_SIGLINK_CODE is a number from 0 to 15 that identifies the link in the linkset.

Associated OM groups

C7HSLAAL provides information on CCS7 high-speed link signaling ATM adaptation (SAAL) layer events.

C7HSLATM provides information on CCS7 high-speed link ATM layer events.

C7HSLCAR provides information on CCS7 high-speed link digital carriers.

C7LINK1 counts failures and recoveries of a CCS7 link.

OM group C7HSLATM (continued)

C7LINK2 provides information on calls and congestion for a CCS7 link.

C7LINK3 monitors traffic and performance of message signal units on a CCS7 link.

C7LKSET provides CCS7 linkset performance information.

Associated functional groups

The following functional groups are associated with OM group C7HSLATM:

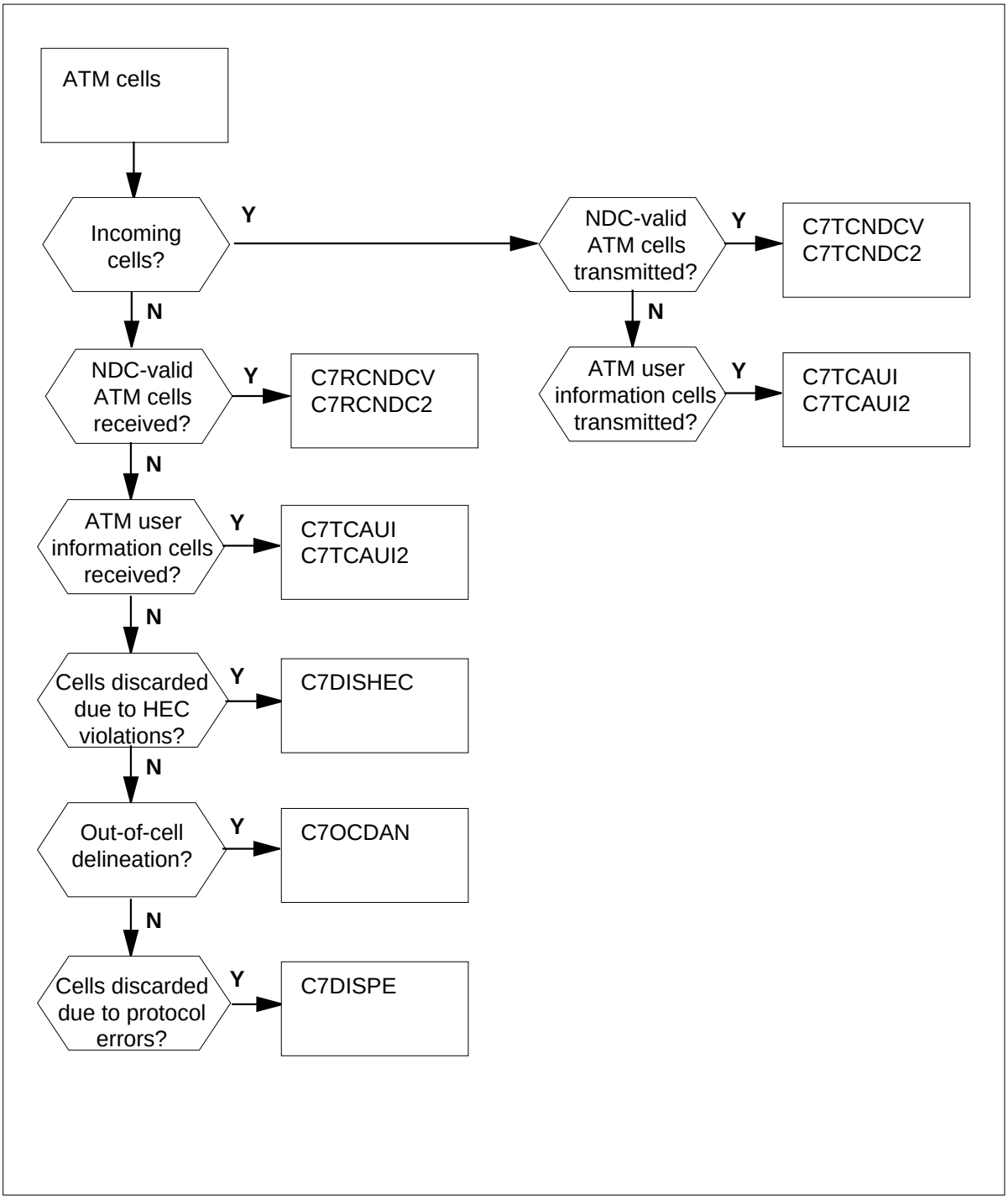
- Common Channel Signaling 7 (CCS7)

Associated functionality codes

The functionality codes associated with OM group C7HSLATM are shown in the following table.

Functionality	Code
TEL CCS7 Base	TEL00008

OM group C7HSLATM registers logic flow



OM group C7HSLATM (continued)

Register C7RCNDCV

Total Received NDC-valid ATM Cells

Register C7RCNDCV counts the total number of network data collection (NDC)-valid ATM cells received. NDC-valid cells are the cells specified as part of the NDC.

Register C7RCNDCV release history

Register C7RCNDCV was introduced in TL10.

Associated registers

None

Associated logs

None

Extension registers

C7RCNDC2

Register C7TCNDCV

Total Transmitted NDC-valid ATM Cells

Register C7TCNDCV counts the total number of NDC-valid ATM cells transmitted.

Register C7TCNDCV release history

Register C7TCNDCV was introduced in TL10.

Associated registers

None

Associated logs

None

Extension registers

C7TCNDC2

Register C7RCAUI

Total Received ATM User Information Cells

Register C7RCAUI counts the total number of ATM user information cells received.

Register C7RCAUI release history

Register C7RCAUI was introduced in TL10.

Associated registers

None

Associated logs

None

Extension registers

C7RCAUI2

Register C7TCAUI

Total Transmitted ATM User Information Cells

Register C7TCAUI counts the total number of ATM user information cells transmitted.

Register C7TCAUI release history

Register C7TCAUI was introduced in TL10.

Associated registers

None

Associated logs

None

Extension registers

C7TCAUI2

Register C7DISHEC

Number of Cells Discarded Due to Header Error Control (HEC) Violations

Register C7DISHEC counts the number of cells discarded due to header error control violations.

Register C7DISHEC release history

Register C7DISHEC was introduced in TL10.

Associated registers

None

OM group C7HSLATM (end)

Associated logs

CCS120 provides detailed information on links exceeding the hourly performance threshold.

Extension registers

None

Register C7OCDAN

Out-of-cell Delineation (OCD) Anomalies

Register C7OCDAN counts out-of-cell delineation anomalies.

Register C7OCDAN release history

Register C7OCDAN was introduced in TL10.

Associated registers

None

Associated logs

CCS120 provides detailed information on links exceeding the hourly performance threshold.

Extension registers

None

Register C7DISPE

Number of Cells Discarded Due to Protocol (ATM-layer Header) Errors

Register C7DISPE counts the number of cells discarded due to protocol (ATM-layer header) errors.

Register C7DISPE release history

Register C7DISPE was introduced in TL10.

Associated registers

None

Associated logs

CCS120 provides detailed information on links exceeding the hourly performance threshold.

Extension registers

None

OM group C7HSLCAR

OM description

CCS7 High-speed Link Carrier Events

C7HSLCAR provides information on Common Channel Signaling 7 (CCS7) high-speed link digital carrier operations.

Release history

OM group C7HSLCAR was introduced in TL10.

Registers

The following OM group C7HSLCAR registers display on the MAP terminal as follows:

```
C7CVL       C7SESL      C7LOSSL
C7ESP       C7SESP      C7SASP
C7FCP       C7AISSP     C7ESLF
C7ESPF      C7SESPF     C7SEFSPF
C7CSPF      C7FCPF
```

Group structure

OM group C7HSLCAR provides a tuple for each key.

Key field:

C7_LINKSET_NUMBER. Number in the range 0 to 254, used as an index into table C7LKSET.

Info field:

C7LINK_OMINFO. The Info field has a two-part key: CLLI and C7_SIGLINK_CODE. CLLI is the common language location identifer of the linkset that owns the link. The C7_SIGLINK_CODE is a number from 0 to 15 that identifies the link in the linkset.

Associated OM groups

C7HSLAL1 and C7HSLAL2 provide information on CCS7 high-speed link signaling ATM adaptation (SAAL) layer events.

OM group C7HSLCAR (continued)

C7HSLATM provides information on CCS7 high-speed link ATM layer events.

C7LINK1 counts failures and recoveries of a CCS7 link.

C7LINK2 provides information on calls and congestion for a CCS7 link.

C7LINK3 monitors traffic and performance of message signal units on a CCS7 link.

C7LKSET provides CCS7 linkset performance information.

Associated functional groups

The following functional groups are associated with OM group C7HSLCAR:

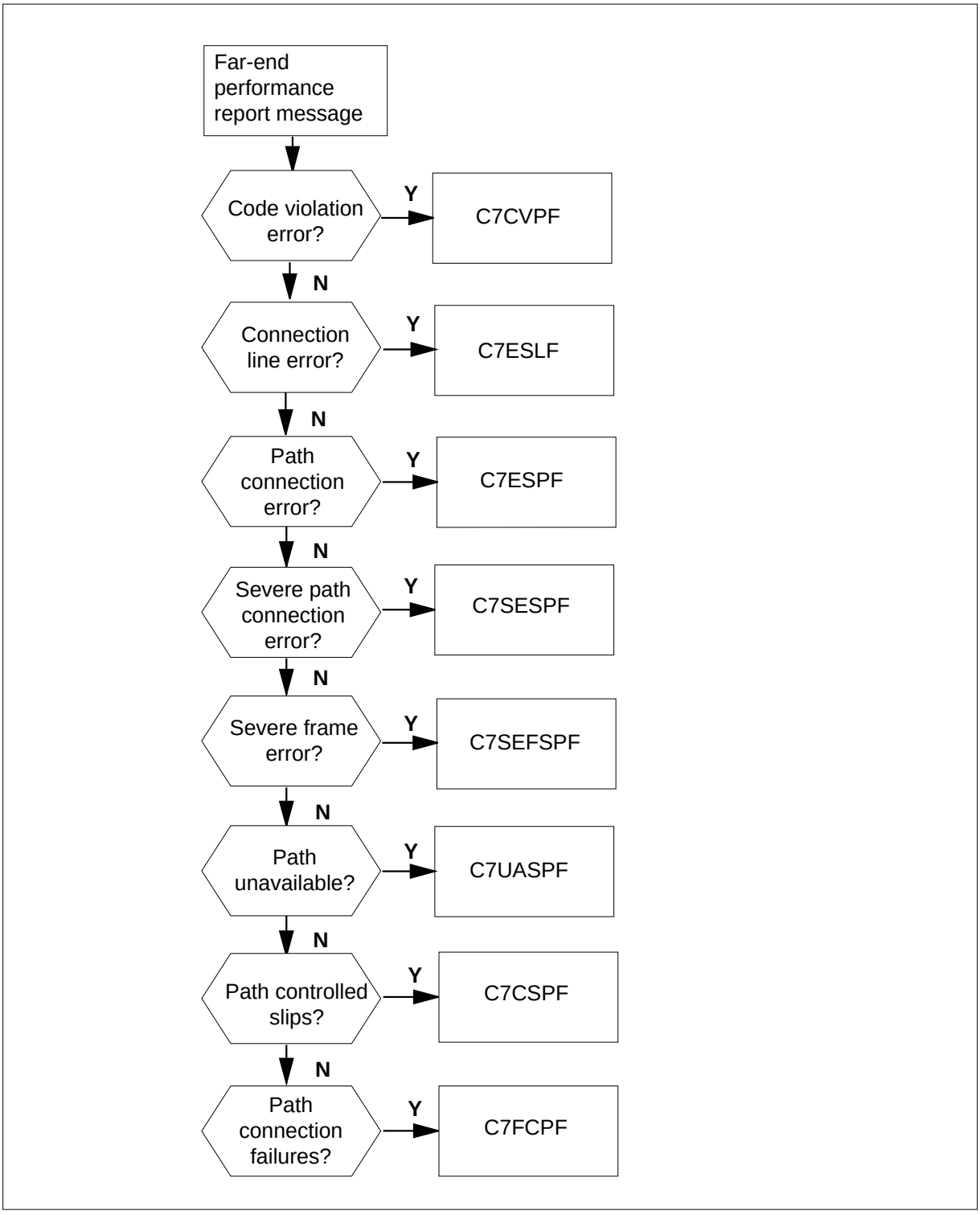
- Common Channel Signaling 7 (CCS7)

Associated functionality codes

The functionality codes associated with OM group C7HSLCAR are shown in the following table.

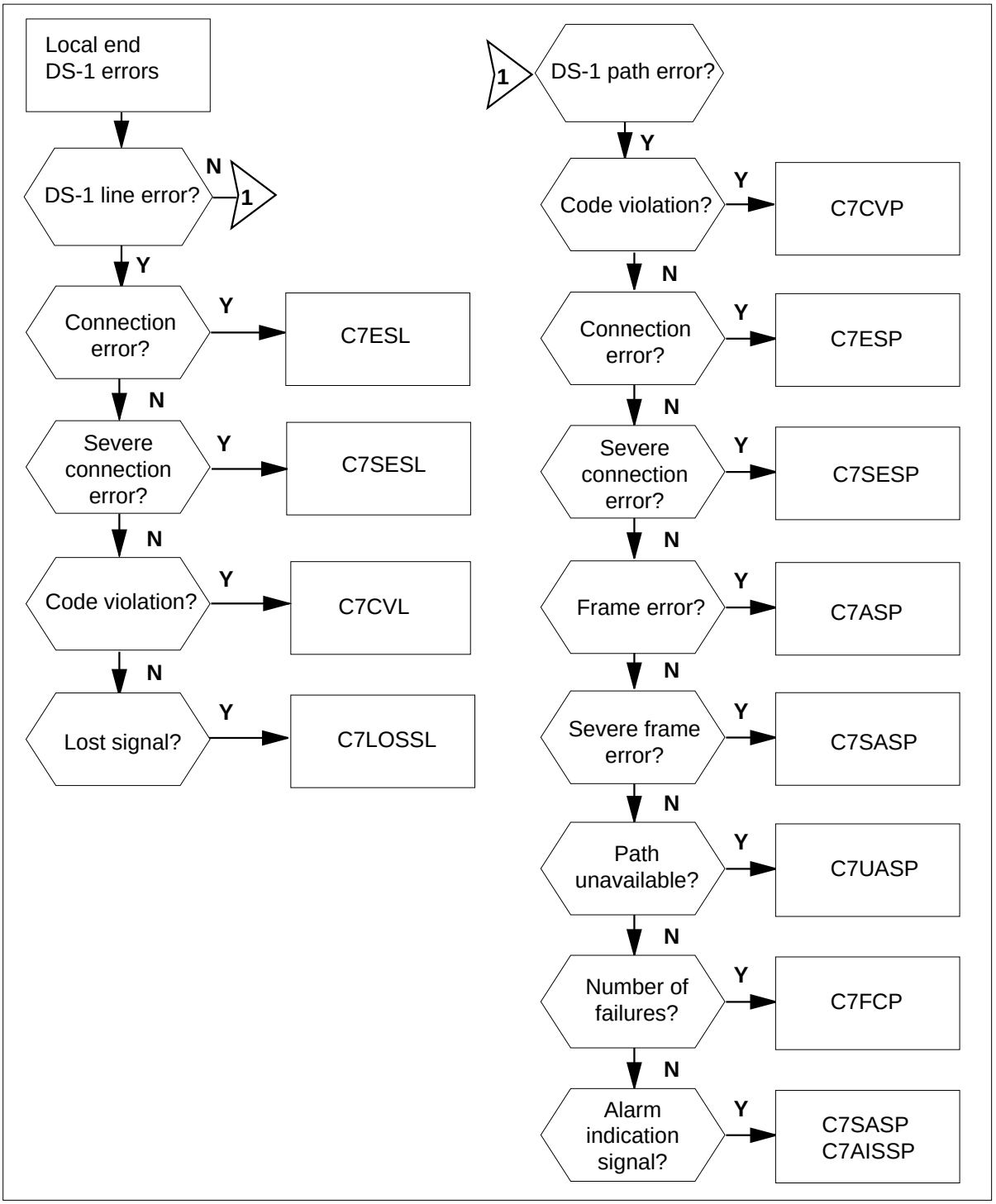
Functionality	Code
TEL CCS7 Base	TEL00008

OM group C7HSLCAR registers: Far-end performance report message



OM group C7HSLCAR (continued)

OM group C7HSLCAR registers: Local-end performance report message



Register C7ESL

Errored Seconds—Line: ES-L

Register C7ESL counts the number of seconds one or more errors exist on the DS-1 line connection.

Register C7ESL release history

Register C7ESL was introduced in TL10.

Associated registers

None

Associated logs

None

Extension registers

None

Register C7CVL

Code Violations—Line: CV-L

Register C7CVL counts the number of code violations on the DS-1 line.

Register C7CVL release history

Register C7CVL was introduced in TL10.

Associated registers

None

Associated logs

None

Extension registers

None

Register C7SESL

Severely Errored Seconds—Line: SES-L

Register C7SESL counts the number of seconds a severe number of errors exist on the DS-1 line.

Register C7SESL release history

Register C7SESL was introduced in TL10.

OM group C7HSLCAR (continued)

Associated registers

None

Associated logs

None

Extension registers

None

Register C7LOSSL

Loss of Signal Seconds—Line: LOSS-L

Register C7LOSSL counts the number of seconds during which the signal is lost on the DS-1 line.

Register C7LOSSL release history

Register C7LOSSL was introduced in TL10.

Associated registers

None

Associated logs

None

Extension registers

None

Register C7CVP

Code Violations—Path: CV-P

Register C7CVP counts the number of code violations on the DS-1 path connection.

Register C7CVP release history

Register C7CVP was introduced in TL10.

Associated registers

None

Associated logs

None

Extension registers

None

Register C7ESP

Errored Seconds—Path: ES-P

Register C7ESP counts the number of seconds one or more errors exist on the DS-1 path connection.

Register C7ESP release history

Register C7ESP was introduced in TL10.

Associated registers

None

Associated logs

CCS125 provides information about high-speed link carriers if certain performance parameters are beyond threshold values.

Extension registers

None

Register C7SESP

Severely Errored Seconds—Path: SES-P

Register C7SESP counts the number of seconds that a severe number of errors exist on the DS-1 path connection.

Register C7SESP release history

Register C7SESP was introduced in TL10.

Associated registers

None

Associated logs

CCS125 provides information about a high-speed link carriers if certain performance parameters are beyond threshold values.

Extension registers

None

Register C7SASP

Severely Errored Frame/AIS Seconds—Path: SAS-P

OM group C7HSLCAR (continued)

Register C7SASP counts the number of seconds that a severe number of frame errors or alarm indication signals (AIS) exist on the DS-1 path connection.

Register C7SASP release history

Register C7SASP was introduced in TL10.

Associated registers

None

Associated logs

None

Extension registers

None

Register C7UASP

Unavailable Seconds—Path: UAS-P

Register C7UASP counts the number of seconds for which the link is not available for the traffic on the DS-1 path connection.

Register C7UASP release history

Register C7UASP was introduced in TL10.

Associated registers

None

Associated logs

CCS125 provides information about high-speed link carriers if certain performance parameters are beyond threshold values.

Extension registers

None

Register C7FCP

Failure Count—Path: FC-P

Register C7FCP counts the number of failures on the DS-1 path connection.

Register C7FCP release history

Register C7FCP was introduced in TL10.

Associated registers

None

Associated logs

None

Extension registers

None

Register C7AISSP

AIS Seconds—Path: AISS-P

Register C7AISSP counts the number of seconds an AIS exists on the DS-1 path connection.

Register C7AISSP release history

Register C7AISSP was introduced in TL10.

Associated registers

None

Associated logs

None

Extension registers

None

Register C7ESLF

Far-end Errored Seconds—Line: ES-LFE

Register C7ESLF counts the number of seconds one or more far-end errors exist on the DS-1 line.

Register C7ESLF release history

Register C7ESLF was introduced in TL10.

Associated registers

None

Associated logs

None

OM group C7HSLCAR (continued)

Extension registers

None

Register C7CVPF

Far-end Code Violations—Path: CV-PFE

Register C7CVPF counts the number of far-end code violations on the DS-1 path connection.

Register C7CVPF release history

Register C7CVPF was introduced in TL10.

Associated registers

None

Associated logs

None

Extension registers

None

Register C7ESPF

Far-end Errored Seconds—Path: ES-PFE

Register C7ESPF counts the number of seconds one or more far-end errors exist on the DS-1 path connection.

Register C7ESPF release history

Register C7ESPF was introduced in TL10.

Associated registers

None

Associated logs

CCS125 provides information about high-speed link carriers if certain performance parameters are beyond threshold values.

Extension registers

None

Register C7SESPF

Far-end Severely Errored Seconds—Path: SES-PFE

Register C7SESPF counts the number of seconds a severe number of far-end errors exist on the DS-1 path connection.

Register C7SESPF release history

Register C7SESPF was introduced in TL10.

Associated registers

None

Associated logs

CCS125 provides information about high-speed link carriers if certain performance parameters are beyond threshold values.

Extension registers

None

Register C7SEFSPF

Far-end Severely Errored Frame Seconds—Path: SEFS-PFE

Register C7SEFSPF counts the number of seconds that a severe number of far-end frame errors exist on the DS-1 path connection.

Register C7SEFSPF release history

Register C7SEFSPF was introduced in TL10.

Associated registers

None

Associated logs

None

Extension registers

None

Register C7UASPF

Far-end Unavailable Seconds—Path: UAS-PFE

Register C7UASPF counts the number of seconds in which the far-end link is not available for the traffic on the DS-1 path connection.

Register C7UASPF release history

Register C7UASPF was introduced in TL10.

OM group C7HSLCAR (continued)

Associated registers

None

Associated logs

CCS125 provides information about high-speed link carriers if certain performance parameters are beyond threshold values.

Extension registers

None

Register C7CSPF

Far-end Controlled Slips—Path: CS-PFE

Register C7CSPF counts the number of far-end controlled slips on the DS-1 path connection.

Register C7CSPF release history

Register C7CSPF was introduced in TL10.

Associated registers

None

Associated logs

CCS125 provides information about high-speed link carriers if certain performance parameters are beyond threshold values.

Extension registers

None

Register C7FCPF

Far-end Failure Count—Path: FC-PFE

Register C7FCPF counts the number of far-end failures on the DS-1 path connection.

Register C7FCPF release history

Register C7FCPF was introduced in TL10.

Associated registers

None

Associated logs

None

OM group C7HSLCAR (end)

Extension registers

None

OM group C7LINK1

OM description

CCS7 link group 1 (C7LINK1)

The OM group CCS7 link group 1 (C7LINK1) provides information on the failures and recoveries of a Common Channel Signaling 7 (CCS7) link. A CCS7 link is a communication path that moves voice or signaling messages between two signaling points in a CCS7 network.

Links must be synchronized or aligned to move messages between signaling points. The system checks for links that are available and that links, signaling terminals, and network connections are allocated where appropriate.

When a link is synchronized, the system or operating company personnel at signaling point offices, can manipulate the link. The system or operating company personnel can inhibit links or reroute messages to other lines. Message traffic determines the action.

Errors, like negative message acknowledgements from the far-end signaling point, signal unit errors, and congestion can occur on a link. The system transmits some errors again and attempts to recover from other errors. If many errors occur, the link becomes unsynchronized. This condition causes an alarm to occur in the office. The alarm must be acted upon immediately, unless otherwise indicated.

The C7LINK1 group counts link synchronization errors and link failure recoveries. When a recovery is possible, the link completes message transmission.

Release history

The OM group C7LINK1 was introduced in BCS20.

TL07

The Ethernet link interface unit (ELIU) was added to the nodes that increase the registers in OM group C7LINK1.

TL04

Register C7CLB was introduced and activated.

BCS33

You can convert registers C7LKSYNU and C7LKUNAU from CCS to deci-erlangs before these registers appear. Use the OMSHOW command on the ACTIVE class to convert these registers.

BCS32

Register C7ERRSEC was introduced to report the length of time the system detected one or more in-service errors on a signaling link.

BCS30

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

BCS29

Register C7AUTOCO was introduced to count automatic changeovers away from the link.

Registers

The OM group C7LINK1 registers appear on the MAP terminal as follows.

```
C7LKSYNU    C7LKFAIL    C7ABNRFB    C7EXDLAY
C7EXERR     C7EXCONG    C7ALIGNF    C7SUERR
C7NACKRX    C7STALFL    C7TLALFL    C7NETCON
C7SLTFL     C7NUCFL     C7COV       C7CBK
C7LKUNAU    C7MANB      C7BSYON     C7BSYOFF
C7LINH      C7LUNINH    C7RINH      C7RUNINH
C7LPO       C7RPO       C7AUTOCO    C7ERRSEC
C7CLB
```

Group structure

The OM group C7LINK1 provides one tuple for each key.

Key field:

C7_LINKSET_NUMBER Number in the range 0 to 254, used as an index into table C7LKSET.

Info field:

C7LINK_OMINFO The information field has a two-part key: CLLI and C7_Sig Link_Code. The common language location identifier (CLLI) is the linkset CLLI of the linkset that owns the link. The CCS7 signaling link code is a number from 0 to 15 that identifies the specific link in the linkset.

Office parameter C7_SLMPR_ALARM_ON in table OFCVAR indicates when a link exceeds a threshold value, a minor alarm occurs.

A link minor alarm occurs and the link goes in-service trouble, with the following:

- the value of the office parameter is TRUE
- a link exceeds the threshold value

OM group C7LINK1 (continued)

Associated OM groups

The OM group C7LINK2 provides information on calls and congestion for a CCS7 link.

The OM group C7LINK3 monitors traffic and performance of message signal units on a CCS7 link.

In the OM group C7LINK3, register C7CLBU contains the duration of the controlled link blocking (CLB). Register C7CLB increases the CLB in OM group C7LINK1.

Associated functional groups

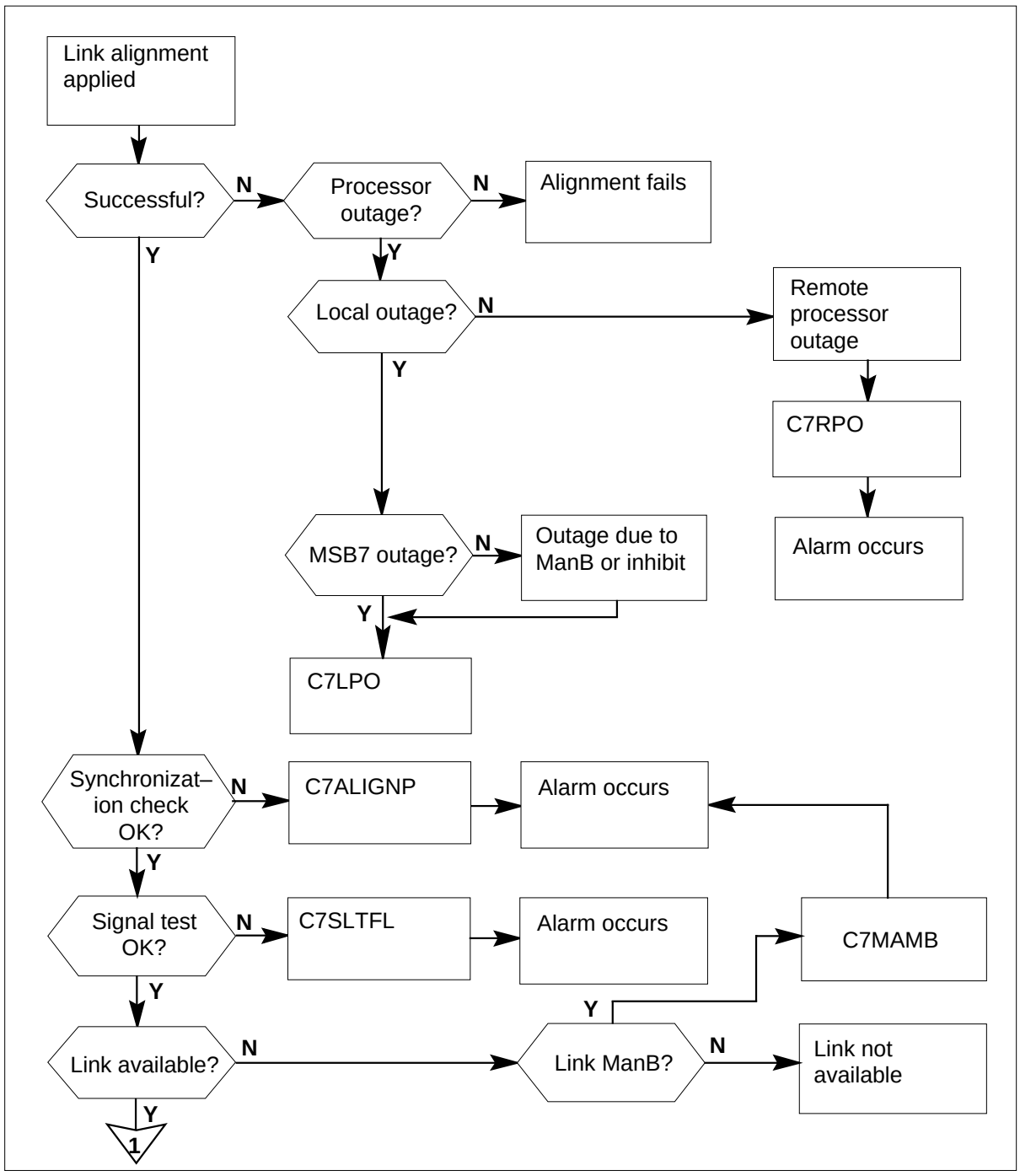
There are no associated functional groups.

Associated functionality codes

The functionality codes associated with OM group C7LINK1 appear in the following table.

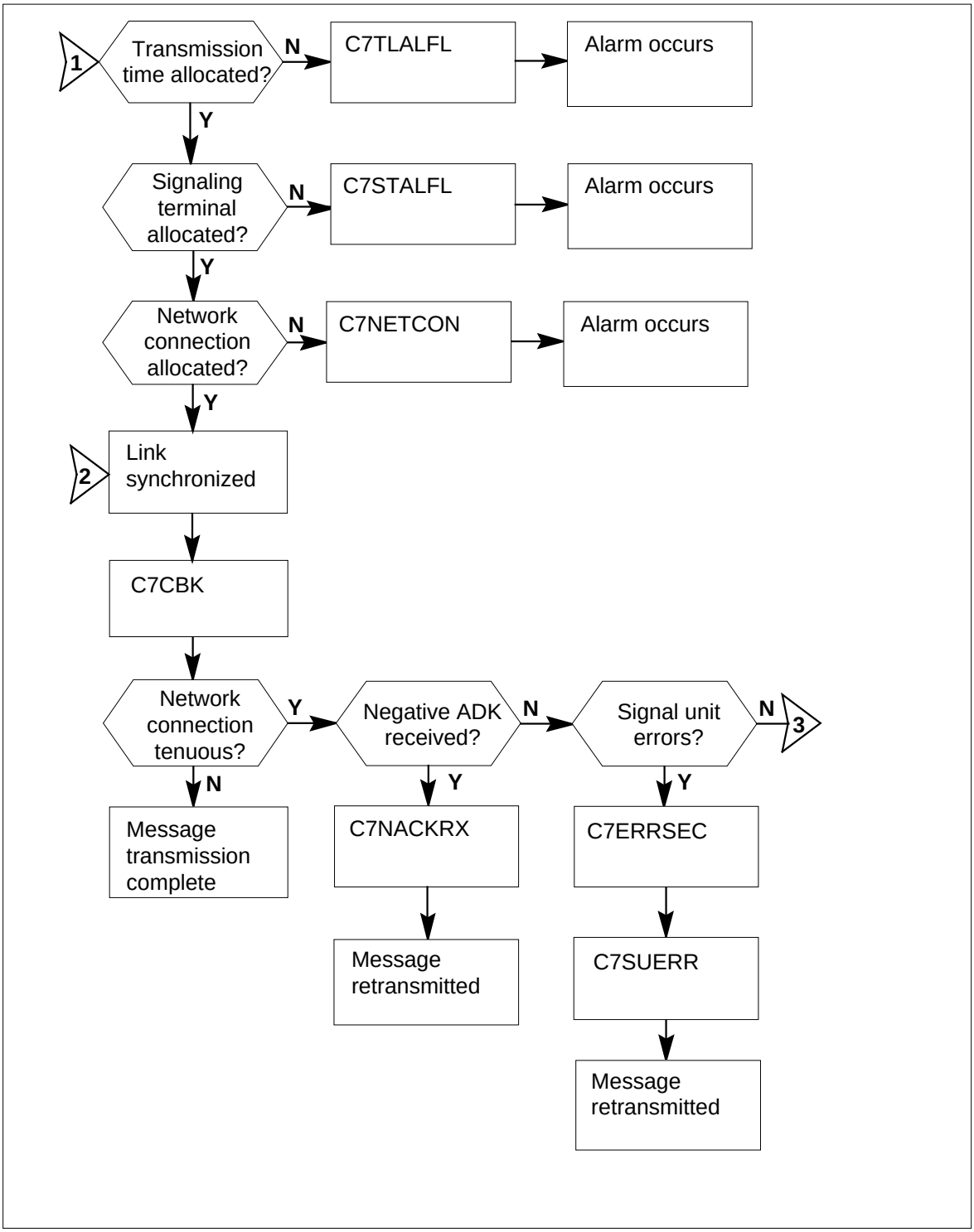
Functionality	Code
Remote Line Module (RLM)	NTX023AB
STP Operations	NTX833AA

OM group C7LINK1 registers: no inhibit

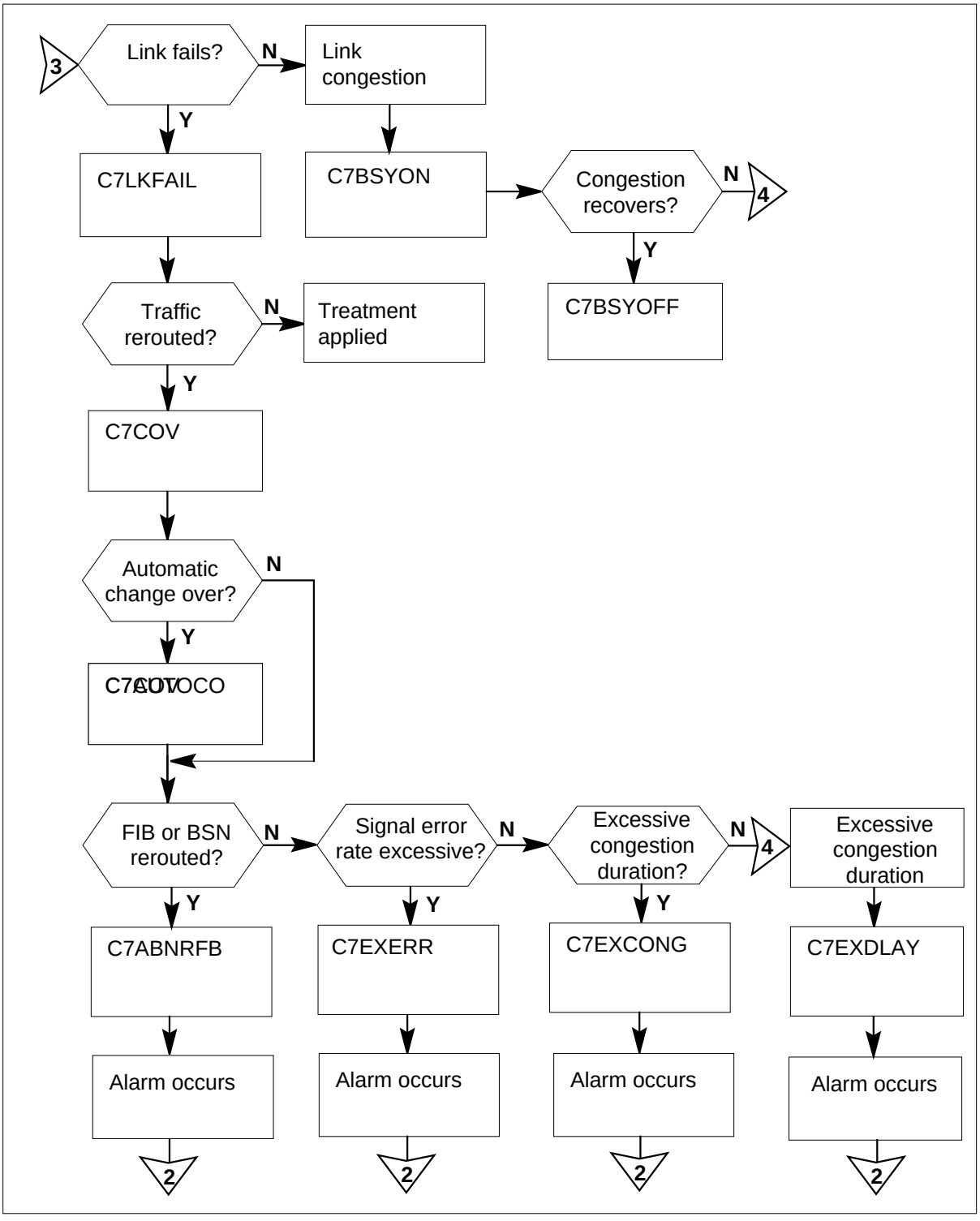


OM group C7LINK1 (continued)

OM group C7LINK1 registers: no inhibit (continued)

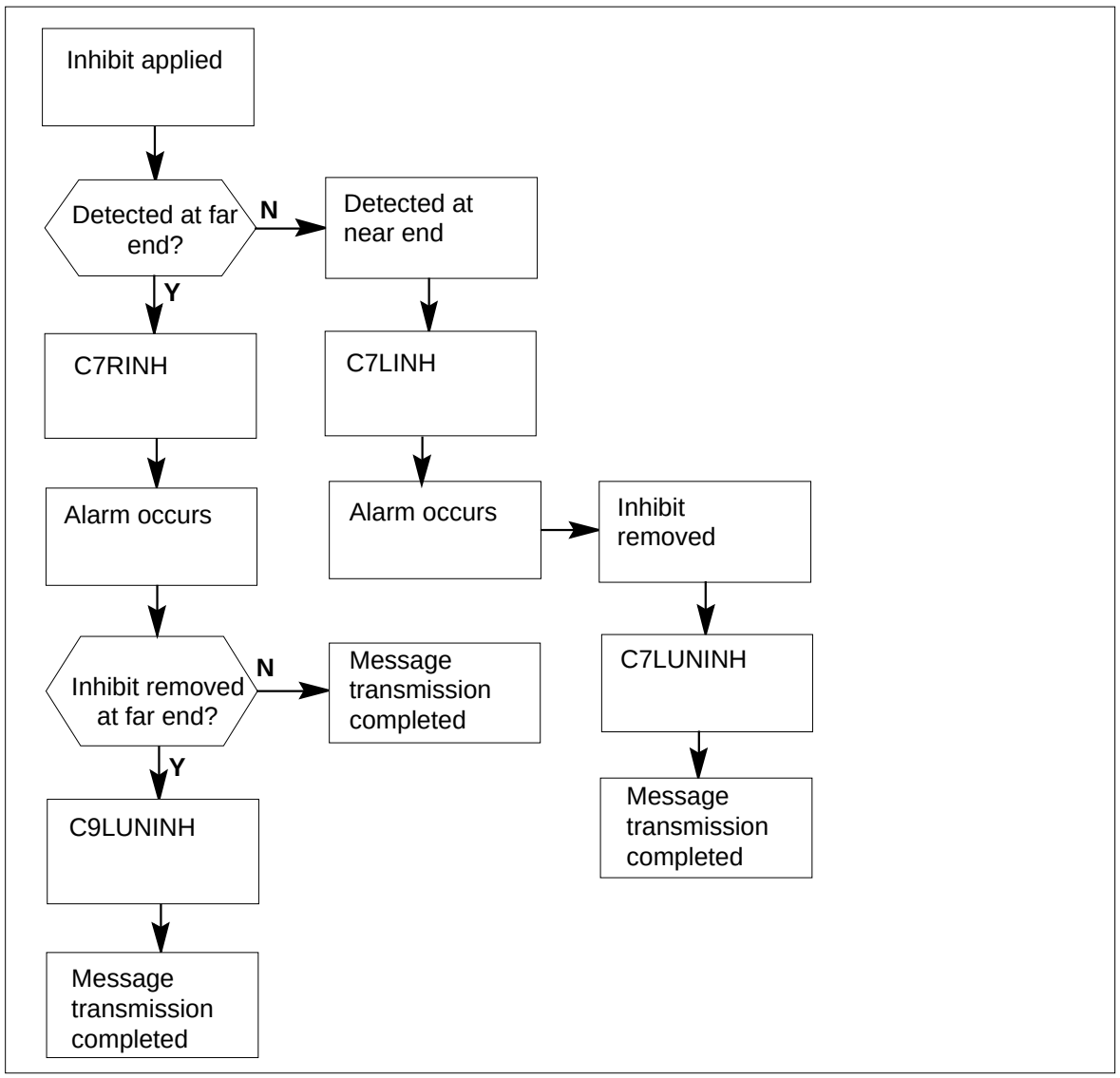


OM group C7LINK1 registers: no inhibit (continued)

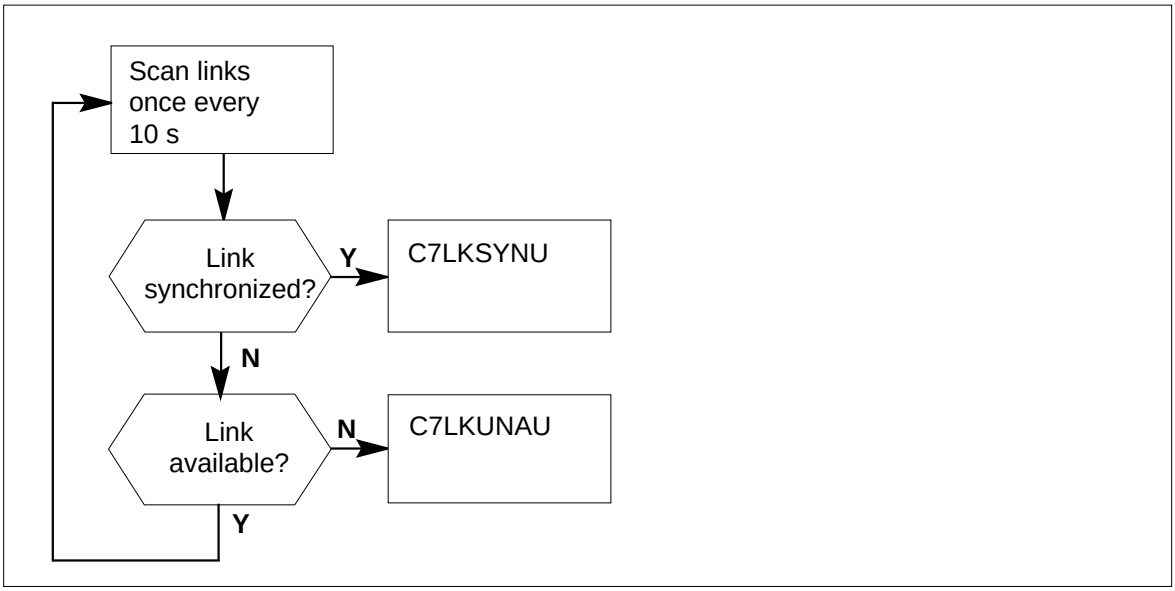


OM group C7LINK1 (continued)

OM group C7LINK1 registers: inhibit applied



OM group C7LINK1 registers: usage registers



Register C7ABNRFB

CCS7 abnormal forward indicator bit Rx or backward sequence number Rx (C7ABNRFB)

Register (C7ABNRFB) counts CCS7 link synchronization failures. Abnormal forward indicator bits (FIB) or backward sequence numbers (BSN) that the signaling terminal (ST) receives cause the failures. When link synchronization fails, an alarm occurs.

This register increases in the central control (CC).

Register C7ABNRFB release history

Register C7ABNRFB was introduced in BCS20.

Associated registers

Register C7ABNRFB counts CCS7 link synchronizations that fail because of abnormal FIBs. Link synchronizations can also fail because the ST receives an abnormal BSN that is abnormal.

Register C7EXCONG counts CCS7 link synchronizations that fail because of prolonged congestion on the link.

Register C7EXDLAY counts CCS7 link synchronizations that fail because the far-end ST delays the acknowledgement of messages that were sent.

OM group C7LINK1 (continued)

Register C7EXERR counts CCS7 link synchronizations that fail because the ST detects excessive signal unit errors.

Register C7LKFAIL counts CCS7 link synchronization failures.

C7LINK1_C7ABNRFB + C7LINK1_C7EXDLAY + C7LINK1_C7EXERR + C7LINK1_C7EXCONG £ C7LINK1_C7LKFAIL

Associated logs

The system generates log CCS101 when synchronization fails.

Extension registers

There are no extension registers.

Register C7ALIGNF

CCS7 alignment failure (C7ALIGNF)

Register C7ALIGNF counts CCS7 link synchronization failures. The failures occur during the alignment or proving period when the system checks links for synchronization.

The signaling link cannot synchronize because of this failure. An alarm continues.

This register increases in the central control (CC).

Register C7ALIGNF release history

Register C7ALIGNF 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 C7AUTOCO

CCS7 automatic changeovers (C7AUTOCO)

Register C7AUTOCO counts CCS7 automatic changeovers (traffic reroutes) away from the link. An automatic changeover is a changeover that operating company personnel does not initiate.

A changeover indicates that traffic was diverted away from a common channel signaling link.

Register C7AUTOCO release history

Register C7AUTOCO 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 C7BSYOFF

CCS7 busy off (C7BSYOFF)

Register C7BSYOFF increases in the signaling terminal (ST). The system transfers the register to the central control (CC) during the OM transfer process.

Register C7BSYOFF counts the busy signal transmission stops at the ST. A busy signal transmission stop indicates that the link recovered from congestion.

Register C7BSYOFF release history

Register C7BSYOFF 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.

OM group C7LINK1 (continued)

Register C7BSYON

CCS7 busy on (C7BSYON)

Register C7BSYON counts the busy signal transmission starts at the ST. A busy signal transmission start indicates congestion on the link that can cause a link failure.

This register increases in the ST. The system transfers the register to the central control (CC) during the OM transfer process.

Register C7BSYON release history

Register C7BSYON 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 C7CBK

CCS7 changeback (C7CBK)

Register C7CBK counts changebacks on the link. A changeback is traffic that the system reroutes and returns to the link. Changebacks indicate an improvement in common channel signaling conditions.

This register increases in the central control (CC).

Register C7CBK release history

Register C7CBK was introduced in BCS20.

Associated registers

There are no associated registers.

Associated logs

The system generates log CCS163 when register C7CBK increases. This action does not occur when system stopped the changeback to perform a changeover and make the link not available. Log CCS163 indicates that a CCS7 link became available for signaling traffic and that traffic runs on the link.

Extension registers

There are no extension registers.

Register C7COV

CCS7 changeover (C7COV)

Register C7COV counts changeovers (traffic reroutes) away from the link.

A changeover indicates that the system diverted traffic away from a common channel signaling link. An alarm occurs.

Register C7COV release history

Register C7COV was introduced in BCS20.

Associated registers

There are no associated registers.

Associated logs

The system generates CCS164 when a link is not available.

Extension registers

There are no extension registers.

Register C7ERRSEC

CCS7 link errored seconds (C7ERRSEC)

Register C7ERRSEC reports the length of time the system detects a minimum of one in-service error on a signaling link.

Register C7ERRSEC release history

Register C7ERRSEC was introduced in BCS32.

Associated registers

C7SUERR

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register C7EXCONG

CCS7 excessive congestion (C7EXCONG)

OM group C7LINK1 (continued)

Register C7EXCONG counts CCS7 link synchronizations that fail because of prolonged congestion on the link.

Link synchronization failure causes an alarm to occur. This register increases in the central control (CC).

Register C7EXCONG release history

Register C7EXCONG was introduced in BCS20.

Associated registers

Register C7ABNRFB counts CCS7 link synchronizations that fail because of abnormal forward indicator bits (FIB). This register also counts CCS7 link synchronizations that fail because an abnormal backward sequence number (BSN) that the ST receives.

Register C7EXDLAY counts CCS7 link synchronizations that fail because the far-end ST delays the acknowledgement of messages that were sent.

Register C7EXERR counts CCS7 link synchronizations that fail because the ST detects excessive signal unit errors.

Register C7LKFAIL counts CCS7 link synchronization failures.

C7LINK1_C7ABNRFB + C7LINK1_C7EXDLAY + C7LINK1_C7EXERR + C7LINK1_C7EXCONG ≤ C7LINK1_C7LKFAIL

Associated logs

The system generates CCS101 when synchronization fails.

Extension registers

There are no extension registers.

Register C7EXDLAY

CCS7 excessive delay (C7EXDLAY)

Register C7EXDLAY counts CCS7 link synchronizations that fail. This event occurs because the far-end ST delays the acknowledgement of messages that were sent.

Link synchronization failure raises an alarm.

This register increases in the central control (CC).

Register C7EXDLAY release history

Register C7EXDLAY was introduced in BCS20.

Associated registers

Register C7ABNRFB counts CCS7 link synchronizations that fail because of abnormal forward indicator bits (FIB). This register also counts CCS7 link synchronizations that fail because of abnormal backward sequence number (BSN) that the ST receives.

Register C7EXCONG counts CCS7 link synchronizations that fail because of prolonged congestion on the link.

Register C7EXERR counts CCS7 link synchronizations that fail because the ST detects excessive signal unit errors.

Register C7LKFAIL counts CCS7 link synchronization failures.

C7LINK1_C7ABNRFB + C7LINK1_C7EXDLAY + C7LINK1_C7EXERR + C7LINK1_C7EXCONG ≤ C7LINK1_C7LKFAIL

Associated logs

The system generates CCS101 when synchronization fails.

Extension registers

There are no extension registers.

Register C7EXERR

CCS7 excessive error rate (C7EXERR)

Register C7EXERR counts CCS7 link synchronizations that fail because the ST detects excessive signal unit errors.

Link synchronization failure raises an alarm.

This register increases in the central control (CC).

Register C7EXERR release history

Register C7EXERR was introduced in BCS20.

Associated registers

Register C7ABNRFB counts CCS7 link synchronizations that fail because of abnormal forward indicator bits (FIB). These synchronizations can also fail because of abnormal backward sequence numbers (BSN) that the ST receives.

OM group C7LINK1 (continued)

Register C7EXCONG counts CCS7 link synchronizations that fail because of prolonged congestion on the link.

Register C7EXDLAY counts CCS7 link synchronizations that fail because the far-end ST delays the acknowledgement of messages that were sent.

Register C7LKFAIL counts CCS7 link synchronization failures.

C7LINK1_C7ABNRFB + C7LINK1_C7EXDLAY + C7LINK1_C7EXERR + C7LINK1_C7EXCONG £ C7LINK1_C7LKFAIL

Associated logs

The system generates CCS101 when synchronization fails.

Extension registers

There are no extension registers.

Register C7LINH

CCS7 local inhibit (C7LINH)

Register C7LINH increases when local inhibit is applied to the link. Local inhibit means that operating company personnel divert traffic away from the link with the use of the inhibit procedure.

Application of local inhibit raises an alarm.

This register increases in the central control (CC).

Register C7LINH release history

Register C7LINH was introduced in BCS20.

Associated registers

Register C7LUNINH increases when local inhibiting state is removed from the link.

Register C7LINK1_C7LINH = C7LINK1_C7LUNINH when the link does not have an inhibit indication.

Associated logs

The system generates log CCS159 when a CCS7 link is inhibited locally, as requested by the operating company personnel.

Extension registers

There are no extension registers.

Register C7LKFAIL

CCS7 link failure (C7LKFAIL)

Register CCS7 link failure (C7LKFAIL) counts CCS7 link synchronization failures. This register counts in-service link failures. This register does not count link activation failures (link not in-service failures).

Link synchronization failure raises an alarm.

This register increases in the central control (CC).

Register C7LKFAIL release history

C7LKFAIL was introduced in BCS20.

Associated registers

Register C7ABNRFB counts CCS7 link synchronizations that fail because of abnormal forward indicator bits (FIB). This register also counts CCS7 link synchronizations that fail because of an abnormal backward sequence number (BSN) that the ST receives.

Register C7EXCONG counts CCS7 link synchronizations that fail because of prolonged congestion on the link.

Register C7EXDLAY counts CCS7 link synchronizations that fail because the far-end ST delays the acknowledgement of messages that were sent.

Register C7EXERR counts CCS7 link synchronizations that fail because the ST detects excessive signal unit errors.

C7LINK1_C7ABNRFB + C7LINK1_C7EXDLAY + C7LINK1_C7EXERR + C7LINK1_C7EXCONG ≤ C7LINK1_C7LKFAIL

Any difference represents link failures that occur as a result of other causes.

Associated logs

The system generates log CCS101 when synchronization fails.

Extension registers

There are no extension registers.

Register C7LKSYNU

CCS7 link synchronization (C7LKSYNU)

OM group C7LINK1 (continued)

Register C7LKSYNU is a usage register. The scan rate is 10 s. This register records if a CCS7 link is synchronized and able to carry signaling units to the far-end ST.

If this register does not increase every 10 s, the link failed. When the link fails an alarm occurs. This action does not indicate that the link is for traffic.

This register increases in the central control (CC).

Register C7LKSYNU release history

Register C7LKSYNU was introduced in BCS20.

BCS33

When the office parameter OMINERLANGS is set to Y, the usage count is converted from CCS to deci-erlangs. This action occurs before the usage count appears. The OMSHOW command on the ACTIVE class converts the usage count from CCS to deci-erlangs. The value in the active registers does not alter and remains in CCS.

BCS30

Software changes provide usage counts in CCS or deci-erlangs.

Associated registers

There are no associated registers.

Associated logs

The system generates log CCS101 when synchronization fails.

The system generates log CCS102 when synchronization occurs.

Extension registers

There are no extension registers.

Register C7LKUNAU

CCS7 link unavailable (C7LKUNAU)

Register CCS7 link unavailable (C7LKUNAU) is a usage register. The scan rate is 10 s. This register records if a link is not available for traffic.

Register C7LKUNAU release history

Register C7LKUNAU was introduced in BCS20.

BCS33
When the office parameter OMINERLANGS is set to Y, the usage count is converted from CCS to deci-erlangs. This action occurs before the count appears. The OMSHOW command on the ACTIVE class converts the usage count from CCS to deci-erlangs. The value held in the active registers does not alter and remains in CCS.

BCS30
Software changes provide usage counts in CCS or deci-erlangs.

Associated registers

There are no associated registers.

Associated logs

The system generates log CCS163 when a link is available.

The system generates log CCS164 when a link is not available.

Extension registers

There are no extension registers.

Register C7LPO

CCS7 local processor outage (C7LPO)

Register CCS7 local processor outage (C7LPO) counts local processor outages (LPO) that the ST detects.

The register controls the following events:

- the message switch and buffer (MSB7) outages
- events during which the local processor is manual busy (the link is taken out of service manually)
- events during which inhibit procedures control a link

If an MSB7 outage caused the LPO, a serious problem occurred. If manual busy or inhibit procedures caused the LPO, an alarm will occur.

This register increases in the ST and transfers to the central control (CC) during the OM transfer process.

Register C7LPO release history

Register C7LPO was introduced in BCS20.

OM group C7LINK1 (continued)

Associated registers

There are no associated registers.

Associated logs

The system generates log PM102 when a system request changes a peripheral module (PM) to system busy.

The system generates log PM105 when a manual request changes a PM to manual busy.

Extension registers

There are no extension registers.

Register C7LUNINH

CCS7 local uninhibit (C7LUNINH)

Register C7LUNINH increases when local inhibiting status is removed from the link.

The link can serve traffic if all other controls and problems can be serviced.

This register increases in the central control (CC).

Register C7LUNINH release history

Register C7LUNINH was introduced in BCS20.

Associated registers

Register C7LINH increases when local inhibit is applied to the link.

When the link does not have an inhibit indication, C7LINK1_C7LUNINH = C7LINK1_C7LINH.

Associated logs

The system generates log CCS161 when operating company personnel remove the local inhibit on a CCS7 link.

Extension registers

There are no extension registers.

Register C7MANB

CCS7 manual busy (C7MANB)

Register C7MANB increases when the link is manual busy.

Manual busy indicates that operating company personnel control a link. An alarm can occur.

This register increases in the central control (CC).

Register C7MANB release history

Register C7MANB was introduced in BCS20.

Associated registers

There are no associated registers.

Associated logs

The system generates logs CCS157 when a CCS link is manual busy.

Extension registers

There are no extension registers.

Register C7NACKRX

CCS7 negative acknowledgements (C7NACKRX)

Register C7NACKRX counts negative acknowledgements received from the far-end signaling terminal (ST). Negative acknowledgement indicates that messages are not correctly received. The messages are transmitted again.

This register increases in the ST and transfers to the central control (CC) during the OM transfer process.

Register C7NACKRX release history

Register C7NACKRX 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 C7NETCON

CCS7 network connection (C7NETCON)

OM group C7LINK1 (continued)

Register C7NETCON increases when link synchronization fails. Link synchronization fails because of failure to connect with the network. An alarm occurs.

This register increases in the central control (CC).

Register C7NETCON release history

Register C7NETCON 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 C7NUCFL

CCS7 nail-up connection failure (C7NUCFL)

Register C7NUCFL increases when link activation cannot establish a permanent network connection.

A synchronized link that does not have a permanent network connection cannot survive a central control (CC) restart. The link continues to operate and service is not affected.

This register increases in the CC.

Register C7NUCFL release history

Register C7NUCFL was introduced in BCS20.

Associated registers

There are no associated registers.

Associated logs

The system generates CCS108 when a CCS7 link reaches synchronization but cannot reserve the link.

Extension registers

There are no extension registers.

Register C7RINH

Register CCS7 remote inhibit

Register C7RINH increases when operating company personnel apply remote inhibit to the link in order to divert traffic away from the link. An alarm occurs in the CCS7 system.

This register increases in the central control (CC).

Register C7RINH release history

Register C7RINH was introduced in BCS20.

Associated registers

Register C7RUNINH increases when remote inhibiting is removed from a link.

When link does not have an inhibit indication, C7LINK1_C7RINH = C7LINK1_C7RUNINH.

Associated logs

The system generates CCS160 when a CCS link is remote inhibited, as requested by the far-end office.

Extension registers

There are no extension registers.

Register C7RPO

CCS7 remote processor outages (C7RPO)

Register C7RPO counts remote processor outages ST reports.

Remote processor outages indicate that the link is not able to deliver traffic. An alarm occurs. The local office must wait for the far-end signaling point to recover.

This register increases in the central control (CC).

Register C7RPO release history

Register C7RPO was introduced in BCS20.

Associated registers

There are no associated registers.

OM group C7LINK1 (continued)

Associated logs

The system generates CCS104 RPO when the far end of a CCS link has a processor outage.

Extension registers

There are no extension registers.

Register C7RUNINH

CCS7 remote uninhibit (C7RUNINH)

Register C7RUNINH increases when remote inhibiting is removed from a link. If other controls or problems are not present on the link, the link can be used.

Register C7RUNINH release history

Register C7RUNINH was introduced in BCS20.

Associated registers

Register C7RINH increases when operating company personnel apply the remote inhibit to the link.

When the link does not have other inhibit indicators, C7LINK1_C7RINH = C7LINK1_C7RUNINH.

Associated logs

The system generates log CCS162 when a CCS link is remote uninhibited by the far end.

Extension registers

There are no extension registers.

Register C7SLTFL

CCS7 signaling link test failure (C7SLTFL)

Register C7SLTFL increases when signaling cannot take place because of a signaling link test (SLT) failure.

An SLT failure indicates that the system cannot synchronize a link. An alarm occurs in the CCS7 system.

This register increases in the central control (CC).

Register C7SLTFL release history

Register C7SLTFL was introduced in BCS20.

Associated registers

There are no associated registers.

Associated logs

The system generates log CCS101 when synchronization fails.

The system generates log CCS107 if the SLT fails during the initial activation procedure.

Extension registers

There are no extension registers.

Register C7STALFL

CCS7 signaling terminal allocation failure (C7STALFL)

Register C7STALFL increases when signaling cannot take place because the ST cannot be allocated.

The system cannot synchronize a link. An alarm occurs in the CCS7 system.

This register increases in the central control (CC).

Register C7STALFL release history

Register C7STALFL 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 C7SUERR

CCS7 signal units error (C7SUERR)

Register C7SUERR counts signal units on a link received in error. The count in this register is the number of messages that are not received correctly from the far-end signaling point. The messages are transmitted.

OM group C7LINK1 (continued)

This register increases in the signaling terminal and transferred to the central control (CC) during the OM transfer process.

Register C7SUERR release history

Register C7SUERR was introduced in BCS20.

Associated registers

C7ERRSEC

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register C7TLALFL

CCS7 transmission link allocation failure (C7TLALFL)

Register C7TLALFL increases when signaling cannot take place. Signaling cannot take place because a transmission link cannot be allocated.

The system cannot synchronize a link. An alarm occurs.

This register increases in the central control (CC).

Register C7TLALFL release history

Register C7TLALFL 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 C7CLB

Number of times that controlled link blocking (CLB) was applied to the link during an OM period.

Register C7CLB release history

Register C7CLB was introduced CSP04.

OM group C7LINK1 (end)

Associated registers

Register C7CLB in the C7LINK1 group stores the period of time that CLB was applied to the link during the last OM period.

Associated logs

The system generates log CCS193 when the last router is out of service. When the system generates CCS193, the CCS7 links are in a CLB state that will increase this OM.

OM group C7LINK2

OM description

CCS7 link group 2 (C7LINK2)

The OM group C7LINK2 provides information on calls and congestion for Common Channel Signaling 7 (CCS7). A CCS7 link is a communication path. This path moves voice or signaling messages between two signaling transfer points (STP) in a CCS7 network system.

This register counts the following types of congestion that impede the flow of signaling messages on a link:

- link congestion detected in the link-handling peripheral. A link-handling peripheral is a message switch and buffer (MSB), a CCS7 link interface unit (LIU7) or a high-speed link interface unit (HLIU).
- transmission buffer congestion detected in the signaling terminals

The system measures link congestion against three set thresholds. The user part gives messages a priority from zero to three. The system compares the priority threshold to the congestion threshold to determine if it should send the message. The system transmits messages with priorities equal to or greater than the congestion threshold. The system discards other messages.

The system measures transmission buffer congestion against three thresholds that are set to determine the onset of congestion in the buffer. The system also measures the three thresholds set to determine the abatement of congestion. An overflow threshold and corresponding abatement threshold also exist.

The LIU7 or HLIU handles all functions that the CCS7 must perform for each link. Registers count the following:

- messages that are lost or not sequenced correctly
- messages that originate and terminate at the signal transfer point
- messages that are passed on to other signaling transfer points

The following registers reside in the signaling terminal (ST):

- register C7BYTRT
- register C7BYTRTX
- register C7BYTRX
- register C7BYTRX2
- register C7BYTTX
- register C7BYTTX2

- register C7MSURX
- register C7MSURX2
- register C7MSUTX
- register C7MSUTX2
- register C7MSUDSC

Register C7STRET increases when the information that these registers collect is transferred to a holding register in the central control (CC). Registers C7MSUDC1, C7MSUDC2, and C7MSUDC3 reside in the link-handling peripheral module. Register C7MSBRET increases when the information that these registers collect is transferred to a holding register in the CC.

Release history

OM group C7LINK2 was introduced in BCS20. Registers C7ONSET1, C7ONSET2, C7ONSET3, C7ABATE1, C7ABATE2, C7ABATE3, C7MSUDC1, and C7MSUDC2 were set to zero.

TL11

Added HLIU information.

TL07

The Ethernet link interface unit (ELIU) was added to the nodes that can increase the registers in OM group C7LINK2.

BCS25

The following registers were added:

- register C7MSGLOS
- register C7MSGMSQ
- register C7MSUTE
- register C7MSUTE2
- register C7MSUTS
- register C7MSUTS2

The listed registers were set to zero for all except CCS7 STP products based on the LIU7.

BCS21

Registers C7ONSETV, C7ABATEV, C7STRET, and C7SMBRET were added. Registers C7MSUOR and C7MSUOR2 were added and set to zero for

OM group C7LINK2 (continued)

all but CCS7 STP products based on the LIU7. Registers C7ONSET1, C7ONSET2, C7ONSET3, C7ABATE1, C7ABATE2, C7ABATE3, C7MSUDC1, C7MSUDC2, and C7MSUDC3 were activated.

Registers

OM group C7LINK2 registers appear on the MAP terminal as follows.

```
C7MSUTX     C7MSUTX2    C7MSURX     C7MSURX2
C7BYTTX     C7BYTTX2    C7BYTRX     C7BYTRX2
C7BYTRT     C7BYTRT2    C7MSUDSC    C7ONSET1
C7ONSET2    C7ONSET3    C7ONSETV    C7ABATE1
C7ABATE2    C7ABATE3    C7ABATEV    C7MSUDC1
C7MSUDC2    C7MSUDC3    C7STRET     C7MSBRET
C7MSGLOS    C7MSGMSQ    C7MSUOR     C7MSUOR2
C7MSUTE     C7MSUTE2    C7MSUTS     C7MSUTS2
```

Group structure

OM group C7LINK2 provides one tuple for each key.

Key field:
C7_LINKSET_NUMBER is a number in the range 0 to 254,used as an index into table C7LKSET.

Info field:
C7LINK_OMINFO

The information field has a two-part key named CLLI, C7_Sig_Link_Code.

The CLLI is the linkset common language location identifier (CLLI) of the linkset that owns the link. The CCS7 signaling link code is a number from 0 to 15 that identifies an exact link in a linkset.

Associated OM groups

Register C7LINK1 counts failures and recoveries of a CCS7 link.

Associated functional groups

There are no associated functional groups.

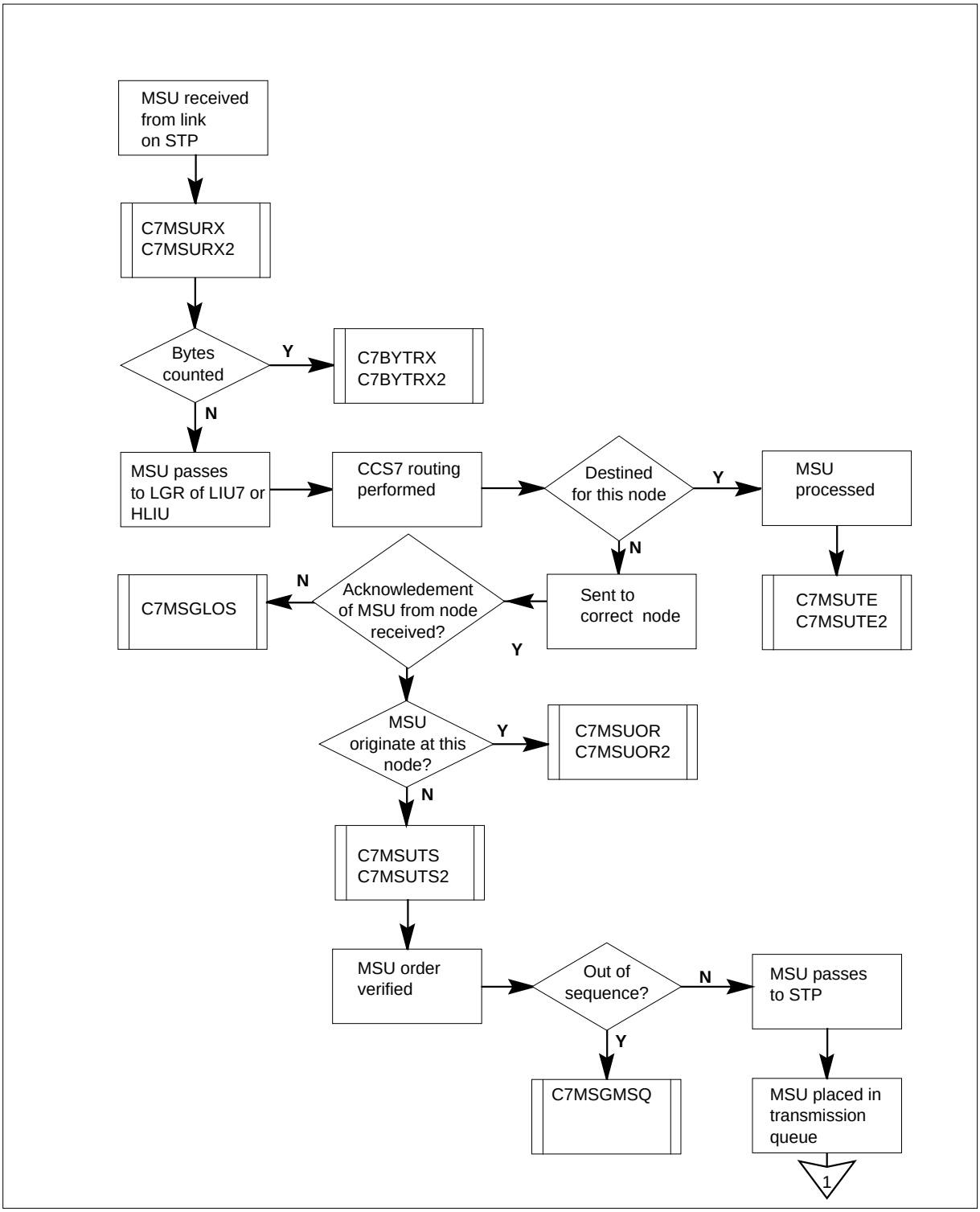
Associated functionality codes

The associated functionality codes for OM group C7LINK2 appear in the following table.

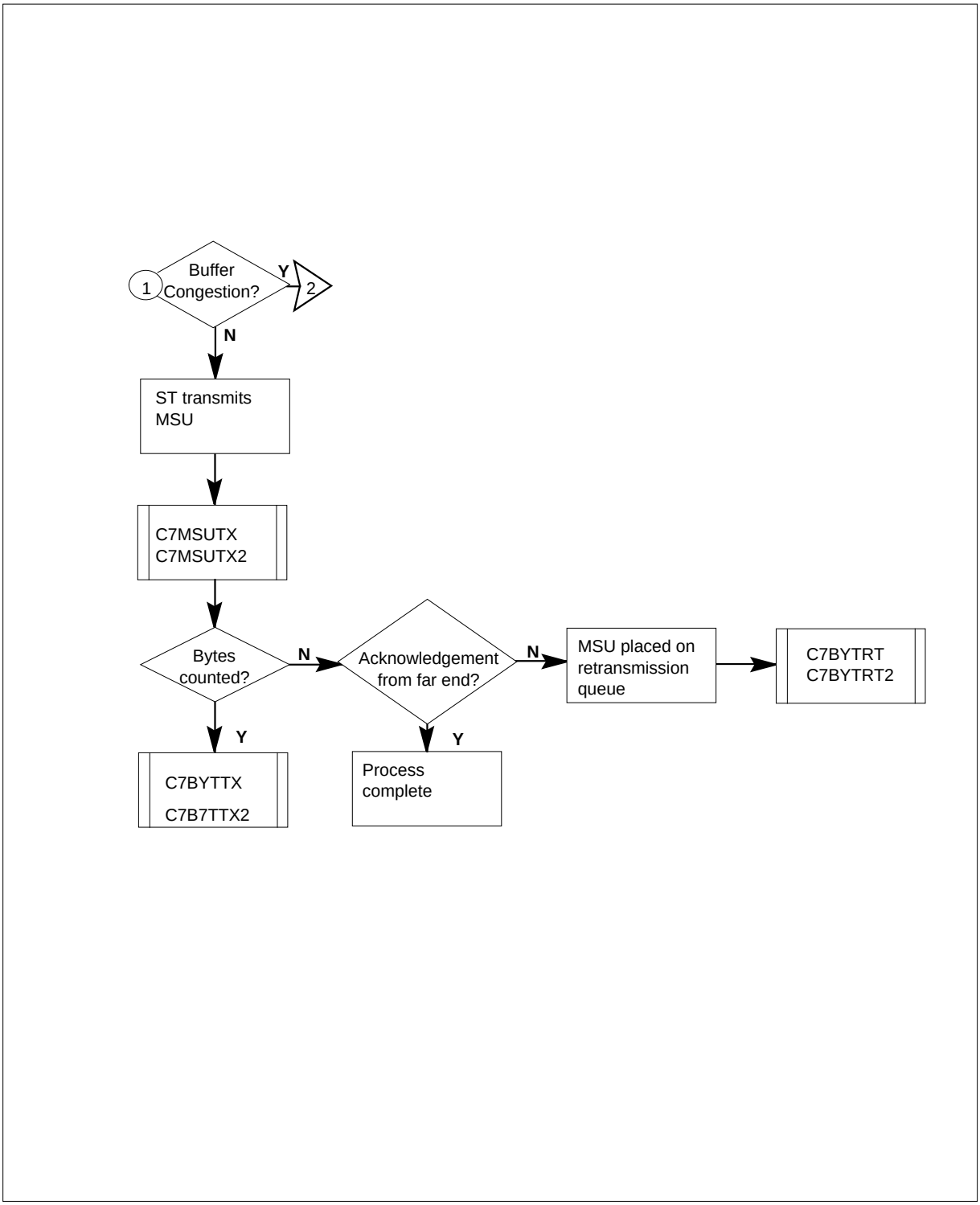
Functionality	Code
Remote Line Module	NTX023AB
CC7-MTP Associated and Non-associated Signaling	NTX041AA
CC7-MTP Associated and Non-associated Signaling	NTX041AB

OM group C7LINK2 (continued)

OM group C7LINK2 registers

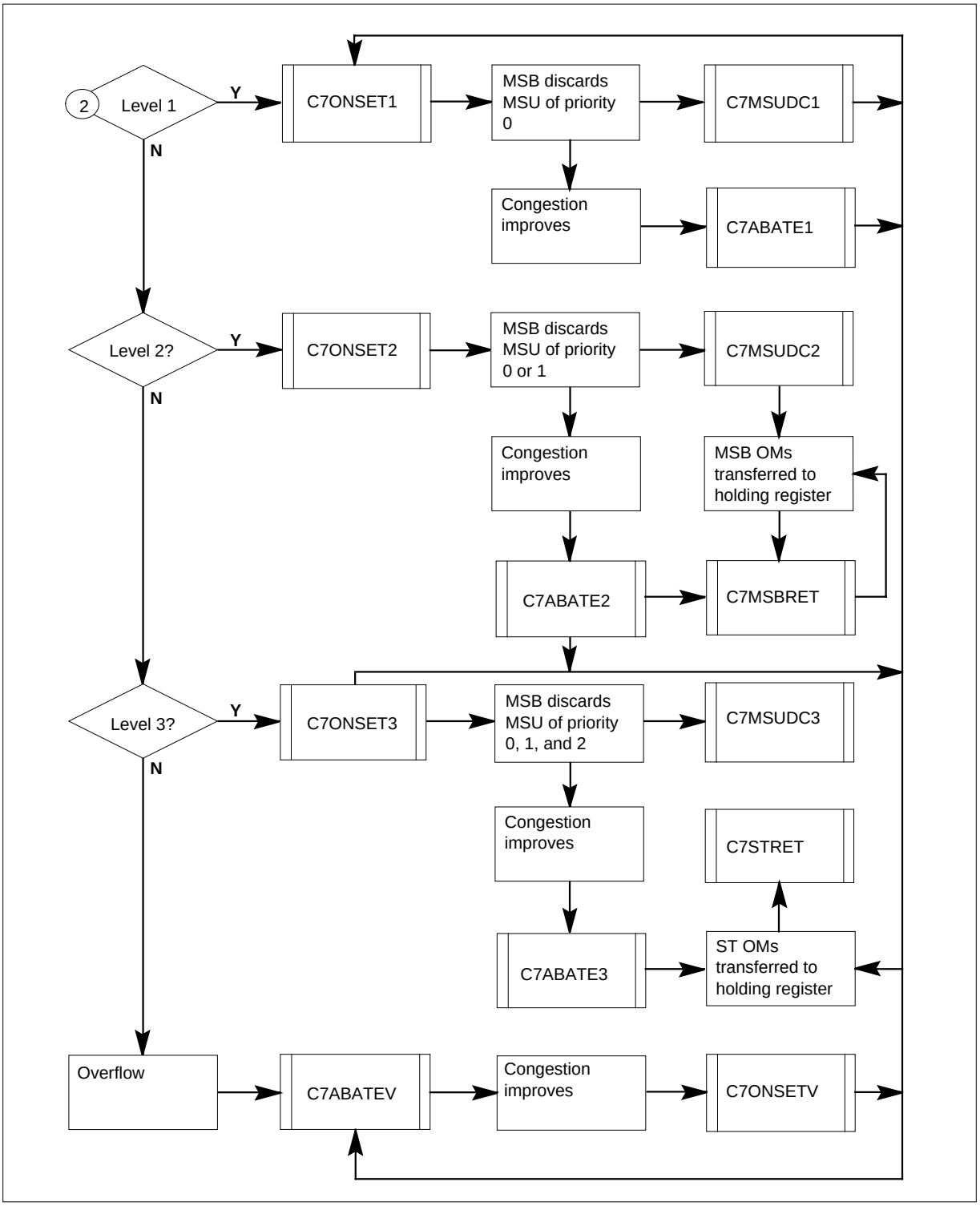


OM group C7LINK2 registers (continued)



OM group C7LINK2 (continued)

OM group C7LINK2 registers (continued)



Register C7ABATE1

CCS7 abatement threshold 1 (C7ABATE1)

C7ABATE1 increases when the transmission buffer congestion for the signaling terminal (ST) falls below the first abatement threshold. This register collects data in the CC.

Register C7ABATE1 release history

Register C7ABATE1 was introduced in BCS20.

BCS21

Register C7ABATE1 was activated.

Associated registers

Register C7ABATE2 increases when ST transmission buffer congestion falls below the second abatement threshold. Register C7ABATE3 increases when ST transmission buffer congestion falls below the third abatement threshold.

Associated logs

The system generates log CCS173 when the transmission buffer of a CCS link is congested.

Register C7ABATE2

CCS7 abatement threshold 2 (C7ABATE2)

Register C7ABATE2 increases when ST transmission buffer congestion falls below the second abatement threshold. This register collects data in the CC.

Register C7ABATE2 release history

Register C7ABATE2 was introduced in BCS20.

BCS21

Register C7ABATE2 was activated.

Associated registers

Register C7ABATE1 increases when ST transmission buffer congestion falls below the first abatement threshold. Register C7ABATE3 increases when ST transmission buffer congestion falls below the third abatement threshold.

Associated logs

The system generates log CCS173 when the transmission buffer of a CCS link is congested.

OM group C7LINK2 (continued)

Register C7ABATE3

CCS7 abatement threshold 3 (C7ABATE3).

Register C7ABATE3 increases when ST transmission buffer congestion falls below the third abatement threshold. This register collects data in the CC.

Register C7ABATE3 release history

Register C7ABATE3 was introduced in BCS20. Register C7ABATE3 was set to zero.

BCS21

Register C7ABATE3 was activated.

Associated registers

Register C7ABATE1 increases when ST transmission buffer congestion falls below the first abatement threshold. Register C7ABATE2 increases when ST transmission buffer congestion falls below the second abatement threshold.

Associated logs

The system generates log CCS173 when the transmission buffer of a CCS link is congested.

Register C7ABATEV

CCS7 abatement overflow (C7ABATEV)

Register C7ABATEV increases when the signaling terminal ST transmission buffer congestion falls below the ST transmission buffer overflow threshold. Messages of all priorities are transmitted. This register collects data in the CC.

Register C7ABATEV release history

Register C7ABATEV was introduced in BCS21.

Associated registers

Register C7ABATE1 increases when ST transmission buffer congestion falls below the first abatement threshold. Register C7ABATE2 counts the number of times the ST transmission buffer congestion falls below the second abatement threshold. Register C7ABATE3 counts the number of times ST transmission buffer congestion level falls below the third abatement threshold.

Associated logs

The system generates log CCS173 when the transmission buffer of a CCS7 link is congested.

Register C7BYTRT

CCS7 bytes retransmitted (C7BYTRT)

Register C7BYTRT counts bytes that the ST transmits again. These bytes include the data service information (SIO) and signaling information field (SIF) data. These bytes do not include the sequence number, length, and priority checking data. This data is referred to as level 2 overhead data.

Register C7BYTRT release history

Register C7BYTRT was introduced in BCS20.

Associated registers

Register C7STRET increases when the information collected in the following registers is transferred from the ST to the CC:

- register C7BYTRT
- register C7BYTRT2
- register C7BYTRX
- register C7BYTRX2
- register C7BYTTX
- register C7BYTTX2
- register C7MSURX
- register C7MSURX2
- register C7MSUTX
- register C7MSUTX2
- register C7MSUDC

Associated logs

There are no associated logs.

Extension registers

C7BYTRT2

Register C7BYTRX

CCS7 bytes received (C7BYTRX)

Register C7BYTRX counts bytes that the ST receives. These bytes include the SIO and SIF data. These bytes do not include the sequence number, length, and priority checking overhead data. This data is referred to as level 2 overhead data.

OM group C7LINK2 (continued)

Register C7BYTRX release history

Register C7BYTRX was introduced in BCS20.

Associated registers

Register C7STRET increases when the information collected in the following registers is transferred from the ST to the CC:

- register C7BYTRT
- register C7BYTRT2
- register C7BYTRX
- register C7BYTRX2
- register C7BYTTX
- register C7BYTTX2
- register C7MSURX
- register C7MSURX2
- register C7MSUTX
- register C7MSUTX2
- register C7MSUDC

Associated logs

There are no associated logs.

Extension registers

C7BYTRX2

Register C7BYTTX

CCS7 bytes transmitted (C7BYTTX)

Register C7BYTTX counts bytes that the ST transmits. These bytes include the SIO and SIF data. These bytes do not include the sequence number, length, and priority checking data. This data is referred to as level 2 overhead data.

Register C7BYTTX release history

Register C7BYTTX was introduced in BCS20.

Associated registers

Register C7STRET increases when information collected in the following registers is transferred from the ST to the CC:

- register C7BYTRT
- register C7BYTRT2
- register C7BYTRX
- register C7BYTRX2
- register C7BYTTX
- register C7BYTTX2
- register C7MSURX
- register C7MSURX2
- register C7MSUTX
- register C7MSUTX2
- register C7MSUDC

Associated logs

There are no associated logs.

Extension registers

C7BYTTX2

Register C7MSBRET

CCS7 message switch buffer retrieval (C7MSBRET)

Register C7MSBRET increases when information is transferred to a holding registers in the CC. Registers that reside in the link-handling peripheral module (PM), which is an MSB, LIU7, or HLIU, collect this information. Registers C7MSUDC1, C7MSUDC2, and C7MSUDC3 reside in the PM that handles the link.

Register C7MSBRET release history

Register C7MSBRET was introduced in BCS21.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

OM group C7LINK2 (continued)

Register C7MSGLOS

CCS7 messages lost (C7MSGLOS)

Register C7MSGLOS counts messages that are lost on paths from an incoming LIU7 or HLIU link to all outgoing LIU7 or HLIU links in the STP.

To find the reliability of the signal transfer point in terms of message loss, perform the following calculation. Compare the sum of register C7MSGLOS for all links to the sum of registers C7MSURX and C7MSURX2.

Register C7MSGLOS release history

Register C7MSGLOS was introduced in BCS25.

Associated registers

To find the performance measurement of the reliability of the signal transfer point, in terms of message loss, perform the following calculation. Compare the sum of register C7MSGLOS to the sum of registers C7MSURX and C7MSURX2.

Associated logs

The system generates CCS400 when a path from one LIU7, HLIU, or HSLR to another is defective.

Register C7MSGMSQ

CCS7 messages mis-sequenced (C7MSGMSQ)

Register C7MSGMSQ counts messages that are recieved out of their correct order on paths from all incoming LIU7 or HLIU links. The messages are sent to a given destination LIU7 or HLIU in the STP. This register collects data in the destination LIU7 or HLIU. This register also provides a cumulative count of all messages that are not sequenced correctly on all paths to the destination.

To find a performance measurement of the reliability of the STP in terms of message sequencing, perform the following calculation. Compare the sum of register C7MSGMSQ for all links to the sum of the OM that counts messages received (C7MSURX/C7MSURX2).

Register C7MSGMSQ release history

Register C7MSGMSQ was introduced in BCS25.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Register C7MSUDC1

CCS7 messages discarded because of congestion level 1 (C7MSUDC1)

Register C7MSUDC1 counts messages discarded by the PM (MSB, LIU7, or HLIU) that supports the link experiencing congestion level 1.

If this count increases, take action to improve link transmission or to reduce the traffic load on the link. This register collects data in the PM that handles the link. This register is transferred to the CC during the OM transfer process.

Register C7MSUDC1 release history

Register C7MSUDC1 was introduced in BCS20.

BCS21

Register C7MSUDC1 was activated.

Associated registers

Register C7MSUDC2 counts messages discarded by the PM that handles the link. Link congestion at level 2 causes the PM to discard the messages.

Register C7MSUDC3 counts the number of messages discarded by the PM that handles the link. Link congestion at level 3 causes the PM to discard the messages.

Register C7MSBRET increases when information collected in C7MSUDC1 is transferred from the PM that handles the link to the CC.

Associated logs

There are no associated logs.

Register C7MSUDC2

CCS7 messages discarded because of congestion level 2 (C7MSUDC2)

Register C7MSUDC2 counts messages discarded by the PM that handles the link. The PM discards the messages when signal routing is at link congestion level 2.

If this count increases, take action to improve link transmission or to reduce the traffic load on the link. This register collects data in the PM that handles the link. This register is transferred to the CC during the OM transfer process.

OM group C7LINK2 (continued)

Register C7MSUDC2 release history

Register C7MSUDC2 was introduced in BCS20.

BCS21

Register C7MSUDC2 was activated

Associated registers

Register C7MSUDC1 counts messages discarded by the PM that handles the link. Link congestion at level 1 causes the PM to discard messages.

Register C7MSUDC3 counts messages discarded by the PM that handles the link. Link congestion at level 3 causes the PM to discard the signal message units.

Register C7MSBRET increases when information collected in C7MSUDC2 is transferred from the PM that handles the links to the CC.

Associated logs

There are no associated logs.

Register C7MSUDC3

CCS7 messages discarded because of congestion level 3 (C7MSUDC3)

Register C7MSUDC3 counts messages discarded by the PM (an MSB, LIU7, or HLIU link) that supports the link experiencing link congestion level 3.

If this count increases, take action to improve link transmission or reduce the traffic load on the link. This register collects data in the link-handling PM and transfers to the CC during the OM transfer process.

Register C7MSUDC3 release history

Register C7MSUDC3 was introduced in BCS20 and set to zero.

BCS21

Register C7MSUDC3 was activated.

Associated registers

Register C7MSUDC1 counts messages discarded by the link-handling PM because of link congestion at level 1.

Register C7MSUDC2 counts messages discarded by the link-handling PM because of link congestion at level 2.

Register C7MSBRET increases when information collected in C7MSUDC3 transfers from the link-handling PM to the CC.

Associated logs

There are no associated logs.

Register C7MSUDSC

CCS7 messages discarded (C7MSUDSC)

Register C7MSUDSC counts message signal units that the ST discards because of congestion overflow in the transmission buffer beyond congestion level 3. If this count persists, take action to improve link transmission or reduce the traffic load on the link. This register collects data in the ST and transfers to the CC during the OM transfer process.

Register C7MSUDSC release history

Register C7MSUDSC was introduced in BCS20.

Associated registers

Register C7STRET increases when the information collected in the following registers is transferred from the ST to the CC:

- Register C7BYTRT
- Register C7BYTRT2
- Register C7BYTRX
- Register C7BYTRX2
- Register C7BYTTX
- Register C7BYTTX2
- Register C7MSURX
- Register C7MSURX2
- Register C7MSUTX
- Register C7MSUTX2
- Register C7MSUDC

Associated logs

There are no associated logs.

Register C7MSUOR

CCS7 messages originated (C7MSUOR)

OM group C7LINK2 (continued)

Register C7MSUOR counts messages that originate at the ST. Messages that originate at the ST include global title translations (GTT) and management messages.

This register is activated only for LIU7 or HLIU.

Register C7MSUOR release history

Register C7MSUOR was introduced in BCS21.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

C7MSUOR2

Register C7MSURX

CCS7 messages received (C7MSURX)

Register C7MSURX counts messages the ST received.

This register collects data in the ST and transfers to the CC during the OM transfer process.

Register C7MSURX release history

Register C7MSURX was introduced in BCS20.

Associated registers

Register C7STRET increases when the information collected in the following registers is transferred from the ST to the CC:

- Register C7BYTRT
- Register C7BYTRT2
- Register C7BYTRX
- Register C7BYTRX2
- Register C7BYTTX
- Register C7BYTTX2
- Register C7MSURX
- Register C7MSURX2

- Register C7MSUTX
- Register C7MSUTX2
- Register C7MSUDC

Associated logs

There are no associated logs.

Extension registers

C7MSURX2

Register C7MSUTE

CCS7 messages terminated (C7MSUTE)

Register C7MSUTE counts messages that terminate at the node.

This register is activated for products based on the LIU7 or HLIU.

Register C7MSUTE release history

Register C7MSUTE was introduced in BCS25.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

C7MSUTE2

Register C7MSUTS

CCS7 messages through-switched (C7MSUTS)

Register C7MSUTS counts messages that an STP or integrated node (INode) relays to other signaling points.

Register C7MSUTS release history

Register C7MSUTS was introduced in BCS25.

Associated registers

There are no associated registers.

OM group C7LINK2 (continued)

Associated logs

There are no associated logs.

Extension registers

C7MSUTS2

Register C7MSUTX

CCS7 messages transmitted (C7MSUTX)

Register C7MSUTX counts messages that the ST transmits.

This register collects data in the ST and is transferred to the CC during the OM transfer process.

Register C7MSUTX release history

Register C7MSUTX was introduced in BCS20.

Associated registers

Register C7STRET increases when the information collected in the following registers is transferred from the ST to the CC:

- Register C7BYTRT
- Register C7BYTRT2
- Register C7BYTRX
- Register C7BYTRX2
- Register C7BYTTX
- Register C7BYTTX2
- Register C7MSURX
- Register C7MSURX2
- Register C7MSUTX
- Register C7MSUTX2
- Register C7MSUDC

Associated logs

There are no associated logs.

Extension registers

C7MSUTX2

Register C7ONSET1

CCS7 onset threshold 1 (C7ONSET1)

Register C7ONSET1 increments when ST transmission buffer congestion passes the first onset threshold. The user must enter thresholds in table C7CNGSTN.

When congestion passes the first threshold, the system discards messages of priority 0. The link transports messages of priority 1, 2, and 3. If congestion persists the user must improve link transmission or reduce the traffic load on the link. This register collects data in the CC.

Register C7ONSET1 release history

Register C7ONSET1 was introduced in BCS20.

BCS21

Register C7ONSET1 was activated.

Associated registers

Register C7ONSET 2 increases when ST transmission buffer congestion passes the second onset threshold.

Register C7ONSET3 increases when ST transmission buffer congestion passes the third onset threshold.

Associated logs

The system generates CCS173 when the transmission buffer of a CCS7 link is congested.

Register C7ONSET2

CCS7 onset threshold 2 (C7ONSET2)

Register C7ONSET2 increments when ST transmission buffer congestion passes the second onset threshold.

When congestion passes the second threshold, the system discards messages of priority zero. The link will transport messages of priority 2 and 3. If congestion persists, the user must improve link transmission or reduce the traffic load on the link. This register collects data in the CC.

Register C7ONSET2 release history

Register C7ONSET2 was introduced in BCS20.

OM group C7LINK2 (continued)

BCS21
Register C7ONSET2 was activated.

Associated registers
Register C7ONSET1 increases when ST transmission buffer congestion passes the first onset threshold.

Register C7ONSET3 increases when ST transmission buffer congestion passes the third onset threshold.

Associated logs
The system generates CCS173 when the transmission buffer of a CCS7 link is congested.

Register C7ONSET3
CCS7 onset threshold 3 (C7ONSET3)

Register C7ONSET3 increments when ST transmission buffer congestion passes the third onset threshold.

When congestion passes the third threshold, the system discards messages of priority 0 and 1. The link will transport messages of priority 3. If congestion persists, the user must take action to improve link transmission or reduce the traffic load on the link. This register collects data in the CC.

Register C7ONSET3 release history
Register C7ONSET3 was introduced in BCS20.

BCS21
Register C7ONSET3 was activated.

Associated registers
Register C7ONSET1 increases when ST transmission buffer congestion passes the first onset threshold.

Register C7ONSET2 increases when ST transmission buffer congestion passes the second onset threshold.

Associated logs
The system generates log CCS173 when the transmission buffer of a CCS7 link is congested.

Register C7ONSETV
CCS7 onset overflow (C7ONSETV)

Register C7ONSETV increases when messages overflow the ST transmission buffer. When this occurs, the system discards all calls. This register collects data in the CC.

Register C7ONSETV release history

Register C7ONSETV was introduced in BCS21.

Associated registers

Register C7ONSET1 increases when ST transmission buffer congestion passes the first onset threshold.

Register C7ONSET2 increases when ST transmission buffer congestion passes the second onset threshold.

Register C7ONSET3 increases when the ST transmission buffer congestion passes the third onset threshold.

Associated logs

The system generates log CCS173 when the transmission buffer of a CCS link is congested.

Register C7STRET

CCS7 signal terminal retrieval (C7STRET)

Register C7STRET increases when the information that registers collect transfers to a holding register in the CC. These registers are in the ST of the link.

The registers in the ST of the link are as follows:

- Register C7BYTRT
- Register C7BYTRT2
- Register C7BYTRX
- Register C7BYTRX2
- Register C7BYTTX
- Register C7BYTTX2
- Register C7MSURX
- Register C7MSURX2
- Register C7MSUTX

OM group C7LINK2 (end)

- Register C7MSUTX2
- Register C7MSUDC

Register C7STRET release history

Register C7STRET was introduced in BCS21.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

OM group C7LINK3

OM description

Common Channel Signaling 7 link group 3 (C7LINK3)

The OM group C7LINK3 monitors the traffic and performance of a message signal unit (MSU) for a Common Channel Signaling 7 (CCS7) link. Message signal units are part of a signal.

Some registers are registers that count MSU octets that originate, terminate, and connect through a switch through an office. These registers also monitor MSU traffic. The following components measure performance:

- registers that count the number of times that local and remote processors are not in service
- MSUs that the system loses because no buffers are available to store messages
- usage registers that record link levels 1, 2, and 3 of congestion on a CCS7 link.

Registers C7MSOR, C7MSOR2, C7MSTE, C7MSTE2, C7MSTS, C7MSTS2, and C7MSUBOV in OM group C7LINK3 only apply to LPP-based CCS7 nodes. These registers are not valid on MSB7-based nodes.

The system uses the OM group C7LINK3 in the Signaling Engineering Administration System (SEAS) for CCS7 offices. Data in C7MTP goes to the signaling engineering administration controller (SEAC) for use in SEAS.

For the SEAC to collect the correct data, the following condition must be present. Table OMACC must define three classes to accumulate the required 30 min, 60 min, and 24 h collection periods. Modify tables OFCOPT and OFCENG to provide the required 5 min reports for SEAC. The ``Group structure'' section describes modifications to tables OFCOPT and OFCENG.

Release history

BCS28 introduced the OM group C7LINK3.

CSP04

Register C7CLBU was added in CSP04.

BCS35

Registers C7HWILLP, C7HWMTS, C7HWST, C7HWTOT, C7RTOVLD, and C7BFOVFL were added but not activated in BCS35.

OM group C7LINK3 (continued)

BCS30

Software change to provide usage counts in hundred call seconds (CCS) or deci-erlangs.

Registers

The OM group C7LINK3 registers appear on the MAP terminal as follows:

```
C7MSOR      C7MSOR2     C7MSTE      C7MSTE2
C7MSTS      C7MSTS2     C7MSUBOV    C7LV1CGU
C7LV2CGU    C7LV3CGU    C7LPOU      C7RPOU
C7HWILLP    C7HWMTS     C7HWST      C7HWTOT
C7RTOVLD    C7BFOVFL    C7CLBU      VALIDLK
LSCCPRX     LSCCPRX2    LSCCPTX     LSCCPTX2
LUPARX      LUPARX2     LUPATX      LUPATX2
```

Group structure

The OM group C7LINK3 provides one tuple for each CCS7 link.

Keyfield:
C7_LINKSET_NUMBER, a number between 0 and 254, for use as an index into table C7LKSET

Info field:
C7LINK_OMINFO

The SEAC OM collection requirements require the following table modifications:

- Add SEAS_30M, SEAS_60M, and SEAS_24H to table OMACC.
- Add group C7LINK3 and corresponding fields (registers) to each of the three classes.
- Set OMHISTORYON to Y in table OFCOPT.
- Set OMXFR to X15 in table OFCENG.

Associated OM groups

The SEAS also uses OM groups C7LINK1, C7LINK2, C7MTP, and C7SCCP to provide performance measurements for CCS7 offices.

The OM group C7LINK1 counts failures and recoveries of a CCS7 link.

The OM group C7LINK2 records congestion and traffic measurements on a CCS7 link.

The OM group C7MTP counts message signal units that the system discards at a signaling transfer point.

The OM group C7SCCP records the performance and use of a CCS7 signaling-connection control part.

The OM group C7LINK1 register C7CLB counts the number of times a link was in the controlled link blocking (CLB) state.

Associated functional groups

The following functional groups associate with OM group C7LINK3:

- SEAS
- SEAC
- CCS7

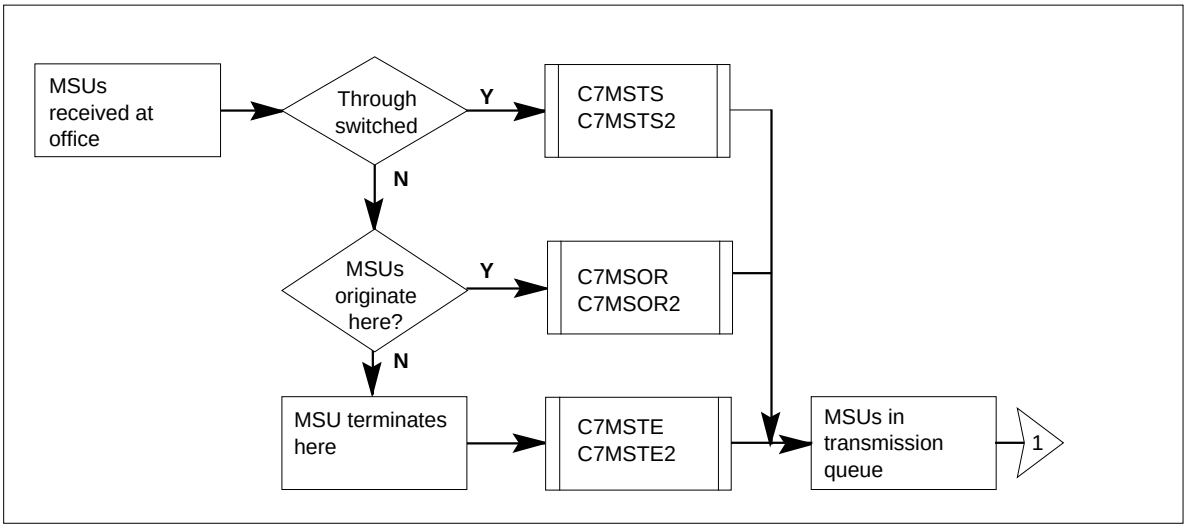
Associated functionality codes

The functionality codes associated with OM group C7LINK3 appear in the following table.

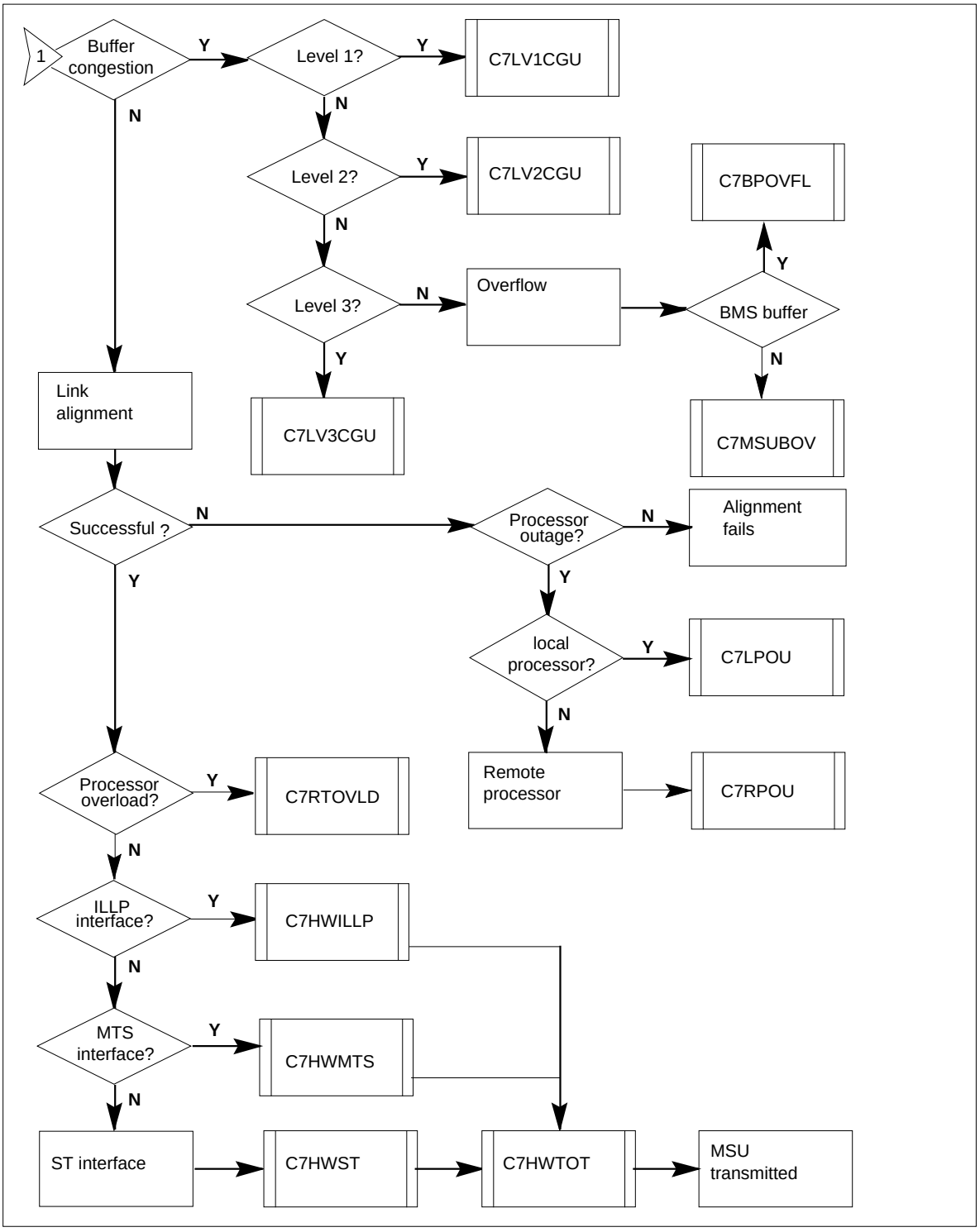
Functionality	Code
STP-SEAS	NTX835AA
International Switching Center--Basic	NTX300AA
CCS7 MTP/SCCP	NTX041AB

OM group C7LINK3 (continued)

OM group C7LINK3 registers



OM group C7LINK3 registers (continued)



OM group C7LINK3 (continued)

Register C7BFOVL

CCS7 buffer overflow (C7BFOVL)

Register C7BFOVL counts the times the system discards a message because message buffers are not available in the CCS7 link interface unit (LIU7).

This register is set to zero (0).

Register-C7BFOVL release history

The BCS35 introduced register C7BFOVL.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Register C7HWILLP

CCS7 high-water mark for ILLP interface (C7HWILLP)

Register C7HWILLP counts the highest number of messages or MSUs that are received in 1 s from the ILLP interface.

This register is set to zero (0).

Register-C7HWILLP release history

The BCS35 introduced register C7HWILLP.

Associated registers

There are no associated registers

Associated logs

There are no associated logs

Register C7HWMTS

CCS7 high-water mark for MTS interface (C7HWMTS)

Register C7HWMTS counts the highest number of messages or MSUs received in 1 s from the MTS interface.

This register is set to zero (0).

Register-C7HWMTS release history

The BCS35 introduced register C7HWMTS.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Register C7HWST

CCS7 high-water mark for ST interface (C7HWST)

Register C7HWST counts the highest number of messages or MSUs received in 1 s from the signaling terminal (ST) interface.

This register is set to zero (0).

Register-C7HWST release history

The BCS35 introduced register C7HWST.

Associated registers

There are no associated registers

Associated logs

There are no associated logs

Register C7HWTOT

CCS7 high-water mark total interfaces (C7HWTOT)

Register C7HWTOT counts the highest number of messages or MSUs received in 1 s from all interfaces (ILLP, MTS, and ST).

This register is set to zero (0).

Register-C7HWTOT release history

The BCS35 introduced C7HWTOT.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

OM group C7LINK3 (continued)

Register C7LPOU

CCS7 local processor outage (C7LPOU)

Register C7LPOU is a usage register. The scan rate is 10 s. Register C7LPOU records each local processor outage (LPO) that the signaling terminal (ST) detects.

Register C7LPOU records outages. The following conditions can cause outages:

- a CCS7-message switch and buffer (MSB7) outage is present
- the local processor is manual busy (the user takes the link out of service)
- inhibit procedures control a link

An MSB7 outage can cause the LPO. This condition indicates that an important problem occurred. If manual busy or inhibit procedures cause the LPO, the system raises an alarm.

This register increases in the ST and transfers to the central control (CC) during the OM transfer process.

Register-C7LPOU release history

The BCS28 introduced register C7LPOU.

BCS30

Software change to provide usage counts in hundred call seconds (CCS) or deci-erlangs.

Associated registers

Register C7RPOU is a usage register. The scan rate is 10 s. Register C7RPOU records remote processor outages that the signaling terminal (ST) reports.

Register C7LPOU corresponds to DRLCLPRO in SEAS.

Associated logs

The system generates log PM102 when a peripheral module changes to system busy by a system request.

The system generates log PM105 when a peripheral module changes to manual busy by a manual request.

Reguster C7LV1CGU

CCS7 level 1-link congestion (C7LV1CGU)

Register C7LV1CGU is a usage register. The scan rate is 10 s. Register C7LV1CGU records level 1-link congestion on a CCS7 link. Table C7CNGSTN contains descriptions of thresholds of link congestion.

Register-C7LV1CGU release history

The BCS28 introduced register C7LV1CGU.

BCS30

Software change to provide usage counts in hundred call seconds (CCS) or deci-erlangs.

Associated registers

Register C7LV1CGU corresponds to TDCNGLV1 in SEAS.

Associated logs

There are no associated logs

Register C7LV2CGU

CCS7 level 2-link congestion (C7LV2CGU)

C7LV2CGU is a usage register. The scan rate is 10 s. Register C7LV2CGU records level 2 congestion on a CCS7 link. Table C7CNGSTN contains descriptions of thresholds of link congestion.

Register-C7LV2CGU release history

The BCS28 introduced register C7LV2CGU.

BCS30

Software change to provide usage counts in hundred call seconds (CCS) or deci-erlangs.

Associated registers

Register C7LV2CGU corresponds to TDCNGLV2 in SEAS.

Associated logs

There are no associated logs.

Register C7LV3CGU

CCS7 level 3-link congestion (C7LV3CGU)

Register C7LV3CGU is a usage register. The scan rate is 10 s. Register C7LV3CGU records level 3 congestion on a CCS7 link. Table C7CNGSTN contains descriptions of thresholds of link congestion.

OM group C7LINK3 (continued)

Register-C7LV3CGU release history

The BCS28 introduced register C7LV3CGU.

BCS30

Software change to provide usage counts in hundred call seconds (CCS) or deci-erlangs.

Associated registers

Register C7LV3CGU corresponds to TDCNGLV3 in SEAS.

Associated logs

There are no associated logs

Register C7MSOR

CCS7 message signal unit (MSU) octets originated (C7MSOR)

Register C7MSOR counts MSU octets that originate on a CCS7 link in an office. Register C7MSOR includes management MSUs and global title translations that generate new messages.

Registers C7MSOR and C7MSOR2 apply to LPP-based CCS7 nodes. These registers are not valid on MSB7-based nodes.

Register-C7MSOR release history

The BCS28 introduced register C7MSOR.

Associated registers

Registers C7MSOR and C7MSOR2 correspond to ORMSUOCT in SEAS.

Associated logs

There are no associated logs

Extension Register

C7MSOR2

Register C7MSTE

CCS7 message signal unit (MSU) octets terminated (C7MSTE)

Register C7MSTE counts MSU octets that terminate on a CCS7 link in an office. Register C7MSTE includes management MSUs and global title translations that generate new messages.

Registers C7MSTE and C7MSTE2 apply to LPP-based CCS7 nodes. These registers are not valid on MSB7-based nodes.

Register-C7MSTE release history

The BCS28 introduced register C7MSTE.

Associated registers

Registers C7MSTE and C7MSTE2 correspond to TRMSUOCT in SEAS.

Associated logs

There are no associated logs

Extension Register

C7MSTE2

Register C7MSTS

CCS7 message signal unit (MSU) octets through-switched (C7MSTS)

Register C7MSTS counts MSU octets that switch through an office. Register C7MSTS does not include global title translations.

Registers C7MSTS and C7MSTS2 apply to LPP-based CCS7 nodes. These registers are not valid on MSB7-based nodes.

Register-C7MSTS release history

The BCS28 introduced register C7MSTS.

Associated registers

Registers C7MSTS and C7MSTS2 correspond to TSMSUOCT in SEAS.

Associated logs

There are no associated logs

Extension Register

C7MSTS2

Register C7MSUBOV

CCS7 message signal unit (MSU) buffer overflow (C7MSUBOV)

Register C7MSUBOV counts MSUs that the system loses because buffers are not available to store messages.

OM group C7LINK3 (continued)

Register C7MSUBOV applies to LPP-based CCS7 nodes. Register C7MSUBOV is not valid on MSB7-based nodes.

Register-C7MSUBOV release history

The BCS28 introduced register C7MSUBOV.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Register C7RPOU

CCS7 remote processor outages (C7RPOU)

Register C7RPOU is a usage register. The scan rate is 10 s. Register C7RPOU records remote processor outages the signaling terminal (ST) reports.

Remote processor outages indicate that the link is not able to deliver traffic. The system raises an alarm. The local office must wait for the far-end signaling point to recover.

The central control (CC) counts register C7RPOU.

Register-C7RPOU release history

The BCS28 introduced register C7RPOU.

Associated registers

Register C7LPOU increases when a local link processor is not in service.

Register C7RPOU corresponds to DRFEPRO in SEAS

Associated logs

The system generates log CCS104 RPO when the far end of a CCS link has a processor outage.

Register C7RTOVLD

CCS7 real time overload (C7RTOVLD)

Register C7RTOVLD counts the number of messages or MSUs that the system discards because an overload occurs in the LIU7.

This register is set to zero (0).

Register-C7RTOVLD release history

The BCS35 introduced register C7RTOVLD.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Register C7CLBU

Register stores the time that the system applies controlled link blocking to the link during an OM period.

The scan rate is 10 s.

Register-C7CLBU release history

The CSP04 introduces register C7CLBU.

Associated registers

Register C7CLBU in the C7LINK3 group stores a time period. This time period is the length of time that the system applied CLB to the link during the last OM period.

Associated logs

The system generates log CCS193 log when the last router goes out of service. The CCS7 links are set to CLB state. The next OM report counts for each link for register C7CLBU.

OM group C7LINK4

OM description

CCS7 Additional MTP Layer 3 Events

C7LINK4 provides information related to Common Channel Signaling 7 (CCS7) message transfer part (MTP) layer 3 events.

Release history

OM group C7LINK4 was introduced in TL10.

Registers

The following OM group C7LINK4 registers display on the MAP terminal as follows:

```
C7OSMSUD    C7ABUFOC    C7PBUFOC    C7ALKODY
C7NMALOD    C7LKFLU     C7LKMTCU    C7HTEACO
```

Group structure

OM group C7LINK4 provides one tuple for each key.

Key field:

C7_LINKSET_NUMBER. Number in the range 0 to 254, used as an index into table C7LKSET.

Info field:

C7LINK_OMINFO. The Info field has a two-part key: CLLI and C7_SIGLINK_CODE. CLLI is the common language location identifier of the linkset that owns the link. The C7_SIGLINK_CODE is a number from 0 to 15 that identifies the link in the linkset.

Associated OM groups

C7HSLAL2 provides information on CCS7 high-speed link asynchronous transfer mode (ATM) adaptation layer operations.

C7HSLATM provides information on CCS7 high-speed link ATM layer events.

C7HSLCAR provides information on CCS7 high-speed link digital carriers.

C7LINK1 counts failures and recoveries of a CCS7 link.

C7LINK2 provides information on calls and congestion for a CCS7 link.

C7LINK3 monitors traffic and performance of message signal units on a CCS7 link.

C7LKSET provides CCS7 linkset performance information.

Associated functional groups

The following functional groups are associated with OM group C7LINK4:

- Common Channel Signaling 7 (CCS7)

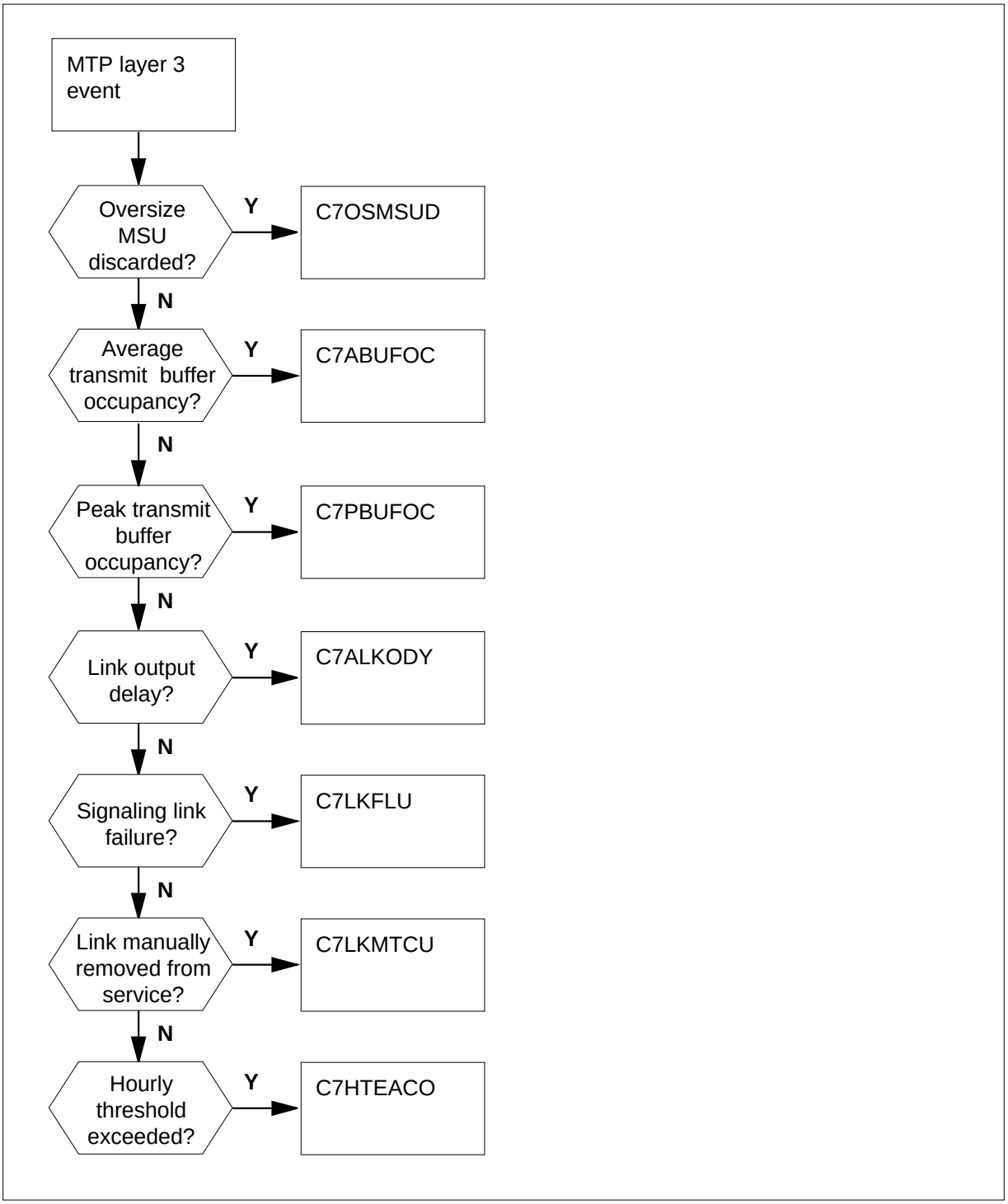
Associated functionality codes

The functionality codes associated with OM group C7LINK4 are shown in the following table.

Functionality	Code
TEL CCS7 Base	TEL00008

OM group C7LINK4 (continued)

OM group C7LINK4



Register C7OSMSUD

CCS7 Oversize MSU Discarded

Register C7OSMSUD counts the number of CCS7 messages discarded because they exceeded the 272-octet message size limit for message signaling units (MSU) on an MTP2 link.

Register C7OSMSUD release history

Register C7OSMSUD was introduced in TL10.

Associated registers

None

Associated logs

None

Extension registers

None

Register C7ABUFOC

CCS7 Average Transmit Buffer Occupancy

Register C7ABUFOC counts the average occupancy of the link transmit buffer in units of MTP3 messages.

Register C7ABUFOC release history

Register C7ABUFOC was introduced in TL10.

Associated registers

None

Associated logs

None

Extension registers

None

Register C7PBUFOC

CCS7 Peak Transmit Buffer Occupancy

Register C7PBUFOC counts the peak occupancy of the link transmit buffer in units of MTP3 messages.

OM group C7LINK4 (continued)

Register C7PBUFOC release history

Register C7PBUFOC was introduced in TL10.

Associated registers

None

Associated logs

None

Extension registers

None

Register C7ALKODY

CCS7 Average Link Output Delay

Register C7ALKODY records the average time of a link output delay in units of microseconds.

Register C7ALKODY release history

Register C7ALKODY was introduced in TL10.

Associated registers

None

Associated logs

None

Register C7NMALOD

Number of Messages Used to Calculate the Average Link Output Delay

Register C7NMALOD counts the number of messages used to calculate the average link output delay.

Register C7NMALOD release history

Register C7NMALOD was introduced in TL10.

Associated registers

None

Associated logs

None

Register C7LKFLU

Cumulative Duration of Signaling Link Failures—All Types

Register C7LKFLU counts the total time that the signaling link was unavailable to MTP level 3 traffic because of signaling link failures. The total time is counted in units of 10 s.

Note: Register C7LKFLU is different from register C7LKUNAU in OM group C7LINK1. C7LKUNAU tracks the unavailability of a link for all reasons. C7LKFLU tracks only the unavailability of a link caused by link failure.

Register C7LKFLU release history

Register C7LKFLU was introduced in TL10.

Associated registers

None

Associated logs

CCS101

Register C7LKMTCU

Link Maintenance Usage

Register C7LKMTCU counts the total time a link was manually made unavailable to MTP level 3 user part message traffic during the measurement interval. The total time is counted in units of 10 s. This includes local or remote management-inhibit, deactivation, or any other manual removal from service.

Register C7LKMTCU release history

Register C7LKMTCU was introduced in TL10.

Associated registers

None

Associated logs

None

Register C7HTEACO

Number of Hourly Thresholds Exceeded for Automatic Changeovers

OM group C7LINK4 (end)

Register C7HTEACO counts the number of times that the automatic changeover hourly threshold is exceeded in a 24 hour period.

Register C7HTEACO release history

Register C7HTEACO was introduced in TL10.

Associated registers

None

Associated logs

CCS120

OM group C7LKSET

OM description

CCS7 linkset (C7LKSET)

The OM group C7LKSET provides information on the performance and use of a CCS7 linkset. The CCS7 affects the performance and use of routesets.

A linkset is a set of synchronized links between any signaling transfer points (STP). A routeset is a set of all routes to a destination in the signaling network. A route is a set of linksets.

The route that a message takes is based on the address and link selector information. The user parts provide the address and link selector in the signaling messages. The system selects a routeset from the signaling routes to a destination. The system selects a linkset and the links in that linkset to route the message.

Routeset management (RSM) determines possible routes for a given routeset and linkset group. The operating company enters a RSM. The RSM examines a route before the RSM routes a message. The RSM checks the traffic capabilities of the route and the linkset for that route. If acceptable routing is available on that route, the RSM selects a link from the linkset. If the first route is not accepted, the RSM examines another route. The RSM repeats this process until the RSM finds an acceptable route, or until the RSM examines all routes.

This group of OMs counts link failures and linkset failures. Failures indicate that the routeset does not transmit messages. The OM group measures the amount of time during which a linkset does not provide calls to a routeset.

Release history

The OM group C7LKSET was introduced in BCS20.

BCS33

Use the OMSHOW command on the ACTIVE class to convert registers C7LSUNAU and C7LSEMRU from CCS to deci-erlangs. Perform this action before the registers appear.

BCS30

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

BCS21

Register C7LSEMRU was introduced.

OM group C7LKSET (continued)

Registers

The OM group C7LKSET registers appear on the MAP terminal as follows:

```
C7LSUNAU     C7LSFAIL     C7LSEMRU
```

Group structure

The OM group C7LKSET provides one tuple for each key.

Key field:
C7_LINKSET_NUMBER, a number in the range 0 to 254, is an index in table C7LKSET

Info field:
There is no information.

Associated OM groups

The OM groups C7LINK1 and C7LINK2 provide information on link availability and link use.

The OM group C7RTESET provides information on routeset availability.

The OM group C7ROUTE provides information on the component routes.

Associated functional groups

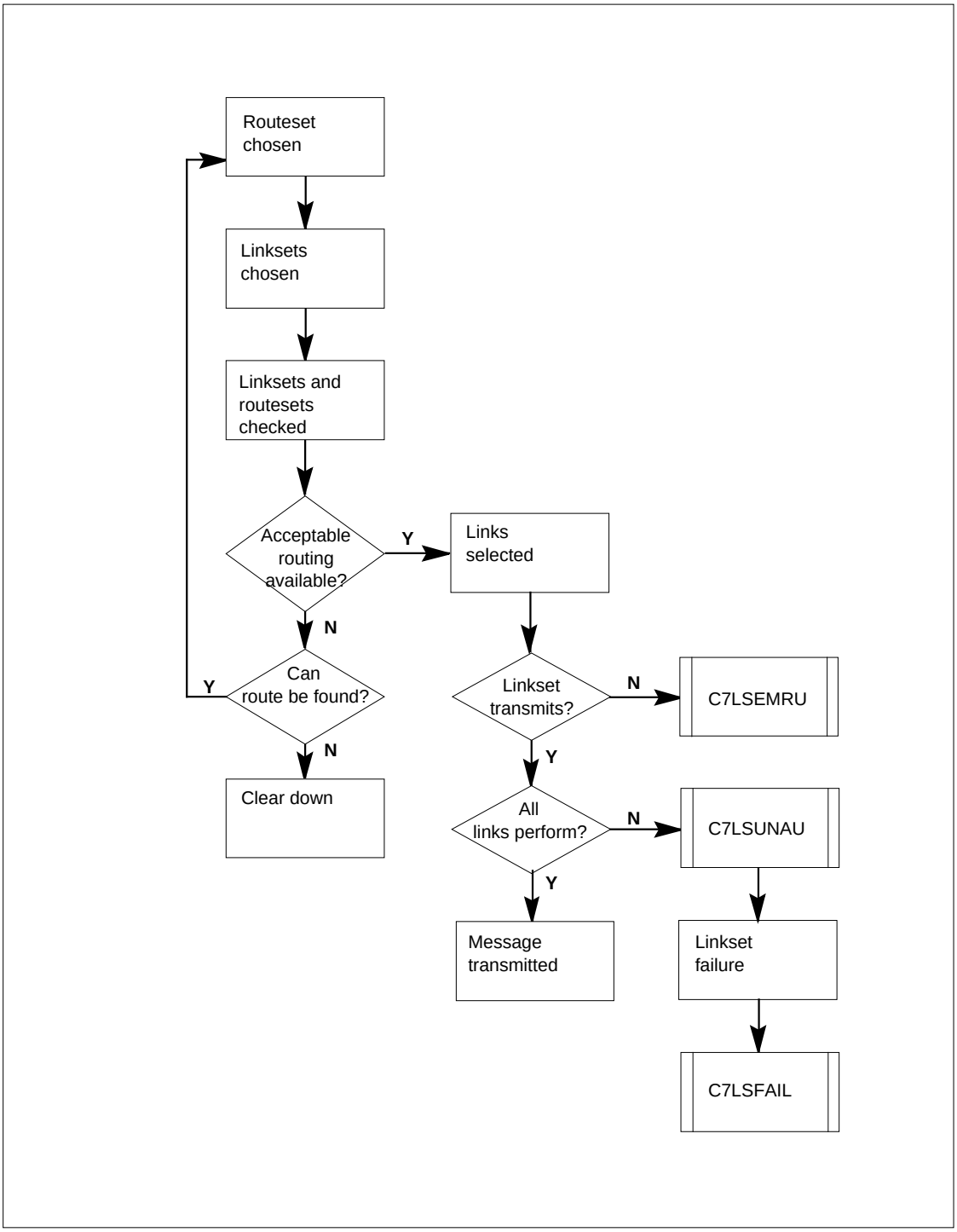
An associated functional group is OM group CCS7.

Associated functionality codes

The functionality codes for OM group C7LKSET appear in the following table.

Functionality	Code
Remote Line Module	NTX023AB
CCS7 MTP/SCCP	NTX041AB
International Switching Center - Basic	NTX300AA

OM group C7LKSET registers



OM group C7LKSET (continued)

Register C7LSEMRU

CCS7 linkset out, routeset traffic blocked (C7LSEMRU)

Register C7LSEMRU is a usage register. The scan rate is 10 s. Register C7LSEMRU records when the following conditions occur:

- the linkset does not transmit messages to the routesets
- a minimum of one routeset does not receive messages

Register C7LSEMRU release history

Register C7LSEMRU was introduced in BCS21.

BCS33

When you set the office parameter OMINERLANGS to Y, you convert the usage count from CCS to deci-erlangs. This conversion occurs 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 change to provide usage counts in CCS or deci-erlangs.

Associated registers

Registers C7LKSET_C7LSEMRU £ C7LKSET_C7LSUNAU associate with register C7LSMERU.

Associated logs

There are no associated logs.

Register C7LSFAIL

CCS7 linkset failure (C7LSFAIL)

Register C7LSFAIL counts links that are out of service.

If the system removes a link from service, the linkset loses all working links and does not transmit messages to the routesets. When this register counts, an alarm occurs. This register collects data in the central control (CC).

Register C7LSFAIL release history

Register C7LSFAIL was introduced in BCS20.

Associated registers

Register C7LSUNAU records when a linkset provides traffic capability to the routesets.

Associated logs

There are no associated logs.

Register C7LSUNAU

CCS7 linkset unavailable (C7LSUNAU)

Register C7LSUNAU is a usage register. The scan rate is 10 s. Register C7LSUNAU records when the linkset does not transmits messages to the routesets.

When this register counts, an alarm occurs because all links on this linkset fail. Some linksets in the routesets of this linkset are available.

Register C7LSUNAU release history

Register C7LSUNAU was introduced in BCS20.

BCS33

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

BCS30

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

Associated registers

Associated registers include C7LKSET_C7LSUNAU C7LKSET_C7LSEMRU.

Associated logs

There are no associated logs.

OM group C7LPP

OM description

CCS7 Link Peripheral Processor

OM group C7LPP stores link peripheral processor (LPP) information for interframe and intraframe traffic and message size on a Common Channel Signaling 7 (CCS7) link. OM group C7LPP can store message switch (MS), link peripheral processor (LPP), and enhanced LPP (ELPP) information.

An intraframe message has source and destination signaling data links (SDL) in the same frame. An interframe message has different source and destination frames.

OM group C7LPP has a traffic level threshold of 60% to 70% processing capacity for the CCS7 link interface unit (LIU7) and high-speed CCS7 link interface unit (HLIU). C7LPP is turned off when the traffic level exceeds the threshold.

OM group C7LPP is not reported through the Signaling, Engineering, and Administration System (SEAS).

Release history

OM group C7LPP is introduced in STP04.

Registers

The following OM group C7LPP registers display on the MAP terminal as follows:

VALID_FL	NILREG1	NILREG2	NILREG3
IEH5SRX	IEH5STX	IAH5SRX	IAH5STX
IEH1TRX	IEH1TTX	IEA1TRX	IEA1TTX
IAH1TRX	IAH1TTX	IAA1TRX	IAA1TTX
C7L27RX	C7L27TX	C7L43RX	C7L43TX
C7L74RX	C7L74TX	C7L75RX	C7L75TX
C7H1CRX	C7H1CTX	C7H2CRX	C7H2CTX
C7H3CRX	C7H3CTX	C7H4CRX	C7H4CTX

Group structure

OM group C7LPP provides 32 tuples.

Key field:

Controlling entity (MS or LIM)

Info field:
Card number for the MS controller or the LIM number for the LIM controller

Associated OM groups

OM group C7LPP2

Registers VALIDFL2, LPPSCRX, and LPPSCRX2 are in OM group C7LPP2 because OM group C7LPP has the maximum number of registers. Register VALIDFL2 indicates the validity of the registers in C7LPP2, and registers LPPSCRX and LPPSCRX2 store the LPP information for message type SCCP, User Part, or SNM.

Associated functional groups

Functional group HLIU is associated with OM group C7LPP.

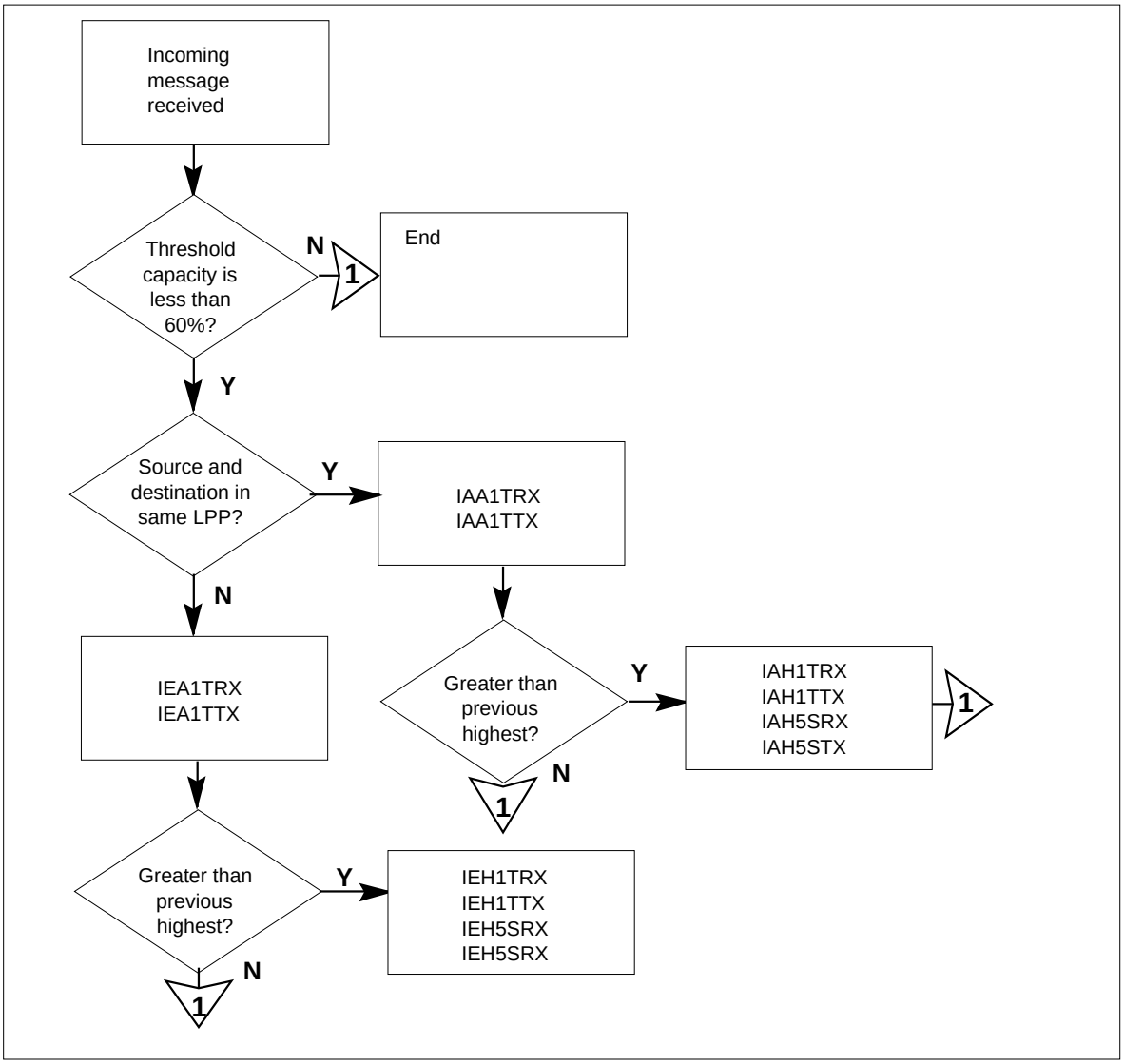
Associated functionality codes

The functionality code associated with OM group C7LPP is shown in the following table.

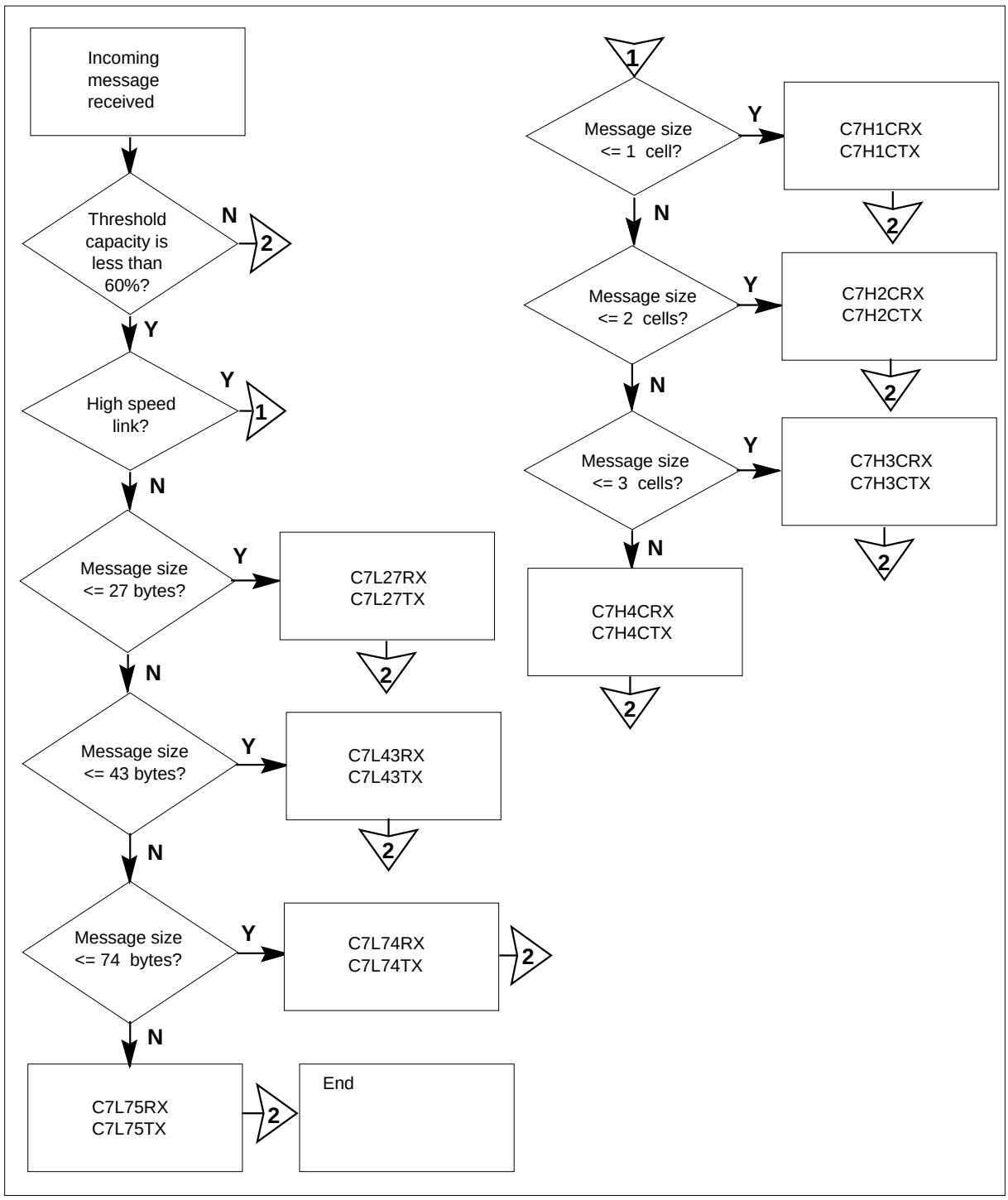
Functionality	Code
High-speed link interface unit (HLIU)	STPE006

OM group C7LPP (continued)

OM group C7LPP registers for interframe and intraframe traffic measurements



OM group C7LPP registers for message length measurements



OM group C7LPP (continued)

Register VALID_FL

Validity of the OM data in table C7LPP

Register VALID_FL indicates the validity of all registers in group C7LPP.

Register VALID_FL release history

Register VALID_FL is introduced in STP04.

Associated registers

All other registers in OM group C7LPP are associated with register VALID_FL. Register VALID_FL indicates the validity of each register. The validation formula is 0 for invalid or 1 for valid.

Associated logs

None

Extension registers

None

Register NILREG1

Nil register 1

Register NILREG1 is a filler to align registers in OM group C7LPP.

Register NILREG1 release history

Register NILREG1 is introduced in STP04.

Associated registers

None

Associated logs

None

Extension registers

None

Register NILREG2

Nil register 2

Register NILREG2 is a filler to align registers in OM group C7LPP.

Register NILREG2 release history

Register NILREG2 is introduced in STP04.

Associated registers

None

Associated logs

None

Extension registers

None

Register NILREG3

Nil register 3

Register NILREG3 is a filler to align registers in OM group C7LPP.

Register NILREG3 release history

Register NILREG3 is introduced in STP04.

Associated registers

None

Associated logs

None

Extension registers

None

Register IEH5SRX

Incoming interframe traffic highest percent (5 s/24 h)

Register IEH5SRX stores the highest percentage of 5-s incoming interframe traffic within 24 h.

Register IEH5SRX release history

Register IEH5SRX is introduced in STP04.

Associated registers

VALID_FL

VALID_FL indicates the validity of register IEH5SRX. The validation formula range is 0 to 100.

Associated logs

None

OM group C7LPP (continued)

Extension registers

None

Register IEH5STX

Outgoing interframe traffic highest percent (5 s/24 h)

Register IEH5STX stores the highest percentage of 5-s outgoing interframe traffic within 24 h.

Register IEH5STX release history

Register IEH5STX is introduced in STP04.

Associated registers

VALID_FL

VALID_FL indicates the validity of register IEH5STX. The validation formula range is 0 to 100.

Associated logs

None

Register IAH5SRX

Incoming intraframe traffic highest percent (5 s/24 h)

Register IAH5SRX stores the highest percentage of 5-s incoming intraframe traffic within 24 h.

Register IAH5SRX release history

Register IAH5SRX is introduced in STP04.

Associated registers

VALID_FL

VALID_FL indicates the validity of register IAH5SRX. The validation formula range is 0 to 100.

Associated logs

None

Extension registers

None

Register IAH5STX

Outgoing intraframe traffic highest percent (5 s/24 h)

Register IAH5STX stores the highest percentage of 5-s outgoing intraframe traffic within 24 h.

Register IAH5STX release history

Register IAH5STX is introduced in STP04.

Associated registers

VALID_FL

VALID_FL indicates the validity of register IAH5STX. The validation formula range is 0 to 100.

Associated logs

None

Extension registers

None

Extension registers

None

Register IEH1TRX

Incoming interframe highest percent (1 transfer period per 24 h)

Register IEH1TRX stores the highest percentage of the incoming interframe traffic for one transfer period within 24 h.

Register IEH1TRX release history

Register IEH1TRX is introduced in STP04.

Associated registers

VALID_FL

VALID_FL indicates the validity of register IEH1TRX. The validation formula range is 0 to 100.

Associated logs

None

OM group C7LPP (continued)

Extension registers

None

Register IEH1TTX

Outgoing interframe traffic highest percent (1 transfer period per 24 h)

Register IEH1TTX stores the highest percentage of the outgoing interframe traffic for one transfer period within 24 h.

Register IEH1TTX release history

Register IEH1TTX is introduced in STP04.

Associated registers

VALID_FL

VALID_FL indicates the validity of register IEH1TTX. The validation formula range is 0 to 100.

Associated logs

None

Extension registers

None

Register IEA1TRX

Incoming interframe traffic accumulated percent (1 transfer period)

Register IEA1TRX stores the accumulated percentage of incoming interframe traffic for one transfer period.

Register IEA1TRX release history

Register IEA1TRX is introduced in STP04

Associated registers

VALID_FL

VALID_FL indicates the validity of register IEA1TRX. The validation formula range is 0 to 100.

Associated logs

None

Extension registers

None

Register IEA1TTX

Outgoing interframe traffic accumulated percent (1 transfer period)

Register IEA1TTX stores the accumulated percentage of outgoing interframe traffic for one transfer period.

Register IEA1TTX release history

Register IEA1TTX is introduced in STP04.

Associated registers

VALID_FL

VALID_FL indicates the validity of register IEA1TTX. The validation formula range is 0 to 100.

Associated logs

None

Extension registers

None

Register IAH1TRX

Incoming intraframe highest percent (1 transfer period per 24 h)

Register IAH1TRX stores the highest percentage of incoming intraframe traffic in one transfer period within 24 h.

Register IAH1TRX release history

Register IAH1TRX is introduced in STP04.

Associated registers

VALID_FL

VALID_FL indicates the validity of register IAH1TRX. The validation formula range is 0 to 100.

Associated logs

None

OM group C7LPP (continued)

Extension registers

None

Register IAH1TTX

Outgoing intraframe highest percent (1 transfer period per 24 h)

Register IAH1TTX stores the highest percentage of outgoing intraframe traffic in one transfer period within 24 h.

Register IAH1TTX release history

Register IAH1TTX is introduced in STP04.

Associated registers

VALID_FL

VALID_FL indicates the validity of register IAH1TTX. The validation formula range is 0 to 100.

Associated logs

None

Extension registers

None

Register IAA1TRX

Incoming intraframe traffic accumulated percent (1 transfer period)

Register IAA1TRX stores the accumulated percentage of incoming intraframe traffic in one transfer period.

Register IAA1TRX release history

Register IAA1TRX is introduced in STP04.

Associated registers

VALID_FL

VALID_FL indicates the validity of register IAA1TRX. The validation formula range is 0 to 100.

Associated logs

None

Extension registers

None

Register IAA1TTX

Outgoing intraframe traffic accumulated percent (1 transfer period)

Register IAA1TTX stores the accumulated percentage of outgoing intraframe traffic in one transfer period.

Register IAA1TTX release history

Register IAA1TTX is introduced in STP04.

Associated registers

VALID_FL

VALID_FL indicates the validity of register IAA1TTX. The validation formula range is 0 to 100.

Associated logs

None

Extension registers

None

Register C7L27RX

Percent of incoming traffic MSU length equal to or less than 27 bytes (LIU7)

Register C7L27RX stores the total percentage of incoming LIU7 traffic transmitted through a frame in one transfer period. The traffic has a message transfer part (MTP) layer 2 message length of less than or equal to 27 bytes.

Register C7L27RX release history

Register C7L27RX is introduced in STP04.

Associated registers

VALID_FL

VALID_FL indicates the validity of register C7L27RX. The validation formula range is 0 to 100. The validation formula follows.

C7L27RX + C7L43RX + C7L74RX + C7L75RX = 100 or 0

C7L27TX + C7L43TX + C7L74TX +C7L75TX = 100 or 0

OM group C7LPP (continued)

Note: If the frame does not have an LIU7, the sum is 0. If the frame has an LIU7, the sum is 100.

Associated logs

None

Extension registers

None

Register C7L27TX

Percent of outgoing traffic MSU length equal to or less than 27 bytes (LIU7)

Register C7L27TX stores the total percent of outgoing LIU7 traffic transmitted through a frame in one transfer period. The traffic has an MTP layer 2 message length of less than or equal to 27 bytes.

Register C7L27TX release history

Register C7L27TX is introduced in STP04.

Associated registers

VALID_FL

VALID_FL indicates the validity of register C7L27TX. The validation formula range is 0 to 100. The validation formula follows.

C7L27RX + C7L43RX + C7L74RX + C7L75RX = 100 or 0

C7L27TX + C7L43TX + C7L74TX +C7L75TX = 100 or 0

Associated logs

None

Extension registers

None

Register C7L43RX

Percent of incoming traffic MSU length 28 to 43 bytes (LIU7)

Register C7L43RX stores the total percent of incoming LIU7 traffic transmitted through a frame in one transfer period. The traffic has an MTP

layer 2 message length of greater than or equal to 28 bytes and less than or equal to 43 bytes.

Register C7L43RX release history

Register C7L43RX is introduced in STP04.

Associated registers

VALID_FL

VALID_FL indicates the validity of register C7L43RX. The validation formula range is 0 to 100. The validation formula follows.

C7L27RX + C7L43RX + C7L74RX + C7L75RX = 100 or 0

C7L27TX + C7L43TX + C7L74TX +C7L75TX = 100 or 0

Associated logs

None

Extension registers

None

Register C7L43TX

Percent of outgoing traffic MSU length 28 to 43 bytes (LIU7)

Register C7L43TX stores the total percent of outgoing LIU7 traffic transmitted through a frame in one transfer period. The traffic has an MTP layer 2 message length of greater than or equal to 28 bytes and less than or equal to 43 bytes.

Register C7L43TX release history

Register C7L43TX is introduced in STP04.

Associated registers

VALID_FL

VALID_FL indicates the validity of register C7L43TX. The validation formula range is 0 to 100. The validation formula follows.

C7L27RX + C7L43RX + C7L74RX + C7L75RX = 100 or 0

C7L27TX + C7L43TX + C7L74TX +C7L75TX = 100 or 0

Associated logs

None

OM group C7LPP (continued)

Extension registers

None

Register C7L74RX

Percent of incoming traffic MSU length 43 to 74 bytes (LIU7)

Register C7L74RX stores the total percent of incoming LIU7 traffic transmitted through a frame in one transfer period. The traffic has an MTP layer 2 message length of greater or equal to 43 bytes and less than or equal to 74 bytes.

Register C7L74RX release history

Register C7L74RX is introduced in STP04.

Associated registers

VALID_FL

VALID_FL indicates the validity of register C7L74RX. The validation formula range is 0 to 100. The validation formula follows.

C7L27RX + C7L43RX + C7L74RX + C7L75RX = 100 or 0

C7L27TX + C7L43TX + C7L74TX +C7L75TX = 100 or 0

Associated logs

None

Extension registers

None

Register C7L74TX

Percent of outgoing traffic MSU length 43 to 74 bytes (LIU7)

Register C7L74TX stores the total percent of outgoing LIU7 traffic transmitted through a frame in one transfer period. The traffic has an MTP layer 2 message length of greater or equal to 43 bytes and less than or equal to 74 bytes.

Register C7L74TX release history

Register C7L74TX is introduced in STP04.

Associated registers

VALID_FL

VALID_FL indicates the validity of register C7L74TX. The validation formula range is 0 to 100. The validation formula follows.

C7L27RX + C7L43RX + C7L74RX + C7L75RX = 100 or 0

C7L27TX + C7L43TX + C7L74TX +C7L75TX = 100 or 0

Associated logs

None

Extension registers

None

Register C7L75RX

Percent of incoming traffic MSU length of greater than or equal to 75 bytes (LIU7)

Register C7L75RX stores the total percent of incoming LIU7 traffic transmitted through a frame in one transfer period. The traffic has an MTP layer 2 message length of greater or equal to 75 bytes.

Register C7L75RX release history

Register C7L75RX is introduced in STP04.

Associated registers

VALID_FL

VALID_FL indicates the validity of register C7L75RX. The validation formula range is 0 to 100. The validation formula follows.

C7L27RX + C7L43RX + C7L74RX + C7L75RX = 100 or 0

C7L27TX + C7L43TX + C7L74TX +C7L75TX = 100 or 0

Associated logs

None

Extension registers

None

Register C7L75TX

Percent of outgoing traffic MSU length greater than or equal to 75 bytes (LIU7)

OM group C7LPP (continued)

Register C7L75TX stores the total percent of outgoing LIU7 traffic transmitted through a frame in one transfer period. The traffic has an MTP layer 2 message length of greater or equal to 75 bytes.

Register C7L75TX release history

Register C7L75TX is introduced in STP04.

Associated registers

VALID_FL

VALID_FL indicates the validity of register C7L75TX. The validation formula range is 0 to 100. The validation formula follows.

C7L27RX + C7L43RX + C7L74RX + C7L75RX = 100 or 0

C7L27TX + C7L43TX + C7L74TX +C7L75TX = 100 or 0

Associated logs

None

Extension registers

None

Register C7H1CRX

Percent of incoming traffic MSU length less than or equal to one asynchronous transfer mode (ATM) cell (HLIU)

Register C7H1CRX stores the total percent of incoming HLIU traffic transmitted through a frame in one transfer period. The traffic has a message length of less than or equal to one asynchronous transfer mode (ATM) cell.

Register C7H1CRX release history

Register C7H1CRX is introduced in STP04.

Associated registers

VALID_FL

VALID_FL indicates the validity of register C7H1CRX The validation formula range is 0 to 100. The validation formula follows.

C7H1CRX + C7H2CRX + C7H3CRX + C7H4CRX = 100 or 0

C7H1CTX + C7H2CTX + C7H3CTX + C7H4CTX = 100 or 0

Note: If the frame does not have an LIU7, the sum is 0. If the frame has an LIU7, the sum is 100.

Associated logs

None

Extension registers

None

Register C7H1CTX

Percent of outgoing traffic MSU length less than or equal to 1 ATM cell (HLIU)

Register C7H1CTX stores the total percentage of outgoing HLIU traffic through a frame in one transfer period. The traffic has a message length of less than or equal to one ATM cell.

Register C7H1CTX release history

Register C7H1CTX is introduced in STP04.

Associated registers

VALID_FL

VALID_FL indicates the validity of register C7H1CTX. The validation formula range is 0 to 100. The validation formula follows.

C7H1CRX + C7H2CRX + C7H3CRX + C7H4CRX = 100 or 0

C7H1CTX + C7H2CTX + C7H3CTX + C7H4CTX = 100 or 0

Associated logs

None

Extension registers

None

Register C7H2CRX

Percent of incoming traffic MSU length 1 to 2 ATM cells (HLIU)

OM group C7LPP (continued)

Register C7H2CRX stores the total percent of incoming HLIU traffic transmitted through a frame in one transfer period. The traffic has a message length of greater than one ATM cell and less than or equal to two ATM cells.

Register C7H2CRX release history

Register C7H2CRX is introduced in STP04.

Associated registers

VALID_FL

VALID_FL indicates the validity of register C7H2CRX. The validation formula range is 0 to 100. The validation formula follows.

C7H1CRX + C7H2CRX + C7H3CRX + C7H4CRX = 100 or 0

C7H1CTX + C7H2CTX + C7H3CTX + C7H4CTX = 100 or 0

Associated logs

None

Extension registers

None

Register C7H2CTX

Percent of outgoing traffic MSU length 1 to 2 ATM cells (HLIU)

Register C7H2CTX stores the total percent of outgoing HLIU traffic transmitted through a frame in one transfer period. The traffic has a message length of greater than one ATM cell and less than or equal to two ATM cells.

Register C7H2CTX release history

Register C7H2CTX is introduced in STP04.

Associated registers

VALID_FL

VALID_FL indicates the validity of register C7H2CTX. The validation formula range is 0 to 100. The validation formula follows.

C7H1CRX + C7H2CRX + C7H3CRX + C7H4CRX = 100 or 0

C7H1CTX + C7H2CTX + C7H3CTX + C7H4CTX = 100 or 0

Associated logs

None

Extension registers

None

Register C7H3CRX

Percent of incoming traffic MSU length 2 to 3 ATM cells (HLIU)

Register C7H3CRX stores the total percent of incoming HLIU traffic transmitted through a frame in one transfer period. The traffic has a message length of greater than two ATM cells and less than or equal to three ATM cells.

Register C7H3CRX release history

Register C7H3CRX is introduced in STP04.

Associated registers

VALID_FL

VALID_FL indicates the validity of register C7H3CRX. The validation formula range is 0 to 100. The validation formula follows.

C7H1CRX + C7H2CRX + C7H3CRX + C7H4CRX = 100 or 0

C7H1CTX + C7H2CTX + C7H3CTX + C7H4CTX = 100 or 0

Associated logs

None

Extension registers

None

Register C7H3CTX

Percent of outgoing traffic MSU length 2 to 3 ATM cells (HLIU)

Register C7H3CTX stores the total percent of outgoing HLIU traffic transmitted through a frame in one transfer period. The traffic has a message length of greater than two ATM cells and less than or equal to three ATM cells.

Register C7H3CTX release history

Register C7H3CTX is introduced in STP04.

OM group C7LPP (continued)

Associated registers

VALID_FL

VALID_FL indicates the validity of register C7H3CTX. The validation formula range is 0 to 100. The validation formula follows.

C7H1CRX + C7H2CRX + C7H3CRX + C7H4CRX = 100 or 0

C7H1CTX + C7H2CTX + C7H3CTX + C7H4CTX = 100 or 0

Associated logs

None

Extension registers

None

Register C7H4CRX

Percent of incoming traffic MSU length greater than 3 ATM cells (HLIU)

Register C7H4CRX stores the total percent of incoming HLIU traffic transmitted through a frame in one transfer period. The traffic has a message length of greater than three ATM cells.

Register C7H4CRX release history

Register C7H4CRX is introduced in STP04.

Associated registers

VALID_FL

VALID_FL indicates the validity of register C7H4CRX. The validation formula range is 0 to 100. The validation formula follows.

C7H1CRX + C7H2CRX + C7H3CRX + C7H4CRX = 100 or 0

C7H1CTX + C7H2CTX + C7H3CTX + C7H4CTX = 100 or 0

Associated logs

None

Extension registers

None

Register C7H4CTX

Percent of outgoing traffic MSU length greater than 3 ATM cells (HLIU)

Register C7H4CTX stores the total percent of incoming HLIU traffic transmitted through a frame in one transfer period. The traffic has a message length of greater than three ATM cells.

Register C7H4CTX release history

Register C7H4CTX is introduced in STP04.

Associated registers

VALID_FL

VALID_FL indicates the validity of register C7H4CTX. The validation formula range is 0 to 100. The validation formula follows.

C7H1CRX + C7H2CRX + C7H3CRX + C7H4CRX = 100 or 0

C7H1CTX + C7H2CTX + C7H3CTX + C7H4CTX = 100 or 0

Associated logs

None

Extension registers

None

OM group C7LPP2

OM description

CCS7 link peripheral processor 2

OM group C7LPP2 stores link peripheral processor (LPP) information related to message type on Common Channel Signaling 7 (CCS7) links.

C7LPP2 has a traffic level threshold of 60% to 70% processing capacity for both the CCS7 link interface unit (LIU7) and high-speed CCS7 link interface unit (HLIU). C7LPP2 is turned off when the traffic level exceeds the threshold.

OM group C7LPP2 is not reported through the Signaling, Engineering, and Administration System (SEAS).

Release history

OM group C7LPP2 is introduced in STP04.

Registers

The following OM group C7LPP2 registers display on the MAP terminal as follows:

```
VALIDFL2    LPP2NIL1    LP2NIL2         LPP2NIL3
LPPSCRX     LPPSCRX2    LPPSCTX         LPPSCTX2
LPPUPRX     LPPUPRX2    LPPUPTX         LPPUPTX2
LPMTPRX     LPMTPRX2    LPMTPTX         LPMTPTX2
```

Group structure

OM group C7LPP2 provides 16 tuples.

Key field:
Controlling entity (MS or LIM)

Info field:
Card number for the MS controller or LIM number for the LIM controller

Associated OM groups

OM group C7LPP

Registers VALIDFL2, LPPSCRX, and LPPSCRX2 are in OM group C7LPP2 because OM group C7LPP has the maximum number of registers. Register

VALIDFL2 indicates the validity of the registers in C7LPP2, and registers LPPSCRX and LPPSCRX2 store the LPP information for message type SCCP, User Part,, or SNM.

Associated functional groups

The following functional group is associated with OM group C7LPP2:

- HLIU

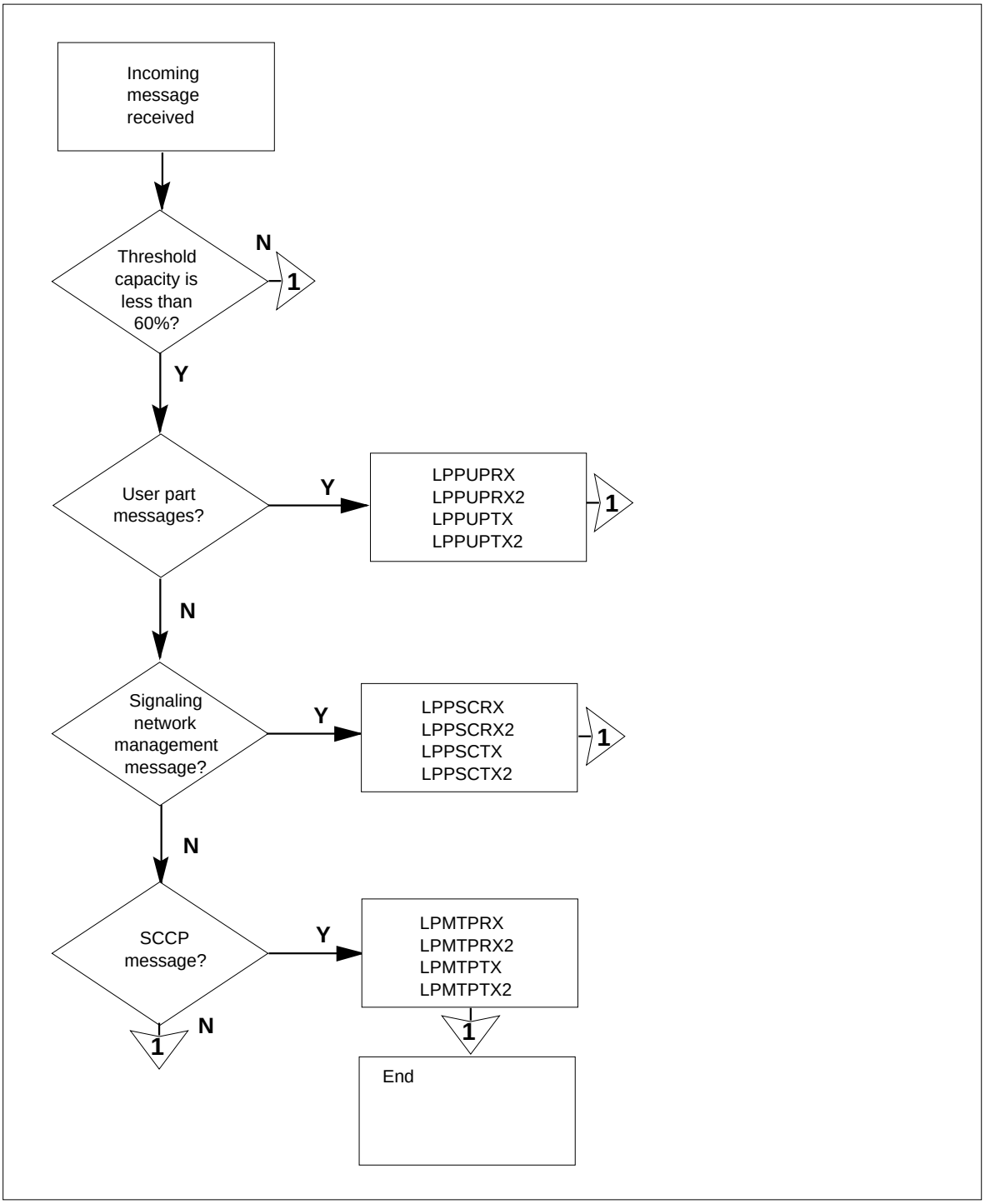
Associated functionality codes

The functionality code associated with OM group C7LPP2 is shown in the following table.

Functionality	Code
High-speed link interface unit (HLIU)	STPE006

OM group C7LPP2 (continued)

OM group C7LPP2 registers



Register VALIDFL2

Validity of OM data in table C7LPP2

Register VALIDFL2 indicates the validity of all registers within OM group C7LPP2.

Register VALIDFL2 release history

Register VALIDFL2 is introduced in STP04.

Associated registers

All registers in table C7LPP2 are associated with register VALIDFL2. VALIDFL2 indicates the validity of each register. The validation formula is 0 for invalid or 1 for valid.

Associated logs

None

Extension registers

None

Register LPP2NIL1

LPP nil register 1 for OM group C7LPP2

Register LPP2NIL1 is a filler to align registers in OM group C7LPP2.

Register LPP2NIL1 release history

Register LPP2NIL1 is introduced in STP04.

Associated registers

None

Associated logs

None

Extension registers

None

Register LP2NIL2

LPP nil register 2 for OM group C7LPP2

Register LP2NIL2 is a filler to align registers in OM group C7LPP2.

OM group C7LPP2 (continued)

Register LP2NIL2 release history

Register LP2NIL2 is introduced in STP04.

Associated registers

None

Associated logs

None

Extension registers

None

Register LPP2NIL3

LPP nil register 3 for OM group C7LPP2

Register LPP2NIL3 is a filler to align registers in OM group C7LPP2.

Register LPP2NIL3 release history

Register LPP2NIL3 is introduced in STP04.

Associated registers

None

Associated logs

None

Extension registers

None

Register LPPSCRX

Incoming SCCP accumulated traffic

Register LPPSCRX stores the number of incoming signaling connection control part (SCCP) messages transmitted through a frame in one transfer period. If the register is longer than the size of the integer, the data is stored in extension register LPPSCRX2.

Register LPPSCRX release history

Register LPPSCRX is introduced in STP04.

Associated registers

VALIDFL2

VALIDFL2 indicates the validity of register LPPSCRX.

Associated logs

None

Extension registers

LPPSCRX2

Register LPPSCTX

Outgoing SCCP accumulated traffic

Register LPPSCTX stores the number of outgoing SCCP messages transmitted through a frame in one transfer period. If the register is longer than the size of the integer, the data is stored in extension register LPPSCTX2.

Register LPPSCTX release history

Register LPPSCTX is introduced in STP04.

Associated registers

VALIDFL2

VALIDFL2 indicates the validity of register LPPSCTX.

Associated logs

None

Extension registers

LPPSCTX2

Register LPPUPRX

Incoming user part accumulated traffic

Register LPPUPRX stores the number of incoming user part messages transmitted through a frame in one transfer period. If the register is longer than the size of the integer, the data is stored in extension register LPPUPRX2.

Register LPPUPRX release history

Register LPPUPRX is introduced in STP04.

Associated registers

VALIDFL2

VALIDFL2 indicates the validity of register LPPUPRX.

OM group C7LPP2 (continued)

Associated logs

None

Extension registers

LPPUPRX2

Register LPPUPTX

Outgoing user part accumulated traffic

Register LPPUPRX stores the number of outgoing user part messages transmitted through a frame in one transfer period. If the register is longer than the size of the integer, the data is stored in extension register LPPUPTX2.

Register LPPUPTX release history

Register LPPUPTX is introduced in STP04.

Associated registers

VALIDFL2

VALIDFL2 indicates the validity of register LPPUPTX.

Associated logs

None

Extension registers

LPPUPTX2

Register LPMTPRX

Incoming MTP accumulated traffic

Register LPMTPRX stores the number of incoming signaling network management (SNM) messages transmitted through a frame in one transfer period. If the register is longer than the size of the integer, the data is stored in extension register LPMTPRX2.

Register LPMTPRX release history

Register LPMTPRX is introduced in STP04.

Associated registers

VALIDFL2

VALIDFL2 indicates the validity of register LPMTPRX.

Associated logs

None

Extension registers

LPMTPRX2

Register LPMTPTX

Outgoing MTP accumulated traffic

Register LPMTPTX stores the number of outgoing SNM messages transmitted through a frame in one transfer period. If the register is longer than the size of the integer, the data is stored in extension register LPMTPTX2.

Register LPMTPTX release history

Register LPMTPTX is introduced in STP04.

Associated registers

VALIDFL2

VALIDFL2 indicates the validity of register LPMTPRX.

Associated logs

None

Extension registers

LPMTPTX2

OM group C7MTP

OM description

CCS7 message transfer part (C7MTP)

The OM group C7MTP counts message signal units (MSU) that a Common Channel Signaling 7 (CCS7) message transfer part (MTP) discards. The OM group C7MTP is part of a signal transfer point (STP). Two registers count discarded MSUs. The system discards MSUs because the system cannot determine the type of message. The system also discards MSUs because the destination point code is not in the routing tables for that office.

Use OM group C7MTP in the Signaling Engineering Administration System (SEAS) for CCS7 offices. Data in the C7MTP transfers to the signaling engineering administration controller (SEAC) for use in SEAS. For the SEAC to collect the correct data, Table OMACC defines three classes. Table OMACC must define three classes to accumulate the required 30-min, 60-min and 24-h collection periods.

The Group Structure section describes how to modify tables OFCOPT and OFCENG. The SEAC requires 5-min reports.

Release history

The OM group C7MTP was introduced in BCS28.

BCS36

Register measurements apply when the user defines the class as active. When users define the class as holding, registers C7PHDYNT, C7PHDYWT, C7XSDYNT, and C7XSDYWT provide totals. The registers do not provide averages.

BCS32

The following registers were introduced:

- C7XSDYWT
- C7XSDYNT
- C7PHDYWT
- C7PHDYNT
- C7GTT95
- C7NGTT95
- C7SMPWT1
- C7SMPWT2

- C7SMPNT1
- C7SMPNT2

Registers

The OM group C7MTP registers appear on the MAP terminal as follows:

```
C7MSIDPC    C7MSISIO    C7XSDYWT    C7XSDYNT
C7PHDYWT    C7PHDYNT    C7GTT95     C7NGTT95
C7SMPWT1    C7SMPWT2    C7SMPNT1    C7SMPNT2
```

Group structure

The OM group C7MTP provides one tuple for each STP.

Key field:
There is no key field.

Info field:
There is no information field.

The SEAC OM collection requires the following table modifications:

- Add SEAS_30M, SEAS_60M, and SEAS_24H to table OMACC.
- Add group C7MTP and fields C7MSIDPC and C7MSISIO to each of the three classes.
- Set OMXFR to X15 in table OFCENG.
- Set OMHISTORYON to Y in table OFCOPT.

Associated OM groups

Use the OM groups C7LINK1, C7LINK2, C7LINK3, and C7SCCP in SEAS to provide performance measurements for CCS7 offices.

Associated functional groups

The following functional groups associate with OM group C7MTP:

- Signaling Engineering Administration System (SEAS)
- Signaling engineering administration controller (SEAC)
- CCS7
- Signal Transfer Point (STP)

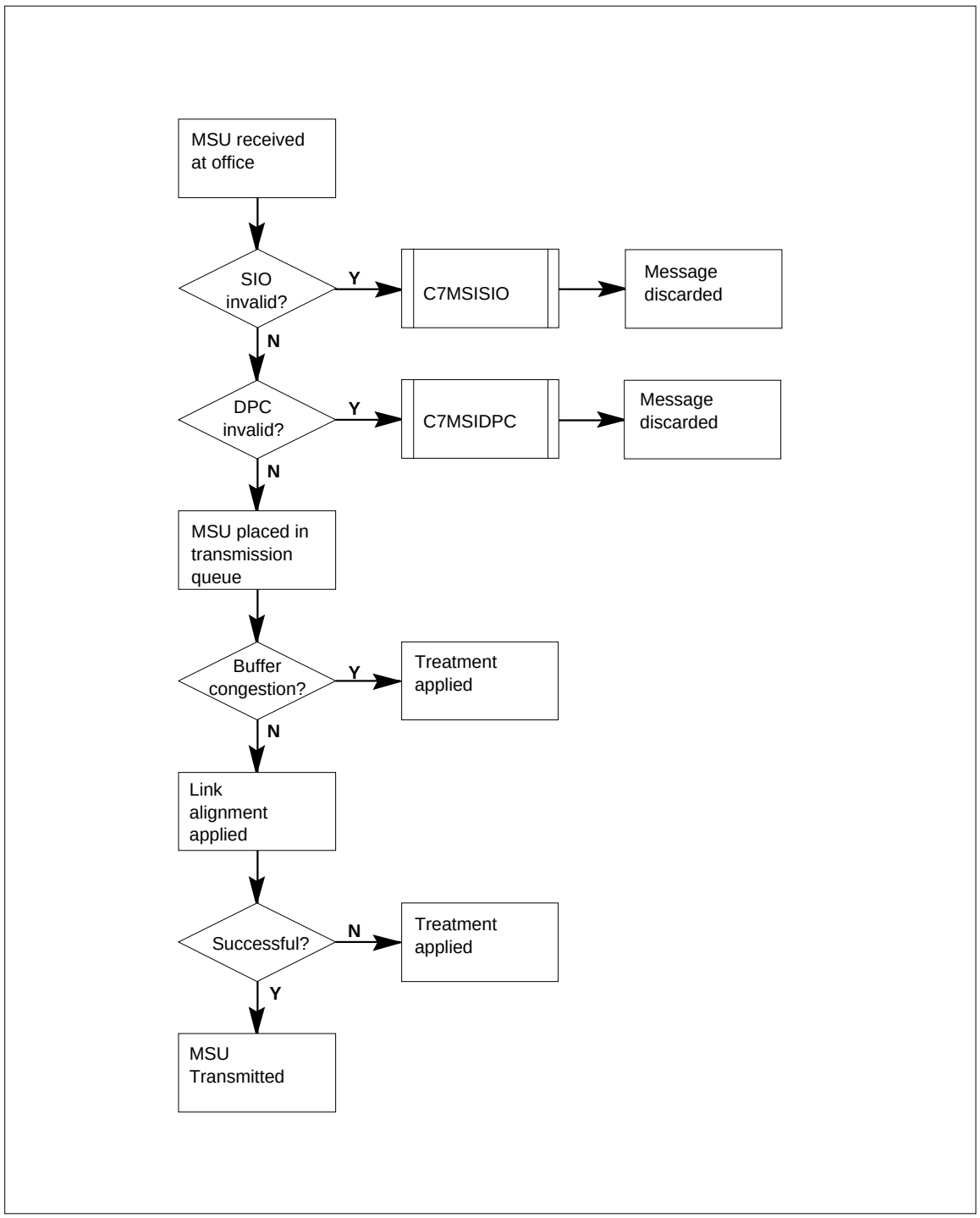
OM group C7MTP (continued)

Associated functionality codes

The functionality codes for OM group C7MTP appear in the following table.

Functionality	Code
STP SEAS	NTX835AA
STP Operations	NTX833AA

OM group C7MTP registers



OM group C7MTP (continued)

Register C7GTT95

Number of 95th percentile tests that failed for MSUs that require global title translation (GTT)

Register C7GTT95 counts the number of MSUs sampled that have processing handling delays. These delays are above the 95th-percentile requirement for MSUs that have GTT.

The processing handling delay is the interval that starts when the STP receives the last bit of a message. The STP receives this message from the incoming signaling link. The interval ends when the message reaches the output signaling link control buffer.

Register C7GTT95 release history

Register C7GTT95 was introduced in BCS32.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Register C7MSIDPC

CCS7 MSU invalid destination point code (C7MSIDPC)

Register C7MSIDPC counts MSUs that the system discards at an STP. The system discards MSUs because the destination point code (DPC) is not in the datafill of the routing tables for the node.

Register C7MSIDPC release history

Register C7MSIDPC was introduced in BCS28.

Associated registers

Register C7MSIDPC associates with MSINVDPC in SEAS.

Associated logs

There are no associated logs.

Register C7MSISIO

CCS7 MSU invalid service information octet (C7MSISIO)

Register C7MSISIO counts MSUs that the system discards at an STP. The system discards MSUs because the service information octet (SIO) cannot determine the type of message.

Register C7MSISIO release history

Register C7MSISIO was introduced in BCS28.

Associated registers

Register C7MSISIO corresponds to MSINVSIO in SEAS.

Associated logs

There are no associated logs.

Register C7NGTT95

Number of 95th percentile tests that failed for MSUs that do not require global title translation (GTT)

Register C7NGTT95 counts the number of MSUs sampled that have processing handling delays. These delalys are above the 95th-percentile requirement for MSUs that do not have GTT.

Register C7NGTT95 release history

Register C7NGTT95 was introduced in BCS32.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Register CYPHDYNT

Average processor handling delay for MSUs that require global title translation (C7PHDYNT)

Register C7PHDYNT records the average processing handling delay for MSUs that do not require global title translation (GTT).

The MSU sampling rate is once every 10 seconds. The register reports the average processing handling delay in milliseconds.

Register CYPHDYNT release history

The register CYPHDYNT was introduced in BCS32.

OM group C7MTP (continued)

BCS36

Register measurements apply when the user defines class as active. When users define the class as holding, register C7PHDYNT provides totals. The register does not provide averages.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Register C7PHDYWT

Average processor handling delay for MSUs that require global title translation (GTT)

The register C7PHDYWT records the average processing handling delay for MSUs that require GTT.

The MSU sampling rate is one time every 10 s. The register reports the average processing handling delay in milliseconds.

Register CYPHDYWT release history

Register CYPHDYWT was introduced in BCS32.

BCS36

Register measurements apply when the user defines the class as active. When users define the class as holding, register C7PHDYWT provides totals. This register does not provide averages.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Register C7SMPNT1

Number of MSUs sampled for cross-STP and processor handling delay measurements that did not require global title translation (C7SMPNT1)

Register C7SMPNT1 records the number of MSUs sampled for cross-STP and processor handling delay measurements. These sampled MSUs do not have GTT.

Cross-STP delay is the interval that starts when the STP receives the last bit of a message. The STP receives this message from the incoming signaling link. The interval ends when the STP transmits the last bit of the message on the outgoing signaling link.

Register C7SMPNT1 release history

Register C7SMPNT1 was introduced in BCS32

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension Registers

Register C7SMPNT2 is an extension register.

Register C7SMPWT1

Number of MSUs sampled for cross-STP and processor handling delay measurements that require global title translation (C7SMWT1)

Register C7SMPWT1 records the number of MSUs sampled for average cross-STP and processor handling delay measurements. These sampled MSUs have GTT.

Register C7SMPWT1 release history

Register C7SMPWT1 was introduced in BCS32.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

Register C7SMPWT2 is an extension register.

Register C7XSDYNT

Average cross-STP delay for MSUs that do not require global title translation (C7XSDYNT)

Register C7XSDYNT records the average cross-STP delay for MSUs that do not have GTT.

OM group C7MTP (end)

The MSU sampling rate is one time every 10 s. The register reports the average cross-STP delay in milliseconds.

Register C7XSDYNT release history

Register C7XSDYNT was introduced in BCS32.

BCS36

Register measurements apply when the user defines the class as active. When users define the class as holding, register C7XSDYNT provides totals. This register does not provide averages.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Register C7XSDYWT

Average cross-STP delay for MSUs that require global title translation (C7XSDYWT)

The register C7XSDYWT records the average cross-STP delay for MSUs that have GTT.

The MSU sampling rate is one time every 10 s. The register reports average cross-STP delay in milliseconds.

Register C7XSDYWT release history

Register C7XSDYWT was introduced in BCS32.

BCS36

Register measurements apply when the user defines the class as active. When users define the class as holding, register C7XSDYWT provides totals. This register does not provide averages.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

OM group C7MTPRES

OM description

MTP Restart (C7MTPRES)

The OM group C7MTPRES counts the number of Message Transfer Part (MTP) Restart procedures initiated in the previous hour.

The OM group C7MTPRES register counts MTP Restarts for the following procedures:

- partial restart procedure
- full restart procedure
- adjacent restart procedure
- unexpected traffic restart message (TRM) procedure

Release history

The OM group C7MTPRES was introduced in TL05 and STP03.

Registers

The OM group C7MTPRES registers appear on the MAP terminal as follows:

```
RESPARCT      RESFULCT      RESADJCT      RESUNXCT
```

Group structure

The OM group C7MTPRES

Key field:
There is no key field.

Info field:
There is no information field.

Associated OM groups

There are no associated OM groups.

OM group C7MTPRES (continued)

Associated functional groups

The following functional groups associate with OM group C7MTPRES:

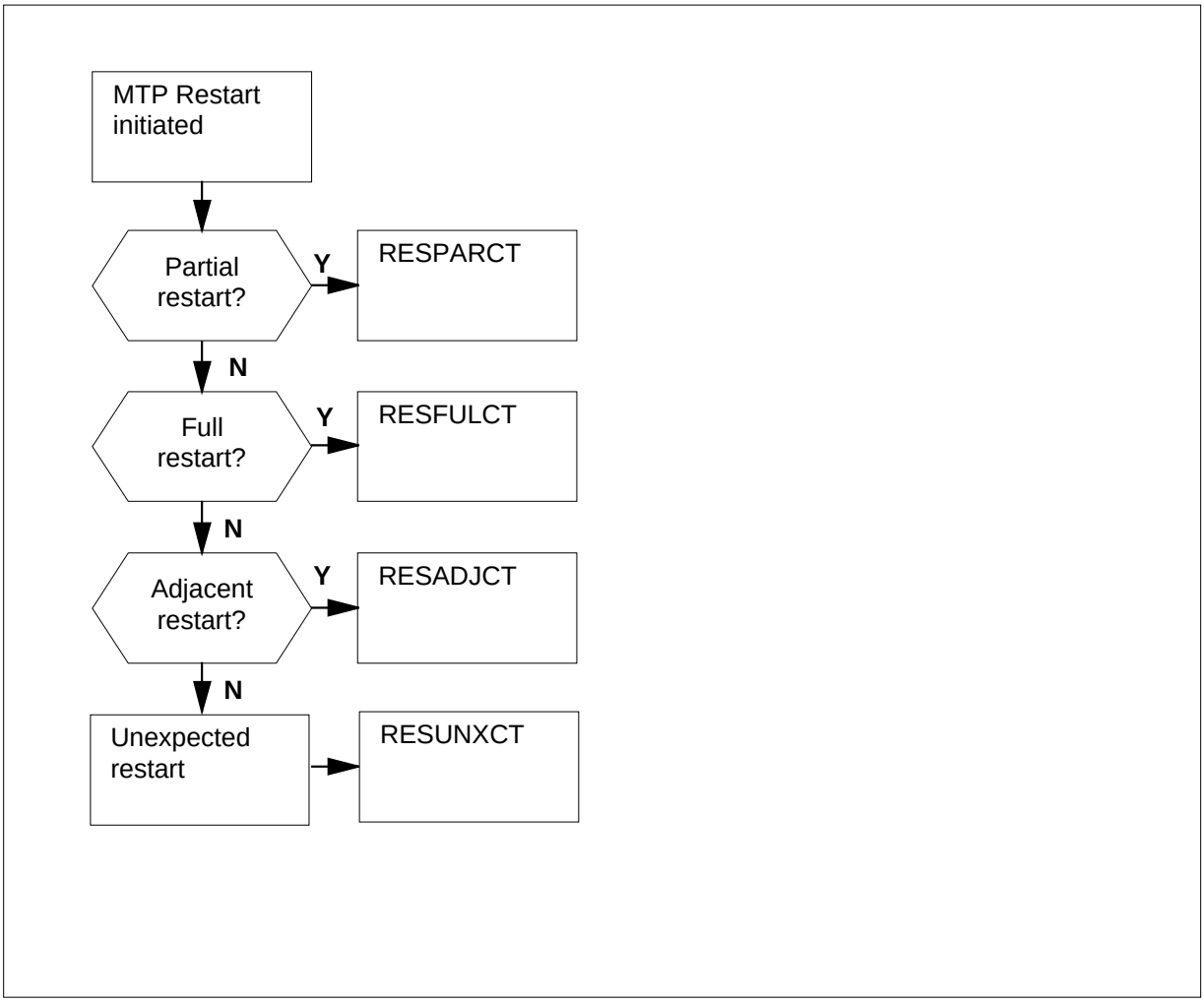
- Common Channel Signaling 7 (CCS7)
- Signaling Transfer Point (STP)
- Service Switching Point (SSP)

Associated functionality codes

The functionality codes for OM group C7MTPRES appear in the following table.

Functionality	Code
STP SEAS	STPS0001
STP Operations	STP0001

OM group C7MTPRES registers



Register RESADJCT

restart adjacent count (RESADJCT)

Register RESADJCT release history

Register RESADJCT was introduced in TL05 and STP03.

Register RESADJCT counts the number of adjacent restarts that the system initiated in the last hour.

Associated registers

There are no associated registers.

OM group C7MTPRES (continued)

Associated logs

The system generates log CCS145 when the system initiates an adjacent restart procedure.

Extension registers

There are no extension registers.

Register RESFULCT

restart full count (RESFULCT)

Register RESFULCT release history

Register RESFULCT was introduced in TL05 and STP03.

Register RESFULCT counts the number of full restarts that the system initiated in the last hour.

Associated registers

There are no associated registers.

Associated logs

The system generates log CCS145 when the system initiates a full restart procedure.

Extension registers

There are no extension registers.

Register RESPARCT

restart partial count (RESPARCT)

Register RESPARCT release history

Register RESPARCT was introduced in TL05 and STP03.

Register RESPARCT counts the number of partial restarts that the system initiated in the last hour.

Associated registers

There are no associated registers.

Associated logs

The system generates log CCS145 when the system initiates a partial restart procedure.

Extension registers

There are no extension registers.

Register RESUNXCT

restart unexpected TRM count (RESUNXCT)

Register RESUNXCT release history

Register RESUNXCT was introduced in TL05 and STP03.

Register RESUNXCT counts the number of unexpected TRM restarts that the system initiated in the last hour.

Associated registers

There are no associated registers.

Associated logs

The system generates log CCS145 when the system initiates an unexpected restart procedure.

Extension registers

There are no extension registers.

OM group C7ROUTE

OM description

CCS7 route (C7ROUTE)

The OM group C7ROUTE describes the performance and use of Common Channel Signaling 7 (CCS7) routes.

Message routing is based on the address and link selector information that signaling messages provide. This information sets out a routeset. The routeset describes all the signaling paths or routes, linksets, and links in the linkset. The system uses these paths and links to route this message to a destination.

Routeset management determines how stable a route is to transmit messages. If acceptable routing is available, the system selects an in-service link from the linkset. If the route not acceptable, the system examines other routes. The system examines other routes until the system finds an in-service link, or until the system cannot finds other routes.

Each route in a routeset has a transfer state that describes the ability of the signaling network to carry messages to the destination. The following transfer states occur:

- transfer allowed (TFA), routing is available
- transfer prohibited (TFP), routing is not available
- transfer restricted (TFR), routing is available at a lower level of service

> ***Note:*** The Japan Public Network (JPN) only handles TFA and TFP messages. The JPN does not accept TFR messages.

The TFA, TFP, and TFR are the result of forced rerouting or controlled rerouting. When a route to a destination fails, the system reroutes a message to another available route. An indication that a route failed arrives from the remote signaling transfer point of a linkset as a TFP signal. This procedure is forced rerouting. The system determines another route and diverts traffic to that route.

When the system restores a route, messages return to that route from the other route. This procedure is controlled rerouting. An indication of a restored route arrives from the remote signaling transfer point as a TFA signal. The system performs controlled rerouting when a route is restricted because of a lower level of service. A TFR indicates this condition. Controlled rerouting buffers the following traffic into buffers that are not permanent. The system determines other routes. Traffic clears out of the old route. The system sends the buffered traffic to the new route.

Remote congestion information is also received over a route. The system informs the user parts of the congestion level. Transfer controlled (TFC) messages on separate routes report remote congestion. Congestion on one route in a routeset indicates congestion on all routes. An indication of this congestion occurs because the system distributes traffic between signaling transfer points (STP). To alleviate route congestion, the system sends a routeset congestion (RSC) test message on one of the routes. This message has a priority of one less than the remote congestion value. If this message does not generate another TFC from a remote location, the system assumes that congestion decreased.

The OM group C7ROUTE reports for the common channel signalling routes. These routes associate with the first 1024 routesets in the C7RTESET table. The OM group C7ROUTE2 reports the last 1023 routesets.

Note: The Japan public network (JPN) uses a different procedure to clear route congestion than the procedure in the preceding paragraph. The JPN does not send RSC test messages. When the JPN receives route congestion information in a TFC message, the system sets a timer. After 90 s the congestion condition clears automatically.

Release history

The OM group C7ROUTE was introduced in BCS20.

CSP04

The OM group C7ROUTE changed to show that this group reports on the first 1024 routesets in the C7RTESET table.

BCS35

For the Japan public network, the system increases registers C7TFA and C7TFP. The system increases these registers one time for each route that a destination point code (DPC) identifies. The DPC is in the TFA or the TFP messages. This increase occurs for affected route states.

A single DPC can identify more than one route. The TFA and the TFP messages can have a maximum of 13 DPCs. The DPCs identify one or more routes.

Registers C7XTFA, C7XTFP, and C7XTFR were introduced to include counts for TFA, TFR, and TFP messages. A CCS7 node receives these messages. This node is from remote signaling points entered as partial-point-code (PPC) routes. These registers only increase if enhanced cluster routing (ECR) is active. The PPC routing, also known as cluster routing, requires knowledge of only part of the point code.

OM group C7ROUTE (continued)

BCS33

You can convert registers C7RTUNAU from hundred call seconds (CCS) to deci-erlangs before the count appears. Use the OMSHOW command on the ACTIVE class.

BCS30

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

BCS21

Registers C7TFC0, C7TFC1, C7TFC2, C7TFC3, C7TFA, C7TFR, C7TFP, C7CNTRER, and C7FRCRER activate.

BCS20

Registers C7TFC0, C7TFC1, C7TFC2, C7TFC3, C7TFA, C7TFR, C7TFP, C7CNTRER, and C7FRCRER zeroed.

Registers

The OM group C7ROUTE registers appear on the MAP terminal as follows:

```
C7RTUNAU    C7TFA       C7TFR       C7TFP
C7TFC0      C7TFC1      C7TFC2      C7TFC3
C7CNTRER    C7FRCRER    C7XTFA      C7XTFR
C7XTFP
```

Group structure

The OM group C7ROUTE provides one tuple for each key.

Key field:
C7_ROUTESET-NUMBER, a number in the range 0 to 1024. This number is an index in table C7RTESET

Info field:
C7ROUTE_OMINFO

Associated OM groups

The OM groups C7LINK1 and C7LINK2 track link availability and link use.

The OM group C7LKSET tracks the performance and use of a linkset.

The OM group C7RTESET tracks routeset availability.

The OM group C7ROUTE2 associates with the OM group C7ROUTE. The OM group C7ROUTE collects the same information as the C7ROUTE group. The OM group C7ROUTE2 reports on the last 1023 routesets.

Associated functional groups

There are no associated functional groups.

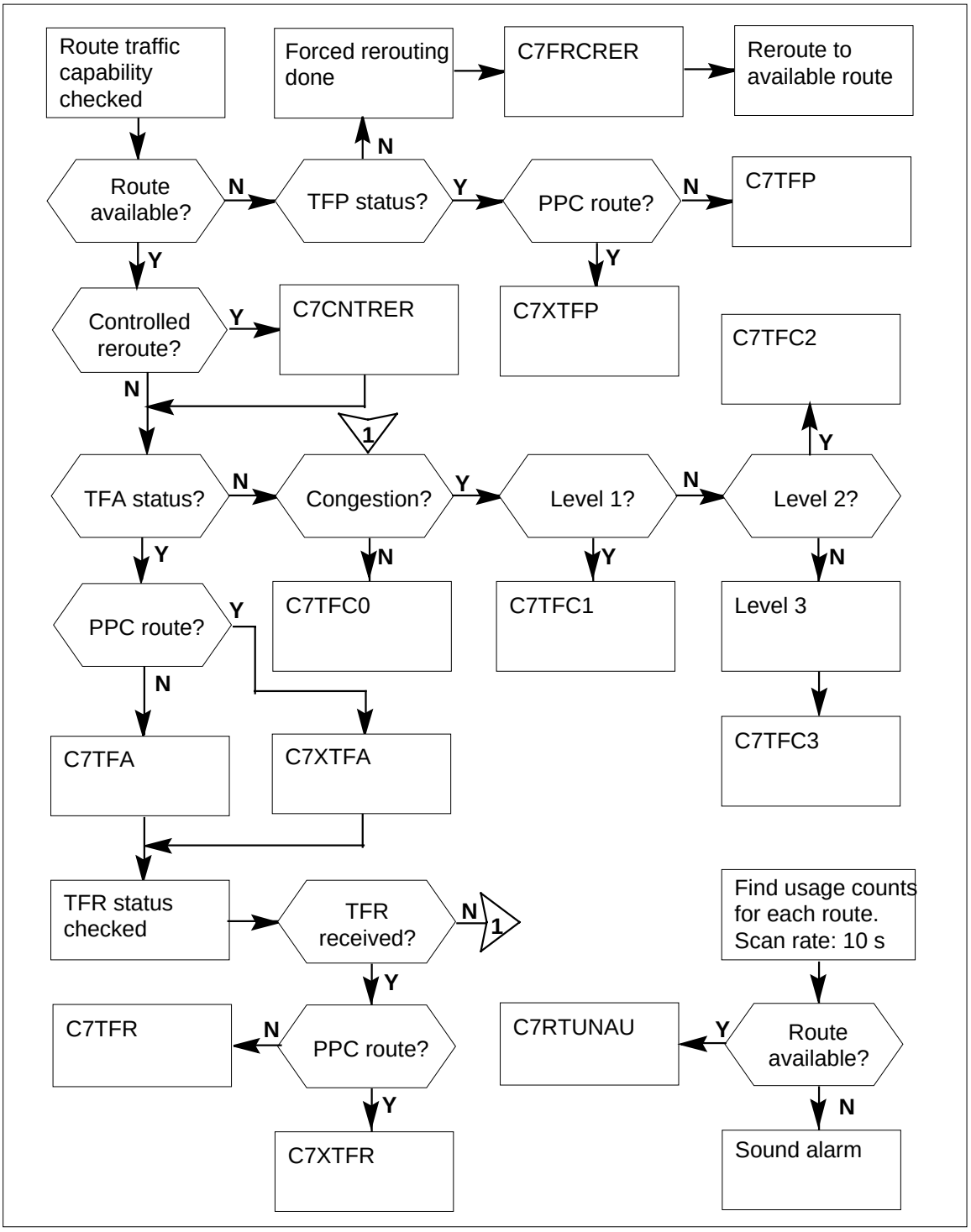
Associated functionality codes

The functionality codes for OM group C7ROUTE appear in the following table.

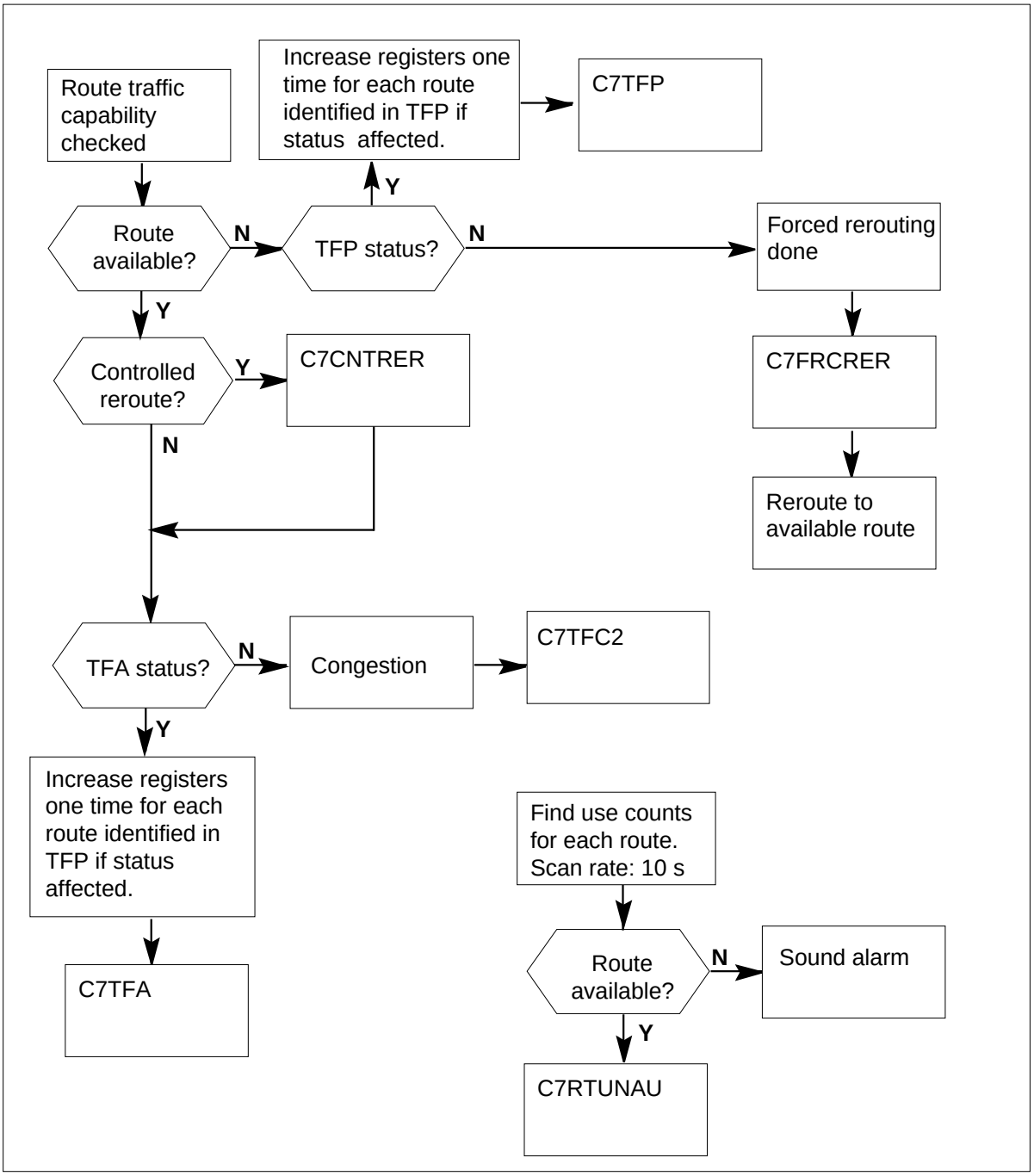
Functionality	Code
Remote Line Module	NTX023AB
CCS7 MTP/SCCP	NTX041AB
International Switching Center—Basic	NTX300AA

OM group C7ROUTE (continued)

OM group C7ROUTE registers



OM group C7ROUTE registers for Japan public network



Register C7CNTRER

CCS7 controlled rerouting (C7CNTRER)

OM group C7ROUTE (continued)

Register C7CNTRER counts controlled rerouting procedures for a route. Controlled rerouting indicates that a route from which the system diverts traffic has traffic restored. The system diverted messages to this route. This register is counted in central control (CC).

Register C7CNTRER release history

Register C7CNTRER was introduced in BCS20.

BCS35

Register also counts for JPN.

BCS21

The register was activated.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register C7FRCRER

CCS7 forced rerouting (C7FRCRER)

Register C7FRCRER counts forced rerouting procedures undertaken for a route.

When a route to a destination fails, the system reroutes messages to alternate available routes. A transfer prohibited status (TFP) message arrives to indicate a failed route. The route is not available to transmit messages. An alarm occurs at the routeset level.

This register is counted in central control (CC).

Register C7FRCRER release history

Register C7FRCRER was introduced in BCS20.

BCS35

Register also counts for JPN.

BCS21

Register activated.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register C7RTUNAU

CCS7 route unavailable (C7RTUNAU)

Register C7RTUNAU is a usage register. The system scans the route every 10 s, and C7RTUNAU records if the route transmits messages. If one of the routes of the routeset is not able to deliver messages, an alarm occurs.

Register increases in central control (CC).

Register C7RTUNAU release history

Register C7RTUNAU was introduced in BCS20.

BCS35

Register also counts for JPN.

BCS33

When office parameter OMINERLANGS is Y, use the OMSHOW command on the ACTIVE class to convert the use count. Use the OMSHOW command to convert the use count from CCS to deci-erlangs before the usage counts appear. The value held in the active registers does not change and remains in CCS.

BCS30

Software change introduced to provide use counts in CCS or deci-erlangs.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

OM group C7ROUTE (continued)

Register C7TFA

CCS7 transfer allowed (C7TFA)

Register C7TFA counts transfer allowed (TFA) status messages received for a route.

A TFA message indicates that the CCS7 network has a good grade of service for the specified route. One destination point code (DPC) in the routing label specifies this route.

The register is counted in central control (CC).

Register C7TFA release history

Register C7TFA was introduced in BCS20 and zeroed.

BCS35

For the Japan public network, registers C7TFA and C7TFP increase one time for each affected route. A destination point code (DPC) identifies the affected route. The DPC uses TFA or the TFP messages to identify the route.

A single DPC can identify more than one route. The TFA and the TFP messages can have up to 13 DPCs that identify one or more routes. For example, a TFA message can contain five DPCs. The first three DPCs identify one route each. The last three DPCs identify 10 routes each. For this message the register C7TFA increases 33 times if the status of each route changes.

Registers C7XTFA, C7XTFP, and C7XTFR were introduced to include counts for TFA, TFR, and TFP messages. A CCS7 node received these messages. These message were from remote signaling points entered as partial-point-code (PPC) routes. These registers increase if enhanced cluster routing (ECR) is active.

BCS21

The register was activated.

Associated registers

There are no associated registers.

Associated logs

The system generates CCS166 when a CCS7 route receives the TFA signal from the network.

Extension registers

There are no extension registers.

Register C7TFC0

CCS7 transfer controlled level 0 (zero) (C7TFC0)

Register C7TFC0 counts transfer controlled level 0 (zero) congestion status messages received for a specified route. This message indicates that congestion on the route is not present.

This register is counted in central control (CC).

Register C7TFC0 release history

Register C7TFC0 was introduced in BCS20.

BCS21

Register activated.

Associated registers

Register C7TFC1 counts transfer controlled level 1 congestion status messages received for a route.

Register C7TFC2 counts transfer controlled level 2 congestion status messages received for a route.

Register C7TFC3 counts transfer controlled level 3 congestion status messages received for a route.

Associated logs

The system generates CCS172 when the system receives a transfer controlled signal. An increase or a decrease in the congestion level of a routeset can cause the system to generate CCS172.

Extension registers

There are no extension registers.

Register C7TFC1

CCS7 transfer controlled level 1 (C7TFC1)

Register C7TFC1 counts transfer controlled level 1 congestion status messages received for a specified route. This message indicates that route congestion reaches the threshold set for level 1. User parts stop the transmission of messages of priority 0 (zero). A routeset major alarm occurs.

This register is counted in central control (CC).

OM group C7ROUTE (continued)

Register C7TFC1 release history

Register C7TFC1 was introduced in BCS20.

BCS21

The register was activated.

Associated registers

Register C7TFC0 counts transfer controlled level 0 (zero) congestion status messages received for a route.

Register C7TFC2 counts transfer controlled level 2 congestion status messages received for a route.

Register C7TFC3 counts transfer controlled level 3 congestion status messages received for a route.

Associated logs

The system generates CCS172 when the system receives a transfer controlled signal. An increase or a decrease in the congestion level of a routeset can cause the system to generate CCS172.

Extension registers

There are no extension registers

Register C7TFC2

CCS7 transfer controlled level 2 (C7TFC2)

Register C7TFC2 counts transfer controlled level 2 congestion status messages received for a specified route. This message indicates that route congestion reaches the threshold set for level 2. User parts stop the transmission of messages of priority 0 (zero) and 1. A routeset major alarm occurs.

This register is counted in central control (CC).

Register C7TFC2 release history

Register C7TFC2 was introduced in BCS20.

BCS35

The register also counts for JPN.

BCS21

Register activated.

Associated registers

Register C7TFC0 counts transfer controlled level 0 (zero) congestion status messages received for a route.

Register C7TFC1 counts transfer controlled level 1 congestion messages received for this route.

Register C7TFC3 counts transfer controlled level 3 congestion status messages received for this route.

Associated logs

The system generates CCS172 when the system receives a transfer controlled signal. An increase or a decrease in the congestion level of a routeset can cause the system to generate CCS172.

Extension registers

There are no extension registers.

Register C7TFC3

CCS7 transfer controlled level 3 (C7TFC3)

Register C7TFC3 counts transfer controlled level 3 congestion status messages received for a specifed route. This message indicates that route congestion reached the threshold set for level 3. User parts stop the transmission of messages of priority 0 (zero), 1, and 2. A routeset major alarm occurs.

This register is counted in central control (CC).

Register C7TFC3 release history

Register C7TFC3 was introduced in BCS20.

BCS21

The register was activated.

Associated registers

The C7TFC0 counts transfer controlled level 0 (zero) congestion status messages received for a route.

Register C7TFC1 counts transfer controlled level 1 congestion status messages received for a route.

Register C7TFC2 counts transfer controlled level 2 congestion status messages received for a route.

OM group C7ROUTE (continued)

Associated logs

The system generates CCS173 when the transmission buffer of a CCS7 link congests.

Extension registers

There are no extension registers.

Register C7TFP

CCS7 transfer prohibited (C7TFP)

Register C7TFP counts transfer prohibited (TFP) status messages received for a route. This message indicates that the CCS7 network cannot deliver messages on this route to the destination point code (DPC). The routing label specifies the DPC. A routeset alarm occurs.

This register is counted in central control (CC).

Register C7TFP release history

Register C7TFP was introduced in BCS20.

BCS35

For the Japan public network, registers C7TFA and C7TFP increase once for each affected route that a destination point code (DPC) identifies. The DPC identifies the route in TFA or the TFP messages.

A DPC can identify more than one route. The TFA and the TFP messages can have up to 13 DPCs. For example, a TFP message can contain five DPCs. The first three DPCs identify one route each and the last three identify 10 routes each. For this message the register C7TFA increases 33 times if the status of each route has changes.

Registers C7XTFA, C7XTFP, and C7XTFR were introduced to include counts for TFA, TFR and TFP messages that a CCS7 node receives. The CCS7 receives messages from remote signaling points entered as partial-point-code (PPC) routes. These registers increase if enhanced cluster routing (ECR) is active.

BCS21

The register was activated.

Associated registers

There are no associated registers.

Associated logs

The system generates CCS168 when a CCS7 route receives the transfer prohibited signal from the network.

Extension registers

There are no extension registers.

Register C7TFR

CCS7 transfer restricted (C7TFR)

Register C7TFR counts transfer restricted status messages received for a route. This message indicates that the CCS7 network offers degraded service for the route. The system delivers message, but not as quickly as normal. A major alarm occurs.

This register is counted in central control (CC).

Register C7TFR release history

Register C7TFR was introduced in BCS20.

BCS35

Register C7XTFA, C7XTFP and C7XTFR were introduced to include counts for TFA, TFR and TFP messages received by a CCS7 node. The CCS7 node receives those messages from remote signaling points entered as partial-point-code (PPC) routes. These registers increase if enhanced cluster routing (ECR) is active.

BCS21

The register was activated.

Associated registers

There are no associated registers.

Associated logs

The system generates CCS167 when a CCS7 route receives the transfer restricted signal from the network.

Extension registers

There are no extension registers.

Register C7XTFA

CCS7 exception-list transfer allowed (C7XTFA)

OM group C7ROUTE (continued)

Register C7XTFA counts the number of transfer-allowed (TFA) messages received for partial-point-code routes. This register increases if enhanced cluster routing (ECR) is active.

A TFA message indicates that the CCS7 network has a satisfactory grade of service for this specified route. One destination point code (DPC) in the routing label specifies this route.

The register is counted in central control (CC).

Register C7XTFA release history

Register C7XTFA was introduced in BCS35.

Associated registers

There are no associated registers.

Associated logs

The system generates CCS180 when a CCS7 partial-point-code route receives the TFA signal from the network.

Extension registers

There are no extension registers.

Register C7XTFP

CCS7 exception-list transfer prohibited (C7XTFP)

Register C7XTFP counts the number of transfer-prohibited (TFP) messages received for partial-point-code routes. This message indicates that the CCS7 network cannot deliver messages on this route to the destination point code (DPC). The routing label specifies the DPC. A routeset alarm occurs.

This register is counted in central control (CC).

Register C7XTFP release history

Register C7XTFP was introduced in BCS35.

Associated registers

There are no associated registers.

Associated logs

The system generates CCS182 when a CCS7 partial-point-code route receives the transfer prohibited signal from the network.

Extension registers

There are no extension registers.

Register C7XTFR

CCS7 exception-list transfer restricted (C7XTFR)

Register C7XTFR counts the number of transfer-restricted messages received for partial-point-code routes. This message indicates that the CCS7 network offers degraded service for the route. The system delivers messages but not as quickly as normal. A major alarm occurs.

This register is counted in central control (CC).

Register C7XTFR release history

Register C7XTFR was introduced in BCS35.

Associated registers

There are no associated registers.

Associated logs

The system generates CCS181 when a CCS7 partial-point-code route receives the transfer restricted signal from the network.

Extension registers

There are no extension registers.

OM group C7ROUTE2

OM description

CCS7 route (C7ROUTE2)

The OM group C7ROUTE2 describes the performance and use of Common Channel Signaling 7 (CCS7) routes. Refer to OM group C7ROUTE for details of message routing.

The OM group C7ROUTE2 is responsible for reporting on half of the common channel signaling routes. These routes associate with the last 1023 routesets in table C7RTESET at a service switching point (SSP) office.

This OM group only applies to offices that require entries for more than 1023 routesets.

Release history

CSP04

OM group C7ROUTE2 introduced and activated.

Registers

The MAP terminal displays the following OM group C7ROUTE2 registers:

```
C72RTUNU    C72TFA      C72TFR      C72TFP
C72TFC0     C72TFC1     C72TFC2     C72TFC3
C72CNTRE    C72FRCRE    C72XTFA     C72XTFR
C72XTFP
```

Group structure

The OM group C7ROUTE2 provides one tuple for each route in each routeset, a maximum of 1023 for each office

Key field:
This field contains the routeset name

Info field:
This field contains the route number within the routesetThe number of tuples: 6138

Associated OM groups

The OM group C7ROUTE associates with the C7ROUTE2 OM group.

OM group C7ROUTE2 (continued)

The OM group C7ROUTE2 collects the same information as the C7ROUTE OM group. The OM group C7ROUTE2 reports on the last 1023 routesets in the SSP office.

Associated functional groups

The functional group CCS7 associates with the OM group C7ROUTE2.

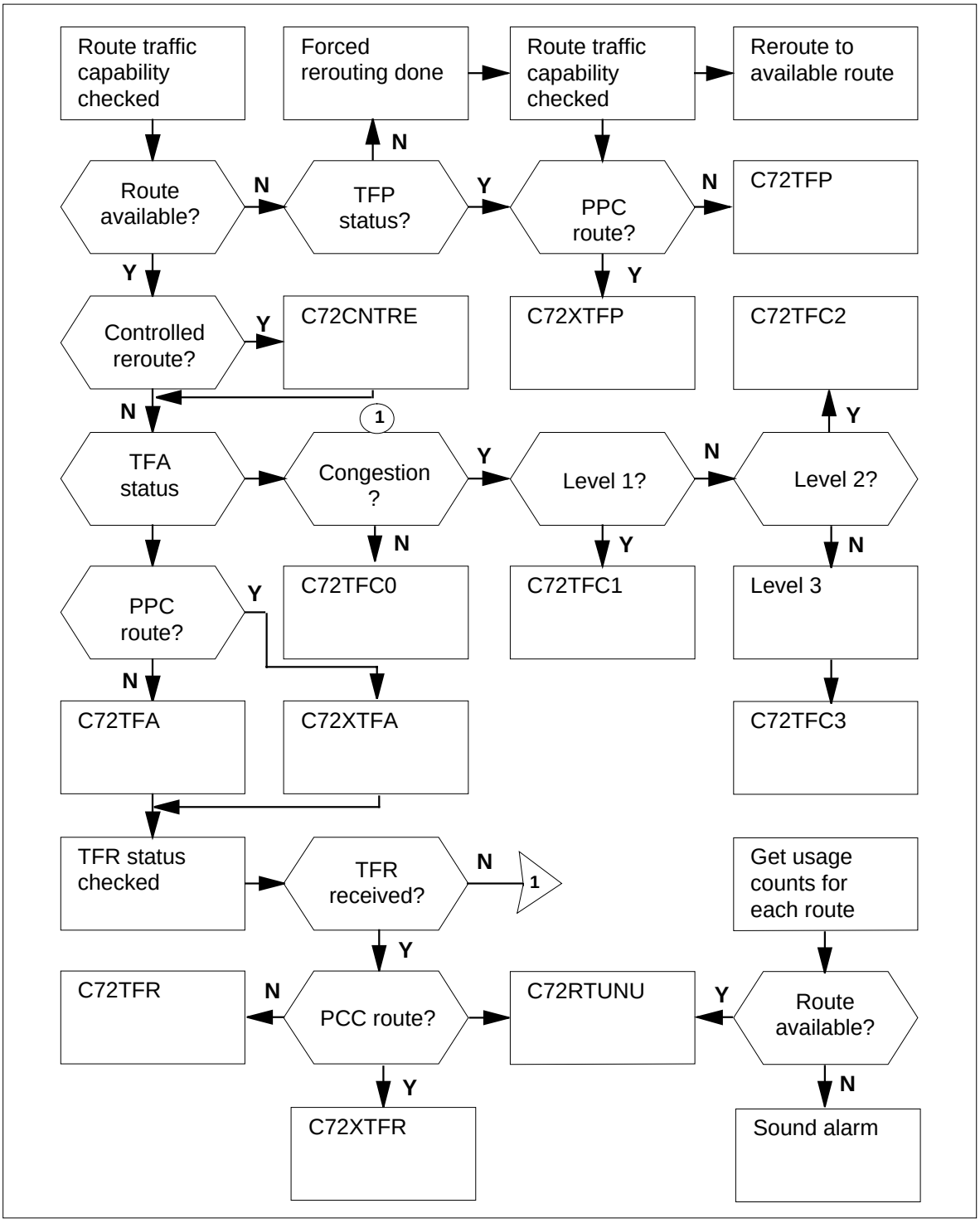
Associated functionality codes

The following table shows the functionality codes for OM group C7ROUTE2.

Functionality	Code
Remote Line Module	NTX023AB
CCS& MTP/SCCP	NTX041AB
International Switching Center-Basic	NTX300AA

OM group C7ROUTE2 (continued)

OM group C7ROUTE2 registers



Register C72CNTRE

Register CCS7 transfer controlled rerouting (C72CNTRE).

The C72CNTRE counts controlled rerouting procedures for a route. Controlled rerouting indicates that a route had traffic diverted. With the route restored, messages return to this route.

This register is counted in computing module (CM).

Register C72CNTRE release history

Register C72CNTRE was introduced and activated in CSP04.

Associated registers

Register C7CNTRER

Associated logs

There are no associated logs.

Register C72FRCRE

CCS7 transfer controlled rerouting (C72FRCRE)

Register C72FRCRE counts the forced rerouted procedures performed for a route.

When a route to a destination fails, the system routes messages to other available routes. The indication of a failed route arrives as a transfer prohibited status (TFP) message. The route is not available to transmit messages. Either a major or a critical alarm occurs at the routeset level.

This register is counted in the computing module CM.

Register C72FRCRE release history

Register C72FRCRE was introduced and activated in CSP04.

Associated registers

Register C7FRCRER

Associated logs

There are no associated logs.

Register C72RTUNU

Register CCS7 route not available.

OM group C7ROUTE2 (continued)

Register C72RTUNU is a use register. The system scans the route every 10 s, and the register records if the route can transmit messages at this time. Either a major or a critical alarm occurs if the routeset can not deliver messages.

This register increases in the CM.

Register C72CTUNU release history

Register C72CTUNU was introduced and activated in CSP04.

Associated registers

Register C7RTUNAU

Associated logs

There are no associated logs.

Register C72TFA

CCS7 transfer allowed (C72TFA)

Register C72TFA counts the transfer allowed (TFA) messages that are received for a route. A TFA message indicates that the CCS7 network has a complete grade of service for this route.

The register is counted in the CM.

Register C72TFA release history

Register C72TFA was introduced and activated in CSP04.

Associated registers

Register C7TFA

Associated logs

The system generates CCS166 when a CCS7 route receives the TFA signal from the network.

Register C72TFC0

CCS7 transfer controlled level 0 (C72TFCO)

Register C72TFC0 counts transfer controlled level 0 (zero) congestion Status Messages that are received for a route. This message indicates that there is no congestion on the route

The register is counted in the CM.

Register C72TFC0 release history

Register C72TFC0 was introduced to CSP04.

Associated registers

Register C7TFC0 counts transfer controlled level 0 congestion Status Messages that are received for a route.

Associated logs

The system generates CCS 172 when a transfer controlled signal is received. The system generates the log as a result either of an increase or drop in the congestion level of a routeset.

Register C72TFC1

CCS7 transfer controlled level 1

Register C72TFC1 counts transfer controlled level 1 congestion Status Messages that the system received for a route. This message indicates that that route congestion reached a threshold level set for level 1. User parts stop sending messages of priority 0. A routeset major alarm occurs.

The register is counted in the CM.

Register C72TFC1 release history

C72TFC1 was introduced to and activated in CSP04.

Associated registers

Register C7TFC1

Associated logs

The system generates CCS 172 when the system receives a transfer-controlled signal. The system generates a log a result either of an increase or drop in the congestion level of a routeset.

Register C72TFC2

CCS7 transfer controlled level 2 (C72TFC2)

Register C72TFC2 counts transfer controlled level 2 congestion Status Messages received for a route. This message indicates that route congestion reached the threshold level set for level 2. User parts stop sending messages of priority 0 and 1. A routeset major alarm occurs.

The register is counted in the CM.

OM group C7ROUTE2 (continued)

Register C72TFC2 release history

Register C72TFC2 was introduced to and activated in CSP04.

Associated registers

Register C7TFC2

Associated logs

The system generates CCS 172 when the system receives a transfer-controlled signal. The system generates the log a result either of an increase or drop in the congestion level of a routeset.

Register C72TFC3

Register CCS7 transfer controlled level 3

Register C72TFC3 counts transfer controlled level 3 congestion Status Messages messages received for a route. This message indicates that route congestion reached the threshold level set for level 3. User parts stop sending messages of priority 0 and 1 and 2. A routeset major alarm occurs.

The register is counted in the CM.

Register C72TFC3 release history

C72TFC3 was introduced and activated in CSP04.

Associated registers

Register C7TFC3

Associated logs

The system generates CCS 173 when there is a congested transmission buffer for a CCS7 link

Register C72TFP

CCS7 transfer prohibited (C72TFP)

Register C72TFP counts the transfer prohibited (TFP) status messages that the system receives for a route. This message indicates that the CCS7 network cannot deliver messages on the route. Either a major or a critical alarm occurs at the routeset.

The register is counted in the CM.

Register C72TFP release history

C72TFP2 was introduced to and activated in CSP04.

Associated registers

Register C7TFP

Associated logs

The system generates CCS168 when a CCS7 route receives the transfer prohibited signal from the network.

Register C72TFR

CCS7 transfer restricted (C72TFR)

Register C72TFR counts the transfer restricted (TFR) Status Messages received for a route. This message indicates a degraded CCS7 network service for the route. The system delivers the messages at a pace slower than the normal rate. A routeset major alarm occurs at the routeset level.

The register is counted in the CM.

Register C72TFR release history

Register C72TFR was introduced and activated in CSP04.

Associated registers

Register C7TFR

Associated logs

The system generates CCS167 when a CCS7 route receives the transfer restricted signal from the network.

Register C72XTFA

CCS7 transfer allowed for a partial-point-code (PPC) route (C72XTFA)

Register C72XTFA counts the number of transfer allowed (TFA) messages received for a PPC route.

A TFA message indicates that the CCS7 network has a complete grade of service for this PPC route.

The register is counted in the CM.

Register C72XTFA release history

Register C72XTFA was introduced to and activated in CSP04.

Associated registers

Register C7XTFA

OM group C7ROUTE2 (end)

Associated logs

The system generates CCS180 when a CCS7 PPC receives the TFA signal from the network.

Register C72XTFP

CCS7 transfer prohibited for PPC route.

C72XTFP counts the number of TFP Status Messages received for a route. This message indicates that the CCS7 network cannot deliver messages on this route. Either a major or a critical alarm occurs for the routeset.

The register is counted in the CM.

Register C72XTFP release history

Register C72XTFP was introduced and activated in CSP04.

Associated registers

Register C7XTFP

Associated logs

The system generates CCS182 when a CCS7 PPC route receives the transfer prohibited signal from the network.

Register C72XTFR

CCS7 exception-list transfer restricted

Register C72XTFR counts the number of TFR Status Messages the system receives for a PPC route. This message indicates a degraded CCS7 network service for the route. The system delivers the messages at a pace that is slower than the normal rate. A major alarm occurs at the routeset level.

The register is counted in the CM.

Register C72CNTRE release history

Register C72CNTRE was introduced and activated in CSP04 .

Associated registers

Register C7XTFR

Associated logs

The system generates CCS181 when a CCS7 PPC route receives the transfer restricted signal from the network.

OM group C7ROUTER

OM description

This OM group captures the Common Channel Signaling 7 (CCS7) routes information. The router receives messages from CCS7 peripheral modules and performs the routing function on these messages.

C7ROUTER tracks

- the number of messages and bytes the system receives for routing
- the high-water marks of messages for each second the router receives
- the number of messages the system discards because of congestion
- the number of times and amount of time when the router is congested or out of service

These measurements determine if the router operates in capacity and indicate the work load during the OM period.

Release history

CSP04

Registers C7INTOVL, C7MTSHW, C7RTCNG and C7RTCNGU were activated.Register C7RTOOSU changed to reflect the time the router was either Sysb or ManB.

BCS36

The OM group C7ROUTER was introduced to BCS36.

Registers

The OM group C7ROUTER registers appear on the MAP terminal as follows:

```
C7RTMSR     C7RTMSR2    C7RTBTR     C7RTBTR2
C7INTOVL    C7INTOV2    C7BUFOFL    C7ILLPHW
C7MTSHW     C7STHW      C7TOTHW     C7RTCNG
C7RTCNGU    C7RTOOS     C7RTOOSU
```

Group structure

OM group C7ROUTER provides one tuple for each router, a maximum of 32 tuples for each office.

Key field:

This field contains the router number.

OM group C7ROUTER (continued)

Info field:
This field has two parts: the peripheral module (PM) type andthe PM number of the router. Only LIU7 is supported as aPM type in BCS36.

Associated OM groups

There are no associated OM groups.

Associated functional groups

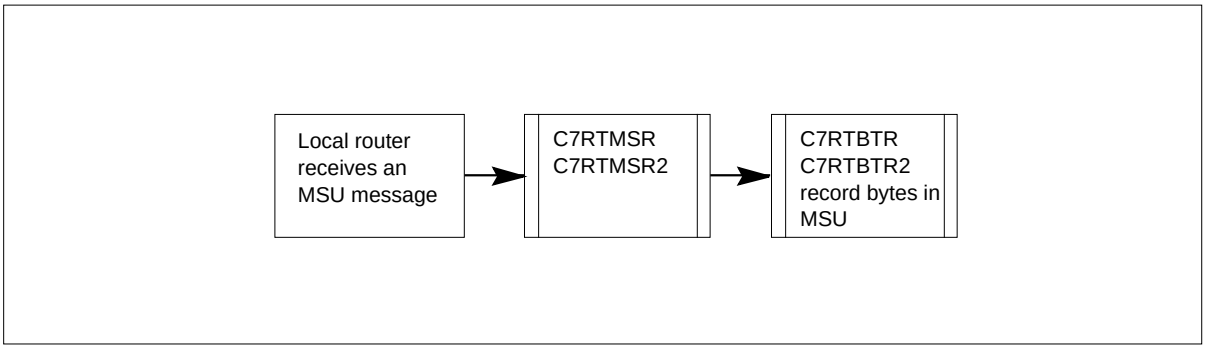
There are no associated functional groups.

Associated functionality codes

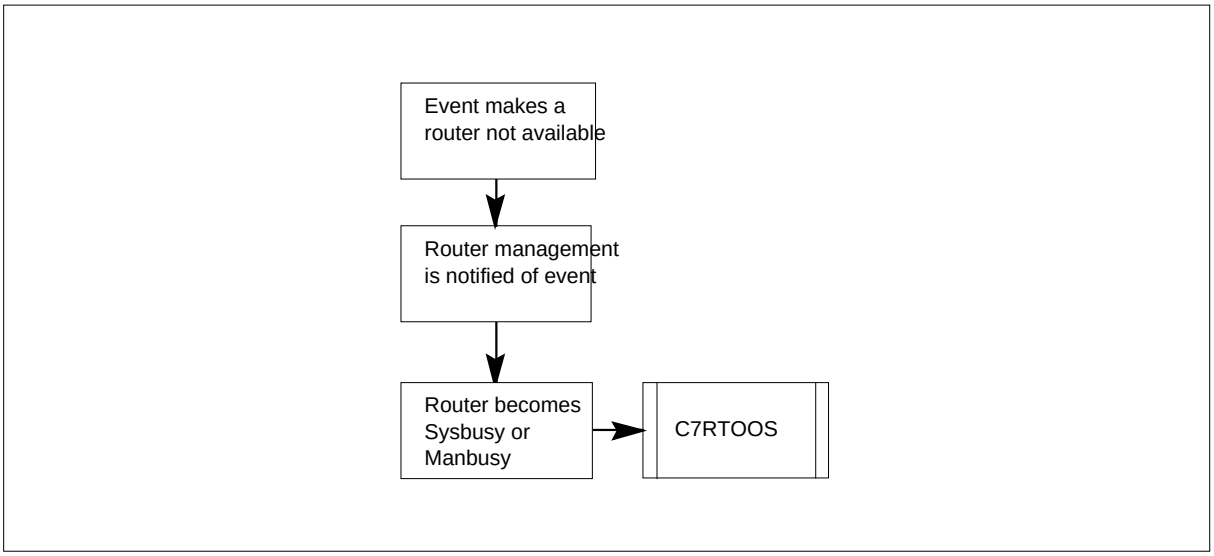
The associated functionality codes for the OM group C7ROUTER appear in the following table:

Functionality	Code
LIU7 Routing	NTXS77AA

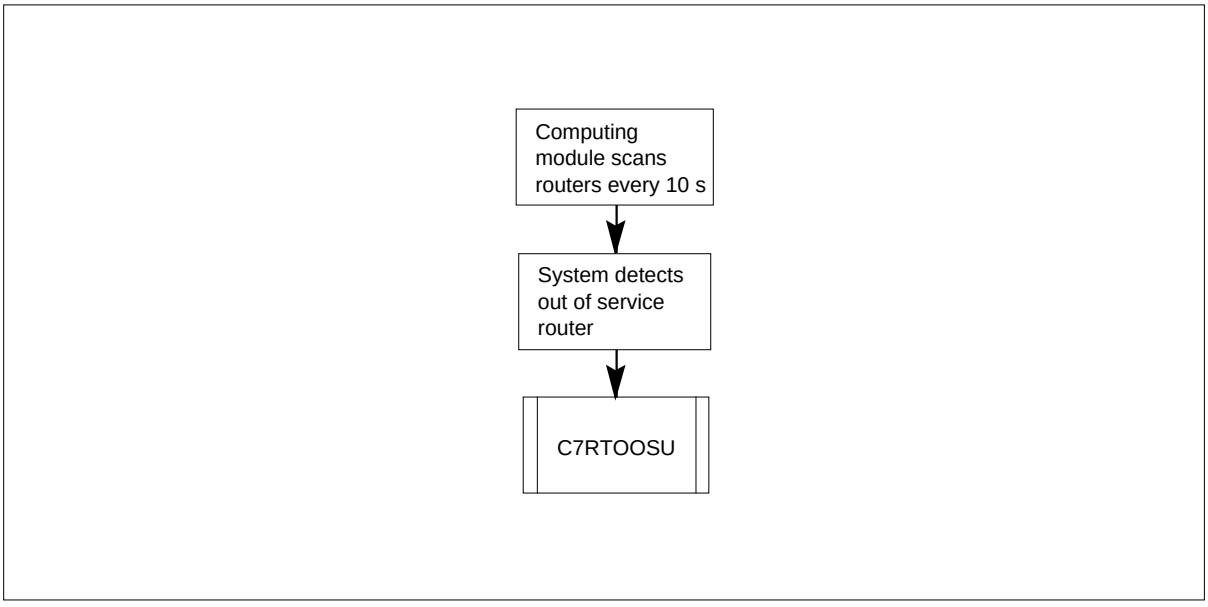
OM group C7ROUTER registers: local router message processing



OM group C7ROUTER registers: router management on CM



OM group C7ROUTER registers: usage registers



Register C7BUFOFL

CCS7 buffer overflow (C7BUFOFL)

Register C7BUFOFL set to zero.

OM group C7ROUTER (continued)

Register C7BUFOFL release history

Register C7BUFOFL was introduced in BCS36.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Register C7ILLPHW

Inter-link-to-link protocol (ILLP) high-water mark for messages received (C7ILLPHW)

Register C7ILLPHW is set to zero.

Register C7ILLPHW release history

Register C7ILLPHW was introduced in BCS36.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Register C7INTOVL

Number of message service units the system discards because of interrupt overload (C7INTOVL)

Register C7INTOVL release history

CSP04

Register C7INTOVL activated.

BCS36

Register C7INTOVL was introduced and set to zero.

Associated registers

C7INTOV2

Associated logs

There are no associated logs.

Register C7MTSHW

Message transport system (MTS) high-water mark for messages received (C7MTSHW)

Register C7MTSHW release history

CSP04

Register C7MTSHW activated.

BCS36

Register C7MTSHW was introduced to BCS36.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Register C7RTBRT

CCS7 router bytes received for routing (C7RTBTR)

Register C7RTBTR increases for each message signal unit (MSU) the CCS7 router receives when the system starts the routing function. This register records the number of bytes the system receives.

Register C7RTBTR release history

Register C7RTBRT was introduced to BCS36.

Associated registers

Register C7RTMSR measures messages to route. The register records the number of MSUs. The register does not record the number of bytes.

Associated logs

There are no associated logs.

Extension registers

C7RTBTR2

Register C7RTCNG

The system increases the register when router reports first onset of congestion from level 0 to level 1.

OM group C7ROUTER (continued)

Register C7RTCNG release history

CSP04

Register C7RTCNG activated.

BCS36

Register C7RTCNG was introduced and set to zero.

Associated registers

C7RTCNGU

Associated logs

The system generates CCS189 log when the external router congestion level changes.

Register C7RTCNGU

CCS7 router congested recorded in seconds (C7RTCNGU)

Register C7RTCNGU release history

CSP04

Register C7RTCNGU activated.

BCS36

Register C7RTCNGU was introduced and set to zero.

Associated registers

C7RTCNG

Associated logs

There are no associated logs.

Register C7RTMSR

CCS7 router message signal units (MSU) received for routing (normal) (C7RTMSR)

Register C7RTMSR increases for each MSU the CCS7 router receives when the routing function is initiated.

Register C7RTMSR release history

Register C7RTMSR was introduced in BCS36.

Associated registers

Register C7RTBTR measures messages to route. The register records the number of bytes. The register does not record the number of units.

Associated logs

There are no associated logs.

Extension registers

C7RTMSR2

Register C7STHW

Signaling terminal high-water mark for messages received (C7STHW)

Register C7STHW is set to zero.

Register C7STHW release history

Register C7STHW was introduced in BCS36.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Register C7TOTHW

Total high-water mark for messages received (C7TOTHW)

Register C7TOTHW is set to zero.

Register C7TOTHW release history

Register C7TOTHW was introduced in BCS36.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Register C7RTOOS

C7 router out of service (C7RTOOS)

Register C7RTOOS counts the number of times the C7 router is out of service. Register C7RTOOS increases when the router becomes system busy (Sysbusy) or Manual busy (Manbusy) from an In-Service state (InSv or ISTb).

Note: The register does not increase if the state toggles between Sysbusy and Manbusy.

OM group C7ROUTER (end)

Register C7RTOOS release history

Register C7RTOOS was introduced in BCS36.

Associated registers

Register C7RTOOSU records the time in seconds that the router is not available. The router is not available because the router is in a Sysbusy, Manbusy, or Offline state.

Associated logs

There are no associated logs.

Register C7RTOOSU

Length of time the C7 router was out of service (C7RTOOSU)

Register C7RTOOSU records the time in seconds that the C7 router is out of service. The router is out of service because the router is in a Sysbusy, Manbusy, or Offline state. Register C7RTOOSU records the time based on a 10 s scan. Register C7RTOOSU time when the router is Offline.

Register C7RTOOSU release history

CSP04

Register C7RTOOSU changed to record the time the router is SySB or ManB.

BCS36

Register C7RTOOSU was introduced in BCS36.

Associated registers

Register C7RTOOS counts the times the router is out of service. The router is out of service because the router entered a Sysbusy or Manbusy state from InSv or ISTb state.

Associated logs

There are no associated logs.

OM group C7RTESET

OM description

CCS7 routeset (C7RTESET)

Register C7RTESET reports on the performance and use of a Common Channel Signaling 7 (CCS7) routeset.

Signaling messages provide the address and link selector information that determines message routing. The messages describe a routeset. The routeset consists of:

- the signaling paths (routes)the signaling paths (routes)
- linksets
- links in the linkset for routing a message to a destination

The system routeset management determines if the routing for transmitting messages is acceptable. If the route is acceptable, the system selects a working link from the linkset. If the route is not acceptable, the system examines other routes until the system finds or cannot find a working link. The system also receives remote congestion information over a route, and the system informs user parts of the congestion level.

Release history

The OM group C7RTESET was introduced in BCS20.

BCS33

Use the OMSHOW command on the ACTIVE class to convert registers C7RSUNAU and C7RSCNGU from CCS to deci-erlangs before they display.

BCS30

Software change provides use counts in CCS or deci-erlangs. This option is set in table OFCOPT.

BCS21

Register C7RSCNGU activated

Registers

The OM group C7RTESET registers appear on the MAP terminal as follows:

```
C7RSUNAU    C7RSFAIL    C7RSMANB    C7RSCNGU
C7RTERR
```

OM group C7RTESET (continued)

Group structure

The OM group C7RTESET provides one tuple for each routeset.

Key field:
The C7_ROUTESET_NUMBER, is in the range 0 to 254.The C7_ROUTESET_NUMBER is used as an index intotable C7RTESET or used to display by route name.

Info field:
There is no info field.

Associated OM groups

The OMs C7LINK1 and C7LINK2 track link availability and link use.

The OM C7LKSET tracks linksets.

The OM C7ROUTE tracks component routes.

Associated operating groups

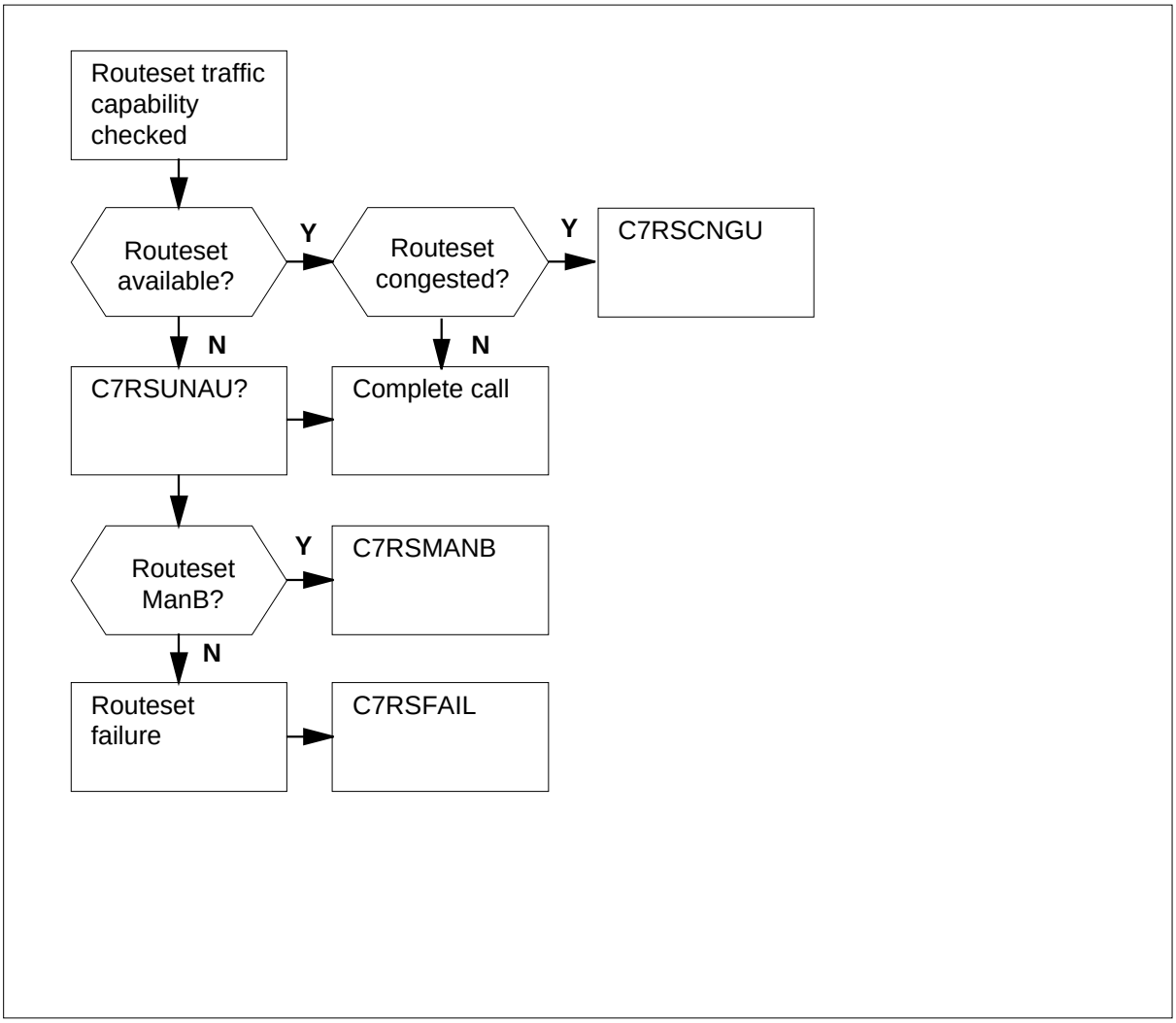
There are no associated operating groups.

Associated functionality codes

The functionality codes associated with OM group C7RTESET. appear in the following table.

Functionality	Code
CCS7 MTP/SCCP	NTX041AB
Internal Switching Center - Basic	NTX300AA

OM group C7RTESET registers



Register C7RSCNGU

CCS7 routeset congestion (C7RSCNGU)

Register C7RSCNGU is a use register. The scan rate is every 10 s. This register records routeset congestion.

When the routeset is congested, a major alarm occurs on the CCS7 destination. The system only delivers higher priority messages.

Register C7RSCNGU release history

Register C7RSCNGU was introduced in BCS20.

OM group C7RTESET (continued)

BCS33
The OMSHOW command on the ACTIVE class converts the use count from CCS to deci-erlangs before the use count displays. The OMSHOW command converts the use count when office parameter OMINERLANGS is Y in table OFCOPT. The OMSHOW command does not alter the value in the active registers. The value of the active registers remains in CCS.

BCS30
Software change provides use counts in CCS or deci-erlangs.

BCS21
Register C7RSCNGU activated

Associated registers

There are no associated registers.

Associated logs

The system generates CCS172 when a routeset congestion is present.

Register C7RSFAIL

CCS7 routeset failure (C7RSFAIL)

Register C7RSFAIL counts routeset failures where the routeset does not transmit messages.

When the routeset does not transmit messages, the common channel signaling destination is not available. A critical alarm occurs.

This register increases in the computing module (CM).

Register C7RSFAIL release history

Register C7RSFAIL was introduced in BCS20.

Associated registers

Register C7RSUNAU records if a routeset is not available.

Associated logs

The system generates CCS154 when a routeset is not available to deliver traffic to the correct destination. All traffic to the destination stops.

Register C7RSMANB

CCS7 routeset manual busy (C7RSMANB)

Register C7RSMANB increases when operating company personnel manually busy the routeset. The common channel signaling destination is not available. A critical alarm occurs.

This register increases in the CM.

Register C7RSMANB release history

Register C7RSMANB was introduced in BCS20.

Associated registers

There are no associated registers.

Associated logs

The system generates CCS152 when a routeset is manually busy.

Register C7RSUNAU

CCS7 routeset not available (C7RSUNAU)

Register C7RSUNAU is a use register. The scan rate is every 10 s. This register records if the routeset transmits messages. This register does not increase when the routeset is offline.

If the routeset does not transmit messages, one of the common channel signaling destinations is not available. A critical alarm occurs.

This register increases in the CM.

Register C7RSUNAU release history

Register C7RSUNAU was introduced in BCS20.

BCS33

The OMSHOW command on the ACTIVE class converts the use count from CCS to deci-erlangs before the use count displays. The OMSHOW command converts the use count when office parameter OMINERLANGS is Y in table OFCOPT. The OMSHOW command does not alter the value in the active registers. The value of the active registers remains in CCS.

BCS30

Software change provides use counts in CCS or deci-erlangs.

Associated registers

There are no associated registers.

OM group C7RTESET (end)

Associated logs

This register records after a CC restart, until CCS155 appears. This register increases in the period between CCS154 and CCS155.

The system generates CCS154 when a routeset is not available to deliver traffic to the destination. All traffic to the destination stops.

The system generates CCS155 when a routeset can deliver traffic to its destination after a stop. All traffic to the destination is restored.

Register C7RTERR

CCS7 routing error (C7RTERR)

Register C7RTERR counts messages that the system cannot route through the routeset. The system cannot route through the routeset because of a routing error.

Register C7RTERR release history

Register C7RTERR was introduced in BCS20.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

OM group C7SCCP

OM description

CCS7 signaling connection control part (C7SCCP)

The OM group C7SCCP registers report the performance and use of the CCS7 signaling connection control part (SCCP). The registers count the number of

- messages the SCCP routing control (SCRC) handles
- messages formatted to UDT user data
- formatted messages that arrive at the SCRC
- global title translations (GTT), messages that correctly reach their destinations
- messages that reach the destination
- messages that fail to reach the destination
- discarded messages with the priority level lower than the internal SCCP congestion level

The SCCP transfers signaling units and provides flexible GTT for different applications.

Some signaling units use logical signaling connection. These units are connection-oriented. Some units do not use logical signaling connection. These units are connectionless. Operational measurements count different aspects of connectionless services. Connectionless services appear in two categories:

- Class 0 data units arrive at different times. These units do not require sequencing
- Class 1 data units arrive in sequence

The SCRC routes the following:

- messages that the message transfer part (MTP) delivers to local subsystems. The MTP uses SCCP connectionless control (SCLC) to deliver these messages.
- messages that originate at local subsystems. Local subsystems are SCCP users. SCLC delivers these messages to other local subsystems.
- messages that originate at local subsystems. The SCRC routes these messages to the network that uses the MTP.

The called party address (CDPA) includes the destination of the message that the application supplies. The CDPA consists of any group of a destination

OM group C7SCCP (continued)

point code (DPC), subsystem number (SSN), or global title (GT). A GT is an application address. An example of a GT is an 800 number of the TCAP/E800 service. SCRC translates a GT to an address form that the SCCP and MTP can use to route the message. This form contains a DPC and an SSN, or a DPC and a GT.

SCCP connectionless control formats the user data to a unitdata (UDT) or extended unitdata (XUDT) message. This message is of the correct class with the requested options. The SCLC delivers these messages to SCRC. The SCRC routes the messages. The SCLC decodes and distributes messages for local subsystems to the correct subsystem. When a routing failure occurs, SCRC starts the return procedure for unitdata messages with the set return option parameter. The routing failure procedure of the SCLC formats the message and the routing failure reason. The routing failure procedure formats the routing failure reason to a UDTS or XUDTS message. The routing failure procedure delivers the message to SCRC. The SCRC routes the message to the originator.

Release history

The OM group C7SCCP was introduced in BCS21.

TL14

Registers C7RTFALL and C7RTFNWC updated for ITU SCCP Congestion Control feature.

TL06

The registers C7RTFALL C7MSGHDL, C7MSGHD2, C7MSGGT, C7MSGGT2, C7CLS0TX, C7CLS0T2, C7CLS0RX, C7CLS0R2, C7CLS1TX, C7CLS1T2, C7CLS1RX, CTCLS1R2, C7SYNERR, C7RTBKSS, C7LOCSS AND C7LOCSS2 increase for SCCP Segmentation and Reassembly.

BCS31

Registers C7RTFALL, C7RTFNTN, C7RTFNTA, C7RTFNWF, C7UDTTX, C7UDTTX2, C7UDTRX, C7UDTRX2, C7UDTSTX, C7UDTSRX, C7MSGHDL, C7MSGHD2, C7CLS0TX, C7CLS0T2, C7CLS0RX, C7CLS0R2, C7CLS1TX, C7CLS1T2, C7CLS1RX, C7CLS1R2, and C7SYNERR increase for international gateway SCCP.

BCS25

Registers C7LOCSS, C7LOCSS, and C7RTBKSS were introduced.

BCS22

Registers C7UDTTX2, C7UDTRX2, C7MSGHD2, C7MSGGT2, C7CLS0T2, C7CLS0R2, C7CLS1T2, and C7CLS1R2 activated. Register C7SYNERR was introduced.

BCS21

Registers C7CLS1R2, C7CLS1T2, C7CLS0R2, C7CLS0T2, C7MSGGT2, C7MSGHD2, C7UDTRX2, and C7UDTT2 were set to zero.

Registers

The OM group C7SCCP registers appear in the MAP terminal as follows:

```
C7RTFALL    C7RTFNTN    C7RTFNTA    C7RTFNWF
C7RTFNWC    C7RTFSSF    C7RTFSSC    C7RTFUEQ
C7UDTTX     C7UDTTX2    C7UDTRX     C7UDTRX2
C7UDTSTX    C7UDTSRX    C7MSGHDL    C7MSGHD2
C7MSGGT     C7MSGGT2    C7CLS0TX    C7CLS0T2
C7CLS0RX    C7CLS0R2    C7CLS1TX    C7CLS1T2
C7CLS1RX    C7CLS1R2    C7SYNERR    C7RTBKSS
C7LOCSS     C7LOCSS2
```

Group structure

The OM group C7SCCP provides one tuple for each office.

Key field:
there are no key fields

Info field:
there are no info fields

Associated OM groups

The following OM groups associate with OM group C7SCCP:

- C7LINK1 and C7LINK2 track link availability and link use.
- C7RTESET tracks routeset availability.
- C7ROUTE tracks the component routes.
- C7LKSET tracks the performance and use of a CCS7 linkset.

Associated functional groups

The functional group CCS7 associates with OM group C7SCCP.

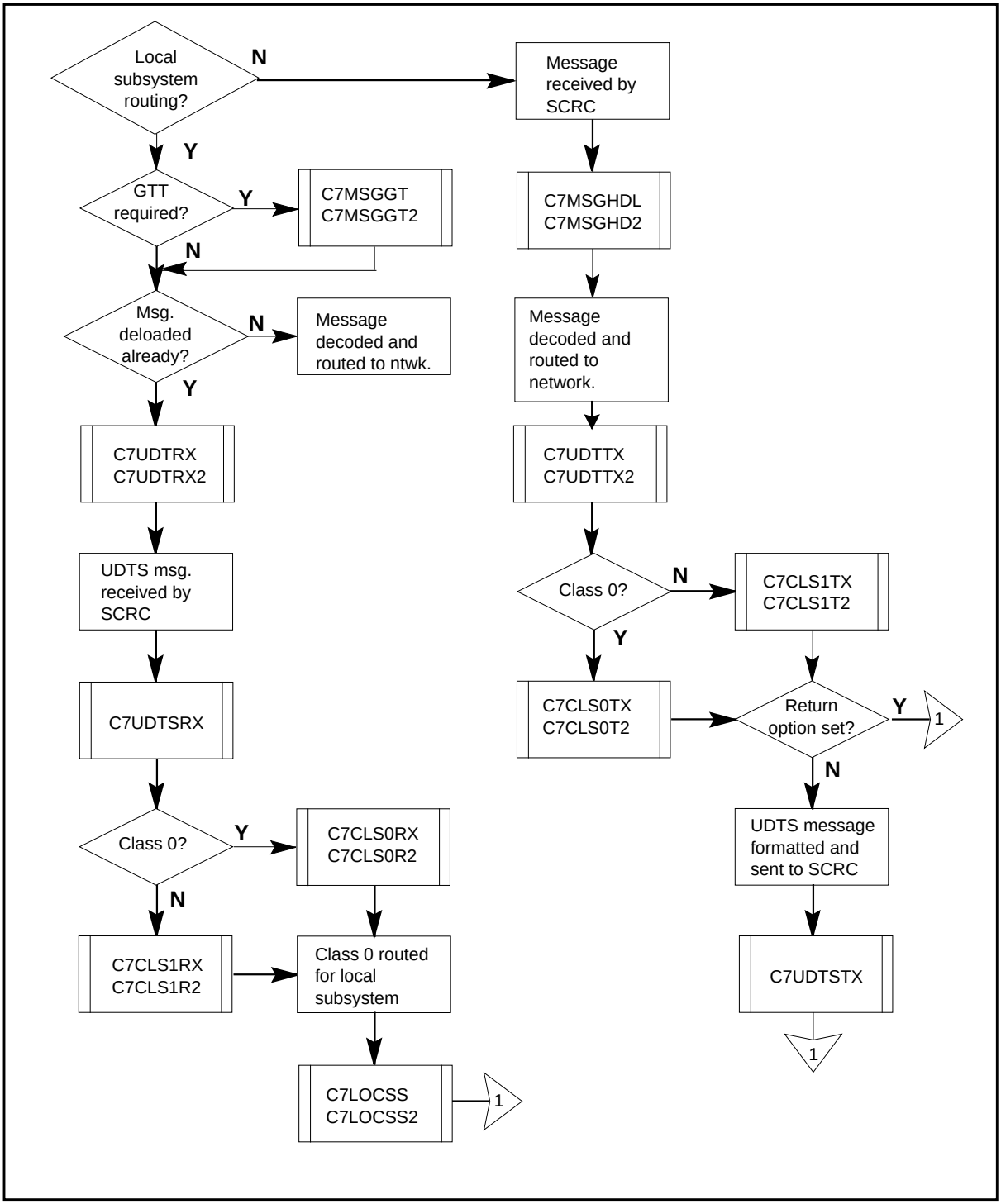
OM group C7SCCP (continued)

Associated functionality codes

The associated functionality codes that associate with OM group C7SCCP. appear in the following table.

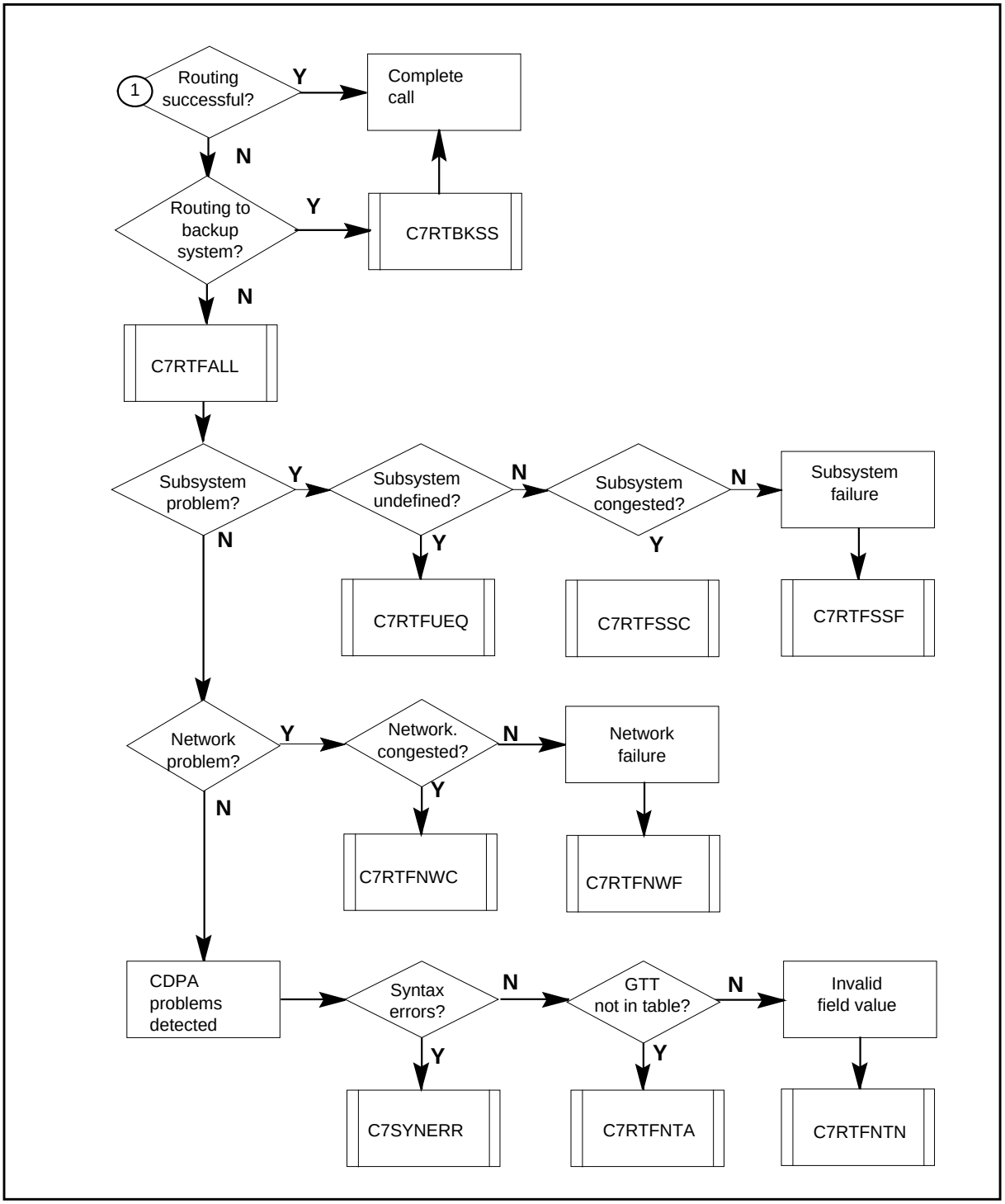
Functionality	Code
CCS7-MTP Associated and Non-Associated Signaling	NTX041AA
CCS7-MTP/SCCP	NTX041AB
SS7 Transaction Service Support	NTX550AA

OM group C7SCCP registers



OM group C7SCCP (continued)

OM group C7SCCP registers (continued)



Register C7CLS1RX

CCS7 connectionless class 1 received (C7CLS1RX)

The register C7CLS1RX counts unitdata (UDT) and the extended unitdata (XUDT) connectionless class 1 SCCP messages. The SCCP routing control (SCRC) receives these messages from the CCS7 network. The CCS7 network sends messages through the message transfer part (MTP). Connectionless class 1 messages are specified data units that have in-sequence delivery.

Register C7CLS1RX release history

Register C7CLS1RX was introduced in BCS21.

TL06

The SCCP Segmentation and Reassembly increases register C7CLS1RX.

BCS31

Register C7CLS1RX increases for international gateway SCCP.

BCS22

Register C7CLS1R2 activated.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

Register C7CLS1R2 is an extension register

Register C7CLS1TX

CCS7 connectionless class 1 transmitted C7CLS1TX)

The register C7CLS1TX counts unitdata (UDT) and the extended unitdata (XUDT) connectionless class 1 SCCP messages. The system routes these messages to the CCS7 network through the message transfer part (MTP). Connectionless class 1 messages are specified data units that have in-sequence delivery.

Register C7CLS1TX release history

Register C7CLS1TX was introduced BCS21.

TL06

The SCCP Segmentation and Reassembly increases register C7CLS1RX.

OM group C7SCCP (continued)

BCS31
The register C7CLS1TX increases for international gateway SCCP.

BCS22
The register C7CLS1T2 activated.

Associated registers
There are no associated registers.

Associated logs
There are no associated logs.

Extension registers
Register C7CLS1T2 is an associated extension register.

Register C7CLS0RX
CCS7 connectionless class 0 received (C7CLS0RX)

The register C7CLS0RX counts unitdata (UDT) and extended unitdata (XUDT) connectionless class 0 SCCP messages. The SCCP routing control (SCRC) receives these messages from the CCS7 network. The CCS7 network sends the messages through the message transfer part (MTP). Connectionless class 0 messages are specified data units that do not have sequencing.

Register C7CLS0RX release history
Register C7CLS0RX was introduced in BCS21.

TL06
The SCCP Segmentation and Reassembly increases register C7CLS0RX.

BCS31
The register C7CLS0RX increases for international gateway SCCP.

BCS22
The register C7CLS0R2 activated.

Associated registers
There are no associated registers.

Associated logs
There are no associated logs.

Extension registers
The register C7CLS0R2 is an extension register.

Register C7CLS0TX

CCS7 connectionless class 0 transmitted (C7CLS0TX)

The register C7CLS0TX counts unitdata (UDT) and extended unitdata (XUDT) connectionless class 0 SCCP messages. The system routes these messages to the CCS7 network through the message transfer part (MTP). Connectionless class 0 messages are specified data units that do not have sequencing.

Register C7CLS0TX release history

Register C7CLS0TX was introduced in BCS21.

TL06

The SCCP Segmentation and Reassembly increases register C7CLS0TX.

BCS31

Register C7CLS0TX increases for international gateway SCCP.

BCS22

Register C7CLS0T2 activated.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

The register C7CLS0T2 is an extension register.

Register C7LOCSS

CCS7 local subsystem (C7LOCSS)

Register C7LOCSS counts UDT/UDTS and XUDT/XUDTS messages for a local subsystem. The SCCP routing control (SCRC) receives these messages from the CCS7 network through the message transfer part (MTP).

Register C7LOCSS release history

Register C7LOCSS was introduced in BCS25.

TL06

The SCCP Segmentation and Reassembly increases register C7LOCSS.

OM group C7SCCP (continued)

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

Register C7LOCSS2 is an extension register.

Register C7MSGGT

CCS7 message global title translations (C7MSGGT)

The register C7MSGGT counts UDT/UDTS and XUDT/XUDTS messages that SCCP routing control (SCRC) receives. These messages require global title translation (GTT).

Register C7MSGGT release history

Register C7MSGGT was introduced in BCS21.

TL06

The SCCP Segmentation and Reassembly increases register C7MSGTT.

BCS22

Register C7MSGGT2 activated.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

The register C7MSGGT2 is an extension register.

Register C7MSGHDL

CCS7 messages handled (C7MSGHDL)

The register C7MSGHDL counts the following:

- UDT/UDTS and XUDT/XUDTS messages that SCCP routing control (SCRC) handles
- messages that local users send through SCCP connectionless control (SCLC)

- messages that the CCS7 network sends through the message transfer part (MTP)
- unitdata service (UDTS) messages
- extended unitdata service (XUDTS) messages

Register C7MSGHDL release history

Register C7MSGHDL was introduced in BCS21.

TL06

The SCCP Segmentation and Reassembly increases register C7MSGHDL.

BCS31

Register C7MSGHDL increases for international gateway SCCP.

BCS22

Register C7MSGHD2 activated.

Associated registers

Registers C7XUDTRX, C7XUDTSR, C7XUDTTX, C7XUDTST, C7UDTRX, C7UDTSRX, C7UDTTX and C7UDTSTX are associated registers.

Associated logs

There are no associated logs.

Extension registers

Register C7MSGHD2 is an extension register.

Register C7RTBKSS

The system routes CCS7 backup subsystem (C7RTBKSS)

The register C7RTBKSS counts UDT/UDTS and XUDT/XUDTS messages that the system routes to a backup subsystem. The system routes these messages to a backup system when the primary subsystem is not available.

Register C7RTBKSS release history

Register C7RTBKSS was introduced in BCS25.

TL06

The SCCP Segmentation and Reassembly increases register C7MSGHDL.

Associated registers

There are no associated registers.

OM group C7SCCP (continued)

Associated logs

There are no associated logs.

Register C7RTFALL

CCS7 route failure all (C7RTFALL)

The register C7RTFALL counts UDT/UDTS and XUDT/XUDTS messages that SCCP routing control (SCRC) receives that the system cannot route.

Messages that the system cannot route include the following:

- messages from the link through the message transfer part (MTP)
- messages from local subsystems routed through SCCP connectionless control (SCLC)
- messages with the incorrect encoding or with unknown fields
- messages with the internal priority code lower than the internal congestion level

Register C7RTFALL increases when the system attempts to send SCCP messages over a routeset that is offline. The system does not generate a log.

Register C7RTFALL release history

Register C7RTFALL was introduced in BCS21.

TL14

The ITU SCCP Congestion Control feature increases register C7RTFALL.

TL06

The SCCP Segmentation and Reassembly increases register C7RTFALL.

BCS31

Register C7RTFALL increases for international gateway SCCP.

Associated registers

Register C7XHCERR is an associated register.

Associated logs

The system generates CCS201 when the CCS7 network sends an SCCP message that is invalid. The system cannot decode this message.

The system generates CCS202 when the network sends an SCCP message that has a Called Party Address (CDPA) that is not valid. The system cannot route the message.

The system generates CCS203 when the network sends an SCCP message that has a Calling Party Address (CGPA) that is not valid. The system attempts to route the message.

The system generates CCS204 when the network sends an SCCP message that is for a local subsystem that is not known.

The system generates CCS205 when the network sends an SCCP message with the following characteristics.

- the message requires the local node to perform Global Title Translation (GTT)
- the global title contains a translation type for which the node does not have translation tables

The system generates CCS228 when the network sends a message that has the following characteristics:

- the message requires the local node to perform global title translation (GTT)
- the network address is not valid for a signaling connection control part (SCCP) at a service switching point (SSP). The system returns the message.

The system generates log CCS241 when the MTP in the CCS7 link interface unit (LIU7) or the high-speed link router (HSLR) does not route an incoming message. The system generates log CCS241 also when the message fails because the system did not route it in the LIU7 or HSLR, because of wrong message field information. The log indicates exact reason for the failure. If the number of routing failures received within a 1-min period exceeds the threshold value, generation of log CCS241 stops.

The system generates log CCS243 when the number of routing failures received within a 1-min period exceeds the threshold value. The log indicates the number of routing failures received every minute.

The system generates CCS246 when a global title (GT) translation occurs that is not correct for a unit data (UDT) message. This translation occurs before a gateway switch. The DMS-300 switch is a gateway switch.

The system generates log report CCS260 when the internal SCCP congestion level for a routeset in an ITU network changes.

The application can generate TCAP101 when the system receives an SCCP service message in response to a routing failure.

OM group C7SCCP (continued)

Register C7RTFNTA

CCS7 routing failure no translation for address (C7RTFMTA)

The register C7RTFNTA counts messages that SCCP routing control (SCRC) receives that the system cannot route. The system cannot route these messages because the field values No Translation for Such Address appear in the called party address (CDPA). These field values are not valid. This field value indicates that a translation in the global title translation table is not present. The translation is for the global title in the CDPA of the message.

Register C7RTFNTA release history

Register C7RTFNTA was introduced in BCS21.

BCS31

Register C7RTFNTA increases for international gateway SCCP.

Associated registers

There are no associated registers.

Associated logs

The application can generate TCAP101 when the system receives an SCCP service message in response to a routing failure. The diagnostic is No Translation for Such Address.

Register C7RTFNTN

CCS7 routing failure no translation of such nature (C7RTFNTN)

The register C7RTFNTN counts messages that SCCP routing control (SCRC) receives. The system cannot route these messages because the field values No Translation for an Address of Such Nature appear in the called party address (CDPA) of the message. These field values are not valid.

Register C7RTFNTN release history

Register C7RTFNTN was introduced in BCS21.

BCS31

Register C7RTFNTN increases for international gateway SCCP.

Associated registers

There are no associated registers.

Associated logs

The system generates CCS202 when the network receives an SCCP message that has an invalid Called Party Address (CDPA). The system generates CCS202 when the system cannot route the message.

The application can generate TCAP101 when the system receives an SCCP service message in response to a routing failure. The diagnostic is No Translation for an Address of Such Nature.

Register C7RTFNWC

CCS7 routing failure network congestion (C7RTFNWC)

The register C7RTFNWC counts messages that SCCP routing control (SCRC) receives. The system cannot route these messages because of network congestion.

Register C7RTFNWC release history

TL14

The ITU SCCP Congestion Control feature increases register C7RTFNWC.

BCS21

Register C7RTFNWC was introduced.

Associated registers

There are no associated registers.

Associated logs

The application generates TCAP101 when the system receives an SCCP service message in response to a routing failure. The application generates TCAP101 when the system cannot route the message because of network congestion.

The system generates log report CCS260 when the internal SCCP congestion level for a routeset in an ITU network changes.

Register C7RTFNWF

CCS7 routing failure network failure (C7RTFNWF)

Register C7RTFNWF counts messages that SCCP routing control (SCRC) receives. The system cannot route these messages because of network failure.

Register C7RTFNWF release history

Register C7RTFNWF was introduced in BCS21.

OM group C7SCCP (continued)

BCS31
Register C7RTFNWF increases for international gateway SCCP.

Associated registers

There are no associated registers.

Associated logs

The application can generate TCAP101 when the system receives an SCCP service message in response to a routing failure. The system cannot route the message because of network failure.

Register C7RTFSSC

CCS7 routing failure subsystem congestion (C7RTFSSC)

The register C7RTFSSC counts messages that SCCP routing control (SCRC) receives. The system cannot route these messages because of subsystem congestion.

Register C7RTFSSC release history

The register C7RTFSSC was introduced in BCS21.

Associated registers

There are no associated registers.

Associated logs

The application can generate TCAP101 when the system receives an SCCP service message in response to a routing failure. The system cannot route the message because of subsystem failure.

Register C7RTFSSF

CCS7 routing failure subsystem failure (C7RTFSSF)

The register C7RTFSSF counts messages that SCCP routing control (SCRC) receives. The system cannot route these messages because of subsystem failure.

Register C7RTFSSF release history

The register C7RTFSSF was introduced in BCS21.

Associated registers

There are no associated registers.

Associated logs

The application can generate TCAP101 when the system receives an SCCP service message in response to a routing failure. The system cannot route the message because of subsystem failure.

Register C7RTFUEQ

CCS7 routing failure user unequipped (C7RTFUEQ)

The register C7RTFUEQ counts messages that SCCP routing control (SCRC) receives. The system cannot route these messages because of a destination local subsystem that is not known.

Register C7RTFUEQ release history

Register C7RTFUEQ was introduced in BCS21.

Associated registers

There are no associated registers.

Associated logs

The system generates CCS204 when the network sends an SCCP message for a local subsystem that is not known.

The application generates TCAP101 when the system receives an SCCP service message in response to a routing failure. The system cannot route the message because the destination local subsystem is not known.

Register C7SYNERR

CCS7 syntax errors (C7SYNERR)

The register C7SYNERR counts UDT/UDTS and XUDT/XUDTS messages that SCCP routing control (SCRC) receives. The system cannot route these messages because syntax errors occur in the called party address (CDPA).

Register C7SYNERR release history

Register C7SYNERR was introduced in BCS22.

TL06

The SCCP Segmentation and Reassembly increases register C7SYNERR.

BCS31

Register C7SYNERR increases for international gateway SCCP.

OM group C7SCCP (continued)

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Register C7UDTRX

CCS7 UDT received (C7UDTRX)

The register C7UDTRX counts unitdata (UDT) connectionless SCCP messages. The SCCP routing control (SCRC) receives these messages from the CCS7 network through the message transfer part (MTP).

Register C7UDTRX release history

Register C7UDTRX was introduced in BCS21.

BCS31

Register C7UDTRX increases for international gateway SCCP.

BCS22

Register C7UDTRX2 activated.

Associated registers

There are no associated registers.

Extension Register

Register C7UDTRX2 is an extension register.

Register C7UDTSRX

CCS7 UDTS received (C7UDTSRX)

The register C7UDTSRX counts unitdata service (UDTS) connectionless SCCP messages. The SCCP routing control (SCRC) receives these messages from the CCS7 network through the message transfer part (MTP). UDTS messages consist of a message that failed. This message has the return option and a routing failure reason.

Register C7UDTSRX release history

Register C7UDTSRX was introduced in BCS21.

BCS31

Register C7UDTSRX increases for international gateway SCCP.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Register C7UDTSTX

CCS7 UDTS sent

The register CCS7 UDTS sent (C7UDTSTX) counts unitdata service (UDTS) connectionless SCCP messages that the system routes to the network through the message transfer part (MTP). The UDTS message contains a message that failed. This message contains the return option and the routing failure reason.

Register C7UDTSTX release history

Register C7UDTSTX was introduced in BCS21.

BCS31

Register C7UDTSTX increases for international gateway SCCP.

Associated registers

There are no associated registers.

Associated logs

The application generates TCAP101 when the system receives an SCCP UDTS message.

Register C7UDTTX

CCS7 UDT transmitted (C7UDTTX)

The register C7UDTTX counts unitdata (UDT) connectionless SCCP messages. The system routes these messages to the network through the message transfer part (MTP).

Register C7UDTTX release history

Register C7UDTTX was introduced in BCS21.

BCS31

Register C7UDTTX increases for international gateway SCCP.

BCS22

Register C7UDTTX2 activated.

OM group C7SCCP (end)

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

Register C7UDTTX2 is an extension register.

OM group C7SCCPA1

OM description

CCS7 SCCP Accounting 1 (C7SCCPA1)

The OM group C7SCCPA1 records each common channel signaling 7 (CCS7) signaling connection control part (SCCP) message that a DMS-300 international gateway switch. The DMS-300 international gateway switch has a Message Switch and Buffer 7 (MSB7). The international gateway allows SCCP messages to route between networks in a country and international networks. The gateway applies successive translations to the global titles that the messages contain.

The registers in C7SCCPA1 count the number of correctly routed messages. These messages are from the most common calling global titles (CGGT) as entered in table N7CLLGGT against the most common called global titles (CDGT). Overflows count SCCP messages with a called or a calling global title outside the most common global titles.

Release history

The OM group C7SCCPA1 was introduced in BCS32.

Registers

The OM group C7SCCPA1 registers display on the MAP terminal as follows:

```
C7SCGT01    C7SCGT02    C7SCGT03    C7SCGT04
C7SCGT05    C7SCGT06    C7SCGT07    C7SCGT08
C7SCGT09    C7SCGT10    C7SCGT11    C7SCGT12
C7SCGT13    C7SCGT14    C7SCGT15    C7SCGT16
C7SCGT17    C7SCGT18    C7SCGT19    C7SCGT20
C7SCGT21    C7SCGT22    C7SCGT23    C7SCGT24
C7SCGT25    C7SCGT26    C7SCGT27    C7SCGT28
C7SCGT29    C7SCGT30    C7SCGTOH
```

Group structure

OM group C7SCCPA1

Keyfield:

One of CALLNG01 to CALLNG30, CALLNGOH or CALLNGIV

Info field:

There is no Info field

OM group C7SCCPA1 (continued)

Associated OM groups

C7SCCPA2 CCS7 SCCP Accounting 2

Associated functional groups

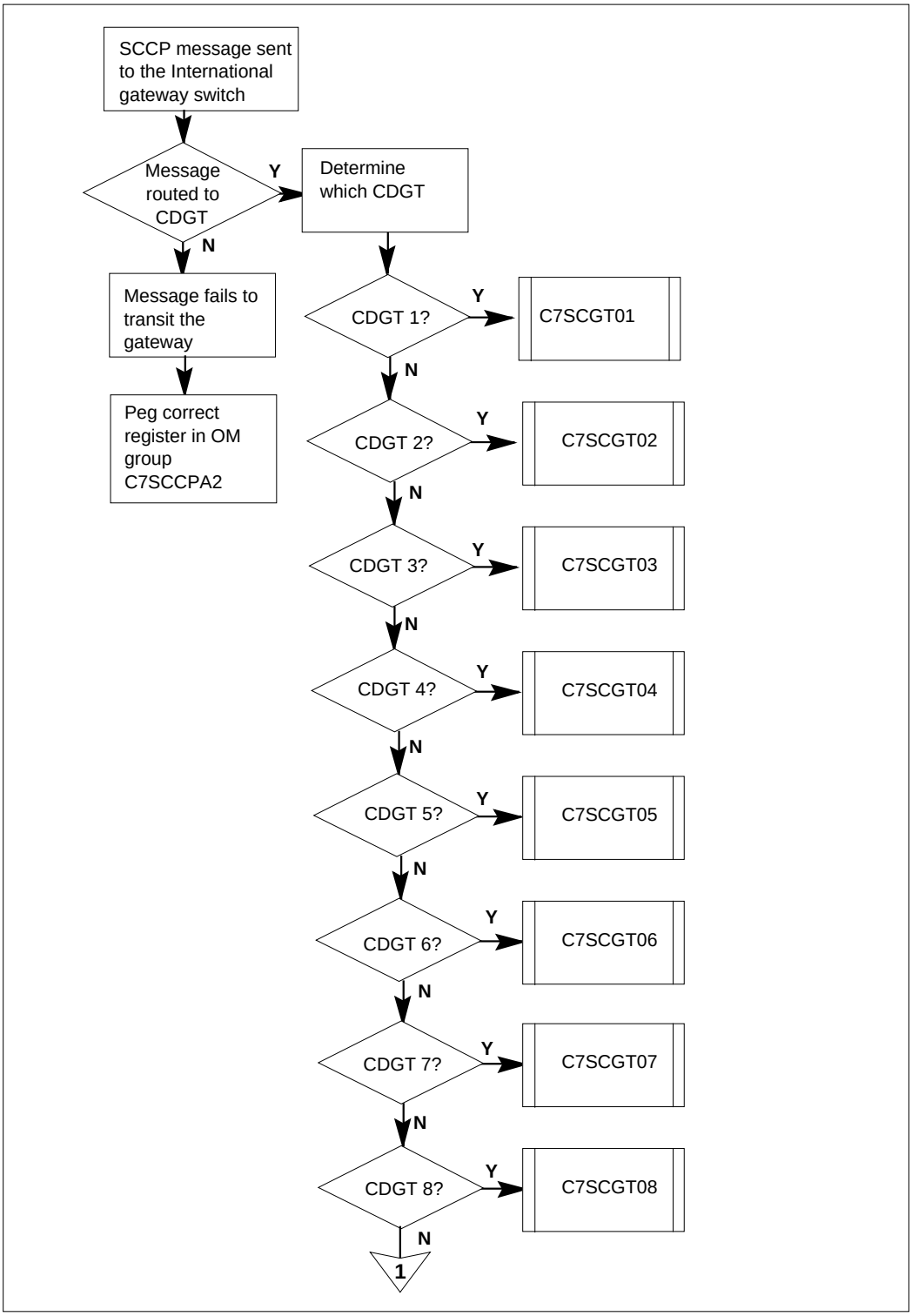
There are no associated functional groups.

Associated functionality codes

The associated functionality codes for OM group C7SCCPA1 appear in the following table.

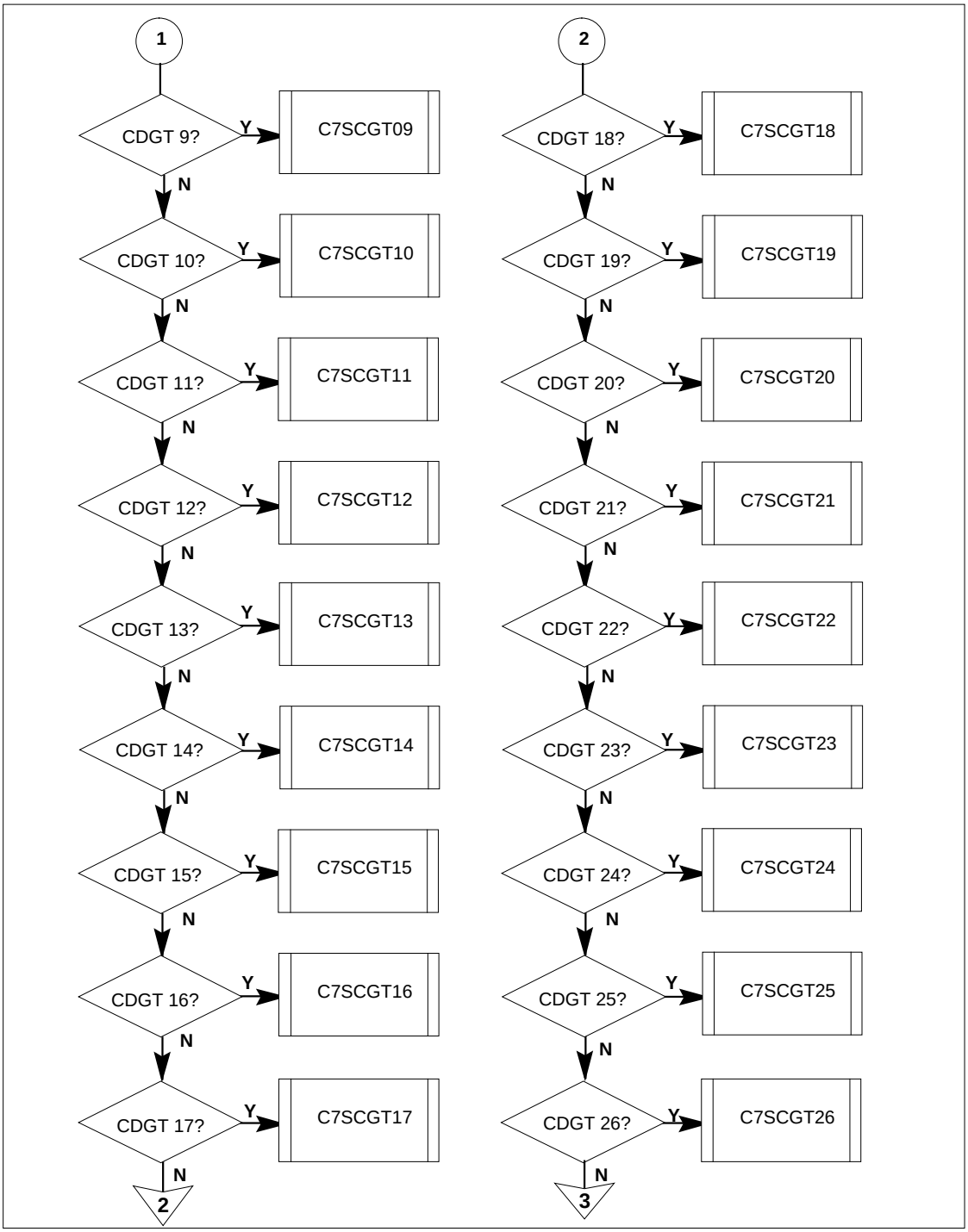
Functionality	Code
Signaling Connection Part (MSB7) DMS300	NTXK51AA

OM group C7SCCPA1 registers

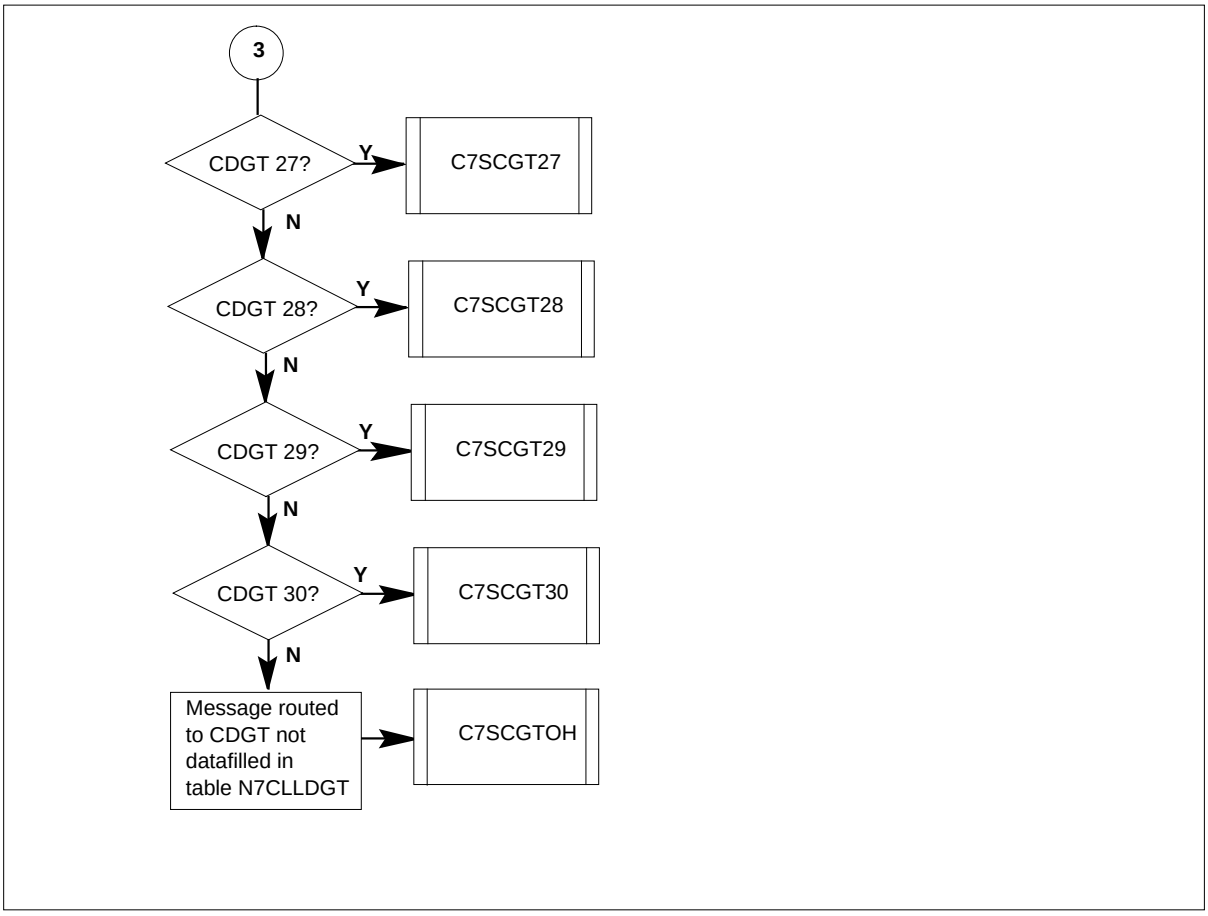


OM group C7SCCPA1 (continued)

OM group C7SCCPA1 registers (continued)



OM group C7SCCPA1 registers (continued)



Register C7SCGT01

CCS7 SCCP called global title 1 (C7SCGT01)

C7SCGT01 increases each time the system routes an SCCP message to CCS7 CDGT 1.

Register C7SCGT01 release history

Register C7SCGT01 was introduced in BCS32.

OM group C7SCCPA1 (continued)

Associated registers

For the following registers also increase for Unitdata Service (UDTS) messages:

- Register C7SCCPA2_C7UDTS00 increases each time the system routes a UDTS message with a return cause field of 00000000 to the SCCP gateway.
- Register C7SCCPA2_C7UDTS01 increases each time the system routes a UDTS message with a return cause field of 00000001 to the SCCP gateway.
- Register C7SCCPA2_C7UDTS05 increases each time the system routes a UDTS message with a return cause field of 00000101 to the SCCP gateway.
- Register C7SCCPA2_C7UDTS07 increases each time the system routes a UDTS message with a return cause field of 00000111 to the SCCP gateway.

Associated logs

There are no associated logs.

Register C7SCGT02

CCS7 SCCP called global title 2 (C7SCGT02)

Register C7SCGT02 increases each time the system routes an SCCP message to CCS7 CDGT 2.

Register C7SCGT02 release history

Register C7SCGT02 was introduced in BCS32.

Associated registers

The following registers also increase for Unidata Service (UDTS) messages. for Unitdata Service (UDTS) messages

- Register C7SCCPA2_C7UDTS00 increases each time the system routes a UDTS message with a return cause field of 00000000 to the SCCP gateway.
- Register C7SCCPA2_C7UDTS01 increases each time the system routes a UDTS message with a return cause field of 00000001 to the SCCP gateway.

- Register C7SCCPA2_C7UDTS05 increases each time the system routes a UDTS message with a return cause field of 00000101 to the SCCP gateway.
- Register C7SCCPA2_C7UDTS07 increases each time the system routes a UDTS message with a return cause field of 00000111 to the SCCP gateway.

Associated logs

There are no associated logs.

Register C7SCGT03

CCS7 SCCP called global title 3

C7SCGT03 increases each time the system routes an SCCP message to CCS7 CDGT 3.

Register C7SCGT03 release history

Register C7 SCGT03 was introduced in BCS32.

Associated registers

The following registers also increase for Unidata Service (UDTS) messages.

- Register C7SCCPA2_C7UDTS00 increases each time the system routes a UDTS message with a return cause field of 00000000 to the SCCP gateway.
- Register C7SCCPA2_C7UDTS01 increases each time the system routes a UDTS message with a return cause field of 00000001 to the SCCP gateway.
- Register C7SCCPA2_C7UDTS05 increases each time the system routes a UDTS message with a return cause field of 00000101 to the SCCP gateway.
- Register C7SCCPA2_C7UDTS07 increases each time the system routes a UDTS message with a return cause field of 00000111 to the SCCP gateway.

Associated logs

There are no associated logs.

Register C7SCGT04

CCS7 SCCP called global title 4 C7SCGT04

OM group C7SCCPA1 (continued)

C7SCGT04 increases each time the system routes an SCCP message to CCS7 CDGT 4.

Register C7SCGT04 release history

C7SCGT04 was introduced in BCS32.

Associated registers

The following registers also increase for Unidata Service (UDTS) messages.

- Register C7SCCPA2_C7UDTS00 increases each time the system routes a UDTS message with a return cause field of 00000000 to the SCCP gateway.
- Register C7SCCPA2_C7UDTS01 increases each time the system routes a UDTS message with a return cause field of 00000001 to the SCCP gateway.
- Register C7SCCPA2_C7UDTS05 increases each time the system routes a UDTS message with a return cause field of 00000101 to the SCCP gateway.
- Register C7SCCPA2_C7UDTS07 increases each time the system routes a UDTS message with a return cause field of 00000111 to the SCCP gateway.

Associated logs

There are no associated logs.

Register C7SCGT05

CCS7 SCCP called global title 5 (C7SCGT05)

C7SCGT05 increases each time the system routes an SCCP message to CCS7 CDGT 5.

Register C7SCGT05 release history

C7SCGT05 was introduced in BCS32.

Associated registers

The following registers also increase for Unidata Service (UDTS) messages.

- Register C7SCCPA2_C7UDTS00 increases each time the system routes a UDTS message with a return cause field of 00000000 to the SCCP gateway.
- Register C7SCCPA2_C7UDTS01 increases each time the system routes a UDTS message with a return cause field of 00000001 to the SCCP gateway.

- Register C7SCCPA2_C7UDTS05 increases each time the system routes a UDTS message with a return cause field of 00000101 to the SCCP gateway.
- Register C7SCCPA2_C7UDTS07 increases each time the system routes a UDTS message with a return cause field of 00000111 to the SCCP gateway.

Associated logs

There are no associated logs.

Register C7SCGT06

CCS7 SCCP called global title 6 (C7SCGT06)

C7SCGT06 increases each time the system routes an SCCP message to CCS7 CDGT 6.

Register C7SCGT06 release history

C7SCGT06 was introduced in BCS32.

Associated registers

For Unitdata Service (UDTS) messages The following registers also increase for Unidata Service (UDTS) messages.:

- Register C7SCCPA2_C7UDTS00 increases each time the system routes a UDTS message with a return cause field of 00000000 to the SCCP gateway.
- Register C7SCCPA2_C7UDTS01 increases each time the system routes a UDTS message with a return cause field of 00000001 to the SCCP gateway.
- Register C7SCCPA2_C7UDTS05 increases each time the system routes a UDTS message with a return cause field of 00000101 to the SCCP gateway.
- Register C7SCCPA2_C7UDTS07 increases each time the system routes a UDTS message with a return cause field of 00000111 to the SCCP gateway.

Associated logs

There are no associated logs.

Register C7SCGT07

CCS7 SCCP called global title 7 (C7SCGT07)

OM group C7SCCPA1 (continued)

C7SCGT07 increases each time the system routes an SCCP message to CCS7 CDGT 7.

Register C7SCGT07 release history

C7SCGT07 was introduced in BCS32.

Associated registers

The following registers also increase for Unidata Service (UDTS) messages.

- Register C7SCCPA2_C7UDTS00 increases each time the system routes a UDTS message with a return cause field of 00000000 to the SCCP gateway.
- Register C7SCCPA2_C7UDTS01 increases each time the system routes a UDTS message with a return cause field of 00000001 to the SCCP gateway.
- Register C7SCCPA2_C7UDTS05 increases each time the system routes a UDTS message with a return cause field of 00000101 to the SCCP gateway.
- Register C7SCCPA2_C7UDTS07 increases each time the system routes a UDTS message with a return cause field of 00000111 to the SCCP gateway.

Associated logs

There are no associated logs.

Register C7SCGT08

CCS7 SCCP called global title 8 (C7SCGT08)

C7SCGT08 increases each time the system routes an SCCP message to CCS7 CDGT 8.

Register C7SCGT08 release history

C7SCGT08 was introduced in BCS32.

Associated registers

The following registers also increase for Unidata Service (UDTS) messages.

- Register C7SCCPA2_C7UDTS00 increases each time the system routes a UDTS message with a return cause field of 00000000 to the SCCP gateway.
- Register C7SCCPA2_C7UDTS01 increases each time the system routes a UDTS message with a return cause field of 00000001 to the SCCP gateway.

- Register C7SCCPA2_C7UDTS05 increases each time the system routes a UDTS message with a return cause field of 00000101 to the SCCP gateway.
- C7SCCPA2_C7UDTS07 increases each time the system routes a UDTS message with a return cause field of 00000111 to the SCCP gateway.

Associated logs

There are no associated logs.

Register C7SCGT09

CCS7 SCCP called global title 9 (C7SCGT09)

C7SCGT09 increases each time the system routes an SCCP message to CCS7 CDGT 9.

Register C7SCGT09 release history

C7SCGT09 was introduced in BCS32.

Associated registers

The following registers also increase for Unidata Service (UDTS) messages.

- Register C7SCCPA2_C7UDTS00 increases each time the system routes a UDTS message with a return cause field of 00000000 to the SCCP gateway.
- Register C7SCCPA2_C7UDTS01 increases each time the system routes a UDTS message with a return cause field of 00000001 to the SCCP gateway.
- Register C7SCCPA2_C7UDTS05 increases each time the system routes a UDTS message with a return cause field of 00000101 to the SCCP gateway.
- Register C7SCCPA2_C7UDTS07 increases each time the system routes a UDTS message with a return cause field of 00000111 to the SCCP gateway.

Associated logs

There are no associated logs.

Register C7SCGT10

CCS7 SCCP called global title 10 (C7SCGT10)

C7SCGT10 increases each time the system routes an SCCP message to CCS7 CDGT 10.

OM group C7SCCPA1 (continued)

Register C7SCGT10 release history

C7SCGT10 was introduced in BCS32.

Associated registers

The following registers also increase for Unidata Service (UDTS) messages.

- Register C7SCCPA2_C7UDTS00 increases each time the system routes a UDTS message with a return cause field of 00000000 to the SCCP gateway.
- Register C7SCCPA2_C7UDTS01 increases each time the system routes a UDTS message with a return cause field of 00000001 to the SCCP gateway.
- Register C7SCCPA2_C7UDTS05 increases each time the system routes a UDTS message with a return cause field of 00000101 to the SCCP gateway.
- Register C7SCCPA2_C7UDTS07 increases each time the system routes a UDTS message with a return cause field of 00000111 to the SCCP gateway.

Associated logs

There are no associated logs.

Register C7SCGT11

CCS7 SCCP called global title 11 (C7SCGT11)

C7SCGT11 increases each time the system routes an SCCP message to CCS7 CDGT 11.

Register C7SCGT11 release history

C7SCGT11 was introduced in BCS32.

Associated registers

The following registers also increase for Unidata Service (UDTS) messages.

- Register C7SCCPA2_C7UDTS00 increases each time the system routes a UDTS message with a return cause field of 00000000 to the SCCP gateway.
- Register C7SCCPA2_C7UDTS01 increases each time the system routes a UDTS message with a return cause field of 00000001 to the SCCP gateway.

- Register C7SCCPA2_C7UDTS05 increases each time the system routes a UDTS message with a return cause field of 00000101 to the SCCP gateway.
- Register C7SCCPA2_C7UDTS07 increases each time the system routes a UDTS message with a return cause field of 00000111 to the SCCP gateway.

Associated logs

There are no associated logs.

Register C7SCGT12

CCS7 SCCP called global title 12 (C7SCGT12)

C7SCGT12 increases each time the system routes an SCCP message to CCS7 CDGT 12.

Register C7SCGT12 release history

C7SCGT12 was introduced in BCS32.

Associated registers

The following registers also increase for Unidata Service (UDTS) messages.

- Register C7SCCPA2_C7UDTS00 increases each time the system routes a UDTS message with a return cause field of 00000000 to the SCCP gateway.
- Register C7SCCPA2_C7UDTS01 increases each time the system routes a UDTS message with a return cause field of 00000001 to the SCCP gateway.
- Register C7SCCPA2_C7UDTS05 increases each time the system routes a UDTS message with a return cause field of 00000101 to the SCCP gateway.
- Register C7SCCPA2_C7UDTS07 increases each time the system routes a UDTS message with a return cause field of 00000111 to the SCCP gateway.

Associated logs

There are no associated logs.

Register C7SCGT13

CCS7 SCCP called global title 13

OM group C7SCCPA1 (continued)

C7SCGT13 increases each time the system routes an SCCP message to CCS7 CDGT 13.

Register C7SCGT13 release history

Register C7SCGT13 was introduced in BCS32.

Associated registers

The following registers also increase for Unidata Service (UDTS) messages.

- Register C7SCCPA2_C7UDTS00 increases each time the system routes a UDTS message with a return cause field of 00000000 to the SCCP gateway.
- Register C7SCCPA2_C7UDTS01 increases each time the system routes a UDTS message with a return cause field of 00000001 to the SCCP gateway.
- Register C7SCCPA2_C7UDTS05 increases each time the system routes a UDTS message with a return cause field of 00000101 to the SCCP gateway.
- Register C7SCCPA2_C7UDTS07 increases each time the system routes a UDTS message with a return cause field of 00000111 to the SCCP gateway.

Associated logs

There are no associated logs.

Register C7SCGT14

CCS7 SCCP called global title 14 (C7SCGT14)

Register C7SCGT14 increases each time the system routes an SCCP message to CCS7 CDGT 14.

Register C7SCGT14 release history

C7SCGT14 was introduced in BCS32.

Associated registers

The following registers also increase for Unidata Service (UDTS) messages.

- Register C7SCCPA2_C7UDTS00 increases each time the system routes a UDTS message with a return cause field of 00000000 to the SCCP gateway.
- Register C7SCCPA2_C7UDTS01 increases each time the system routes a UDTS message with a return cause field of 00000001 to the SCCP gateway.

- Register C7SCCPA2_C7UDTS05 increases each time the system routes a UDTS message with a return cause field of 00000101 to the SCCP gateway.
- Register C7SCCPA2_C7UDTS07 increases each time the system routes a UDTS message with a return cause field of 00000111 to the SCCP gateway.

Associated logs

There are no associated logs.

Register C7SCGT15

CCS7 SCCP called global title 15

Register C7SCGT15 increases each time the system routes an SCCP message to CCS7 CDGT 15.

Register C7SCGT15 release history

Register C7SCGT15 was introduced in BCS32.

Associated registers

The following registers also increase for Unidata Service (UDTS) messages.

- Register C7SCCPA2_C7UDTS00 increases each time the system routes a UDTS message with a return cause field of 00000000 to the SCCP gateway.
- Register C7SCCPA2_C7UDTS01 increases each time the system routes a UDTS message with a return cause field of 00000001 to the SCCP gateway.
- Register C7SCCPA2_C7UDTS05 increases each time the system routes a UDTS message with a return cause field of 00000101 to the SCCP gateway.
- Register C7SCCPA2_C7UDTS07 increases each time the system routes a UDTS message with a return cause field of 00000111 to the SCCP gateway.

Associated logs

There are no associated logs.

Register C7SCGT16

CCS7 SCCP called global title 16 C7SCGT16

OM group C7SCCPA1 (continued)

Register C7SCGT16 increases each time the system routes an SCCP message to CCS7 CDGT 16.

Register C7SCGT16 release history

C7SCGT16 was introduced in BCS32.

Associated registers

The following registers also increase for Unidata Service (UDTS) messages.

- Register C7SCCPA2_C7UDTS00 increases each time the system routes a UDTS message with a return cause field of 00000000 to the SCCP gateway.
- Register C7SCCPA2_C7UDTS01 increases each time the system routes a UDTS message with a return cause field of 00000001 to the SCCP gateway.
- Register C7SCCPA2_C7UDTS05 increases each time the system routes a UDTS message with a return cause field of 00000101 to the SCCP gateway.
- Register C7SCCPA2_C7UDTS07 increases each time the system routes a UDTS message with a return cause field of 00000111 to the SCCP gateway.

Associated logs

There are no associated logs.

Register C7SCGT17

CCS7 SCCP called global title 17 C7SCGT17

Register C7SCGT17 increases each time the system routes an SCCP message to CCS7 CDGT 17.

Register C7SCGT17 release history

C7SCGT17 was introduced in BCS32.

Associated registers

The following registers also increase for Unidata Service (UDTS) messages.

- Register C7SCCPA2_C7UDTS00 increases each time the system routes a UDTS message with a return cause field of 00000000 to the SCCP gateway.
- Register C7SCCPA2_C7UDTS01 increases each time the system routes a UDTS message with a return cause field of 00000001 to the SCCP gateway.

- Register C7SCCPA2_C7UDTS05 increases each time the system routes a UDTS message with a return cause field of 00000101 to the SCCP gateway.
- Register C7SCCPA2_C7UDTS07 increases each time the system routes a UDTS message with a return cause field of 00000111 to the SCCP gateway.

Associated logs

There are no associated logs.

Register C7SCGT18

CCS7 SCCP called global title 18 (C7SCGT18)

Register C7SCGT18 increases each time the system routes an SCCP message to CCS7 CDGT 18.

Register C7SCGT18 release history

C7SCGT18 was introduced in BCS32.

Associated registers

The following registers also increase for Unidata Service (UDTS) messages.

- Register C7SCCPA2_C7UDTS00 increases each time the system routes a UDTS message with a return cause field of 00000000 to the SCCP gateway.
- Register C7SCCPA2_C7UDTS01 increases each time the system routes a UDTS message with a return cause field of 00000001 to the SCCP gateway.
- Register C7SCCPA2_C7UDTS05 increases each time the system routes a UDTS message with a return cause field of 00000101 to the SCCP gateway.
- Register C7SCCPA2_C7UDTS07 increases each time the system routes a UDTS message with a return cause field of 00000111 to the SCCP gateway.

Associated logs

There are no associated logs.

Register C7SCGT19

CCS7 SCCP called global title 19 (C7SCGT19)

OM group C7SCCPA1 (continued)

Register C7SCGT19 increases each time the system routes an SCCP message to CCS7 CDGT 19.

Register C7SCGT19 release history

C7SCGT19 was introduced in BCS32.

Associated registers

The following registers also increase for Unidata Service (UDTS) messages.

- Registers C7SCCPA2_C7UDTS00 increases each time the system routes a UDTS message with a return cause field of 00000000 to the SCCP gateway.
- Registers C7SCCPA2_C7UDTS01 increases each time the system routes a UDTS message with a return cause field of 00000001 to the SCCP gateway.
- Registers C7SCCPA2_C7UDTS05 increases each time the system routes a UDTS message with a return cause field of 00000101 to the SCCP gateway.
- Registers C7SCCPA2_C7UDTS07 increases each time the system routes a UDTS message with a return cause field of 00000111 to the SCCP gateway.

Associated logs

There are no associated logs.

Register C7SCGT20

CCS7 SCCP called global title 20 (C7SCGT20)

Register C7SCGT20 increases each time the system routes an SCCP message to CCS7 CDGT 20.

Register C7SCGT20 release history

C7SCGT20 was introduced in BCS32.

Associated registers

The following registers also increase for Unidata Service (UDTS) messages.

- Register C7SCCPA2_C7UDTS00 increases each time the system routes a UDTS message with a return cause field of 00000000 to the SCCP gateway.
- Register C7SCCPA2_C7UDTS01 increases each time the system routes a UDTS message with a return cause field of 00000001 to the SCCP gateway.

- Register C7SCCPA2_C7UDTS05 increases each time the system routes a UDTS message with a return cause field of 00000101 to the SCCP gateway.
- Register C7SCCPA2_C7UDTS07 increases each time the system routes a UDTS message with a return cause field of 00000111 to the SCCP gateway.

Associated logs

There are no associated logs.

Register C7SCGT21

CCS7 SCCP called global title 21 (C7SCGT21)

Register C7SCGT21 increases each time the system routes an SCCP message to CCS7 CDGT 21.

Register C7SCGT21 release history

C7SCGT21 is added toBCS32.

Associated registers

The following registers also increase for Unidata Service (UDTS) messages.

- Register C7SCCPA2_C7UDTS00 increases each time the system routes a UDTS message with a return cause field of 00000000 to the SCCP gateway.
- Register C7SCCPA2_C7UDTS01 increases each time the system routes a UDTS message with a return cause field of 00000001 to the SCCP gateway.
- Register C7SCCPA2_C7UDTS05 increases each time the system routes a UDTS message with a return cause field of 00000101 to the SCCP gateway.
- Register C7SCCPA2_C7UDTS07 increases each time the system routes a UDTS message with a return cause field of 00000111 to the SCCP gateway.

Associated logs

There are no associated logs.

Register C7SCGT22

CCS7 SCCP called global title 22 (C7SCGT22)

OM group C7SCCPA1 (continued)

Register C7SCGT22 increases each time the system routes an SCCP message to CCS7 CDGT 22.

Register C7SCGT22 release history

C7SCGT22 was introduced in BCS32.

Associated registers

The following registers also increase for Unidata Service (UDTS) messages.

- Register C7SCCPA2_C7UDTS00 increases each time the system routes a UDTS message with a return cause field of 00000000 to the SCCP gateway.
- Register C7SCCPA2_C7UDTS01 increases each time the system routes a UDTS message with a return cause field of 00000001 to the SCCP gateway.
- Register C7SCCPA2_C7UDTS05 increases each time the system routes a UDTS message with a return cause field of 00000101 to the SCCP gateway.
- Register C7SCCPA2_C7UDTS07 increases each time the system routes a UDTS message with a return cause field of 00000111 to the SCCP gateway.

Associated logs

There are no associated logs.

Register C7SCGT23

CCS7 SCCP called global title 23 (C7SCGT23)

Register C7SCGT23 increases each time the system routes an SCCP message to CCS7 CDGT 23.

Register C7SCGT23 release history

C7SCGT23 was introduced in BCS32.

Associated registers

The following registers also increase for Unidata Service (UDTS) messages.

- Register C7SCCPA2_C7UDTS00 increases each time the system routes a UDTS message with a return cause field of 00000000 to the SCCP gateway.
- Register C7SCCPA2_C7UDTS01 increases each time the system routes a UDTS message with a return cause field of 00000001 to the SCCP gateway.

- Register C7SCCPA2_C7UDTS05 increases each time the system routes a UDTS message with a return cause field of 00000101 to the SCCP gateway.
- Register C7SCCPA2_C7UDTS07 increases each time the system routes a UDTS message with a return cause field of 00000111 to the SCCP gateway.

Associated logs

There are no associated logs.

Register C7SCGT24

CCS7 SCCP called global title 24 Register (C7SCGT24)

Register C7SCGT24 increases each time the system routes an SCCP message to CCS7 CDGT 24.

Register C7SCGT24 release history

C7SCGT24 was introduced in BCS32.

Associated registers

The following registers also increase for Unidata Service (UDTS) messages.

- Register C7SCCPA2_C7UDTS00 increases each time the system routes a UDTS message with a return cause field of 00000000 to the SCCP gateway.
- Register C7SCCPA2_C7UDTS01 increases each time the system routes a UDTS message with a return cause field of 00000001 to the SCCP gateway.
- Register C7SCCPA2_C7UDTS05 increases each time the system routes a UDTS message with a return cause field of 00000101 to the SCCP gateway.
- Register C7SCCPA2_C7UDTS07 increases each time the system routes a UDTS message with a return cause field of 00000111 to the SCCP gateway.

Associated logs

There are no associated logs.

Register C7SCGT25

CCS7 SCCP called global title 25

OM group C7SCCPA1 (continued)

C7SCGT25 increases each time the system routes an SCCP message to CCS7 CDGT 25.

Register C7SCGT25 release history

Register C7SCGT25 was introduced in BCS32.

Associated registers

The following registers also increase for Unidata Service (UDTS) messages.

- Register C7SCCPA2_C7UDTS00 increases each time the system routes a UDTS message with a return cause field of 00000000 to the SCCP gateway.
- Register C7SCCPA2_C7UDTS01 increases each time the system routes a UDTS message with a return cause field of 00000001 to the SCCP gateway.
- Register C7SCCPA2_C7UDTS05 increases each time the system routes a UDTS message with a return cause field of 00000101 to the SCCP gateway.
- Register C7SCCPA2_C7UDTS07 increases each time the system routes a UDTS message with a return cause field of 00000111 to the SCCP gateway.

Associated logs

There are no associated logs.

Register C7SCGT26

CCS7 SCCP called global title 26 (C7SCGT26)

Register C7SCGT26 increases each time the system routes an SCCP message to CCS7 CDGT 26.

Register C7SCGT26 release history

C7SCGT26 was introduced in BCS32.

Associated registers

The following registers also increase for Unidata Service (UDTS) messages.

- Register C7SCCPA2_C7UDTS00 increases each time the system routes a UDTS message with a return cause field of 00000000 to the SCCP gateway.
- Register C7SCCPA2_C7UDTS01 increases each time the system routes a UDTS message with a return cause field of 00000001 to the SCCP gateway.

- Register C7SCCPA2_C7UDTS05 increases each time the system routes a UDTS message with a return cause field of 00000101 to the SCCP gateway.
- Register C7SCCPA2_C7UDTS07 increases each time the system routes a UDTS message with a return cause field of 00000111 to the SCCP gateway.

Associated logs

There are no associated logs.

Register C7SCGT27

CCS7 SCCP called global title 27 (C7SCGT27)

Register C7SCGT27 increases each time the system routes an SCCP message to CCS7 CDGT 27.

Register C7SCGT27 release history

Register C7SCGT27 was introduced in BCS32.

Associated registers

The following registers also increase for Unidata Service (UDTS) messages.

- Register C7SCCPA2_C7UDTS00 increases each time the system routes a UDTS message with a return cause field of 00000000 to the SCCP gateway.
- Register C7SCCPA2_C7UDTS01 increases each time the system routes a UDTS message with a return cause field of 00000001 to the SCCP gateway.
- Register C7SCCPA2_C7UDTS05 increases each time the system routes a UDTS message with a return cause field of 00000101 to the SCCP gateway.
- Register C7SCCPA2_C7UDTS07 increases each time the system routes a UDTS message with a return cause field of 00000111 to the SCCP gateway.

Associated logs

There are no associated logs.

Register C7SCGT28

CCS7 SCCP called global title 28 (C7SCGT28)

OM group C7SCCPA1 (continued)

Register C7SCGT28 increases each time the system routes an SCCP message to CCS7 CDGT 28.

Register C7SCGT28 release history

Register C7SCGT28 was introduced in BCS32.

Associated registers

The following registers also increase for Unidata Service (UDTS) messages.

- Register C7SCCPA2_C7UDTS00 increases each time the system routes a UDTS message with a return cause field of 00000000 to the SCCP gateway.
- Register C7SCCPA2_C7UDTS01 increases each time the system routes a UDTS message with a return cause field of 00000001 to the SCCP gateway.
- Register C7SCCPA2_C7UDTS05 increases each time the system routes a UDTS message with a return cause field of 00000101 to the SCCP gateway.
- Register C7SCCPA2_C7UDTS07 increases each time the system routes a UDTS message with a return cause field of 00000111 to the SCCP gateway.

Associated logs

There are no associated logs.

Register C7SCGT29

CCS7 SCCP called global title 29 (C7SCGT29)

Register C7SCGT29 increases each time the system routes an SCCP message to CCS7 CDGT 29.

Register C7SCGT29 release history

Register C7SCGT29 was introduced in BCS32.

Associated registers

The following registers also increase for Unidata Service (UDTS) messages.

- Register C7SCCPA2_C7UDTS00 increases each time the system routes a UDTS message with a return cause field of 00000000 to the SCCP gateway.
- Register C7SCCPA2_C7UDTS01 increases each time the system routes a UDTS message with a return cause field of 00000001 to the SCCP gateway.

- Register C7SCCPA2_C7UDTS05 increases each time the system routes a UDTS message with a return cause field of 00000101 to the SCCP gateway.
- Register C7SCCPA2_C7UDTS07 increases each time the system routes a UDTS message with a return cause field of 00000111 to the SCCP gateway.

Associated logs

There are no associated logs.

Register C7SCGT30

CCS7 SCCP called global title 30 (C7SCGT30)

Register C7SCGT30 increases each time the system routes an SCCP message to CCS7 CDGT 30.

Register C7SCGT30 release history

Register C7SCGT30 was introduced in BCS32.

Associated registers

The following registers also increase for Unidata Service (UDTS) messages.

- Register C7SCCPA2_C7UDTS00 increases each time the system routes a UDTS message with a return cause field of 00000000 to the SCCP gateway.
- Register C7SCCPA2_C7UDTS01 increases each time the system routes a UDTS message with a return cause field of 00000001 to the SCCP gateway.
- Register C7SCCPA2_C7UDTS05 increases each time the system routes a UDTS message with a return cause field of 00000101 to the SCCP gateway.
- Register C7SCCPA2_C7UDTS07 increases each time the system routes a UDTS message with a return cause field of 00000111 to the SCCP gateway.

Associated logs

There are no associated logs.

Register C7SCGTOH

CCS7 SCCP called global title others C7SCGTOH

OM group C7SCCPA1 (end)

Register C7SCGTOH increases each time the system routes an SCCP message to a CCS7 CDGT that is not datafilled in table N7CLLDGT.

Register C7SCGTOH release history

Register C7SCGTOH was introduced in BCS32.

Associated registers

The following registers also increase for Unidata Service (UDTS) messages.

- Register C7SCCPA2_C7UDTS00 increases each time the system routes a UDTS message with a return cause field of 00000000 to the SCCP gateway.
- Register C7SCCPA2_C7UDTS01 increases each time the system routes a UDTS message with a return cause field of 00000001 to the SCCP gateway.
- Register C7SCCPA2_C7UDTS05 increases each time the system routes a UDTS message with a return cause field of 00000101 to the SCCP gateway.
- Register C7SCCPA2_C7UDTS07 increases each time the system routes a UDTS message with a return cause field of 00000111 to the SCCP gateway.

Associated logs

There are no associated logs.

OM group C7SCCPA2

OM description

CCS7 SCCP Accounting 2

The OM group C7SCCPA2 records information about Common Channel Signaling 7 (CCS7) signaling connection control part (SCCP) messages and Unitdata Services (UDTS) messages. ADMS 300s with that has a message switch and Buffer 7 (MSB7) receives the SCCP and UDTS messages. Separate registers record the number of SCCP and UDTS messages received by the switch but not routed to specified called global titles (CDGT). The switch does not route the messages for one of the following reasons:

- message contains syntax that is not correct.
- the system routes the message to a CDGT that is not correct.

Four additional registers count the number of UDTS messages that contain specified return causes that transit the gateway.

Release history

The OM group C7SCCPA2 was introduced in BCS32.

Registers

The OM group C7SCCPA2 registers display on the MAP terminal as follows:

```
C7SCSYN     C7SCGTIV    C7SCOTH     C7UDTS00
C7UDTS01    C7UDTS05    C7UDTS07
```

Group structure

The OM group C7SCCPA2 provides one tuple for each calling global title (total 32)

Key field:
One of CALLNG01 to CALLNG30, CALLNGOH orCALLNGIV

Info field:
There is no Info field.

Associated OM groups

C7SCCPA1 CCS7 SCCP Accounting 1

Associated functional groups

There are no associated functional groups.

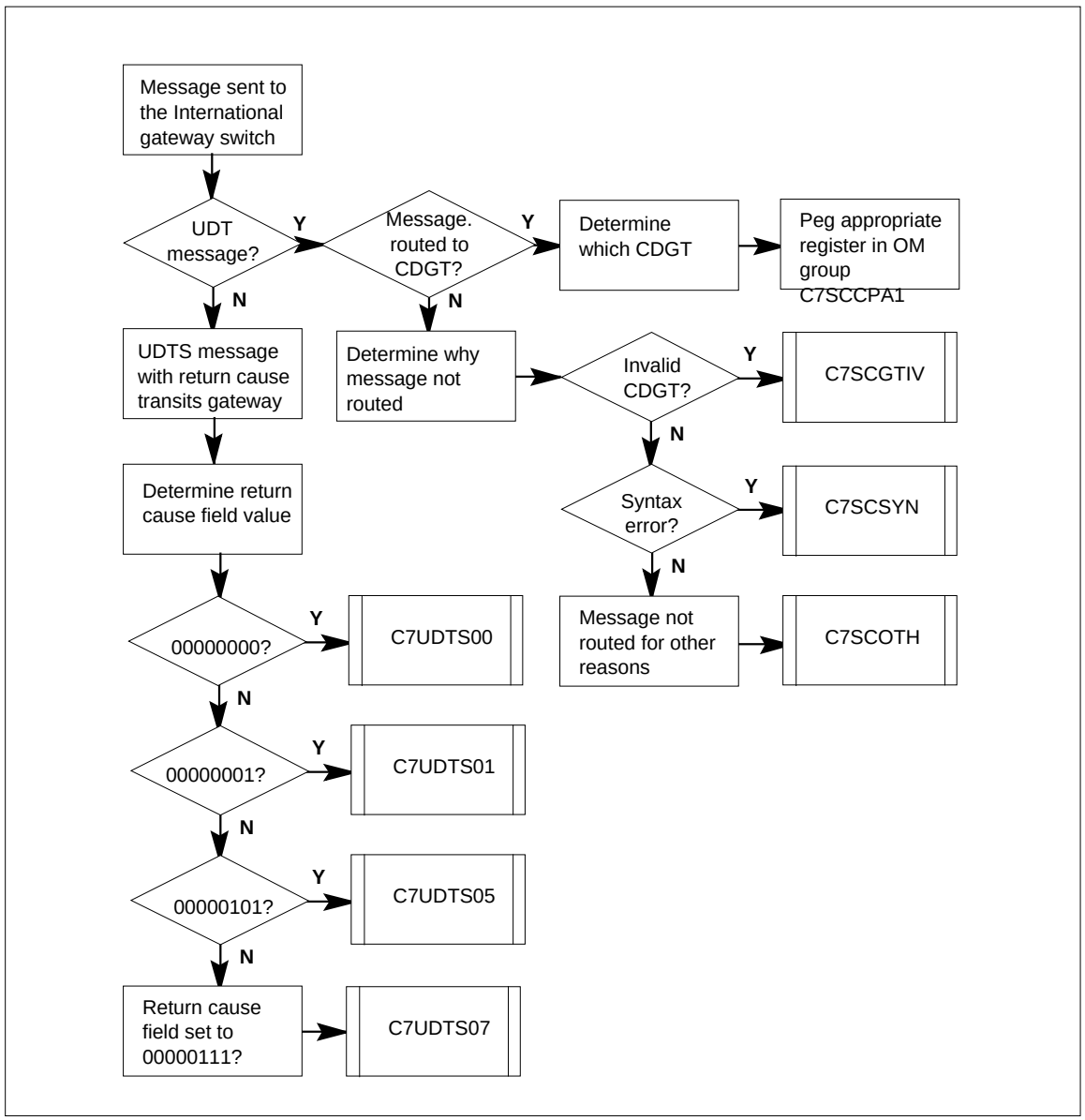
OM group C7SCCPA2 (continued)

Associated functionality codes

The associated functionality codes for OM group C7SCCPA2 appear in the following table.

Functionality	Code
Signaling Connection Part (MSB7) DMS300	NTXK51AA

OM group C7SCCPA2 registers



Register C7SCGTIV

CCS7 SCCP called global title invalid (C7SCGTIV)

Register C7SCGTIV increases each time the system cannot route an SCCP message received by the DMS-300 gateway switch because of a CDGT that is not correct.

OM group C7SCCPA2 (continued)

Register C7SCGTIV release history

Register C7SCGTIV was introduced in BCS32.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Register C7SCOTH

Register CCS7 SCCP invalid other (C7SCOTH)

Register C7SCOTH increases each time the system cannot route an SCCP message received by the DMS-300 gateway switch for reasons other than CDGT that is not correct or syntax error.

Register C7SCOTH release history

Register C7SCOTH was introduced in BCS32.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Register C7SCSYN

CCS7 SCCP syntax invalid C7SCSYN.

Register C7SCSYN increases each time the system cannot route SCCP message received by the DMS-300 gateway switch cannot be routed due to an invalid message syntax.

Register C7SCSYN release history

C7SCSYN was introduced in BCS32.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Register C7UDTS00

CCS7 SCCP UDTS return cause 00 (C7UDTS00)

Register C7UDTS00 increases each time a successfully transmitted SCCP UDTS message contains a return cause field of 00000000. This return cause indicates that the message cannot be routed because the address cannot be translated.

Register C7UDTS00 release history

Register C7UDTS00 was introduced in BCS32.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Register C7UDTS01

CCS7 SCCP UDTS return cause 01 (C7UDTS0)

Register C7UDTS01 increases each time a transmitted SCCP UDTS message contains a return cause field of 00000001. This return cause indicates that the message cannot be routed because this specific address cannot be translated.

Register C7UDDTS01 release history

Register C7UDDTS01 was introduced in BCS32.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Register C7UDTS05

CCS7 SCCP UDTS return cause 05 (C7UDTS05)

Register C7UDTS05 increases each time a transmitted SCCP UDTS message contains a return cause field of 00000101. This return cause indicates that the system cannot route the message because of a network failure.

Register C7UDTS05 release history

Register C7UDTS05 was introduced in BCS32.

Associated registers

There are no associated registers.

OM group C7SCCPA2 (end)

Associated logs

There are no associated logs.

Register C7UDTSO7

CCS7 SCCP UDTS return cause 07

Register C7UDTS07 increases each time a transmitted SCCP UDTS message contains a return cause field of 00000111. This return cause indicates that the system cannot route the message because the message is not qualified.

Register C7UDTSO7 release history

Register C7UDTSO7 was introduced in BCS32.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

OM group C7SCCPCO

OM description

C7 SCCP Connection Oriented (C7SCCPCO)

Register C7SCCPCO measures the volume of traffic and failures on the class 2 signaling connection control part (SCCP). Specifically, this OM group counts the total number of messages received and sent over the DMS-300 switch. The OM group produces separate counts for each type of message. The OM group also counts the number of times a connection is rejected or fails and has to be taken down.

The counts establish the overhead for the use of SCCP class 2 connections and point out design inefficiencies or indicate that you must adjust the timers. The overhead is normally 10-25 percent of the total DT1 messages. You must enter subsystems that support connection oriented SCCPs into table C7 LOCSSN.

Release history

The OM group C7SCCPCO was introduced in BCS35.

Registers

The OM group C7SCCPCO registers display on the MAP terminal as follows:

C7CLS2TX	C7CLS2T2	C7CLS2RX	C7CLS2R2
C7DT1TX	C7DT1T2	C7DT1RX	C7DT1R2
C7ITTX	C7ITRX	C7CRTX	C7CRT2
C7CRRX	C7CRR2	C7CCTX	C7CCT2
C7CCRX	C7CCR2	C7RLSDTX	C7RLSDT2
C7RLSDRX	C7RLSDR2	C7RLCTX	C7RLCT2
C7RLCRX	C7RLCR2	C7CREFRX	C7CREFTX
C7COFAIL	C7COMREJ		

Group structure

OM group C7SCCPCO

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 C7SCCPCO (continued)

Associated functional groups

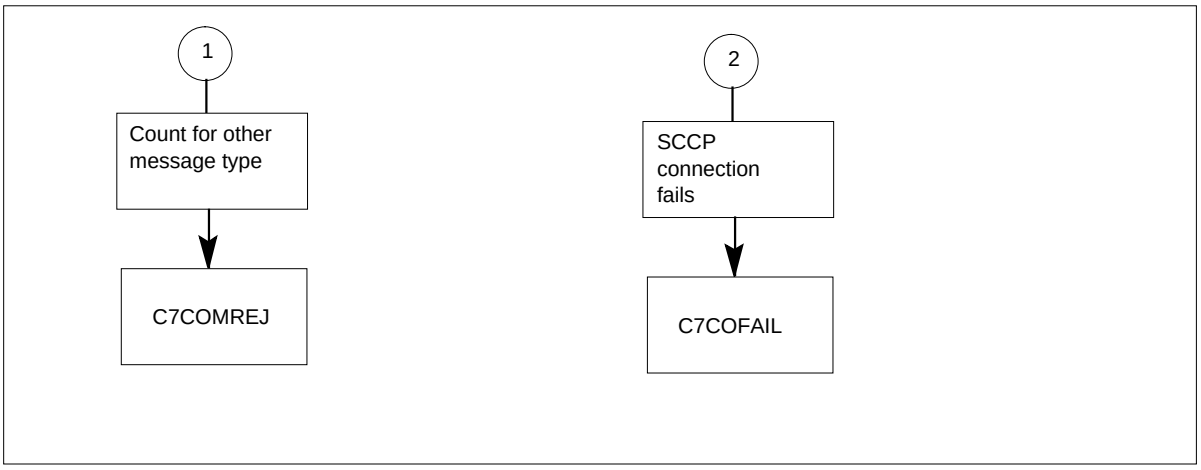
There are no associated functional groups.

Associated functionality codes

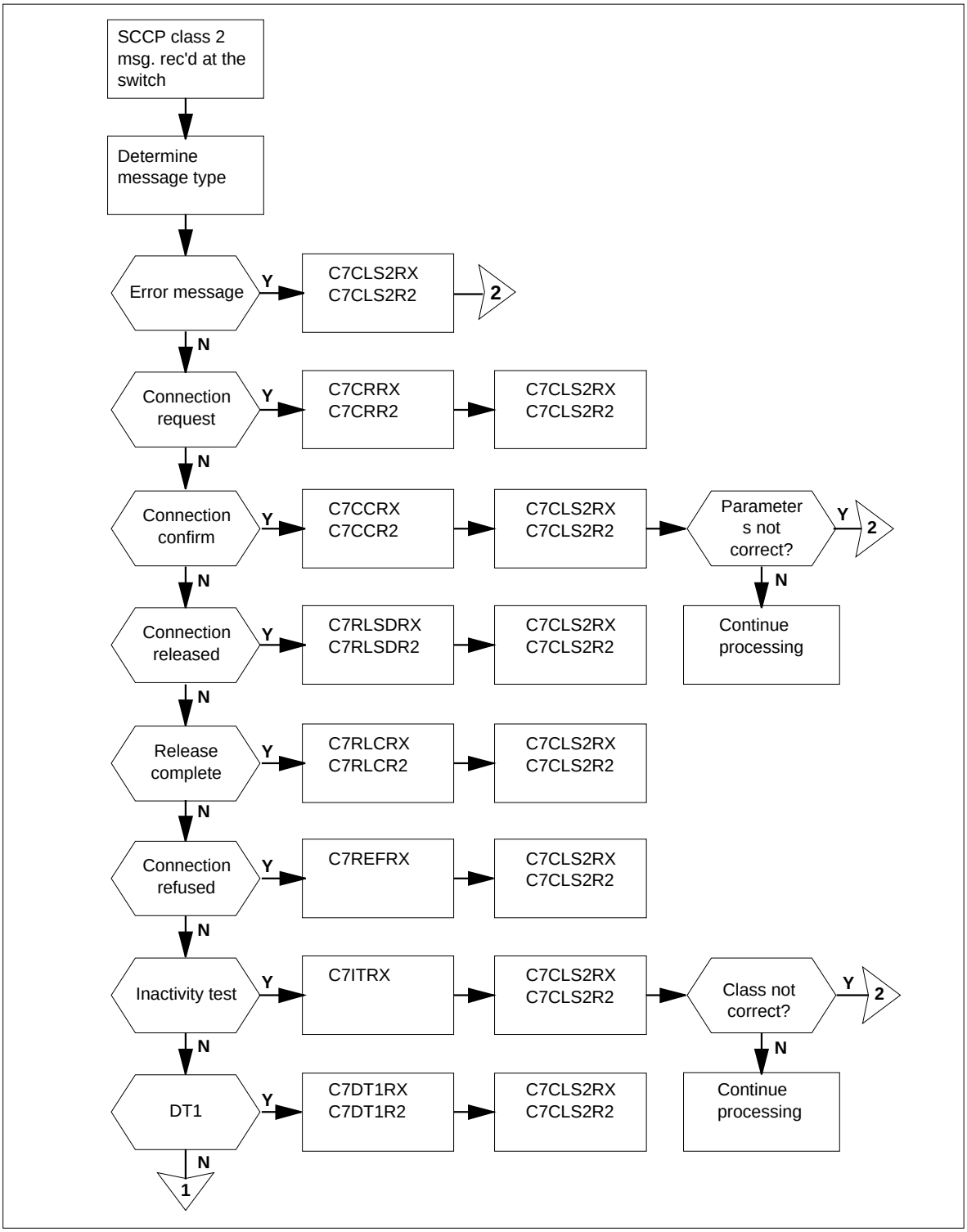
The functionality codes associated with OM group C7SCCPCO are shown in the following table.

Functionality	Code
GSM Base	NTXM99AA

OM group C7SCCPCO registers



OM group C7SCCPCO registers: messages received



OM group C7SCCPCO (continued)

Register C7CCRX

SCCP CC messages received (C7CCRX)

Register C7CCRX counts the number of times the switch receives a connection confirm (CC) message from the application.

Register C7CCRX release history

Register C7CCRX was introduced in BCS35.

Associated registers

Register C7CLS2RX counts each time the switch receives a correct SCCP class 2 message from the application.

Associated logs

There are no associated logs.

Extension registers

C7CCR2

Register C7CCTX

SCCP CC messages transmitted (C7CCTX)

Register C7CCTX counts the number of times the switch sends a connection confirm (CC) message to the application.

Register C7CCTX release history

Register C7CCTX was introduced in BCS35.

Associated registers

Register C7CLS2TX counts each time the switch sends a correct SCCP class 2 message to the application.

Associated logs

There are no associated logs.

Extension registers

C7CCT2

Register C7CLS2RX

SCCP class 2 messages received (C7CCRX)

Registers C7CCRX counts the number of times the switch receives a correct class 2 message from the application. This register contains the total number of incoming correct class 2 messages transmitted across the CCS7 link.

Register C7CLS2RX release history

Register C7CLS2RX was introduced in BCS35.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension Register

C7CLS2R2

Register C7CLS2TX

SCCP class 2 messages transmitted

C7CCRX counts the number of times the switch sends a valid class 2 message to the application. The value in this register indicates the total number of valid outgoing messages transmitted across the CCS7 link.

Register C7CLS2TX release history

Registers C7CLS2TX was introduced in BCS35.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension Register

C7CLS2T2

Register C7COFAIL

SCCP connection failed

Register C7CCRX counts the number of connections that fail because of software errors such as the following: the IT message contains a correct class that is not correct, an ERR message is received, or a CC message contains data that is not correct. When this register increases, the system dismantles the connection.

OM group C7SCCPCO (continued)

Register C7COFAIL release history

C7COFAIL was introduced in BCS35.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension Register

There are no associated register.

Register C7COMREJ

SCCP connection messages rejected (C7COMREJ)

Register C7COMREJ counts the number of times the system discards a connection oriented message because it contains a message type that is not supported. The following message types are not supported: DT2 (Data Form 2), AK (Data acknowledge), ED (Expedited data), EA (Expedited data acknowledge), RSR (Reset request), and RSC (Reset confirm).

Register C7COMREJ release history

C7COMREJ was introduced in BCS35.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension Register

There are no extension registers.

Register C7CREFRX

SCCP CREF message received (C7CCREFX)

Register C7CCREFX counts the number of times the switch receives a connection refused (CREF) message from the application.

Register C7CREFRX release history

Register C7CREFRX was introduced in BCS35.

Associated registers

Register C7CLS2RX counts the number of times the switch receives a correct class message is received by the switch.

Associated logs

There are no associated logs.

Register C7CREFTX

SCCP CREF messages transmitted (C7CCREFTX)

Register C7CCRX counts the number of times the switch sends a connection refused (CREF) message to the application. This event occurs, for example, when the local subsystem is not in service or if the maximum number of connections (2048) are already established.

Register C7CREFTX release history

Register C7CREFTX was introduced in BCS35.

Associated registers

Register C7CLS2TX counts each time the switch sends a correct class 2 message across the CCS7 link.

Associated logs

There are no associated logs.

Register C7CRRX

SCCP CR messages received (C7CRRX)

Register C7CRRX counts the number of times the switch receives a connection request (CR) message from the application.

Register C7CRRX release history

Register C7CRRX was introduced in BCS35.

Associated registers

Register C7CLS2RX counts the number of times the switch receives a correct class 2 message.

Associated logs

There are no associated logs.

Extension Register

C7CRR2

OM group C7SCCPCO (continued)

Register C7CRTX

SCCP CR messages transmitted (C7CRTX)

Register C7CRTX counts the number of times the switch sends a connection request (CR) message to the application.

Register C7CRTX release history

Register C7CRTX was introduced in BCS35.

Associated registers

Register C7CLS2TX counts each time the switch sends a correct class 2 message across the CCS7 link.

Associated logs

There are no associated logs

Extension Register

C7CRT2

Register C7DT1RX

SCCP DT1 messages received (C7DT1RX)

Register C7DT1RX counts the number of times the switch receives a Data Form 1 (DT1) message from the application.

Register C7DT1RX release history

Register C7DT1RX was introduced in BCS35.

Associated registers

Register C7CLS2RX counts the number of times the switch receives a correct class 2 message.

Associated logs

There are no associated logs.

Extension Register

C7DT1R2

Register C7DT1TX

SCCP DT1 messages transmitted

Register C7DT1TX counts the number of times the switch sends a Data Form 1 (DT) message to the application.

Register C7DT1TX release history

Register C7DT1TX was introduced in BCS35.

Associated registers

Register C7CLS2TX counts each time the switch sends a correct class 2 message across the CCS7 link.

Associated logs

There are no associated logs.

Extension Register

C7DT1T2

Register C7ITRX

SCCP IT messages received (C7ITRX)

Register C7ITRX counts the number of times the switch receives an inactivity test (IT) message from the application. This event occurs when a timeout of the inactivity send timer occurs at the far end.

Register C7ITRX release history

Register C7ITRX was introduced in BCS35.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Register C7ITTX

SCCP IT messages transmitted (C7ITTX)

C7ITTX counts the number of times the switch sends an inactivity test (IT) message to the application. This event occurs when a timeout of the inactivity send timer occurs at the local end. This timer tracks the time between consecutive messages sent on an active connection in table SCCPTMR contains the value of this timer.

The value in this register is used to determine if the timeouts are set at too short an interval and are not efficient because of the large number of IT messages sent.

OM group C7SCCPCO (continued)

Register C7ITTX release history

Register C7ITTX was introduced in BCS35.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension Register

There are no associated registers.

Register C7RLCRX

SCCP release complete messages received (C7CCRX)

Register C7CCRX counts the number of times the switch receives a release complete (RLC) message from the application. The far end sends this message in response to a RLSD message from the local end.

Register C7RLCRX release history

Register C7RLCRX was introduced in BCS35.

Associated registers

Register C7CLS2RX counts the number of times the switch receives a correct class 2 message.

Associated logs

There are no associated logs.

Extension Register

C7RLCR2

Register C7RLCTX

SCCP RLC messages transmitted

Register C7RLCTX counts the number of times the switch sends a release complete (RLC) message to the application. The switch sends this message in response to an RLSD message if a valid connection was present or not.

Register C7RLCTX release history

Register C7RLCTX was introduced in BCS35.

Associated registers

Register C7CLS2TX counts each time the switch sends a correct class 2 message across the CCS7 link.

Associated logs

There are no associated logs.

Extension Register

C7RLCT2

Register C7RLSDRX

SCCP RLSD messages received (C7RLSDRX)

C7RLSDRX counts the number of times the switch receives a released (RLSD) message from the application. This message indicates that the far end wants to release the established connection.

Register C7RLSDRX release history

Register C7RLSDRX was introduced in BCS35.

Associated registers

Register C7CLS2RX counts the number of times the switch receives a class 2 message.

Associated logs

There are no associated logs.

Extension Register

C7RLSDR2

Register C7RLSDTX

SCCP RLSD messages transmitted

Register C7RLSDTX counts the number of times the switch sends a released (RLSD) message to the application.

Register C7RLSDTX release history

Register C7RLSDTX was introduced in BCS35.

Associated registers

Register C7CLS2TX counts each time the switch sends a correct class 2 message across the CCS7 link.

OM group C7SCCPCO (end)

Associated logs

There are no associated logs.

Extension Register

C7RLSDT2

OM group C7SCCPX

OM description

The OM group C7SCCPX registers provide information on the performance and use of extended unitdata and extended unitdata service (XUDT/XUDTS) messages. These registers count the number of messages that are formatted into extended unitdata messages and extended unitdata service messages. The registers also count messages that encounter reassembly errors and messages that encounter hop counter problems.

Release history

The OM group C7SCCPX was introduced in TL06.

Registers

The following OM group C7SCCPX registers display on the MAP terminal as follows:

```
C7XUDTRX C7XUDTR2 C7XUDTSR C7XUDTTX
C7XUDTT2 C7XUDTST C7XTIMER C7XSGTOS
C7XRSERR C7XHCERR
```

Group structure

The OM group C7SCCPX provides one tuple for each office.

Key field:
There is no Key field.

Info field:
There is no Info field.

Associated OM groups

Associated operating groups

The following operating groups are for OM group C7SCCPX:

- Register C7SCCP tracks the performance and use of the CCS7 SCCP.
- Register C7LINK1 and C7LINK2 track link availability and link use.
- Register C7RTESET tracks routeset availability.
- Register C7ROUTE tracks the component routes.
- Register C7LKSET tracks the performance and use of a CCS7 LINKSET.

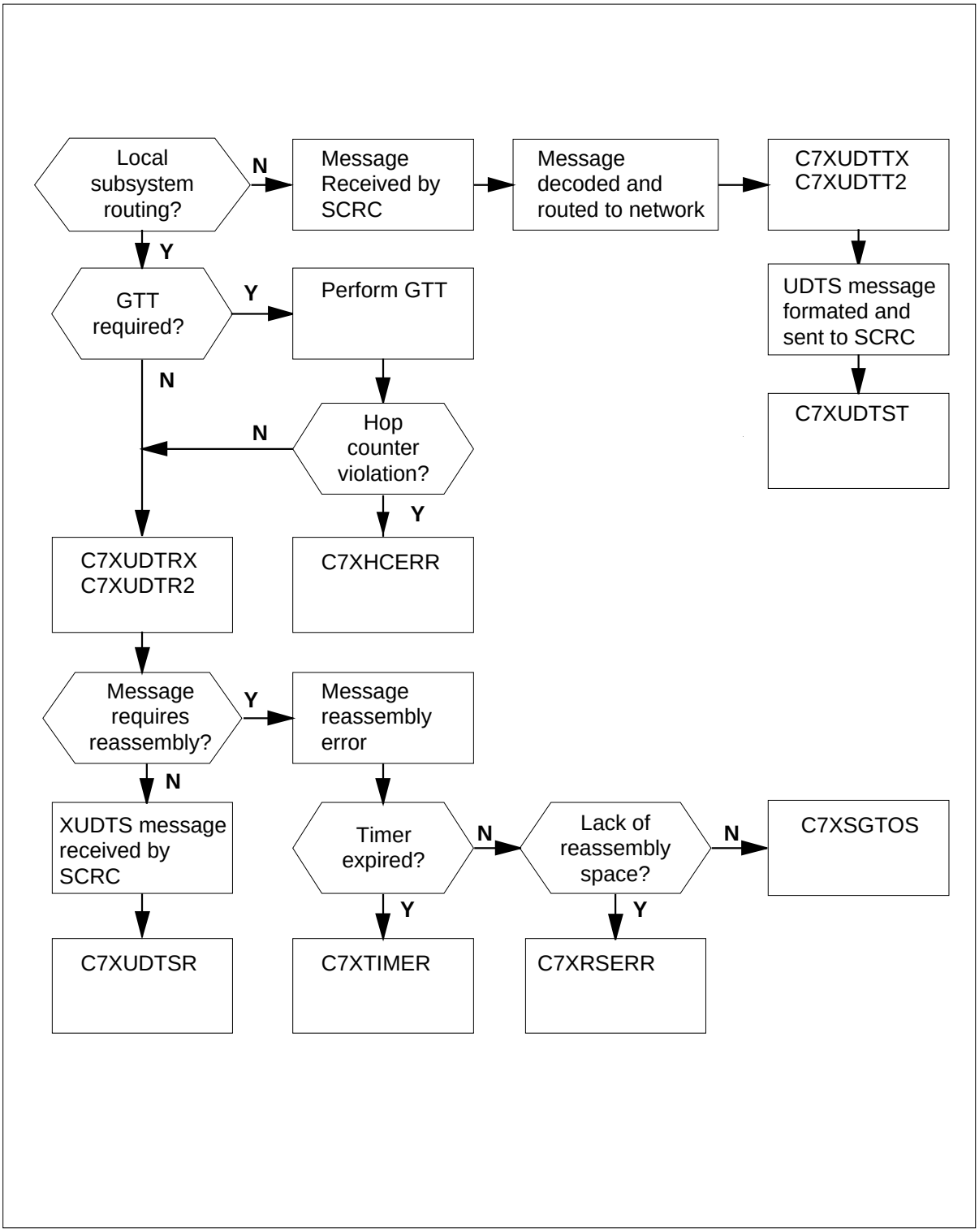
OM group C7SCCPX (continued)

Associated functionality codes

The associated functionality codes for OM group C7SCCPX appear in the following table.

Functionality	Code
CCS7-MTP associated and Non-associated Signaling	NTX041AA
CCS7-MTP/SCCP	NTX041AB
SS7 Transaction Service Support	NTX550AA

OM group C7SCCPX registers



OM group C7SCCPX (continued)

Register C7XUDTRX

Register CCS7 XUDT received

Register C7XUDTRX counts the number of extended unitdata (XUDT) SCCP messages without connections. The SCCP routing control (SCRC) receives the XUDT SCCP messages without connections from the CCS7. The XUDT messages without connections pass through the message Transfer Part (MTP)

Register C7XUDTRX release history

Register C7XUDTRX was introduced in TL06.

Associated registers

Register C7MSGHDL associates with this register.

Associated logs

There are no associated logs.

Extension registers

C7XUDTR2.

Register C7XUDTSR

Register CCS7 XUDTS received

Register C7XUDTSR counts the number of extended unitdata service(XUDTS) SCCP messages without connections. The SCCP routing control (SCRC) receives these messages from the CCS7 network through the MTP.

Register C7XUDTSR release history

Register C7XUDTSR was introduced in TL06.

Associated registers

Register C7MSGHDL associates with this register.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register C7XUDTTX

Register CCS7 XUDT transmitted

Register C7XUDTTX counts the number of extended unitdata (XUDT) SCCP messages without connection routed into the network through the MTP.

Register C7XUDTTX release history

Register C7XUDTTX was introduced in TL06.

Associated registers

Register C7MSGHDL associates with this register.

Associated logs

There are no associated logs.

Extension registers

C7XUDTT2.

Register C7XUDTST

Register CCS7 XUDTS transmitted

Register C7XUDTST counts the number of extended unitdata service (XUDTS) SCCP messages without connection. The system routes these messages into the network through the Message Transfer Part(MTP).

Register C7XUDTST release history

Register C7XUDTST was introduced in TL06.

Associated registers

Register C7MSGHDL associates with this register.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register C7XTIMER

Register CCS7 reassembly error, timer expired (C7XTIMER)

Register C7XTIMER counts the number of extended unitdata (XUDT) SCCP messages without connections that could not be assembled again before the reassembly timer expired.

Register C7XTIMER release history

Register C7XTIMER was introduced in TL06.

OM group C7SCCPX (continued)

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register C7XSGTOS

CCS7 reassembly error, XUDT message received out of sequence (C7XSGTOS)

Register C7XSGTOS counts the number of extended unitdata (XUDT) SCCP messages without connection that could not be reassembled. The message could not be reassembled because a segment was received out of sequence.

Register C7XSGTOS release history

Register C7XSGTOS was introduced in TL06.

Associated registers

There are no associated registers.

Associated logs

Log Number CCS201.

Extension registers

There are no associated registers.

Register C7XRSERR

Register CCS7 reassembly error, no reassembly space. (C7XRSERR)

Register C7XRSERR counts the number of extended unitdata and extended unitdata service (XUDT/XUDTS) SCCP messages without connection that could not be reassembled as a result of lack of resources.

Register C7XRSERR release history

Register C7XRSERR was introduced in TL06.

Associated registers

There are no associated registers.

Associated logs

Log number CCS201.

Extension registers

There are no extension registers.

Register C7XHCERR

Register CCS7 hop count violation (C7XHCERR)

Register C7XHCERR counts the number of extended unitdata and extended unitdata service (XUDT/XUDTS) SCCP messages without connections discarded as a result of a hop counter problem.

Register C7SGTOS release history

Register C7XHCERR was introduced in TL06.

Associated registers

There are no associated registers.

Associated logs

Log Number CCS241.

Extension registers

There are no extension registers.

OM group CACHEMGR

OM Description

Cache manager

This OM group collects and reports data for each cache to the cache manager system to measure cache use. The cache manager system provides memory buffering of data stored on disk for NPP data management services.

Release history

The OM group CACHEMGR was introduced in BCS36.

Registers

The OM group CACHEMGR registers display on the MAP terminal as follows:

```
MEMREAD     MEMREAD2    MEMWRIT     MEMWRIT2
DSKREAD     DSKREAD2    DSKWRIT     DSKWRIT2
```

Group structure

OM group CACHEMGR

The OM group CACHEMGR provides a maximum of 200 tuples. The CACHEMGR assigns one cache for each OM tuple. The CACHEMGR only reports tuples for allocated caches. When a cache is deallocated, the CACHEMGR suppresses the tuple. The CACHEMGR does not report the data for the interval while the cache is deleted. If a cache is deallocated and reallocated when a database is closed and then reopened-the OM system assigns a new tuple. The OM assigns a new tuple and does not use the present tuple. The cache manager does not keep information to indicate that the same cache is allocated again. The OM system assigns a new tuple.

Key field:

A key is not defined for this group because it cannot be uniquely predefined.

Info field:

This filed contains the cache name assigned at run time by the application when the cache is allocated.

Associated OM groups

There are no associated OM groups.

Associated functional groups

There are no functional groups.

Associated functionality codes

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

Functionality	Code
Transaction Record Management System	NTXF86AA

Register DSKREAD

Disk read (DSKREAD)

Register DSKREAD increases for each successful read operation that requires disk access.

Register DSKREAD release history

Register DSKREAD was introduced in BCS36.

Associated registers

MEMREAD, MEMWRIT, DSKWRIT

Associated logs

There are no associated logs.

Extension registers

DSKREAD2

Register DSKWRIT

Disk write (DSKWRIT)

Register DSKWRIT increases for each successful write operation that requires disk access.

Register DSKWRIT release history

Register DSKWRIT was created in BCS36.

OM group CACHEMGR (end)

Associated registers

MEMREAD, MEMWRIT, DSKREAD

Associated logs

There are no associated logs.

Extension Register

DSKWRIT2

Register MEMREAD

Memory read (MEMREAD)

Register MEMREAD increases each time a successful read operation does not require disk access.

Register MEMREAD release history

Register MEMREAD was introduced in BCS36.

Associated registers

MEMWRIT, DSKREAD, DSKWRIT

Associated logs

There are no associated logs.

Extension Register

MEMREAD2

Register MEMWRIT

Memory write (MEMWRIT)

Register MEMWRIT increases each time a successful write operation does not require disk access.

Register MEMWRIT release history

Register MEMWRIT was introduced in BCS36.

Associated registers

There are no associated registers.

Extension registers

MEMWRIT2

OM group CALLFWD

OM description

Call Forward (CALLFWD)

The following CALLFWD registers provide information about incoming calls. The CALLFWD uses the following call forward features to redirect these calls:

- Call Forward Busy (CFB) forwards calls from a busy line to any other line.
- Call Forward Don't Answer (CFD). When incoming calls are not answered within a specified time period, this feature forwards calls to another line. The operating company specifies this time period.
- Call Forward Fixed (CFF) forwards calls from a line to a fixed customer-defined location.
- Call Forward Intragroup (CFI) forwards calls from a line to any customer-defined location in the customer group.
- Control of Multiple Call Forwarding (CMCF). This feature limits the number of calls forwarded by a Meridian Digital Centrex (MDC) customer line at the same time.
- Call Forward Simultaneous/Screening (CFS) allows an operating company to impose a limit on calls forwarded at the same time. The limit is between 1 and 1024 on the number of calls forwarded through a call forwarding base station.
- Call Forward Timed (CFT) times a call that the CFB or CFD feature forwards. The CFT routes the call to treatment if the call is not answered before the timer expires.
- Call Forward Unconditional (CFU) forwards calls from a line to a customer-defined location. The customer-defined location can be inside and outside the customer group, and includes the attendant.
- Universal Access to Call Forwarding (UCFW). This feature provides universal access to Call Forwarding for telephones with a line class code of RES, RES-1FR, and RES-1MR.

Note: Registers CFDATTD, CFBATTD, CFUATTD, CFDXMPTD, and CFBXMPTD are pegged for NI-2 ISDN circuit mode data (CMD) calls only. Registers continue to be pegged for voiceband information (VI) calls.

Release history

The OM group CALLFWD was introduced before BCS20.

OM group CALLFWD (continued)

NA008

Registers CFDATTD, CFBATTD, CFUATTD, CFDXMPTD, and CFBXMPTD are added for the ISDN CMD call type.

NA006

Registers CUSPACT, CUSPFAIL, CUSPDEA, and CUSPOVR were added to track events that relate to UCFW.

Registers CFTBATT, CFTBFAIL, CFTDATT, and CFTDFAIL were added for the Call Forward Timed feature. The CFT for CFB (CFTB) and CFT for CFD (CFTD) operational measurements (OM) are pegged to measure the number of times that the CFTB or CFTD features attempt to route a call to treatment. The CFT and CFT also measure the number of times the attempts fail to route a call to treatment.

APC005

Functionality was added to support MDC features.

The MDC features include:

- CFU, CFB and CFD on Global Peripheral Platform (GPP) lines for Australian telephone user part (ATUP)
- American National Standards Institute ISDN user part (ANSI ISUP)
- Australian ISUP (AISUP) trunk signaling

BCS35

Registers CMCFEOV and CMCFIOV were added for the CMCF feature.

BCS25

Registers CFUATT, CFUFAIL, CFUOVFL changed to include the CFF feature and CFUIFSOV, CFBSOV, CFDSOV added.

Registers

The OM group CALLFWD registers display on the MAP terminal as follows:

```
  CFDATT     CFDATT2     CFDFAIL     CFDEXMPT
 CFDOVFL     CDFCNCL    CFDCNCL2       CFBATT
 CFBFAIL    CFBEXMPT     CFBOVFL       CFUATT
 CFUFAIL     CFUOVFL    CFUIFSOV       CFBSOV
  CFDSOV     CMCFIOV     CMCFEOV      CUSPACT
CUSPFAIL     CUSPDEA     CUSPOVR      CFTBATT
CFTBFAIL     CFTDATT    CFTDFAIL      CFDATTD
 CFBATTD     CFUATTD    CFDXMPTD
CFBXMPTD
```

Group structure

The OM group CALLFWD provides one tuple for each key.

Key field:
IBNG_INDEX. Key to CALLFWD. Identifies up to 4096 customer groups.

Info field:
OMIBNGINFO. Customer name as defined in field CUSTNAME in table CUSTHEAD.

The following fields in the following tables must be set:

```
Table OFCENG:   CFW_EXT_BLKS
                NO_OF_FTR_DATA_BLKS
                NUMCPWAKE
                FTRQ2WAREAS
Table OFCOPT:   IBN_CFW
Table CUSTSTN:  CFDATIM for register DFDCNCL
```

Associated OM groups

There are no associated OM groups.

Associated functional groups

The following functional groups associate with OM group CALLFWD:

- MDC Meridian Digital Centrex
- RES Residential Enhanced Services

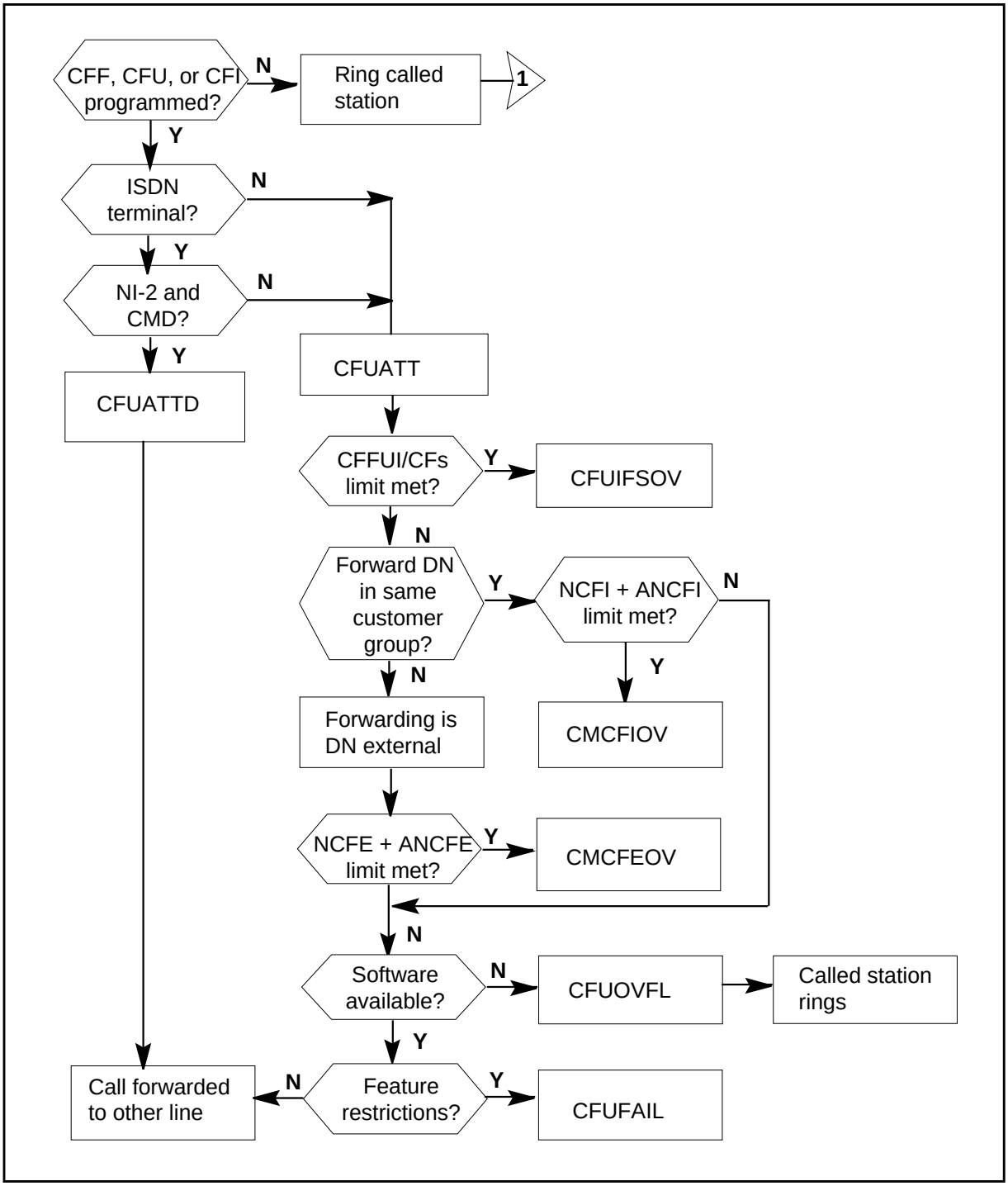
OM group CALLFWD (continued)

Associated functionality codes

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

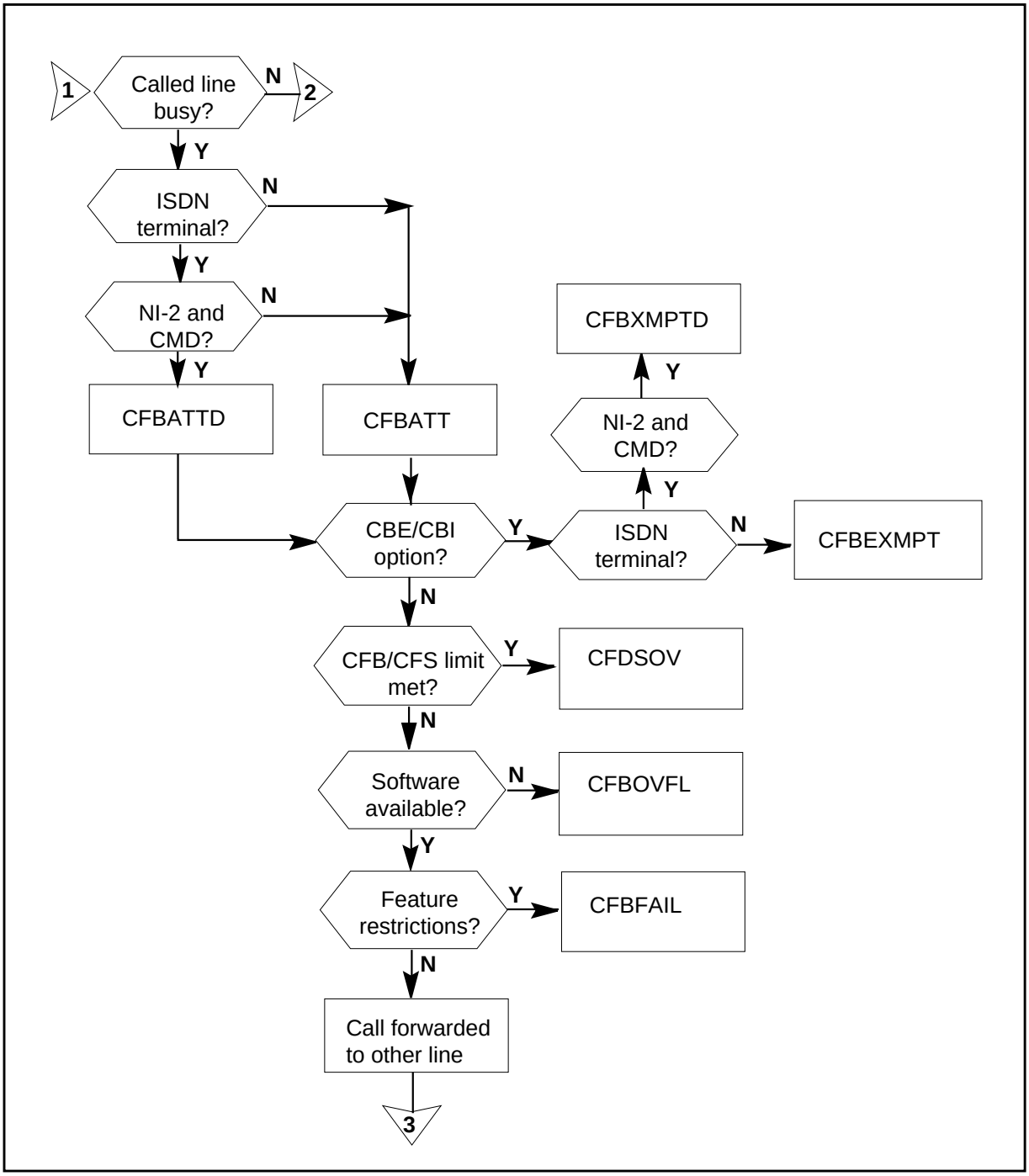
Functionality	Code
Integrated Business Networks-Basic	NTX100AA
IBN-Enhanced Call Forwarding	NTX413AA
NI0 NI-2/3 BRI Services	NI000051

OM group CALLFWD registers for legacy

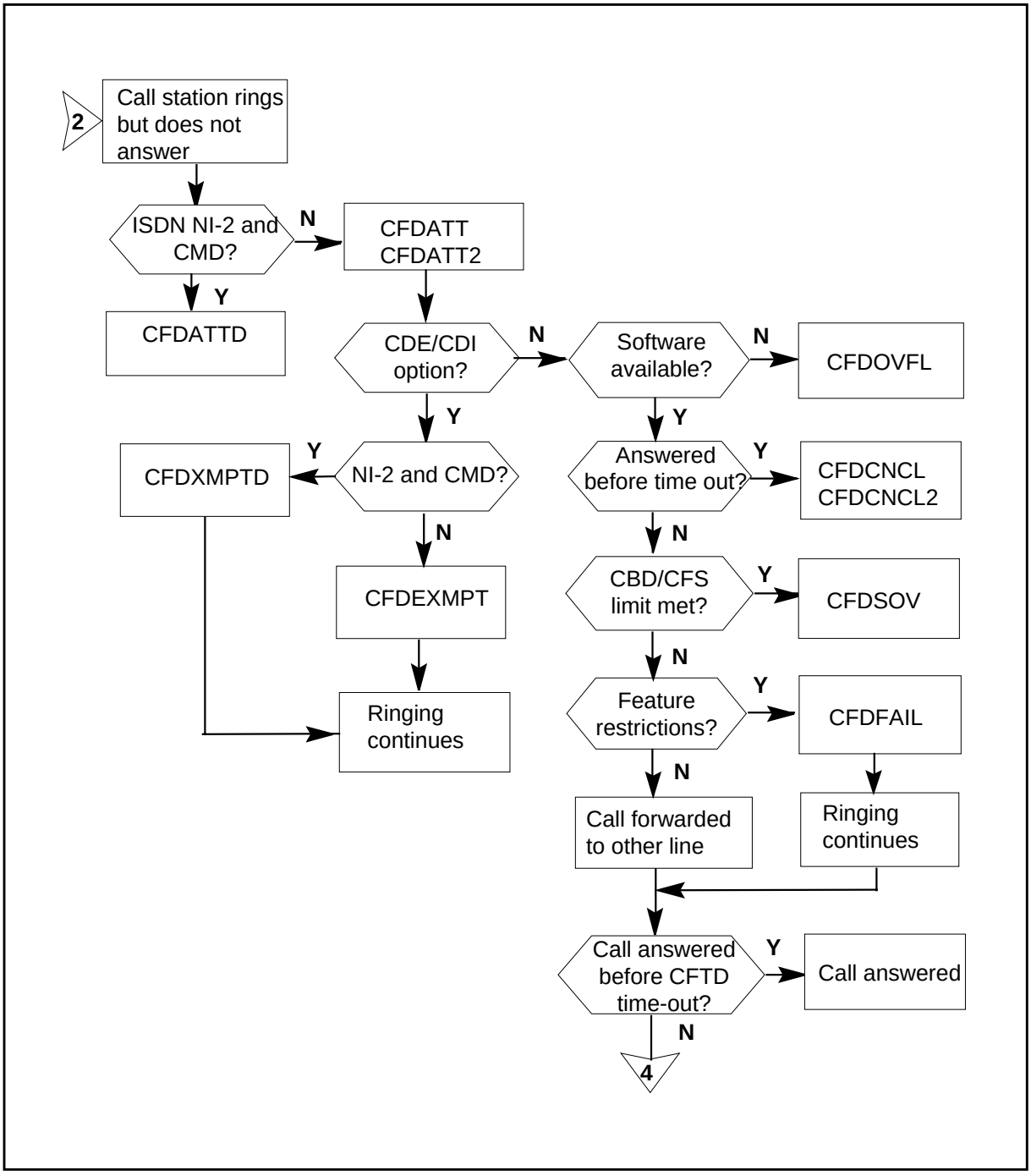


OM group CALLFWD (continued)

OM group CALLFWD registers for legacy (continued)

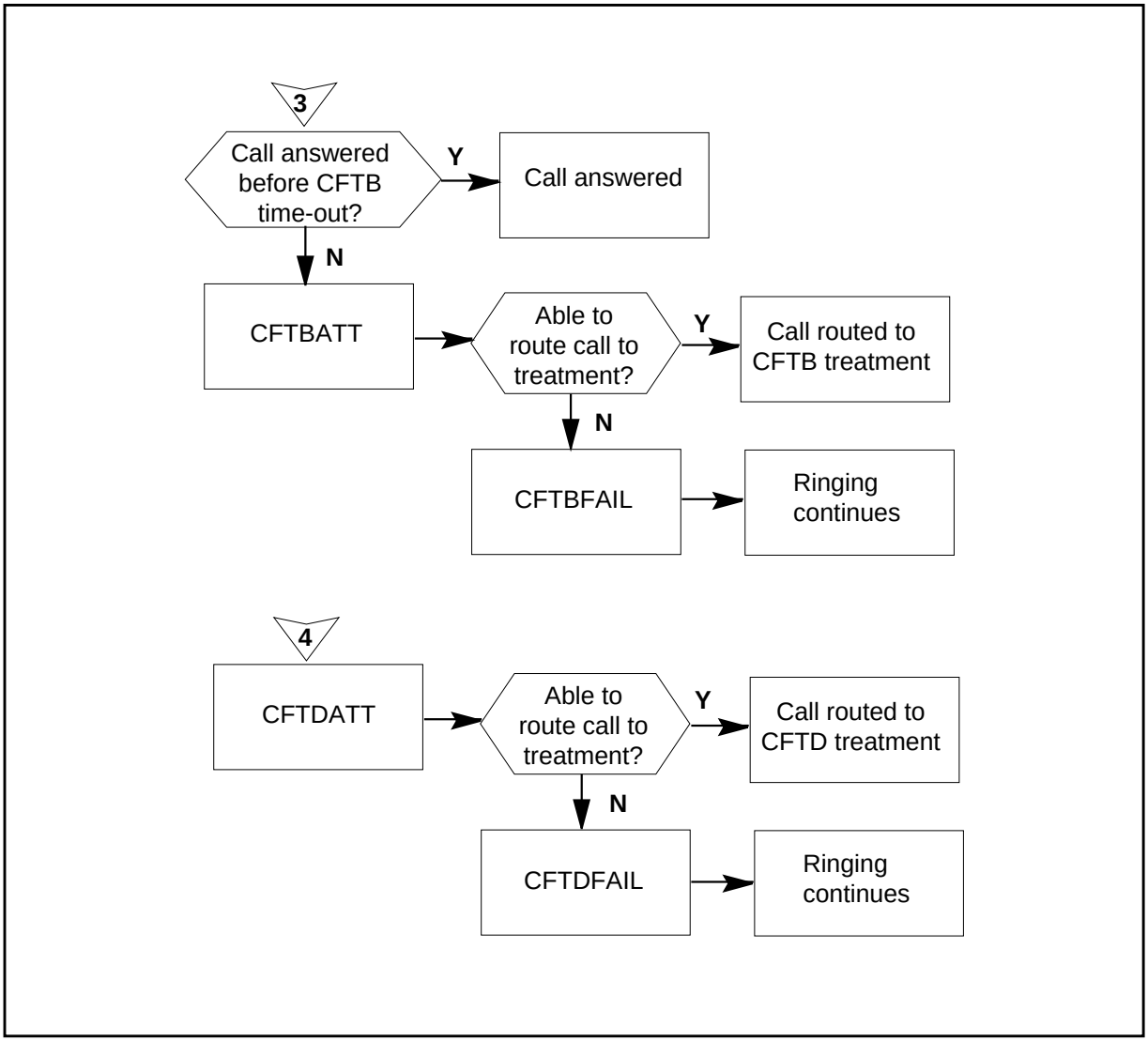


OM group CALLFWD registers for legacy (continued)



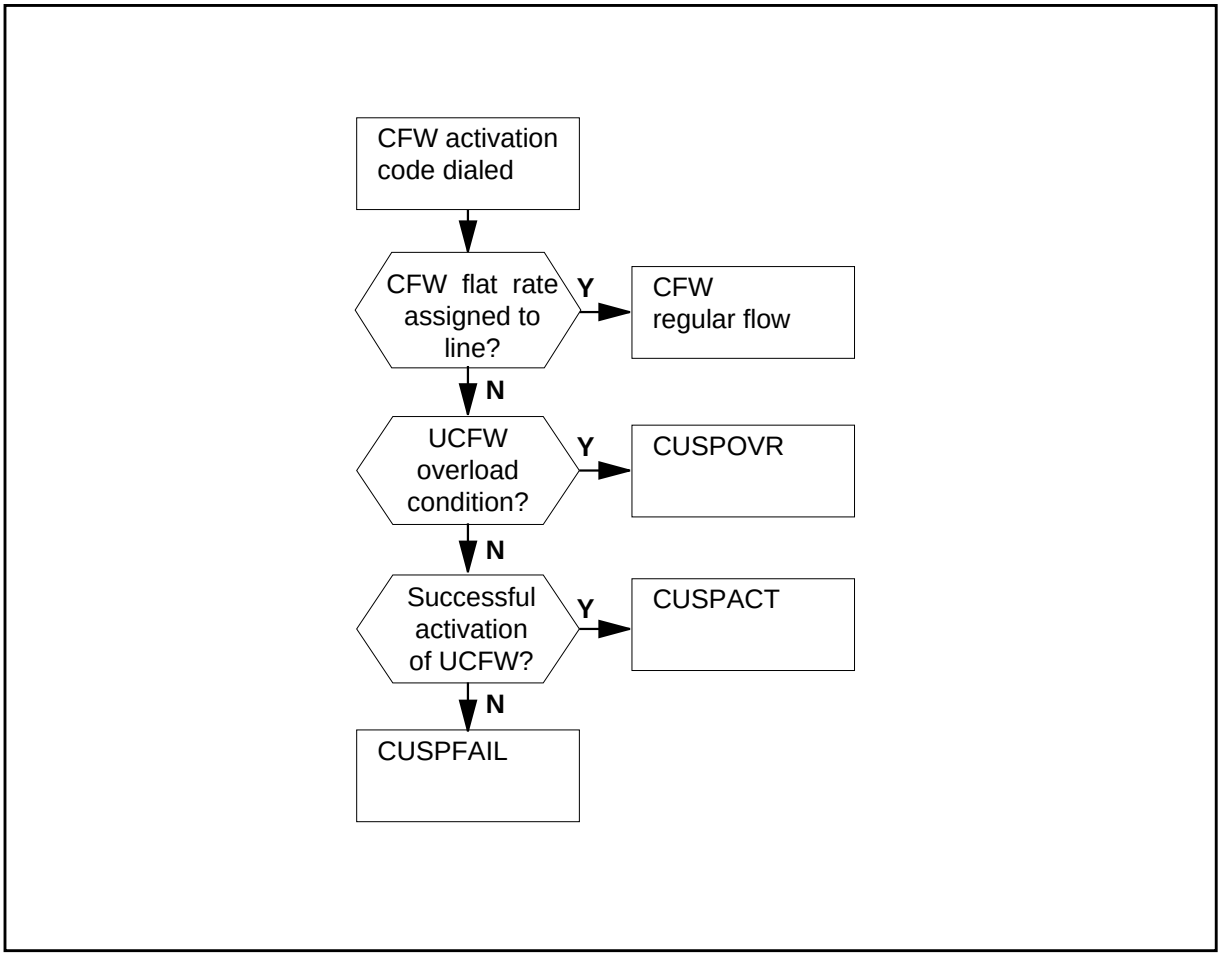
OM group CALLFWD (continued)

OM group CALLFWD registers for legacy (continued)



The following flowchart is for activation of UCFW. The flowchart includes only a limited number of events.

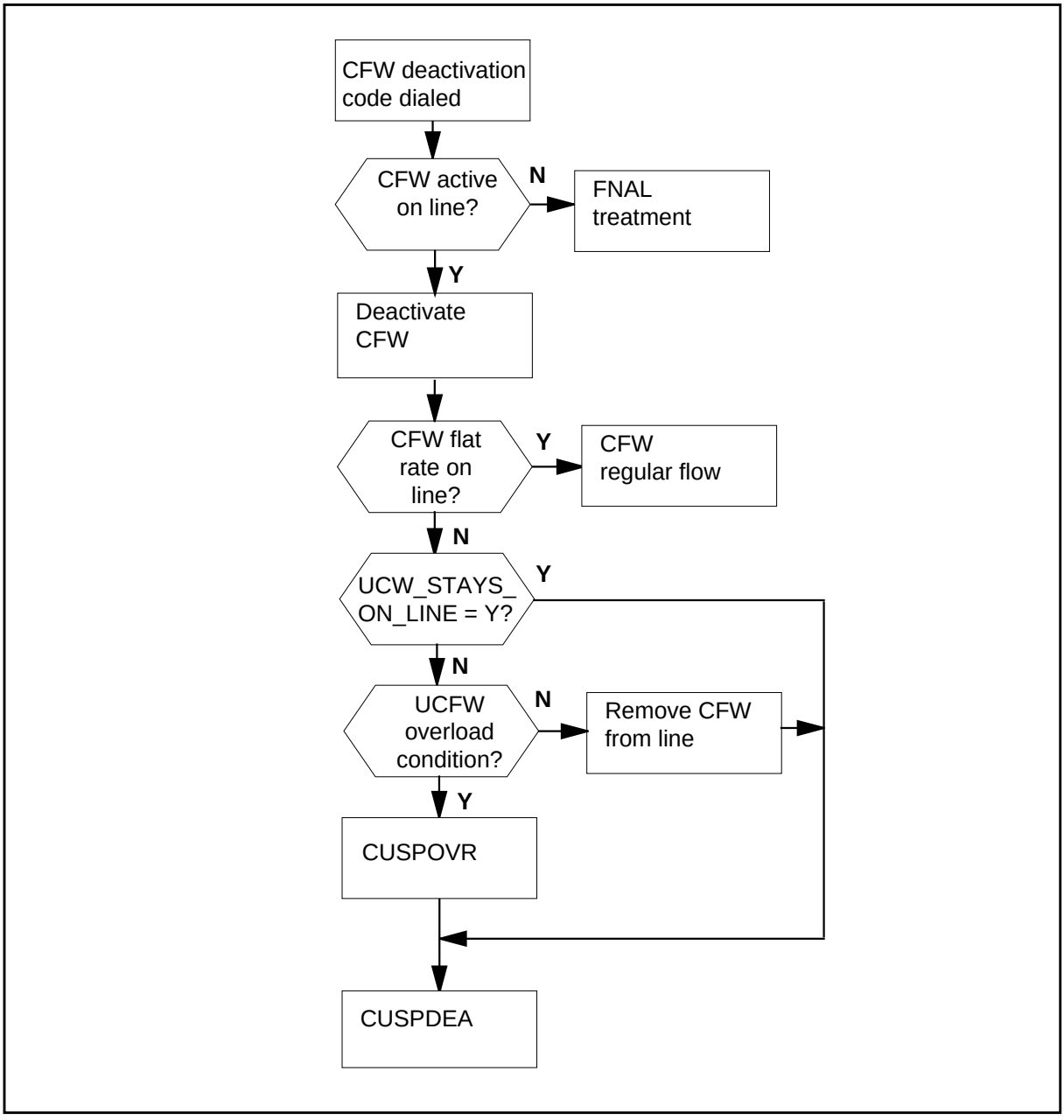
OM group CALLFWD activation of UCFW



The following flowchart is for UCFW deactivation. The flowchart includes only a limited number of events.

OM group CALLFWD (continued)

OM group CALLFWD to deact UCFW



Register CFBATT

Register Call Forward Busy Attempt (CFBATT)

Register CFBATT counts attempts to forward a call from a busy line to any other line.

Register CFBATT release history

Register CFBATT was introduced before BCS20.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

CFBATT2

Register CFBATT2

Register Call Forward Busy Attempt Extension (CFBATT2)

Register CFBATT2 is the extension register for CFBATT. Register CFBATT2 increases when the count for CFBATT reaches maximum. At this point CFBATT2 increases by one, and CFBATT resets to zero.

Register CFBATT2 release history

Register CFBATT2 was introduced in GSF031.

Associated registers

CFBATT

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register CFBEXMPT

Register Call Forward Busy Exempt (CFBEXMPT)

Register CFBEXMPT counts failed attempts to forward a call from a busy line to another line. These attempts fail because the called number is exempt from call forwarding busy internal (CBI) or external (CBE) calls when busy.

Register CFBEXMPT release history

CFBEXMPT was introduced before BCS20.

OM group CALLFWD (continued)

Associated registers

There are no associated registers.

Associated logs

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

Extension registers

There are no extension registers.

Register CFBFAIL

Register Call Forward Busy Failure (CFBFAIL)

Register CFBFAIL counts failed attempts to forward a call from a busy line to any other line because of feature restrictions.

Register CFBFAIL release history

Register CFBFAIL was introduced before BCS20.

Associated registers

There are no associated registers.

Associated logs

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

Extension registers

There are no extension registers.

Register CFBOVFL

Register Call Forward Busy Overflow (CFBOVFL)

Register CFBOVFL counts failed attempts to forward a call from a busy line to any other line. These attempts fail because of too many software resource requests.

The operating company must enter office parameters CFW_EXT_BLKS and FTRQ2WAREAS in table OFCENG for register CFBOVFL to count.

Register CFBOVFL release history

CFBOVFL was introduced before BCS20.

Associated registers

There are no associated registers.

Associated logs

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

Extension registers

There are no extension registers.

Register CFBSOV

Register Call Forward Busy Call Forward Simultaneous and Screening Overflow (CFBSOV)

Register CFBSOV counts requests for call forwarding that the system denies. The system denies requests because the request to forward a call exceeds the maximum CFB simultaneous limit. The call forwarding occurs from a busy line to any other line.

Register CFBSOV release history

Register CFBSOV was introduced in BCS25.

Associated registers

There are no associated registers.

Associated logs

The system generates LINE138 when the system routes a line-originated call to treatment.

The system generates TRK138 when the system routes a trunk-originated call to treatment.

Extension registers

There are no extension registers.

Register CFDATT

Register Call Forward Don't Answer Attempt (CFDATT)

Register CFDATT counts attempts to forward to any other line when the subscriber does not answer incoming calls in specified time period. The operating company specifies the time period.

OM group CALLFWD (continued)

Register CFDATT release history

Register CFDATT was introduced before BCS20.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension Register

CFDATT2

Register CFDATT2

Register Call Forward Don't Answer Attempt Extension (CFDATT2)

Register CFDATT2 is the extension register for CFDATT. Register CFDATT2 increases when the count for CFDATT reaches maximum. At this point CFDATT2 increases by one, and CFDATT resets to zero.

Register CFDATT release history

Register CFDATT2 was introduced before BCS20.

Associated registers

CFDATT

Associated logs

There are no associated logs.

Extension Register

There are no extension registers.

Register CFDCNCL

Register Call Forward Don't Answer Cancellations (CFDCNCL)

Register CFDCNCL counts cancellations of the call forward don't answer option. Cancellations occur when the subscriber answers a call forwarded to another line before a specified time period. The operating company specifies the time period.

The operating company must enter office parameter CFDATIM in table CUSTSTN with values of 12 to 60 s to indicate the timeout period.

Register CFDCNCL release history

Register CFDCNCL was introduced before BCS20.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension Register

CFDCNCL2

Register CFDCNCL2

Register Call Forward Don't Answer Cancellations Extension (CFDCNCL2)

Register CFDCNCL2 is the extension register for CFDCNCL. Register CFDCNCL2 increases when the count for CFDCNCL reaches maximum. At this point CFDCNCL2 increases by one, and CFDCNCL resets to zero.

Register CFDCNCL release history

Register CFDCNCL was introduced to BCS20.

Associated registers

There are no associated registers.

Associated logs

CFDCNCL

Extension Register

There are no extension registers.

Register CFDEXMPT

Register Call Forward Don't Answer Exempt (CFDEXMPT)

Register CFDEXMPT counts failed attempts to forward to another line. Register CFDEXMPT counts failed attempts when the subscriber does not answer incoming calls in a specified time period. The operating company specifies the time period. This register is only pegged when the call cannot forward because CDI or CDE is on the line.

Register CFDEXMPT release history

Register CFDEXMPT was introduced before BCS20.

OM group CALLFWD (continued)

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register CFDFAIL

Register Call Forward Don't Answer Failure (CFDFAIL)

Register CFDFAIL counts failed attempts to forward to any other lines. Register CFDFAIL counts failed attempts when the subscriber does not answer incoming calls in a specified time period. The operating company specifies the time period because of feature restrictions.

Register CFDFAIL release history

Register CFDFAIL was introduced before BCS20.

Associated registers

There are no associated registers.

Associated logs

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

Extension registers

There are no extension registers,

Register CFDOVFL

Register Call Forward Don't Answer Overflow (CFDOVFL)

Register CFDOVFL counts failed attempts to forward to any other lines. Register CFDOVFL counts failed attempts when the subscriber does not answer incoming calls in a specified time period. The operating company specifies the time period because of too many software resource requests.

The operating company must define office parameters CFW_EXT_BLKS, NO_OF_FTR_DATA_BLKS, NUMCPWAKE, and FTRQ2WAREAS in table OFCENG for register CFDOVFL to count.

Register CFDOVFL release history

Register CFDOVFL was introduced before BCS20.

Associated registers

There are no associated registers.

Associated logs

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

Extension registers

There are no extension registers.

Register CFDSOV

Register Call Forward Don't Answer Call Forward Simultaneous and Screening Overflow (CFDSOV)

Register CFDSOV counts call forwarding requests that the system denied. The system denied the requests because the request to forward a call exceeds the maximum CFD simultaneous limit. This call forwarding occurs from an idle line to any other line .

Register CFDSOV release history

Register CFDSOV was introduced before BCS25.

Associated registers

There are no associated registers.

Associated logs

The system generates LINE138 when the system routes a line-originated call to treatment.

The system generates TRK138 when the system routes a trunk-originated call to treatment.

Extension registers

There are no extension registers.

Register CFUATT

Register Call Forward Unconditional Attempts (CFUATT)

Register CFUATT counts attempts to forward a call terminating on an IBN line that has the CFU, CFI, or CFF features.

OM group CALLFWD (continued)

Register CFUATT release history

Register CFUATT was introduced before BCS20.

BCS25

Changed to include the CFF feature.

Associated registers

There are no associated registers.

Associated logs

There are no associated registers.

Extension registers

CFUATT2

Register CFUATT2

Register Call Forward Unconditional Attempts Extension (CFUATT2)

Register CFUATT2 is the extension register for CFUATT. Register CFUATT2 increases when the count for CFUATT reaches maximum. At this point CFUATT2 increases by one, and CFUATT resets to zero.

Register CFUATT2 release history

Register CFUATT2 was introduced in GSF031.

Associated registers

CFUATT

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register CFUFAIL

Register Call Forward Unconditional Failure (CFUFAIL)

Register CFUFAIL counts requests for call forwarding that the system denied. The denial occurs because the requests attempt to forward a call to an IBN line that has CFU, CFI, or CFF features. The system does not permit forwarding a call to an IBN line that has CFU, CFI, or CFF.

Register CFUFAIL release history

Register CFUFAIL was introduced before BCS20.

BCS25

Changed to include the CFF feature.

Associated registers

There are no associated registers.

Associated logs

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

Extension registers

There are no extension registers.

Register CFUIFSOV

Register Call Forward Unconditional/Integrated/Fixed Simultaneous and Screening Overflow (CFUIFSOV)

Register CFUIFSOV counts requests for call forwarding that the system denies because the requests exceed the maximum CFU simultaneous limit.

Register CFUIFSOV release history

Register CFUIFSOV was introduced before BCS25.

Associated registers

There are no associated registers.

Associated logs

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

Extension registers

There are no extension registers.

Register CFUOVFL

Register Call Forward Unconditional Overflow (CFUOVFL)

Register CFUOVFL counts failed attempts to forward a call to another line because the system cannot obtain a required software resource.

OM group CALLFWD (continued)

For register CFUOVFL to increase, the operating company must define fields CFW_EXT_BLKS and FTRQ2WAREAS in table OFCENG.

Register CFUOVFL release history

Register CFUOVFL was introduced before BCS20.

BCS25

Changed to include the CFF feature.

Associated registers

There are no associated registers.

Associated logs

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

Extension registers

There are no extension registers.

Register CMCFEOV

Register Control of Multiple Call Forwarding External Overflow (CMCFEOV)

Register CMCFEOV counts the number of calls at the same time that the system does not forward outside the customer group. The system does not forward calls outside the customer group because the number of calls exceed the maximum limit set.

The maximum limit equals the total number of the customer group value and the base station value. The customer group value is field NCFE in table CUSTSTN, and the base station value is field ANCFE in table KSETFEAT or IBNFEAT.

The operating company must enter the CMCF option in table CUSTSTN for this register to increase.

Register CMCFEOV release history

Register CMCFEOV was introduced before BCS35.

Associated registers

There are no associated registers.

Associated logs

The system generates LINE138 when the system routes a line-originated call to a treatment.

The system generates TRK138 when the system routes a trunk-originated call to a treatment.

Extension registers

There are no extension registers.

Register CMCFIOV

Register Control of Multiple Call Forwarding Intragroup Overflow (CMCFIOV)

Register CMCFIOV counts the number of calls at the same time that the system does not forward in the customer group. The system does not forward call in the customer group because the number of calls exceeds the maximum limit set.

The maximum limit equals the total number of the customer group value and the base station value. The customer group value is field NCFI in table CUSTSTN. The base station value is field ANCFI in table KSETFEAT or IBNFEAT.

The operating company must enter the CMCF option in table CUSTSTN for this register to increase.

Register CMCFIOV release history

Register CMCFIOV was introduced in BCS35.

Associated registers

There are no associated registers.

Associated logs

The system generates LINE138 when the system routes a line-originated call to a treatment.

The system generates TRK138 when the system routes a trunk-originated call to a treatment.

Extension registers

There are no extension registers.

OM group CALLFWD (continued)

Register CUSPACT

Register Call Forward Usage Sensitive Pricing Activation (CUSPACT)

Register CUSPACT records the number of successful activation sessions of Usage Sensitive CFW. When the system forwards the base station directory number (DN) to a selected remote station DN, a successful activation session occurs.

Note: Register CUSPACT only applies to the usage sensitive variant of call forwarding or UCFW. Register CUSPACT does not apply to the basic flat rate call forwarding feature.

Register C release history

Register CUSPACT was introduced in NA006.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

There are no extension requests.

Register CUSPFAIL

Register Call Forward Usage Sensitive Pricing Failure (CUSPFAIL)

Register CUSPFAIL records the number of Usage Sensitive CFW activation sessions that fail. These sessions fail as a result of denial for each line of UCFW or feature conflicts.

Note: Register CUSPFAIL only applies to the usage sensitive variant of call forwarding or UCFW. Register CUSPFAIL does not apply to the basic flat rate call forwarding feature.

Register CUSPFAIL release history

Register CUSPFAIL 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 CUSPDEA

Register Call Forward Usage Sensitive Pricing Deactivation (CUSPDEA)

Register CUSPDEA records the number of successful deactivation sessions of Usage Sensitive CFW. A successful deactivation session is a session that cancels call forwarding on the selected DN.

Note: Register CUSPDEA only applies to the usage sensitive variant of call forwarding or UCFW. Register CUSPDEA does not apply to the basic flat rate call forwarding feature.

Register CUSPDEA release history

Register CUSPDEA 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 CUSPOVR

Register Call Forward Usage Sensitive Pricing Overload (CUSPOVR)

Register CUSPOVR records the number of Usage Sensitive CFW activation and deactivation requests that fail. These requests fail because the number of concurrent UCFW requests exceed the maximum.

OM group CALLFWD (continued)

Note: Register CUSPOVR only applies to the usage sensitive variant of call forwarding or UCFW. Register CUSPOVR does not apply to the basic flat rate call forwarding feature.

Register CUSPOVR release history

Register CUSPOVR 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 CFTBATT

Register Call Forward Timed for Call Forward Busy Attempts (CFTBATT)

Register CFTBATT measures the number of times that the CFTB feature attempts to route a call to treatment. This register counts the frequency that a customer group uses the feature.

Register CFTBATT release history

Register CFTBATT was introduced in NA006.

Associated registers

Register CFTBFAIL counts the number of times the CFTB feature attempts to route a call to an announcement or a tone without successful completion. As a result, the CFTB leaves the call ringing.

Register ANNATT in OM group ANN counts attempts to connect to an announcement.

Register TONEATT in OM group TONES counts attempts to connect to a tone generator.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register CFTBFAIL

Register Call Forward Timed for Call Forward Busy Failures (CFTBFAIL)

Register CFTBFAIL measures the number of times the CFTB feature attempts to route a call to treatment without successful completion. As a result, the CFTB feature leaves the call ringing. Register CFTBFAIL indicates that a problem is present in the entries for the CFTB treatment.

Register CFTBFAIL release history

Register CFTBFAIL was introduced in NA006.

Associated registers

Register CFTBATT counts the number of times the CFTB feature attempts to route a call to either an announcement or a tone.

Register ANNATT in OM group ANN counts attempts to connect to an announcement.

Register TONEATT in OM group TONES counts attempts to connect to a tone generator.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register CFTDATT

Register Call Forward Timed for Call Forward Don't Answer Attempts (CFTDATT)

Register CFTDATT measures the number of times the CFTD feature attempts to route a call to treatment. This register counts the number of times a customer group uses a feature.

Register CFTDATT release history

Register CFTDATT was introduced in NA006.

Associated registers

Register CFTDFAIL counts the number of times the CFTD feature attempts to route a call to an announcement or a tone without successful completion. As a result, the CFTD leaves the call ringing.

OM group CALLFWD (continued)

Register ANNATT in OM group ANN counts attempts to connect to an announcement.

Register TONEATT in OM group TONES counts attempts to connect to a tone generator.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register CFTDFAIL

Register Call Forward Timed for Call Forward Don't Answer Failures (CFTDFAIL)

Register CFTDFAIL measures the number of times that the CFTD feature attempts to route a call to treatment without completion. As a result, the CFTD feature leaves the call ringing. This register indicates that a problem is present in the entries for the CFTD treatment.

Register CFTDFAIL release history

Register CFTDFAIL was introduced in NA006.

Associated registers

Register CFTDATT counts the number of times the CFTD feature attempts to route a call to either an announcement or a tone.

Register ANNATT in OM group ANN counts attempts to connect to an announcement.

Register TONEATT in OM group TONES counts attempts to connect to a tone generator.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register CFDATTD

Register Call Forward Don't Answer Attempt Data (CFDATTD)

Register CFDATTD measures the number of CFD attempts. The completion does not affect the measurement of attempts. This register is only pegged if the call type is CMD and CFD is active.

Option IECFD can be present with the CFD option on a CFD base terminal. Option IECFD allows the system to forward incoming internal and external calls to separate destinations. Option IECFD does not affect register CFDATTD. Option IECFD is not affected by this register.

Register CFDATTD release history

Register CFDATTD was introduced in NA008.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

CFDATT2D

Register CFBATTD

Register Call Forward Busy Attempt Data (CFBATTD)

Register CFBATTD is a peg for CFB attempts. Call completion does not affect the peg of attempts. This register only increases if the call type is CMD and CFB is active.

Option IECFB can be present with option CFB on a CFB base terminal. Option IECFB allows the system to forward incoming internal and external calls to separate destinations. Option IECFB does not affect register CFBATTD. Option IECFB is not affected by this register.

Register CFBATTD release history

Register CFBATTD 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.

OM group CALLFWD (continued)

Register CFUATTD

Register Call Forward Universal Attempt Data (CFUATTD)

Register CFUATTD pegs CFU attempts for CMD call types. This register measures the number of CFU attempts. Call completion does not affect the attempts. This register increases for each CFU, CFI, or CFF attempt.

Register CFUATTD release history

Register CFUATTD 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 CFDXMPTD

Register Call Forward Don't Answer Exempt Data (CFDXMPTD)

Register CFDXMPTD pegs for each CFD attempt that is not complete. This register measures the number of exempted CFD calls if the CFD base terminal has CDE or CDI and the call is restricted. The CDE and CDI are additional options and must be present with CFD on the CFD base terminal.

If a terminal has the CDE option, the terminal does not forward an intergroup-originated call. The CFDXMPTD register is pegged.

The system does not forward intragroup-originated calls if the terminal has CDI. The CFDXMPTD register is pegged.

This register increases only if CFD is active and the call type is CMD.

Register CFDXMPTD release history

Register CFDXMPTD 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 CFBXMPTD

Register Call Forward Busy Exempt Data (CFBXMPTD)

Register CFBXMPTD pegs CBF attempts that are incomplete only if CFB is active and the call type is CMD. This register measures the number of exempted CFB calls if the CFB base terminal has CBE or CBI and the call is restricted. CBE and CBI are additional options and must be present with CFB on the CFB base terminal.

If a terminal has the CBE option, the terminal does not forward an intergroup-originated call. The CFBXMPTD register is pegged.

The system does not forward intragroup-originated calls if the terminal has CBI. The CFBXMPTD register is pegged.

Register CFBXMPTD release history

Register CFBXMPTD 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.

OM group CALLHOLD

OM description

Call hold (CALLHOLD)

The OM group call hold (CALLHOLD) registers provide information on incoming calls that are on hold.

The subscriber places calls on hold in order to

- dial a third party
- talk to call waiting
- talk to a camped-on party

Only one call can be on hold at a time.

Release history

The OM group CALLHOLD was introduced before BCS20.

APC005

Functionality is added to support Meridian Digital Centrex (MDC) features, like call hold (CHD). These features are on Global Peripheral Platform (GPP) lines for Australian telephone user part (ATUP), ANSI ISDN user part (ANSI ISUP), and Australian ISUP (AISUP) trunk signaling.

Registers

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

```
CHDATT      CHDFAIL     CHDOVFL     CHDABDN
CHDRBK
```

Group structure

The OM group CALLHOLD provides one tuple for each key.

Key field:
IBNG_INDEX. Key to CALLHOLD. Identifies a maximum of 4096 customer groups.

Info field:
OMBINGINFO. Customer name as defined in field CUSTNAME in table CUSTHEAD.

The following office parameters must be set in table OFCENG:

- NO_OF_FTR_DATA_BLKS
- FTRQ2WAREAS
- NUMCPWAKE

Associated OM groups

There are no associated OM groups.

Associated fuctional groups

The Meridian Digital Centrex (MCD) funcitonal group associates with OM group CALLHOLD.

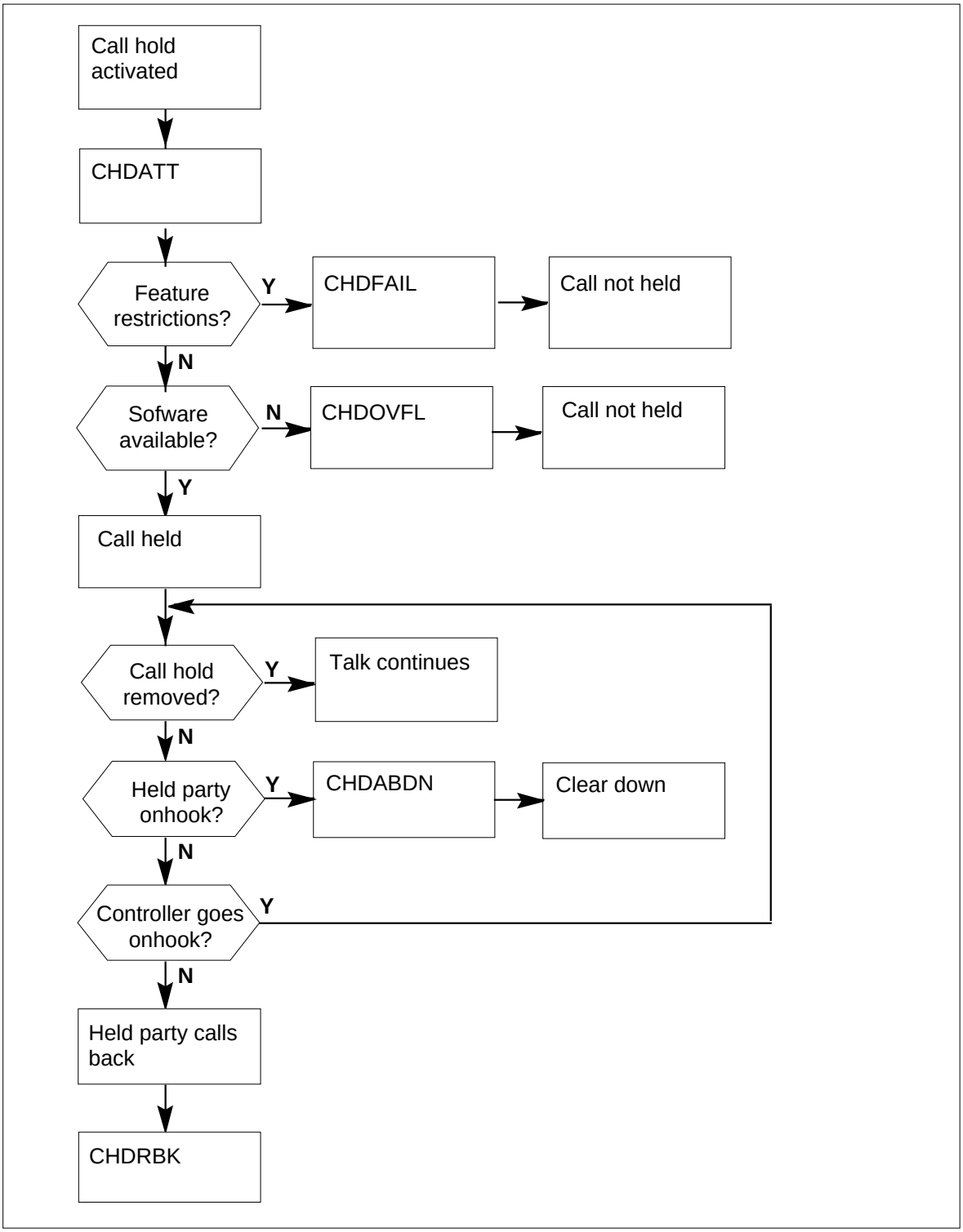
Associated functionality codes

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

Functionality	Code
IBN Superset	NTX435AA

OM group CALLHOLD (continued)

OM group CALLHOLD registers



Register CHDABDN

Call hold abandon (CHDABDN)

Register Call hold abandon (CHDABDN) increases when the party on hold goes on-hook.

Register CHDABDN release history

Register CHDABDN 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 CHDATT

Call hold attempts (CHDATT)

Register call hold attempts (CHDATT) counts attempts to put a call on hold.

Register CHDATT release history

CHDATT 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 CHDFAIL

Call hold failures (CHDFAIL)

Register call hold failures (CHDFAIL) counts attempts to put a call on hold that fail because of feature restrictions.

Register CHDFAIL release history

Register CHDFAIL was introduced before BCS20.

OM group CALLHOLD (continued)

Associated registers

There are no associated registers.

Associated logs

The system generates LINE 138 when the system routes a call to a treatment after being call processing busy.

Extension registers

There are no extension registers

Register CHDOVFL

Call hold overflow (CHDOVFL)

Register (CHDOVFL) counts attempts to put a call on hold that fail because enough software resources are not present.

Office parameters NO_OF_FTR_DATA_BLKS, FTRQ2WAREAS, and NUMCPWAKE in table OFCENG define software resources used by the call hold feature.

Register CHDOVFL release history

Register CHDOVFL was introduced before BCS20.

Associated registers

There are no associated registers.

Associated logs

The system generates LINE 138 when the system routes a call to a treatment after being call processing busy.

Extension registers

There are no extension registers.

Register CHDRBK

Call hold ring back(CHDRBDK)

Call hold ring back (CHDRBDK) increases when the held party calls back controller who goes on-hook.

Register CHDRBK release history

Register CHDRBK was introduced before BCS20.

OM group CALLHOLD (end)

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

OM group CALLOG

OM description

Call logging (CALLOG)

The OM group CALLOG records office-wide use of the CALLOG feature. The CALLOG record includes a record of lacking resources that result from use.

Release history

The OM group CALLOG was introduced in BCS34.

Registers

The MAP terminal displays the OM group CALLOG registers as follows:

```
CALLACT
```

Group structure

The OM group CALLOG 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

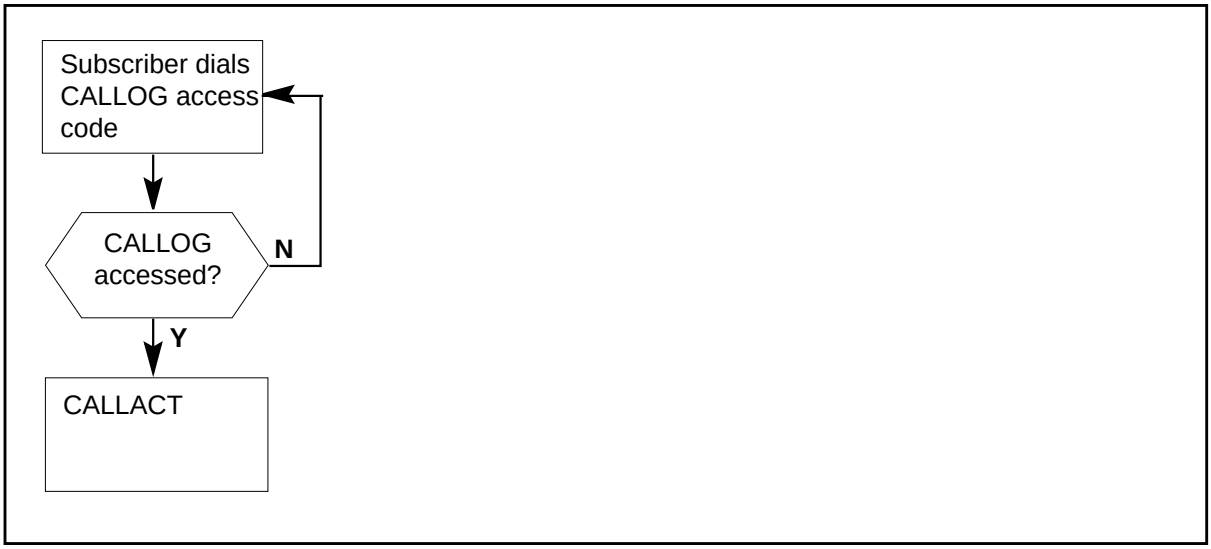
There are no associated functional groups.

Associated functionality codes

The following table lists the functionality codes associated with OM group CALLOG.

Functionality	Code
CLASSplus: Call Logging	NTXP96AA

OM group CALLOG registers



Register CALLACT

Call logging access (CALLACT)

Register CALLACT increases when a subscriber dials the call logging access code and accesses the call logging feature.

CALLACT release history

Register CALLACT 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 CALLRDT

OM description

The operational measurement (OM) group Call Redirect (CALLRDT) uses the following registers to count actions that relate to the Call Redirect (CRT) feature:

- CRTACT
- CRTUACT
- CRTOPHUP

Release history

NA013 introduced OM group CALLRDT.

Registers

OM group CALLRDT registers display on the MAP terminal as follows.

```
CALLRDT
CLASS:  ACTIVE
START:1999/11/22 05:00:00 MON; STOP: 1999/11/22 05:21:39 MON;
SLOWSAMPLES              13;  FASTSAMPLES:           130;

          CRTACT     CRTUACT       CRTOPHUP

   0          0           0              0
```

Group structure

OM group CALLRDT

Key field:
There is no key field.

Info field:
There is no info field.

Related OM groups

There are no related OM groups.

Related functional groups

There are no related functional groups..

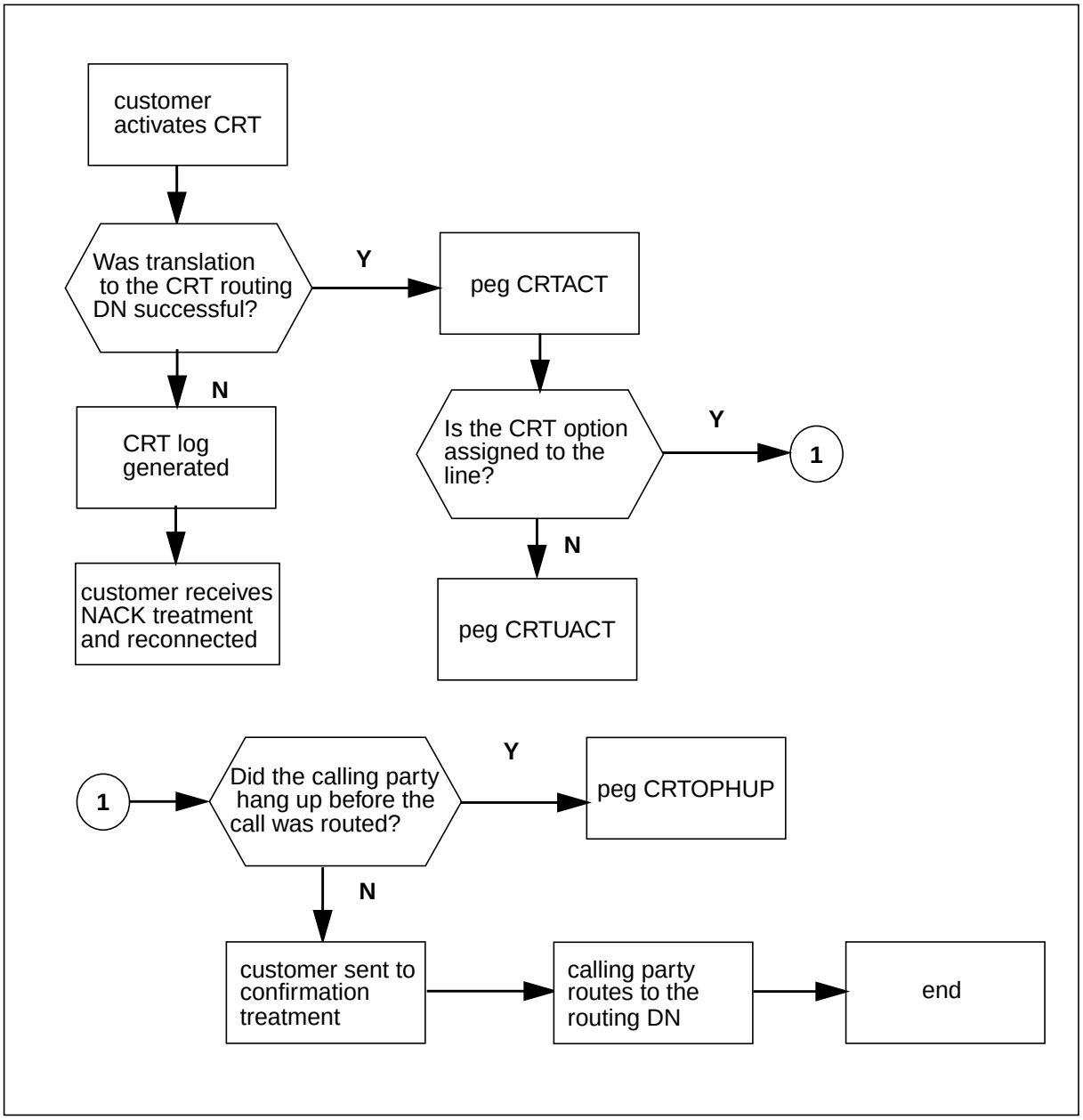
Related functionality codes

The table that follows lists the functionality name and code related to OM group CALLRDT.

Functionality	Code
Call Redirect	RES00099

OM group CALLRDT (continued)

OM group CALLRDT registers



Register CRTACT

Register call redirect activate (CRTACT) counts the number of CRT activations. The register increments when a subscriber successfully activates the CRT feature during a two-party call. Register CRTACT pegs for both usage sensitive and line subscription activations.

Register CRTACT release history

NA013 introduced register CRTACT.

Related registers

There are no related registers.

Related logs

There are no related logs.

Extension registers

There are no extension registers.

Register CRTUACT

Register call redirect usage sensitive activate (CRTUACT) counts the number of CRT pay-per-use activations. The register increments when a subscriber successfully activates the usage sensitive CRT feature during a two-party call.

Register CRTUACT release history

NA013 introduced register CRTUACT.

Related registers

There are no related registers.

Related logs

There are no related logs.

Extension registers

There are no extension registers.

Register CRTOPHUP

Register call redirect other party hang up (CRTOPHUP) counts the number of calling party disconnects. The register increments when the calling party disconnects after CRT activation but before the call reaches the routing DN.

Register CRTOPHUP release history

NA013 introduced register CRTOPHUP.

Related registers

There are no related registers.

Related logs

There are no related logs.

OM group CALLRDT (end)

Extension registers

There are no extension registers.

OM group CALLWAIT

OM description

Call waiting

This OM group is used for both RES and IBN lines.

The OM group call waiting (CALLWAIT) provides information on the use of the following:

- Call Waiting (CWT)
- Call Waiting Originating (CWO)
- Meridian Business Set Camp-on (MBSCAMP)
- Call Waiting Exempt (CWX)
- Cancel Call Waiting (CCW)
- Dial Call Waiting (CWD)
- Call Waiting Conference (CWTC)

When terminated to a busy line, the calling party hears a continous ringing. The called party, who is already taking another call, hears a call waiting tone. The called party can acknowledge the calling party and place the current call on hold (and alternate between the calls). The called party can also abandon either of the calls.

Dial Call Waiting and Call Waiting Originating allow a calling party to use call waiting on a called party. Dial call waiting dials the call waiting feature-activation code and the called party's directory number to use call waiting. Call waiting originating permits a calling party to use permits a calling party to use CWT on a busy called party without dialing to activate the feature.

Feature MBSCAMP is a form of Call Waiting Originating that allows a Meridian Business Set used as an attendant console to camp on busy lines in the customer group.

Call waiting exempt exempts the called party from CWD, CWO, and MBSCAMP.

Cancel call waiting allows a calling party to prevent incoming calls from call waiting.

Registers CWTTATT, CCWGRANT, and DNYBYCCW apply to electronic business set (EBS) call waiting.

OM group CALLWAIT (continued)

Call Waiting Conference provides conference functionality to CWT users by offering the capability to join a calling party into an existing call.

Release history

MMP13

Registers MBSCABDN, MBSCATT, MBSCFAIL, and MBSEXMPT updated to include camp-on for IBN7 calls.

NA011

The Call Waiting Conference feature adds registers CWTCATT, CWTCCONF, CWTCPPU, and CWTCINV.

APC005

Functionality is added to support Meridian Digital Centrex (MDC) features, like CWT, on the following:

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

BCS31

Register MBSCATT, MBSCABDN, MBSCFAIL, and MBSEXMPT were introduced.

BCS22

Registers CCWGRANT, DNYBYCCW were introduced.

BCS20

The OM group CALLWAIT was introduced in BCS20.

Registers

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

```
CWTTATT     CWTABDN     CWTFAIL     CWRCL
CWDATT      CWDABDN     CWDFAIL     CWDEXMPT
CWOATT      CWOABDN     CWOFAIL     CWOEXMPT
CWTTOVFL    CWOOVFL     CCWGRANT    DNYBYCCW
MBSCATT     MBSCABDN    MBSCFAIL    MBSEXMPT
CWTCATT     CWTCCONF    CWTCPPU     CWTCINV
```

Group structure

OM group CALLWAIT provides one tuple per key.

Key field:
IBNG_INDEX. Key to CALLWAIT. This key identifies a maximum of 4095 customer groups.

Info field:
OMIBNGINFO. Customer name as defined in field CUSTNAME in table CUSTHEAD.

Parameter NO_OF_FTR_DATA_BLKS in table OFCENG specifies the number of feature data blocks required . Parameter NUMCPWAKE in table OFCENG, specifies the maximum number of call process wakeups.

Associated OM groups

There are no associated OM groups.

Associated operating groups

The following operating groups are associated with OM group CALLWAIT:

- IBN—Integrated Business Network
- EBS—Electronic Business Set

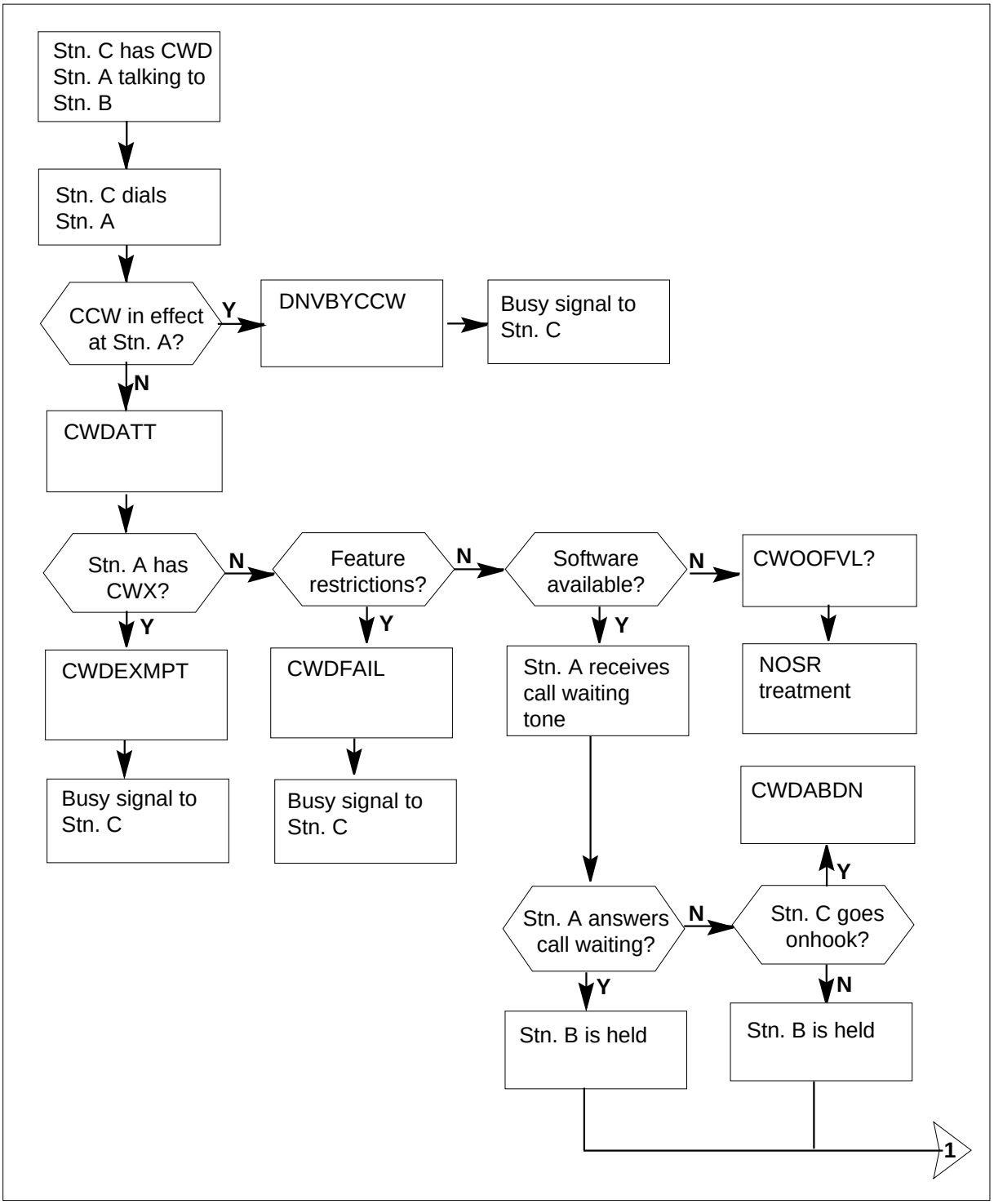
Associated functionality codes

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

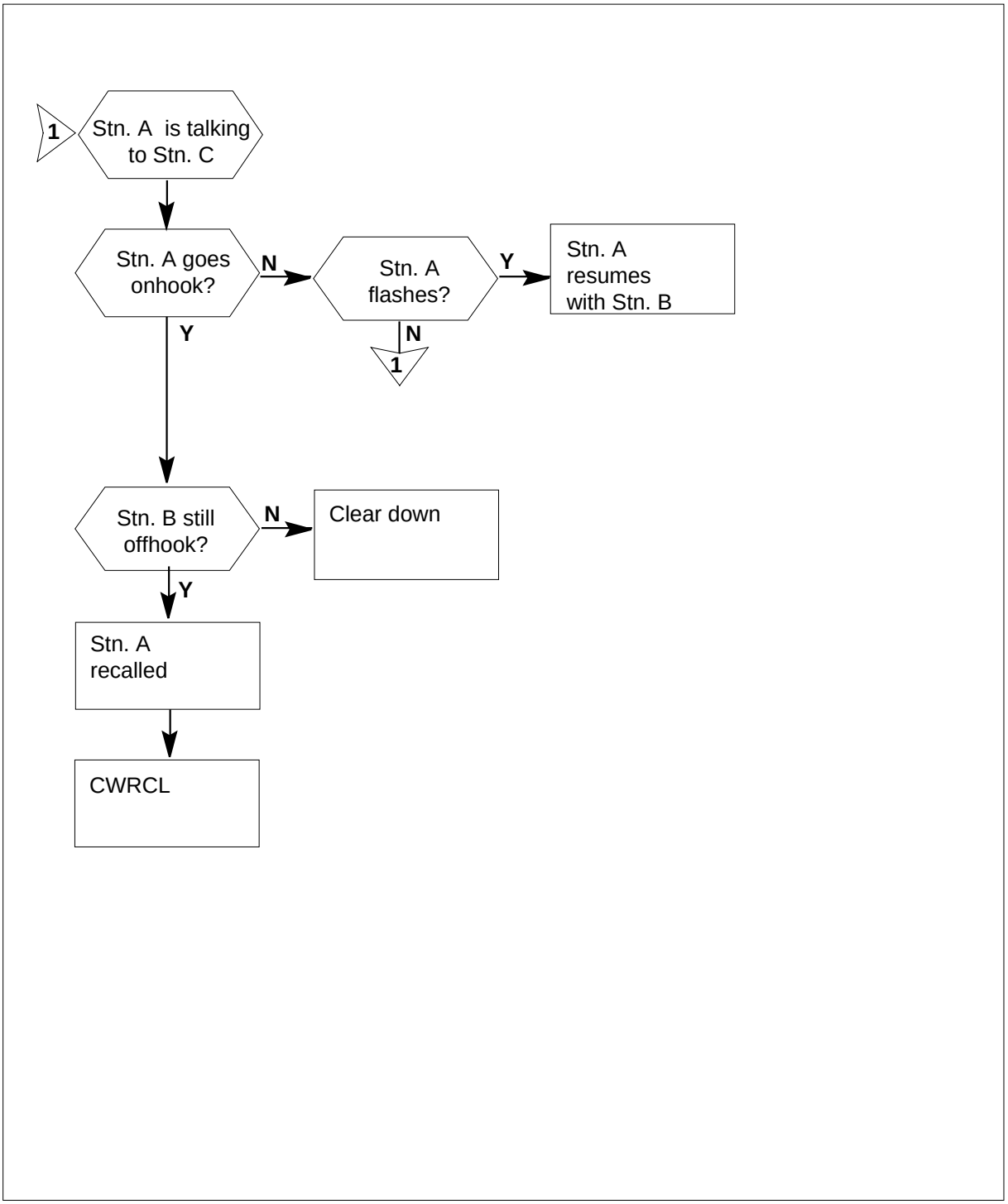
Functionality	Code
IBN Superset	NTX435AA
Meridian Business Set Camp-on	NTXJ98AA

OM group CALLWAIT (continued)

OM group CALLWAIT registers: CWD option

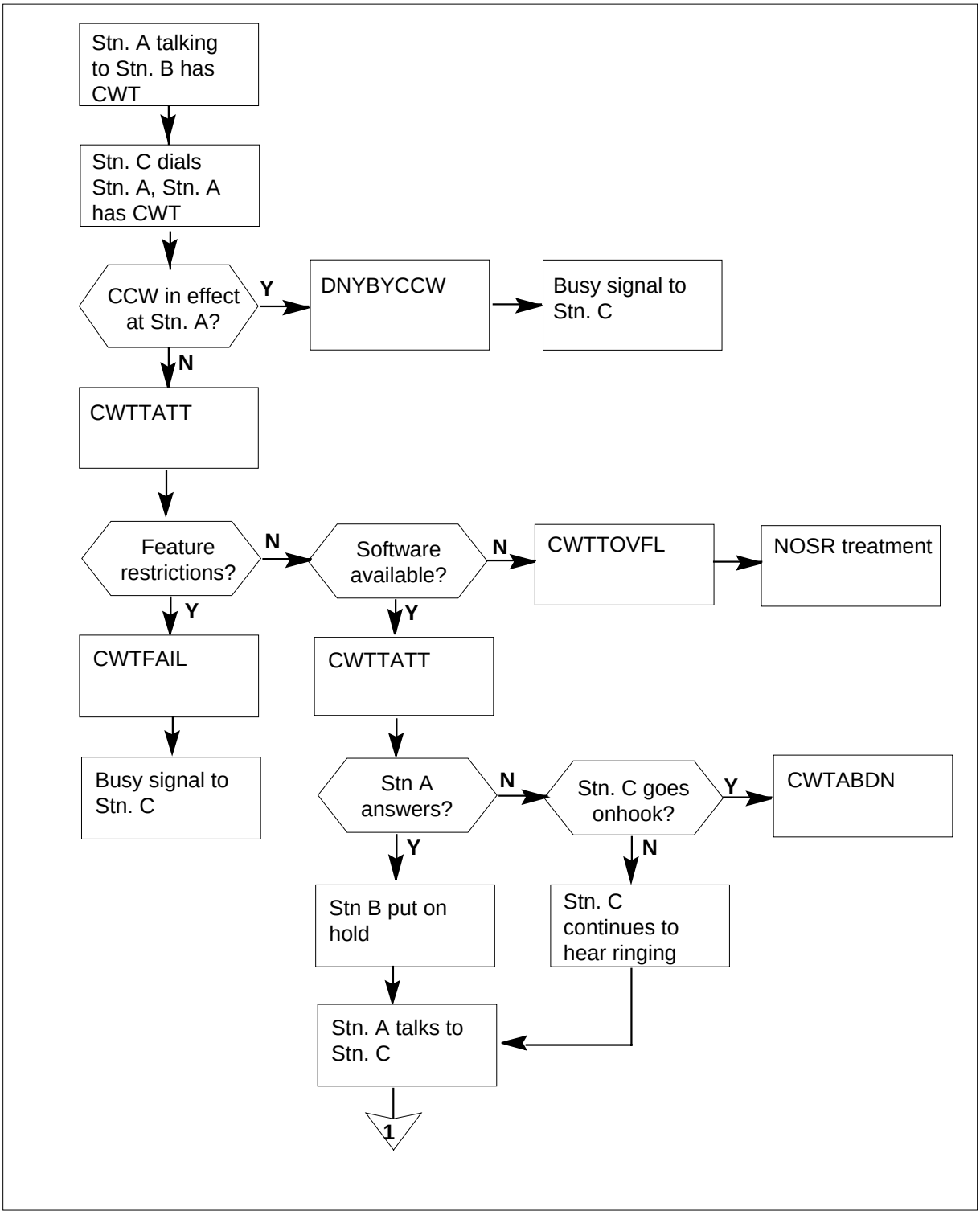


OM group CALLWAIT registers: CWD option (continued)

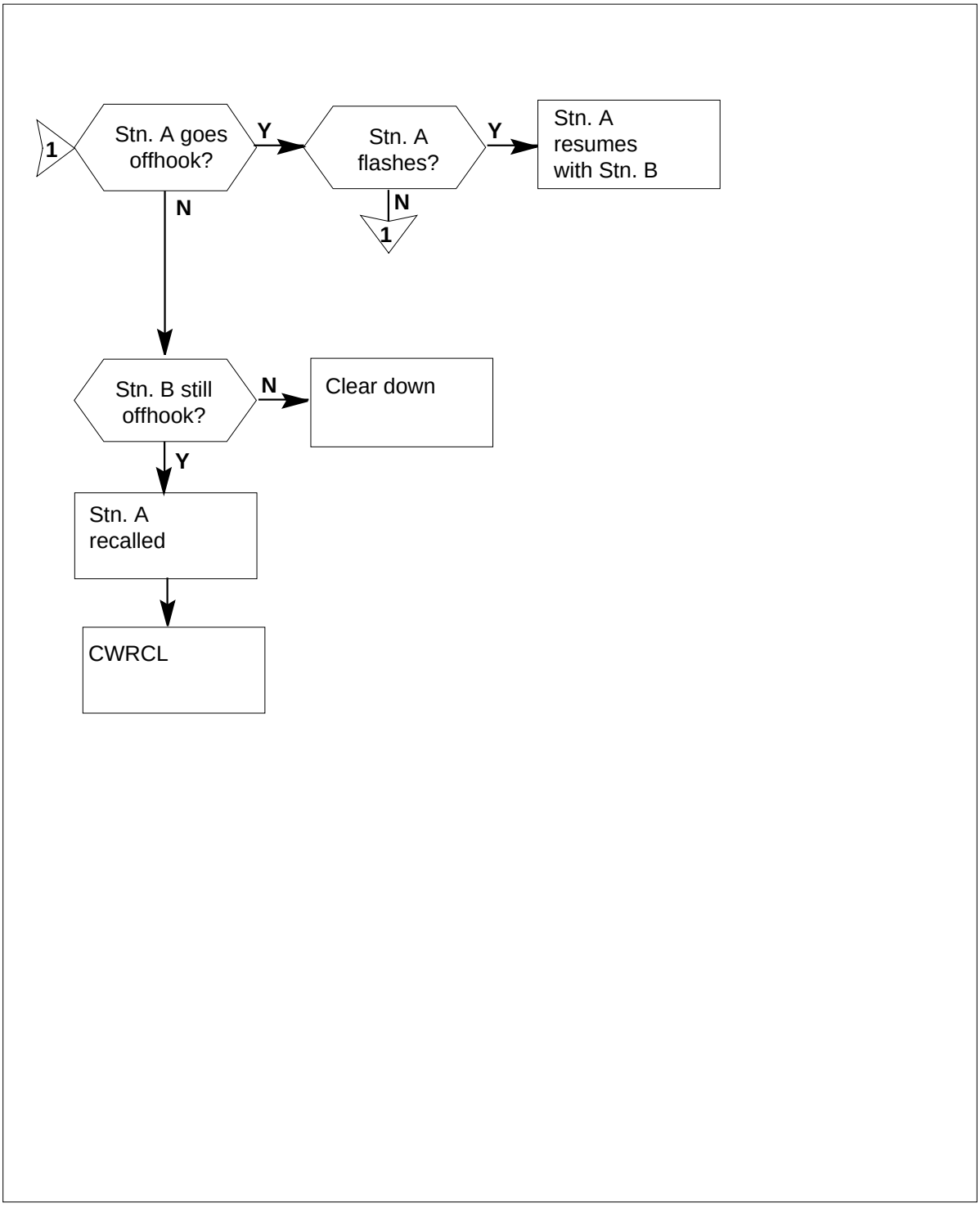


OM group CALLWAIT (continued)

OM group CALLWAIT registers: CWT option

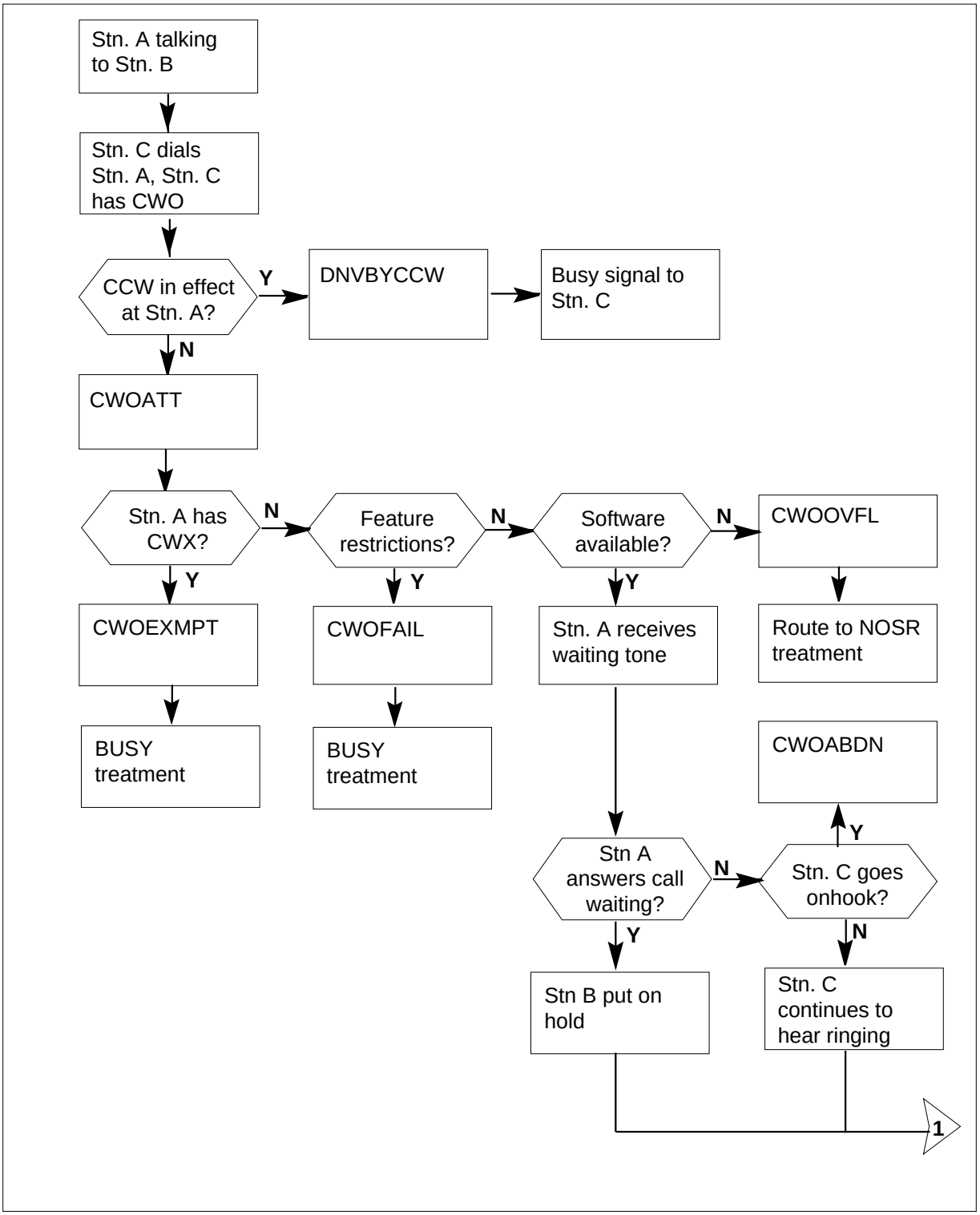


OM group CALLWAIT registers: CWT option (continued)

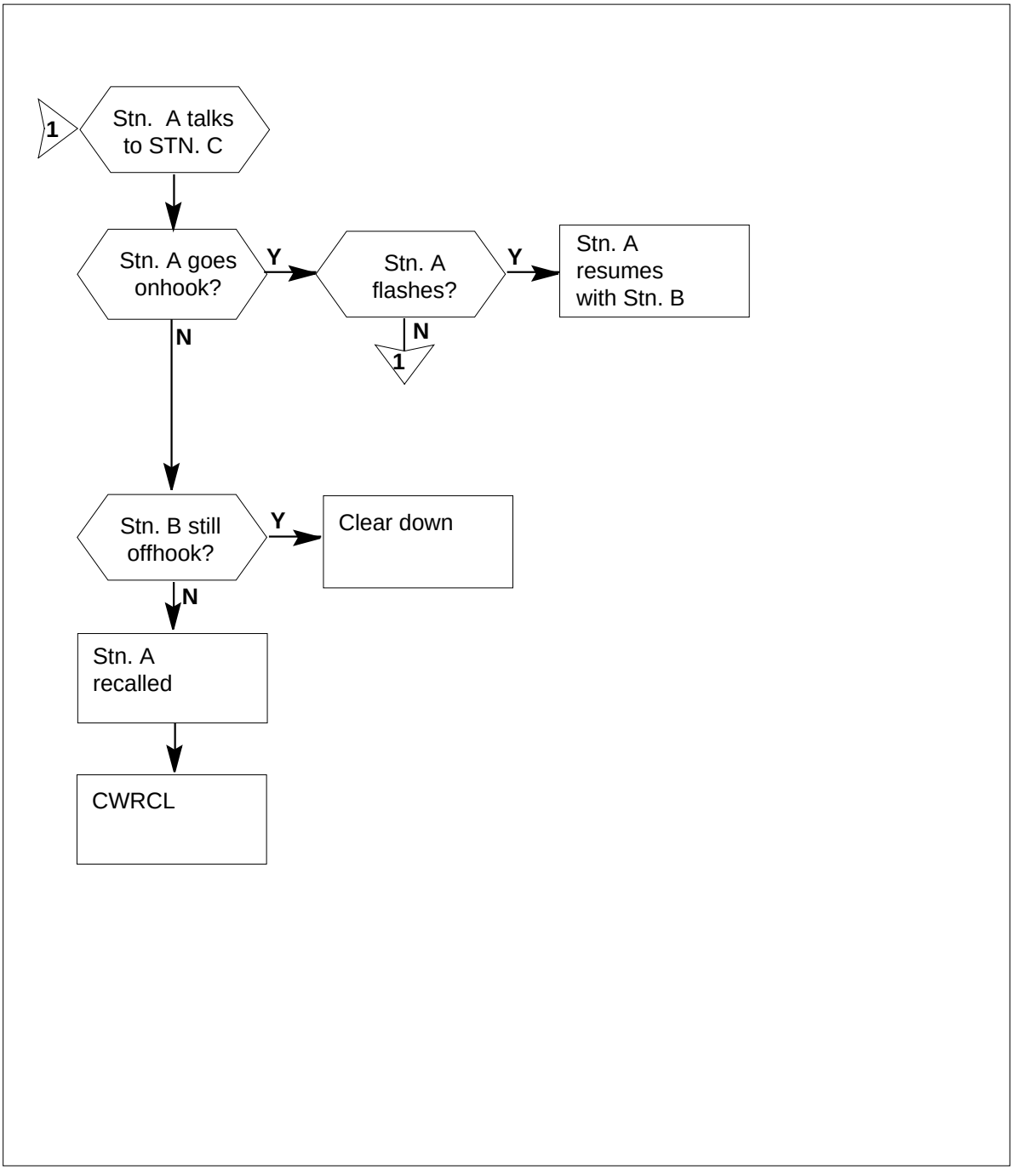


OM group CALLWAIT (continued)

OM group CALLWAIT registers: CWO option

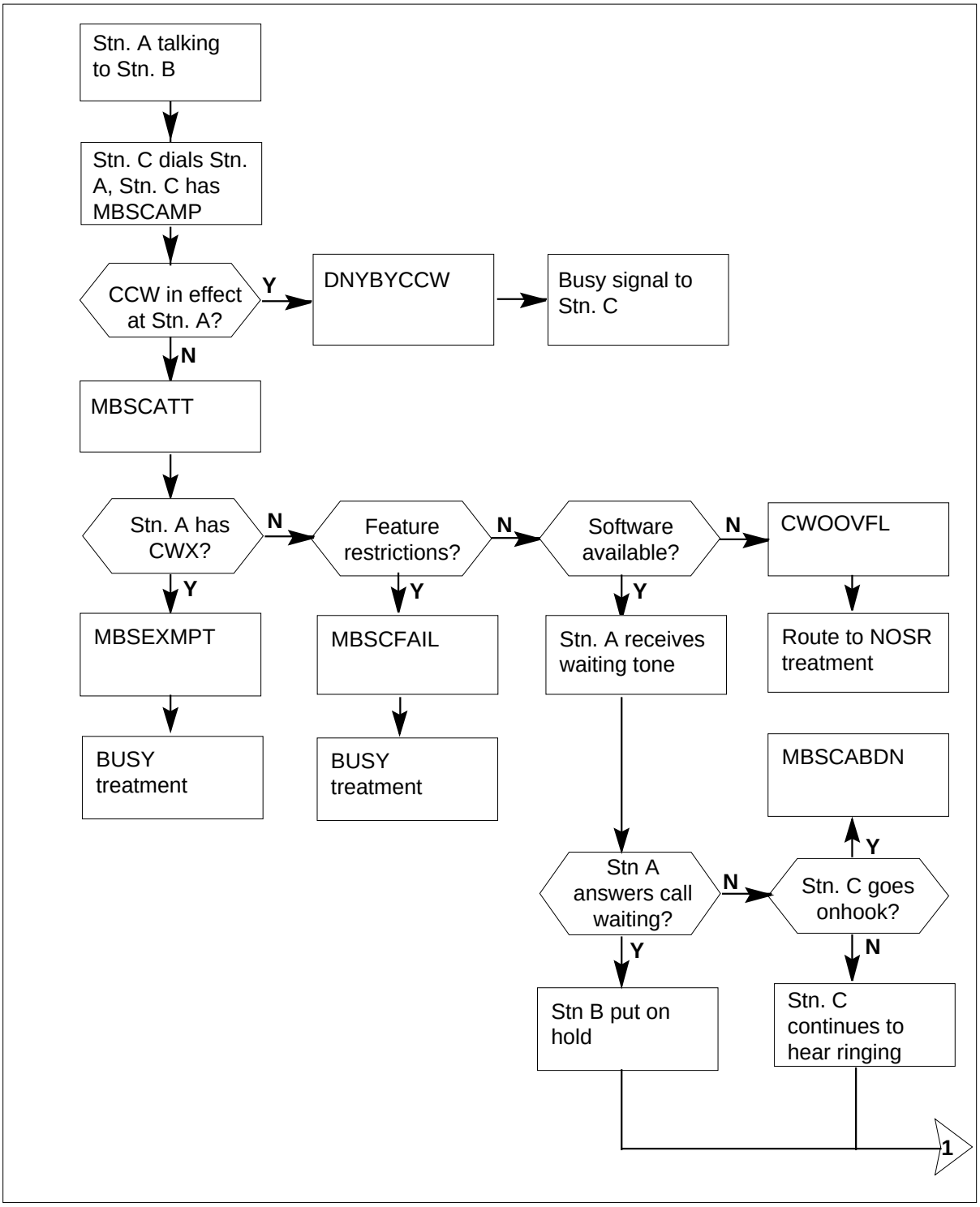


OM group CALLWAIT registers: CWO option (continued)



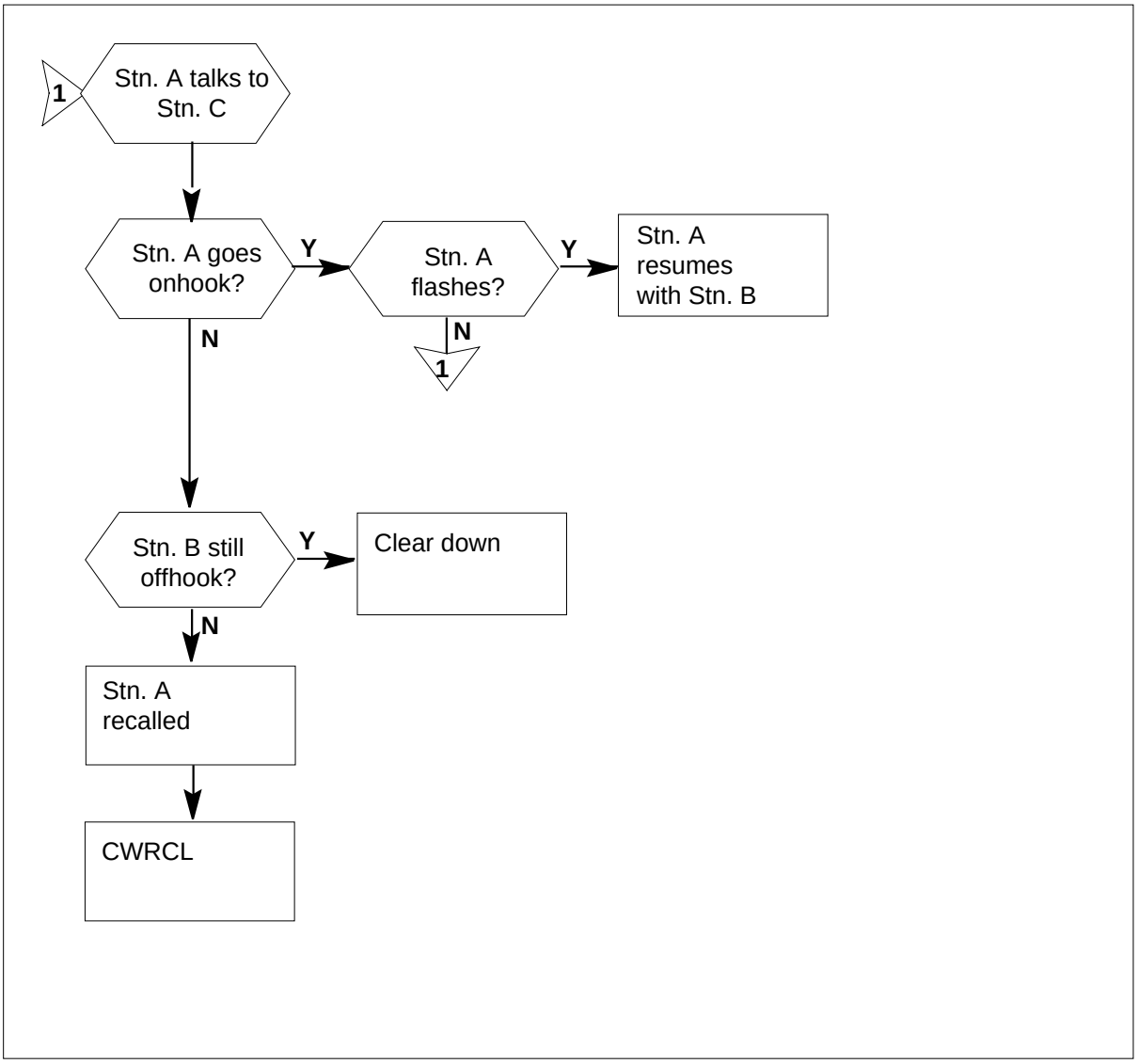
OM group CALLWAIT (continued)

OM group CALLWAIT registers: MBSCAMP option



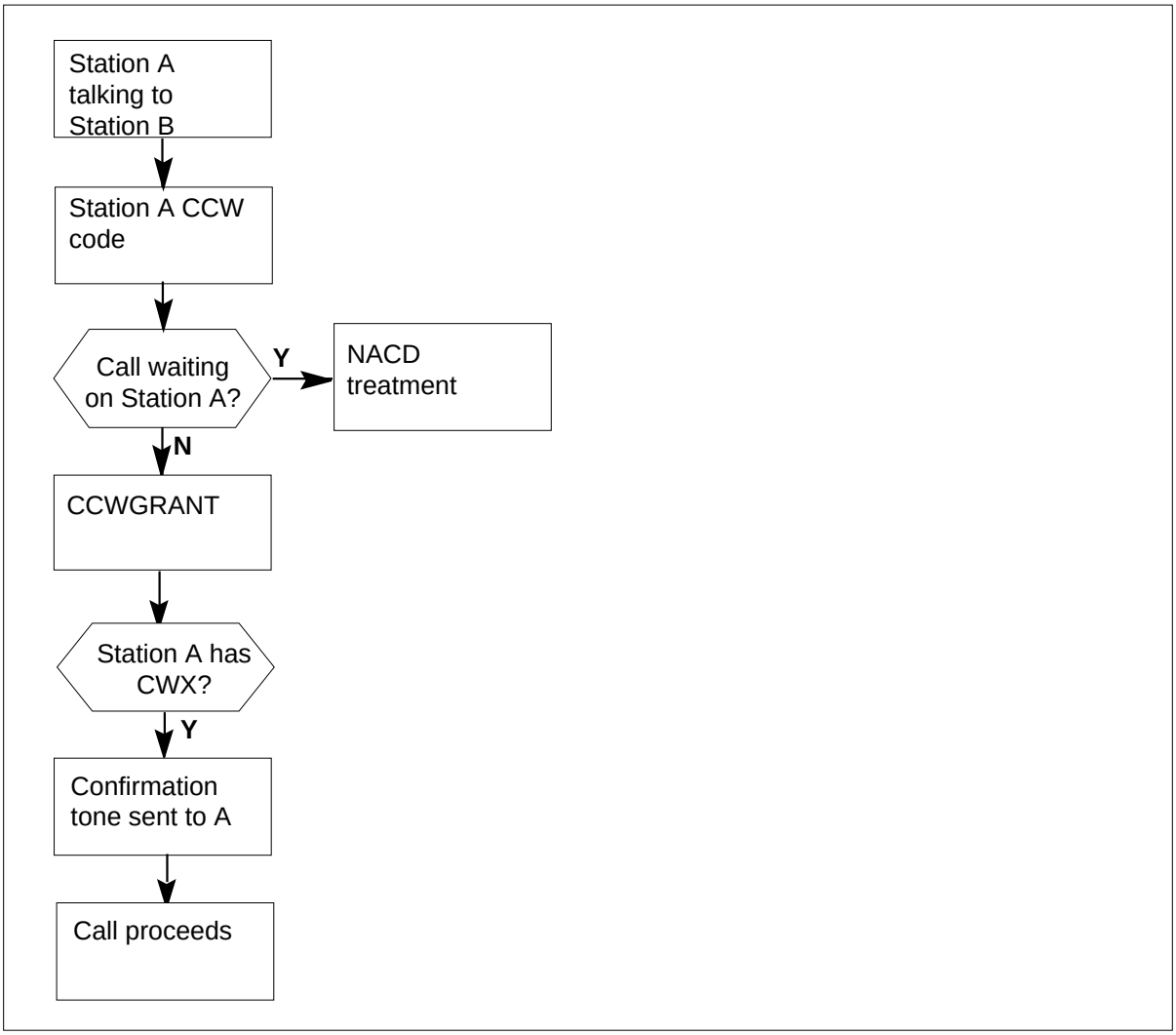
OM group CALLWAIT (continued)

OM group CALLWAIT registers: MBSCAMP option (continued)

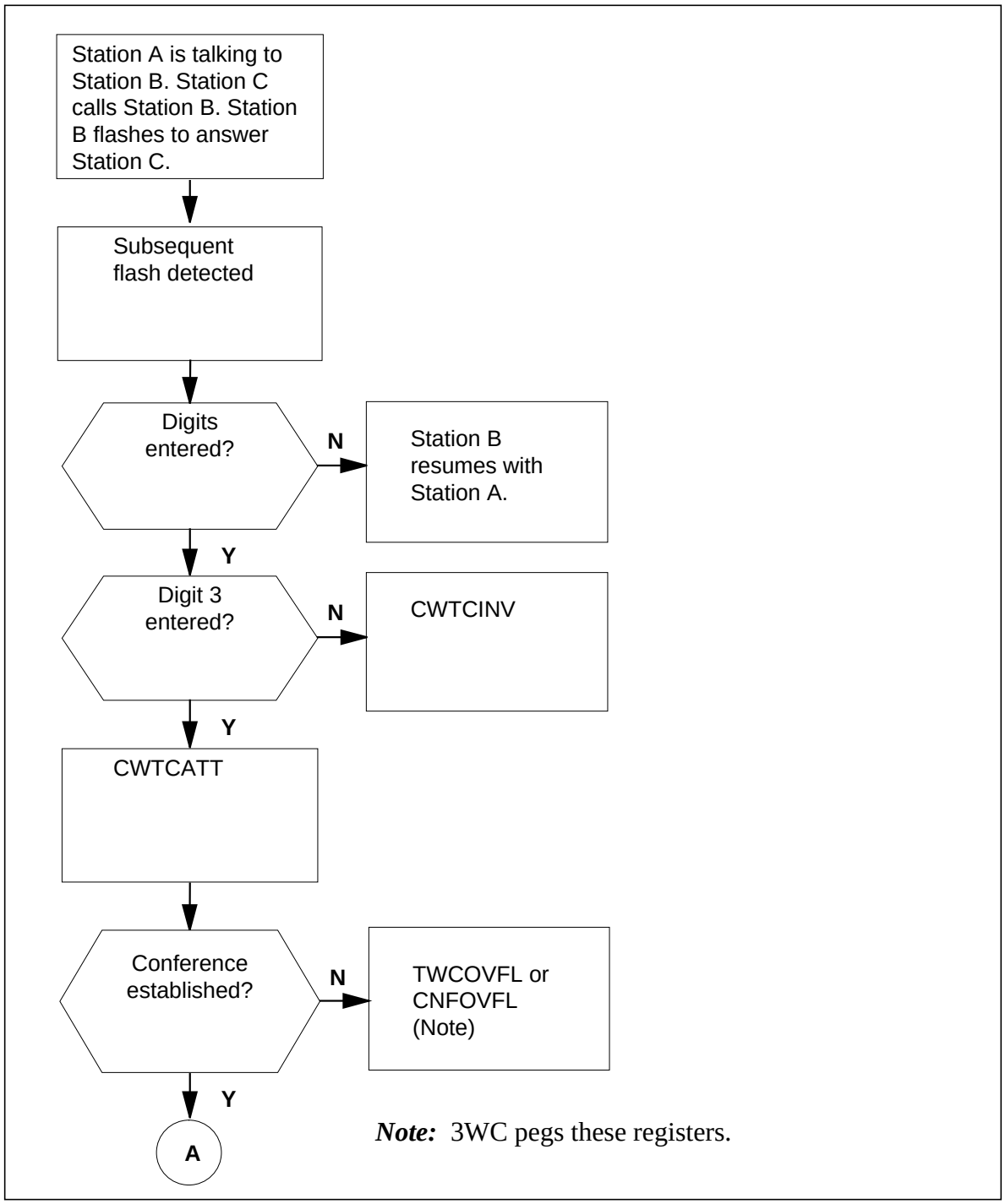


OM group CALLWAIT (continued)

OM group CALLWAIT registers: CCW option



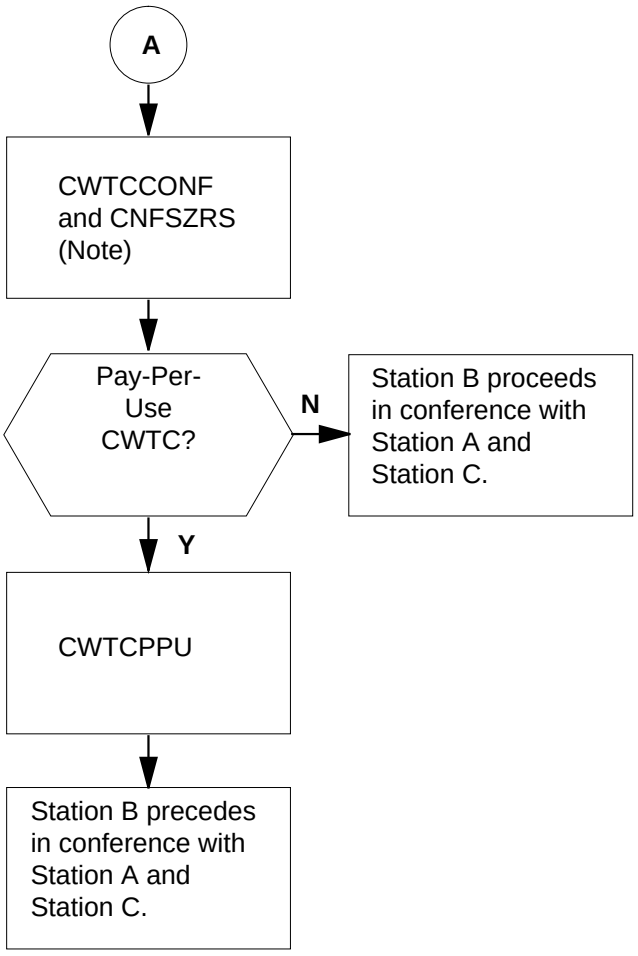
OM group CALLWAIT registers: CWTC option



Note: 3WC pegs these registers.

OM group CALLWAIT (continued)

OM group CALLWAIT registers: CWTC option (continued)



Note: 3WC pegs these registers.

Register CCWGRANT

Cancel call waiting granted (CCWGRANT)

Register CCWGRANT counts successful attempts by members of a given customer group to inhibit call waiting. CCWGRANT counts the attempts to inhibit call waiting for the duration of a call.

This register also applies to electronic business sets with the CCW feature.

Register CCWGRANT release history

Register CCWGRANT 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 CWDABDN

Call waiting dial abandon (CWDABDN)

Register (CWDABDN) increases when the calling party abandons a call after the called party has heard the call waiting indicator tone.

Register CWDABDN release history

Register CWDABDN 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 CWDATT

Call waiting dial attempt (CWDATT)

Register CWDATT counts attempts by the calling party to use call wait. The calling party dials the call waiting access code to use call wait.

Register CWDATT release history

CWDATT was introduced in BCS20.

Associated registers

There are no associated registers.

OM group CALLWAIT (continued)

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register CWDEXMPT

Call waiting exempt (CWDEXMPT)

Register CWDEXMPT counts attempts by the calling party to use call waiting. The calling party dials the access code to use call waiting. The attempt fails because the called party activated the call waiting exempt option.

Register CWDEXMPT release history

CWDEXMPT 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 being call processing busy.

Extension registers

There are no extension registers.

Register CWDFAIL

Call waiting dialed failures (CWDFAIL)

Call waiting dialed failures CWDFAIL counts failed attempts by the calling party to use call waiting. The calling party dials the access code to use call waiting. The attempts fail because of feature interactions.

Register CWDFAIL release history

CWDFAIL was introduced before BCS20.

Associated registers

There are no associated registers.

Associated logs

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

Extension registers

There are no extension registers.

Register CWOABDN

Call waiting originator abandon (CWOABDN)

Register CWOABDN increases when the calling party goes on-hook after the called party has heard the call waiting indicator tone.

Register CWOABDN release history

CWOABDN 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 CWOATT

Call waiting originator attempts (CWOATT)

Register (CWOATT) counts attempts by the calling party to use call waiting.

Register CWOATT release history

Register CWOATT 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 CWOEXMPT

Call waiting originator exempt (CWOEXMPT)

OM group CALLWAIT (continued)

Register CWOEXMPT counts failed attempts by the calling party to use call waiting. Attempts by the calling party fail because the called party has the call waiting exempt (CWX) option.

Register CWOEXMPT release history

CWOEXMPT was introduced before BCS20.

Associated registers

There are no associated registers.

Associated logs

LINE138 is generated when a call is routed to a treatment after being call processing busy.

Extension registers

There are no extension registers.

Register CWOFAIL

Call waiting originator failures

Call waiting originator failures (CWOFAIL) counts attempts by the calling party to use call waiting that fail because of feature interactions.

Register CWOFAIL release history

CWOFAIL 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 being call processing busy.

Extension registers

There are no extension registers.

Register CWOOVFL

Call waiting originator overflow (CWOOVFL)

Register CWOOVFL counts failed attempts by the calling party to use call waiting. These attempts fail as a result of a lack of insufficient software resources. The calling party use the call wait originator feature, or by dials the call wait access code to use call waiting.

Office parameter NO_OF_FTR_DATA_BLKS in table OFCENG specifies the number of required feature data blocks. Parameter NUMCPWAKE in table OFCENG specifies the maximum number of call process wake ups.

Register CWOOVFL release history

Register CWOOVFL was introduced in BCS20.

Associated registers

There are no associated registers.

Associated logs

The system generates SWER when either a software condition that affects normal operation of the DMS or DMS peripherals occurs. The system also generates SWER when a manual request for a log trace at the LOGUTIL utility of a MAP terminal.

Extension registers

There are no extension registers.

Register CWRCL

Call waiting recalls (CWRCL)

Call waiting recalls CWRCL increses when a called party goes on-hook while a call is waiting, and the calling party is recalled.

Register CWRCL release history

Register CWRCL 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 CWTABDN

Call waiting abandon (CWTABDN)

Call waiting abandon CWTABDN increases when the calling party goes on-hook after notification that a call is waiting. The called party has the call waiting option.

OM group CALLWAIT (continued)

Register CWTABDN release history

Register CWTABDN 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 CWTCATT

Call waiting conference attempt (CWTCATT)

Register CWTCATT increases when an attempt is made to activate the CWTC feature. The register increases when the end user presses 3 within the digit detection time period.

Register CWTCATT release history

Register CWTCATT was introduced in NA011.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register CWTCCONF

Call waiting conference conference (CWTCCONF)

Register CWTCCONF increases when a CWTC request results in a three-way conference.

Register CWTCCONF release history

Register CWTCCONF was introduced in NA011.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register CWTCINV

Call waiting conference invalid (CWTCINV)

Register CWTCINV counts invalid attempts to activate the CWTC feature. The register increases if the end user presses a digit different from 3.

Register CWTCINV release history

Register CWTCINV was introduced in NA011.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register CWTCPPU

Call waiting conference pay-per-use (CWTCPPU)

Register CWTCPPU counts pay-per-use successful attempts of the CWTC feature.

Register CWTCPPU release history

Register CWTCPPU was introduced in NA011.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

OM group CALLWAIT (continued)

Register CWTFAIL

Call waiting failure (CWTFAIL)

Call waiting failure CWTFAIL counts attempts to have calls wait that fail because of feature interactions. The called party has the call waiting option.

Register CWTFAIL release history

Register CWTFAIL was introduced in BCS20.

Associated registers

There are no associated registers.

Associated logs

LINE138 is generated when a call is routed to a treatment after being call processing busy.

Extension registers

There are no extension registers.

Register CWTTATT

Call waiting originator attempts (CWTTATT)

Register CWTTATT counts the attempts of a called party to use call waiting.

This register also applies to electronic business sets with the call waiting feature.

Register CWTTATT release history

Register CWTTATT 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 CWTTOVFL

Call waiting terminator overflow (CWTTOVFL)

Register CWTTOVFL counts failed attempts by the called party to use call waiting. These attempts fail because of a lack of software resources.

Office parameter NO_FTR_DATA_BLKS in table OFCENG specifies the number of required feature data blocks. Parameter NUMCPWAKE in table OFCENG specifies the maximum number of call process wake ups.

Register CWTTOVFL release history

CWTTOVFL was introduced before BCS20.

Associated registers

There are no associated registers.

Associated logs

The system generates SWER when a software condition that affects normal operation of the DMS or DMS peripherals occurs. The system also generates SWER when a user makes a manual request for a log trace at the LOGUTIL utility of a MAP terminal.

Extension registers

There are no extension registers.

Register DNYBYCCW

Deny by cancel call waiting (DNYBYCCW)

Register DNYBYCCW counts denied attempts to use call waiting. The system denies these attempts because the CCW feature is active for the called party.

When the Call Waiting Auto-Suppression (CWAS) feature is activated, register DNYBYCCW also counts the number of termination attempts on a CWT-denied Secondary Directory Number (SDN).

This register also applies to electronic business sets with the CCW feature.

Register DNYBYCCW release history

DNYBYCCW was introduced in BCS22.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

OM group CALLWAIT (continued)

Extension registers

There are no extension register.

Register MBSCABDN

Meridian Business Set camp on abandon (MBSCABDN)

Register MBSCABDN increases when a calling party transferred by a line with the MBSCAMP feature, goes on-hook. The calling party must go on-hook before the called party answers. Register MSBCABDN increases if the recall timer expires and the MBSCAMP line is rung again when the calling party goes on-hook.

This register also increases when the waiting party goes on-hook before the called party answers a call camped-on over IBN7.

Register MBSCABDN release history

Register MBSCABDN was introduced in BCS31.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register MBSCATT

Meridian Business Set camp on attempt (MBSCATT)

Register MBSCATT increases when a subscriber attempts a Meridian Business Set camp on (MBSCAMP) call to a busy line.

This register increases when the system attempts a camp-on for a call over IBN7.

Register MBSCATT release history

MBSCATT was introduced in BCS31.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register MBSCFAIL

Meridian Business Set camp on failed (MBSCFAIL)

Register MBSCFAIL increases when an MBSCAMP attempt fails because of feature interactions. This register also increases when call attempts fail over IBN7 as a result of feature interactions.

Register MBSCFAIL release history

MBSCFAIL was introduced in BCS31.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register MBSEXMPT

Meridian Business Set camp on exempt (MBSEXMPT)

Register MBSEXMPT increases when a subscriber attempts Meridian Business Set camp on (MBSCAMP) call to a line that has the call-waiting exempt (CWX) option.

This register increases when a camp-on over IBN7 fails because the called party has the call-waiting exempt (CWX) option.

Register MBSEXMPT release history

MBSEXMPT was introduced in BCS31.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

OM group CALLWAIT (end)

Extension registers

There are no extension registers.

OM group CBK

OM description

Code block group (CBK)

The OM group CBK counts call attempts that are blocked or passed by the network management (NWM) CBK control. The group counts each call attempt made under NWM CBK.

Code controls allow the operating company to:

- limit traffic that enters the network from specified destination codes
- flag codes that are hard to reach
- study the level of traffic that is routed to specified destination codes.

The OM group CBK contains two peg registers: CBKCNT, and CBKPASS.

Release history

BCS20

The OM group CBK was introduced prior to BCS20.

BCS23

The CBKPASS was added in BCS23.

Registers

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

```
CBKCNT      CBKPASS
```

Group structure

The OM group CBK provides one tuple for each active CBK control. The maximum number of active NWM controls is 256. In offices with the NTX455AB package, the maximum number of active NWM controls is 64.

Key field:
There is no key field.

Info field:
CBK_OMINFO has the following parts: CBKKEY, CBKANN, CBK_TYPE and CBKGAP_OR_PCT_LEVEL.

The CBKKEY has the following parts: CT, DR, and SNPA.

OM group CBK (continued)

CT is the code type. The fixed CT for CBK are:

CCODE
Country code

NAC
Non-area code

ACODE
Area code

PFX
Prefix digits

The digit register (DR) is the called number code that calls are diverted from if the call comes from a specified serving numbering plan area (SNPA).

The SNPA or serving translation scheme (STS) is the area code of the serving office to which the control applies. If the control applies to all SNPA/STS served by the office, set the SNPA to ALL. If the code type is CCODE or PFX, the SNPA field does not apply. A field appears in the printout.

The CBKANN identifies the announcement to which blocked calls are to be routed. The fixed CBKANN for CBK are:

NCA
No-circuit announcement

EA1
Emergency announcement 1

EA2
Emergency announcement 2.

Calls are normally routed to the NCA. When an extreme congestion condition occurs, the blocked calls can be routed to EA1 or EA2.

The CBK_TYPE is the type of CBK control used. The fixed CBK_TYPE for CBK are:

PCT
Percentage

GAP
Call Gapping.

If the CBK_TYPE is GAP, CBKGAP_OR_PCT_LEVEL indicates the length of time between the calls that are complete. If CBK_TYPE is PCT, CBKGAP_OR_PCT_LEVEL indicates the percentage of calls to be blocked.

Associated OM groups

There are no associated OM registers.

Associated functional groups

There are no associated functional groups.

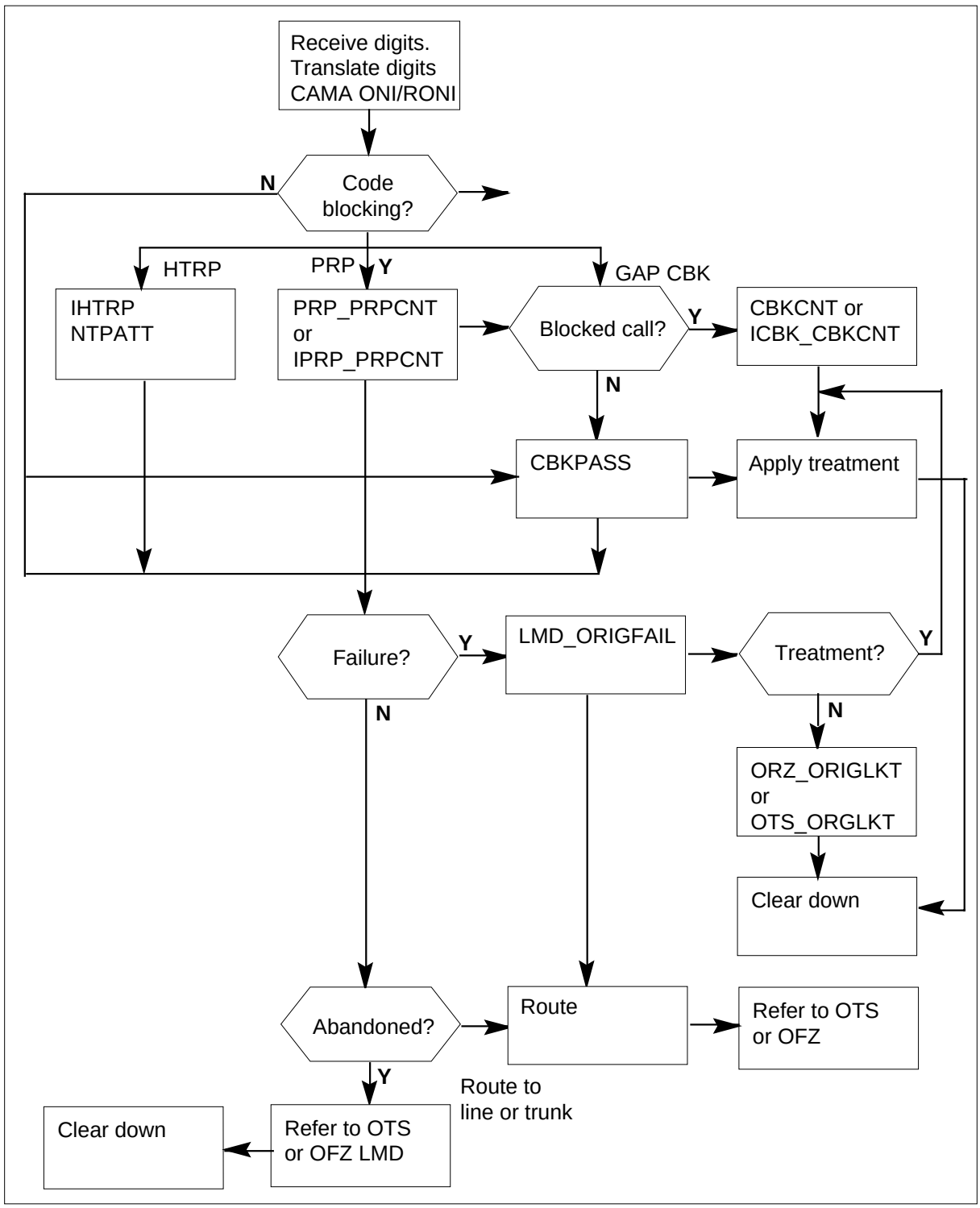
Associated functionality codes

The functionality codes associated with OM group CBK appear in the following table:

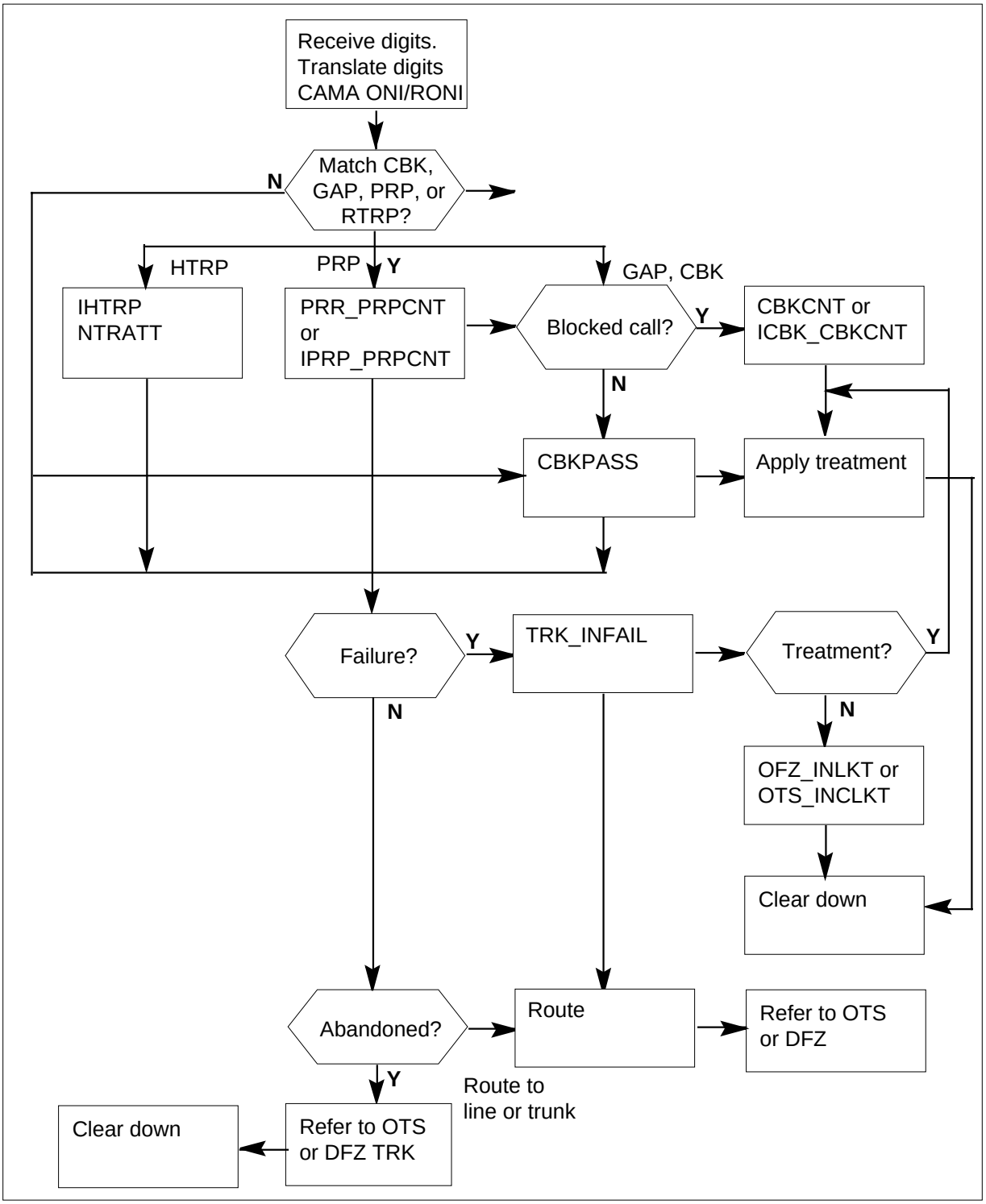
Functionality	Code
NWM	NTX060AB
Local Features II	NTX902AA

OM group CBK (continued)

OM group CBK registers: originating traffic



OM group CBK registers: incoming traffic



OM group CBK (continued)

CBKCNT

Code block group count (CBKCNT)

The CBKCNT counts calls that are blocked by the NWM CBK control.

CBKCNT release history

BCS20

The CBKCNT was introduced in BCS20.

Associated registers

There are no associated registers.

Associated logs

The system generates the NWM200 log when the code blocking control PCT is activated or deactivated.

Extension registers

There are no extension registers.

The system generates the NWM203 log when the code blocking control GAP is activated or deactivated.

CBKPASS

Code block group pass (CBKPASS)

The CBKPASS counts calls that are passed by the NWM CBK.

CBKPASS release history

BCS23

The CBKPASS was introduced in BCS23.

Associated registers

There are no associated registers.

Associated logs

The system generates the NWM110 log when the CBK control PCT is activated or deactivated.

The system generates the NWM113 log when the CBK control GAP is activated or deactivated.

Extension registers

There are no extension registers.

OM group CCTOOM-Canada only

OM Description

Call completion with trunk optimization (CCTOOM)

This OM group records the frequency of use of the CCTO feature.

Release history

This OM group was introduced in BCS33.

Registers

The MAP terminal displays the OM group CCTOOM-Canada only registers as follows:

```
CCTORQST    CCTORCVD
```

Group structure

The OM group CCTOOM-Canada only

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 are associated with OM group CCTOOM-Canada only:

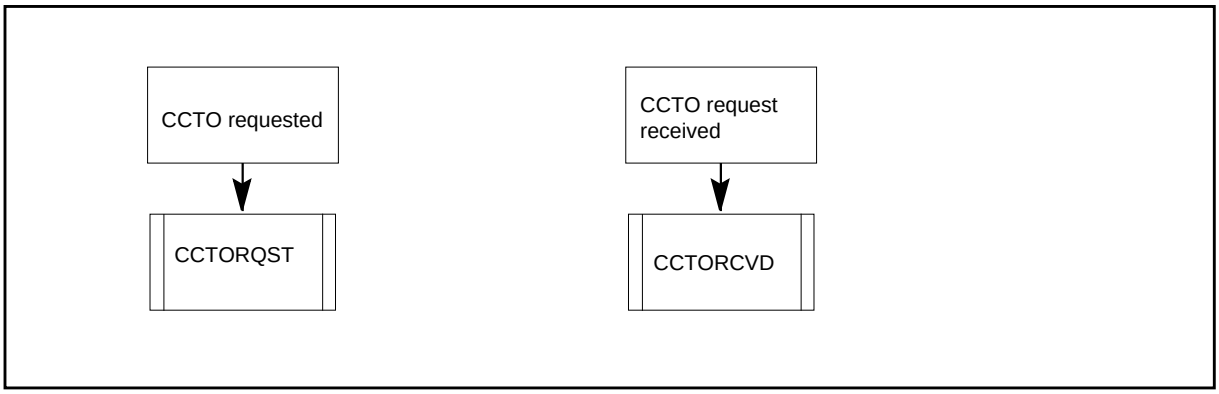
- ISUP
- CCS7

Associated functionality codes

The following table lists the functionality codes associated with OM group CCTOOM-Canada only.

Functionality	Code
CCS7 Auto Attendant Release Link Trunk	NTXQ65AA

OM group CCTOOM-Canada only registers



Register CCTORCVD

CCTO requests received (CCTORCVD)

Register CCTORCVD counts the number of times a serving or intermediate switch receives a CCTO request.

CCTORCVD release history

Register CCTORCVD was introduced in BCS33.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Register CCTORQST

CCTORQST release history

Register CCTORQST was introduced in BCS33.

OM group CCTOOM-Canada only (end)

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

OM group CDACCS

OM Description

Customer-dialed automatic calling card service (CDACCS)

The OM group CDACCS provides information about the condition of calling card verification calls.

The automatic calling card service (ACCS) is a credit card calling service that allows customers to make calls automatically. The system charges these calls to an account separate from the calling line. The service routes calling card calls to a central database. The service routes the calls to verify the account number and personal identification number (PIN) of the caller. If the check is positive, the system connects the call to the called party. The system charges the call to the account of the caller.

The OM group CDACCS contains ten registers that count

- attempts to use the customer-dialed automatic calling card service (ACCS)
- failed attempts to use the customer-dialed ACCS. Failure occurs because of hardware problems with the digital recorded announcement machine (DRAM) or with an ACCS receiver
- customer-dialed ACCS sequence call attempts
- customer-dialed ACCS sequence call attempts that fail. Failure occurs because of hardware problems with the DRAM or with an ACCS receiver
- ACCS calls that the system routes to the operator because of a time out or because the customer dialed the octothorpe (#) character
- calls that the system cannot complete because the customer dialed an invalid international B-number
- calls that the customer abandons before the initial ACCS DRAM announcement
- ACCS calls that the system completes
- queries sent to a database on ACCS sequence calls

Release history

The OM group CDACCS was introduced in BCS31.

BCS35

Registers ACCSROPR and CCANBSCR were introduced in BCS35.

Registers

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

OM group CDACCS (continued)

```
ACCSATT     ACCSFAIL    ISEQATT     ISEQFAIL
ACCSOPR     ACCSABN     ACCSSUCC    ISEQQRY
ACCSROPR    CCANBSCR
```

Group structure

The OM group CDACCS 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 ACCSCCV provides information on calling card validation (CCV) database queries and responses.

Associated functional groups

The following functional groups associate with OM group CDACCS:

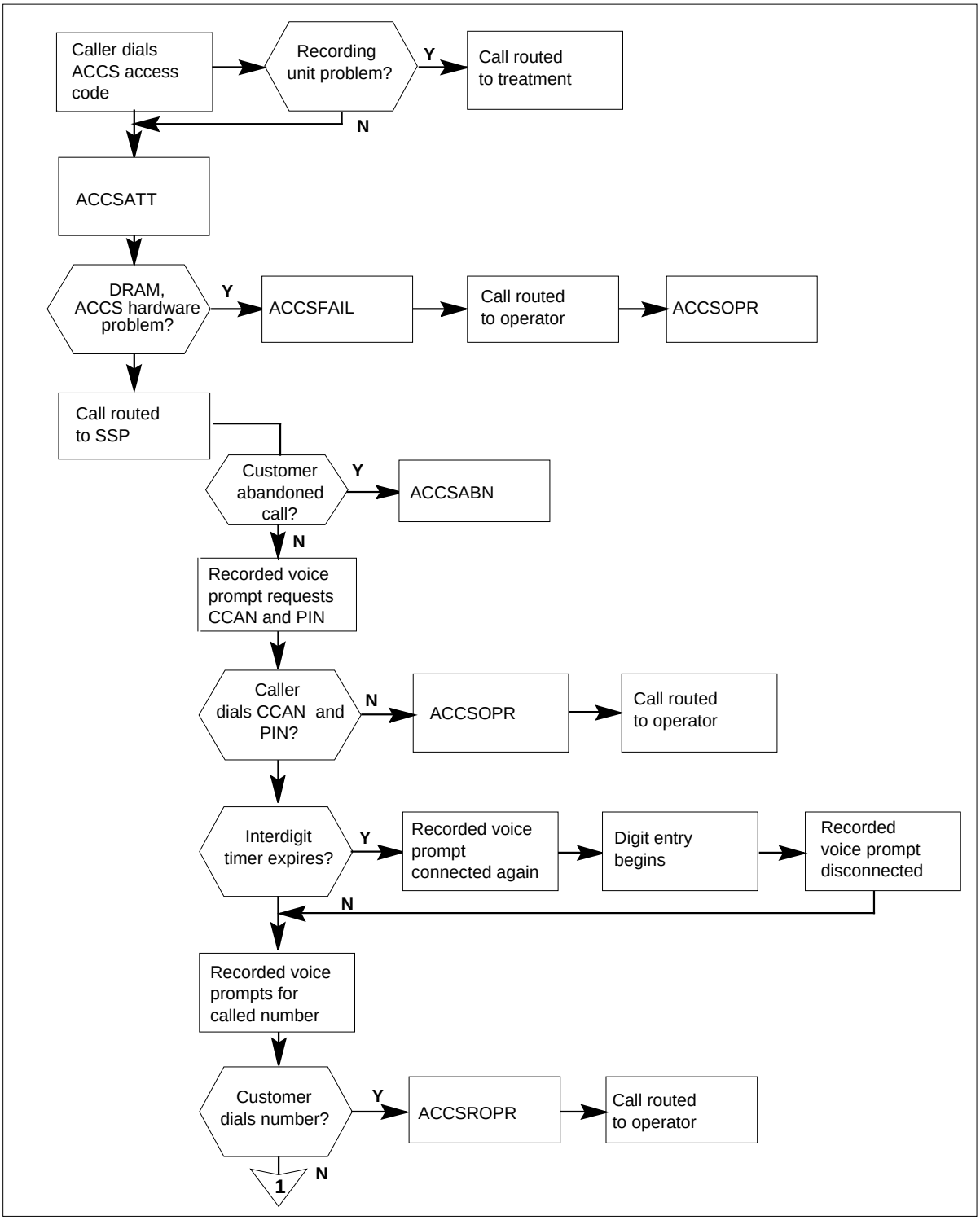
- DMS-200 with international ACCS

Associated functionality codes

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

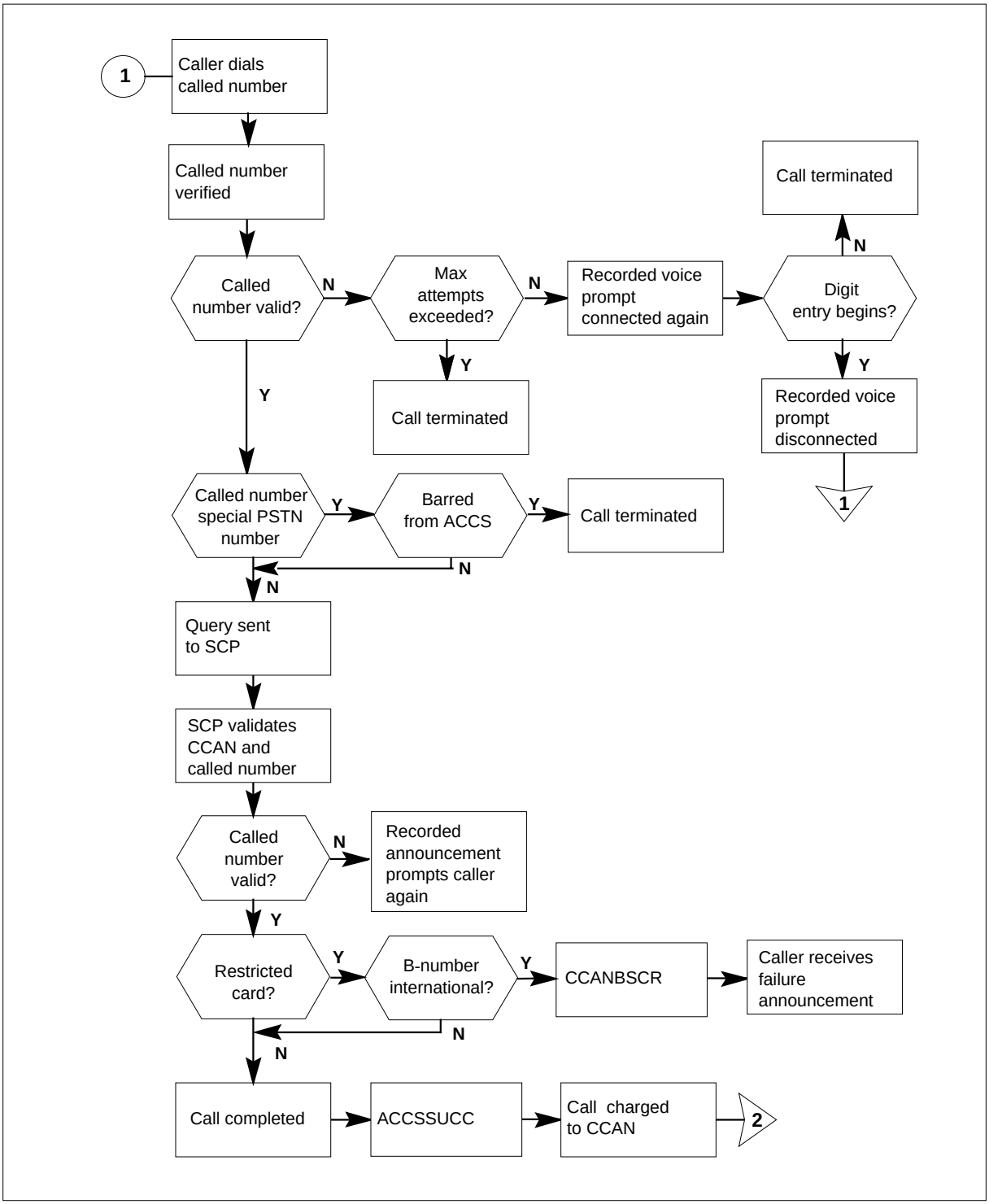
Functionality	Code
Australian ACCS Support	NTXH48AA

OM group CDACCS registers

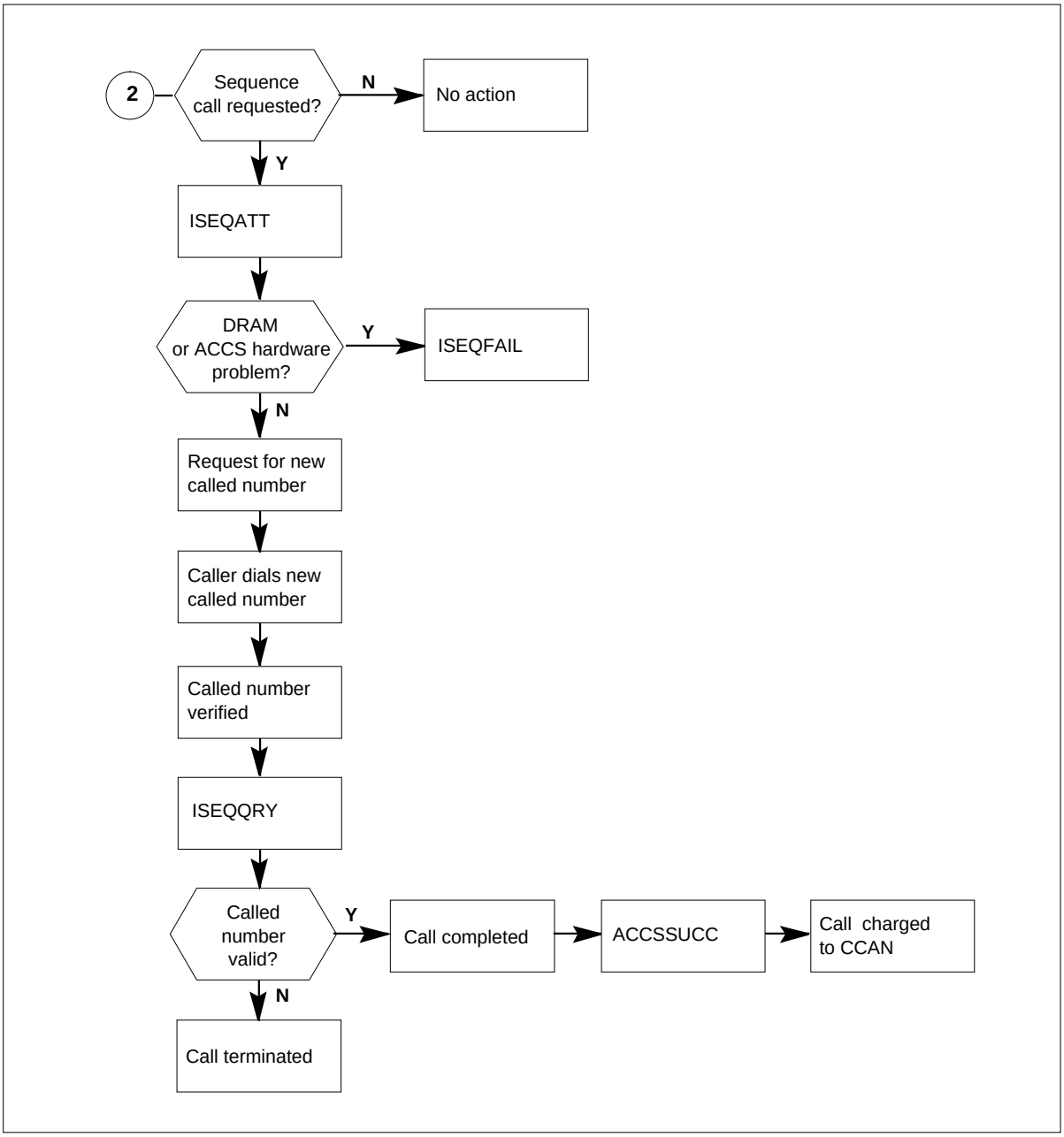


OM group CDACCS (continued)

OM group CDACCS registers (continued)



OM group CDACCS registers (continued)



Register ACCSABN

ACCS call abandon (ACCSABN)

Register ACCSABN counts ACCS calls that the caller abandons during ACCS announcement.

OM group CDACCS (continued)

Register ACCSABN release history

Register ACCSABN was introduced in BCS31.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Register ACCSATT

ACCS call attempts (ACCSATT)

Register ACCSATT counts attempts to use ACCS.

Register ACCSATT release history

Register ACCSATT was introduced in BCS31.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Register ACCSFAIL

ACCS failed calls (ACCSFAIL)

Register ACCSFAIL counts customer-dialed ACCS call attempts that fail. Failure occurs because of hardware problems with the digital recorded announcement machine (DRAM) or with an ACCS receiver. The system routes the call to an operator.

Register ACCSFAIL release history

Register ACCSFAIL was introduced in BCS31.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Register ACCSOPR

ACCS calls routed to operator (ACCSOPR)

Register ACCSOPR counts ACCS calls that the system routes to the operator.

The system routes a call to the operator when:

- a hardware failure occurs on the first set up
- the customer does not enter any digits on first prompt

Register ACCSOPR release history

Register ACCSOPR was introduced in BCS31.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Register ACCSROPR

ACCS request operator (ACCSROPR)

Register ACCSROPR counts customer-dialed ACCS calls where the subscriber requests the operator. To request the operator, the subscriber dials the octothorpe (#) key in response to the first prompt.

Register ACCSROPR release history

Register ACCSROPR was introduced in BCS35.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Register ACCSSUCC

ACCS calls successfully completed (ACCSSUCC)

Register ACCSSUCC counts ACCS calls that the system does not complete correctly.

Register ACCSSUCC release history

Register ACCSSUCC was introduced in BCS31.

Associated registers

There are no associated registers.

OM group CDACCS (continued)

Associated logs

There are no associated logs.

Register CCANBSCR

Calling card account number B-number screening (CCANBSCR)

Register CCANBSCR counts ACCS calls the system denied because the system does not authorize the calling card to access the B-number dialed. The caller receives an error announcement.

Register CCANBSCR release history

Register CCANBSCR was introduced in BCS35.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Register ISEQATT

ACCS sequence call attempts (ISEQATT)

Register ISEQATT counts customer-dialed ACCS sequence call attempts.

Register ISEQATT release history

Register ISEQATT was introduced in BCS31.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Register ISEQFAIL

ACCS sequence call failures (ISEQFAIL)

Register ISEQFAIL counts customer-dialed ACCS sequence call attempts that fail. Failure occurs because of hardware problems with the DRAM or with an ACCS receiver. The system returns a dial tone to the caller.

Register ISEQFAIL release history

Register ISEQFAIL was introduced in BCS31.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Register ISEQQRY

ACCS sequence call database queries (ISEQQRY)

Register ISEQQRY counts queries sent to a database on ACCS sequence calls.

Register ISEQQRY release history

Register ISEQQRY was introduced in BCS31.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

OM group CDACTS

OM description original

Customer dialed automatic coin toll service

CDACTS provides information about calls that can receive automatic coin toll service (ACTS). Calls may be routed to ACTS for the following reasons:

- initial coin charges
- coin charges due collection
- initial coin period notification
- nonstandard notification
- time and charges information

Registers count the following:

- unpaid coin phone calls
- calls that would receive ACTS but do not because the subscriber allows two successive timeouts to occur or flashes the switchhook

Registers also count unpaid coin phone calls, and calls that would receive ACTS but do not because the subscriber allows two successive timeouts to occur or flashes the switchhook.

ACTS replaces an operator with a digital recorded announcement machine (DRAM) and a coin detection circuit (CDC). On coin calls, the DRAM plays announcements to the subscriber indicating the amount of money that should be deposited. The CDC is connected to the calling party and counts the coins deposited by analyzing the dual frequency coin deposit tones that are generated by the coin phone. Once sufficient coinage has been deposited, a Thank You announcement is played and the called number is outpulsed. The subscriber can always reach the operator by flashing the switchhook or by allowing timeouts to occur.

- ACTS can fully automate 1+ station paid calls under the following conditions:
- Calls that are to receive ACTS service must be made from ACTS-compatible coin phones. To be ACTS-compatible, a coin phone must be able to generate dual frequency coin deposit tones that the CDC can recognize.
- Automatic number identification (ANI) success is necessary for rating. If ANI failure does not occur on a coin call, then it is handled by an operator

for initial contact. The call can be automatically handled by ACTS on subsequent contacts.

- Coin phones must have appropriately filled rate step tables.
- The call cannot have large charges, since coin station hoppers can handle only a limited number of coins. If the cost of a coin call exceeds a set amount, then the call is routed to an operator who can do intermediate collections.
- If a call is not billable (for example, a 1-800-type call), it is routed without receiving ACTS processing.
- A subscriber can request that a non-coin call receive a notification message after a specified period of time. In this case, a DRAM plays an announcement at the end of the specified interval.

Release history

OM group CDACTS was introduced prior to BCS20.

BCS33

Register ACTSTEST added.

BCS22

Registers ACTSOPRI and ACTSOPRR added. Register ACTSOPR deleted.

BCS21

Registers ACTSABN and ACTSSUCC added.

Registers

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

ACTSINI	ACTSCHG	ACTSCNFY	ACTSNFY
ACTSTAC	ACTSFAIL	ACTSWALK	ACTSABN
ACTSSUC	CACTSOPRI	ACTSOPRR	ACTSTEST

Group structure

OM group CDACTS

Key field:
None

Info field:
None

OM group CDACTS (continued)

Associated OM groups

None

Associated functional groups

The following functional groups are associated with OM group CDACTS:

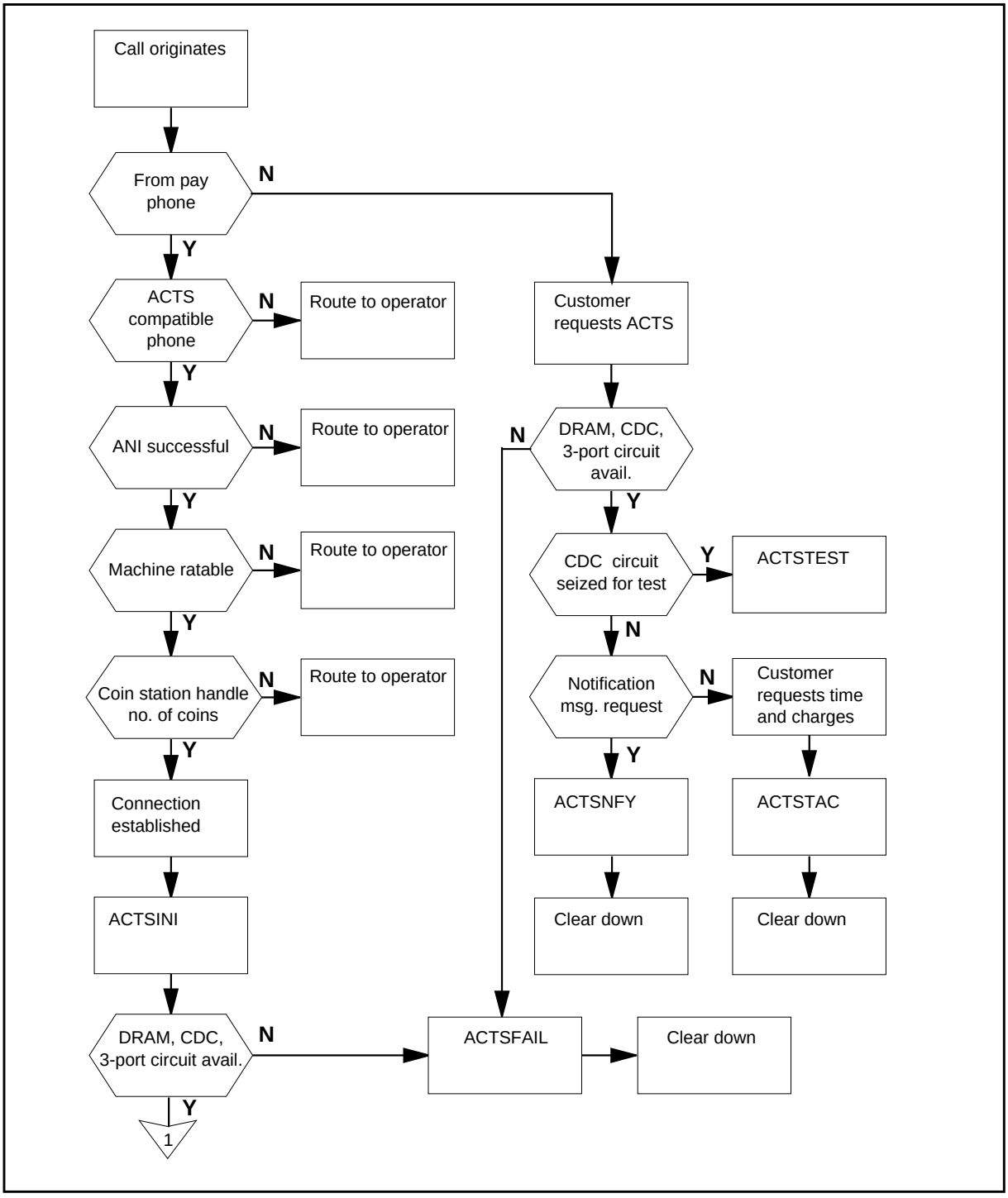
- ACTS Automatic Coin Toll Service

Associated functionality codes

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

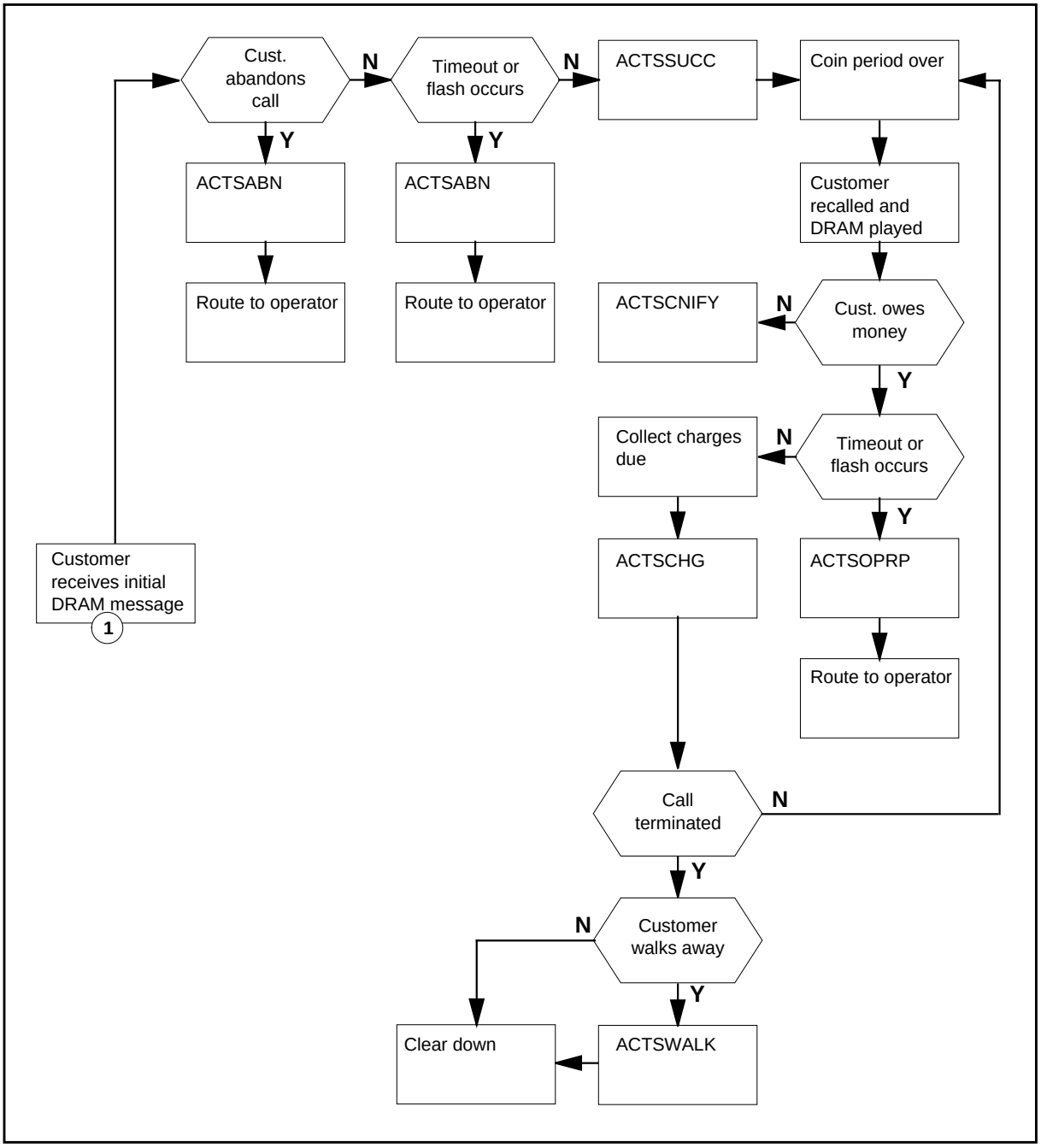
Functionality	Code
Automatic Coin Toll Service	NTX208AA

OM group CDACTS registers



OM group CDACTS (continued)

OM group CDACTS registers (continued)



Register ACTSABN

Automatic coin toll service (ACTS) abandons

ACTSABN is incremented when a subscriber abandons a call while the call is connected to an initial DRAM message.

Register ACTSABN release history

ACTSABN was introduced in BCS21.

Associated registers

None

Associated logs

None

Register ACTSCHG

Automatic coin toll service (ACTS) charge

ACTSCHG is incremented when ACTS calls a coin phone because a subscriber has made a call for which charges are due.

Register ACTSCHG release history

ACTSCHG was introduced prior to BCS20.

Associated registers

None

Associated logs

None

Register ACTSCNFY

Automatic coin toll service (ACTS) coin notify

ACTSCNFY is incremented when ACTS calls a coin phone because the subscriber has requested a notification message.

Register ACTSCNFY release history

ACTSCNFY was introduced prior to BCS20.

Associated registers

None

Associated logs

None

OM group CDACTS (continued)

Register ACTSFAIL

Automatic coin toll service (ACTS) failure

ACTSFAIL is incremented when a call cannot route to ACTS because a DRAM, CDC, or three-port conference circuit is not available.

Register ACTSFAIL release history

ACTSFAIL was introduced prior to BCS20.

Associated registers

None

Associated logs

None

Register ACTSINI

Automatic coin toll service (ACTS) initial coin charges

ACTSINI is incremented when a subscriber dials a 1+ call on a line equipped with ACTS.

Register ACTSINI release history

ACTSINI was introduced prior to BCS20.

Associated registers

None

Associated logs

None

Register ACTSNFY

Automatic coin toll service (ACTS) notify

ACTSNFY is incremented when ACTS calls a non-coin subscriber because the subscriber has requested a notification message.

Register ACTSNFY release history

ACTSNFY was introduced prior to BCS20.

Associated registers

None

Associated logs

None

Register ACTSOPRI

Automatic coin toll service (ACTS) calls initially routed to operator

ACTSOPRI is incremented when a call is routed to an operator because of timeout or subscriber flash during the initial DRAM message.

This register is not incremented for calls that are routed to an operator because of hardware problems or unavailability of DRAM or coin receivers.

Register ACTSOPRI release history

ACTSOPRI was introduced prior to BCS22.

Associated registers

None

Associated logs

None

Register ACTSOPRR

ACTS calls that route to an operator on a recall

ACTSOPRR is incremented when a call is routed to an operator because of timeout or subscriber flash, during a recall or during the notify DRAM message. This register is not incremented for calls that are routed to the operator because of hardware problems or unavailability of DRAM or coin receivers.

Register ACTSOPRR release history

ACTSOPRR was introduced in BCS22.

Associated registers

None

Associated logs

None

Register ACTSSUCC

Automatic coin toll service (ACTS) success

OM group CDACTS (continued)

ACTSSUCC is incremented when a subscriber successfully completes an ACTS call.

An increase in the value of this register means that the call was routed to a trunk, a tone, or an announcement.

Register ACTSSUCC release history

ACTSSUCC was introduced in BCS21.

Associated registers

None

Associated logs

None

Register ACTSTAC

Automatic coin toll service (ACTS) time and charges

ACTSTAC is incremented when a non-coin subscriber attempts to reach ACTS to receive time and charges information. Calls requiring treatments are routed to a TOPS operator.

Register ACTSTAC release history

ACTSTAC was introduced prior to BCS20.

Associated registers

None

Associated logs

None

Register ACTSTEST

Automatic coin toll service (ACTS) coin tone generation test coin detection circuit (CDC) seizure

ACTSTEST counts the number of times a coin detection circuit is seized for use in performing an ACTS coin tone generation test.

Register ACTSTEST release history

ACTSTEST was introduced prior to BCS33.

Associated registers

None

Associated logs

None

Register ACTSWALK

Automatic coin toll service (ACTS) walkaway

ACTSWALK is incremented when a subscriber at a coin phone does not answer a call requesting charges due within 30 seconds. ACTS initiates a call to request charges due if the subscriber goes on hook during a call before a DRAM is connected and the announcement sequence is started.

Register ACTSWALK release history

ACTSWALK was introduced prior to BCS20.

Associated registers

None

Associated logs

None

OM group CDCOM

OM description

Customer data change operational measurements

CDCOM provides information on customer data change (CDC) users. CDCOM contains two registers that count:

- the number of times a CDC user logs on within a 24-hour period
- the total amount of time, in a 24-hour period, that a CDC user logs in.

Release history

OM group CDCOM was introduced in BCS32.

Registers

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

```
CDCLGCNT    CDCUSAGE
```

Group structure

OM group CDCOM provides one tuple per CDC user.

Key field:
USER_NAMES

Info field:
There is no Info field

This feature requires the entry of a CDC user and owner in table CDCLOGON.

Associated OM groups

There are no associated OM groups.

Associated functional groups

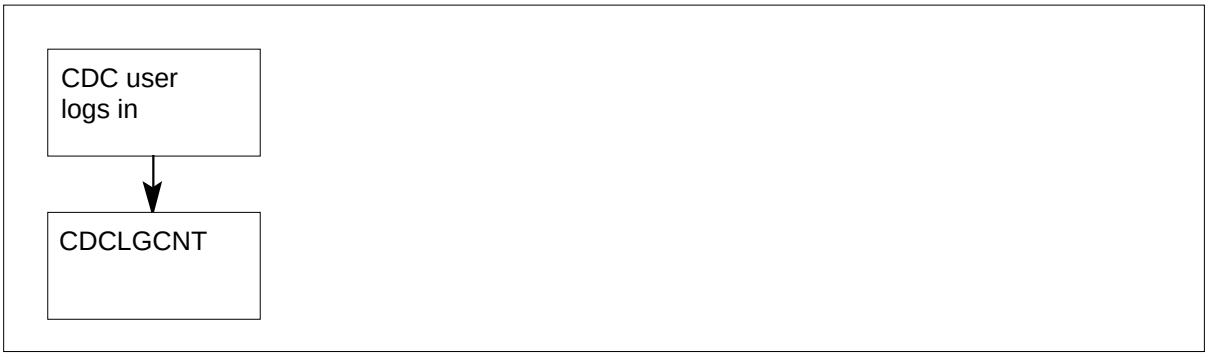
There are no associated functional groups.

Associated functionality codes

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

Functionality	Code
IBN-Customer Administration of Data	NTX412CB

OM group CDCOM registers



OM group CDCOM usage registers

Register CDCLGCNT

Customer data change (CDC) login time CDCLGCNT

Register CDCLGCNT counts the total amount of the time, in a 24-hour period, that a CDC user remains logged in.

OM group CDCOM (end)

Register CDCLGCNT release history

Register CDCLGCNT 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 CDCUSAGE

Customer data change (CDC) login count (CDCUSAGE)

Register CDCUSAGE counts the total amount of the time, in a 24-hour period, that a CDC user logs in.

Register CDCUSAGE release history

Register CDCUSAGE 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 CDMCCS

OM Description

Customer-dialed mechanized calling card service

CDMCCS counts mechanized calling card service (MCCS) call attempts and failures caused by hardware problems with MCCS receivers (RCVRMCCS). Also counted are failures with the digital recorded announcement machine (DRAM). Registers in this group also count attempts to make MCCS sequence calls and queries sent to the billing validation database on sequence calls. Registers in this group also count sequence call failures caused by hardware problems with either MCCS receivers or DRAMs.

Release history

OM group CDMCCS is added before BCS20.

BCS33

Register MCCSACBS and MCCSACBF added.

BCS31

Register SEQQRY added.

BCS21

Register MCCSABN and MCCSSUCC added.

BCS20

Register MCCSOPR added.

Registers

The OM group CDMCCS registers display on the MAP terminal as follows:

```
MCCSATT     MCCSFAIL    SEQATT      SEQFAIL
MCCSOPR     MCCSABN     MCCSSUCC    SEQQRY
MCCSACBS    MCCSACBF
```

Group structure

The OM group CDMCCS provides one tuple for each office.

Key field:
There is no Key field.

Info field:
There is no Info field.

OM group CDMCCS (continued)

Field SEQQRY in table INTCCFMT indicates if the system must send a query on each sequence call for the card issuer.

Office parameter MCCS_SEQ_QUERY in table OFCVAR indicates if the system must send a query on each sequence call for traditional 14-digit format calling cards. The parameter also indicates if the system must send a query on each sequence call for transitional CCITT format calling cards that are validated as 14-digit format.

Associated OM groups

There are no associated OM groups.

Associated functional groups

The functional groups associate with OM group CDMCCS:

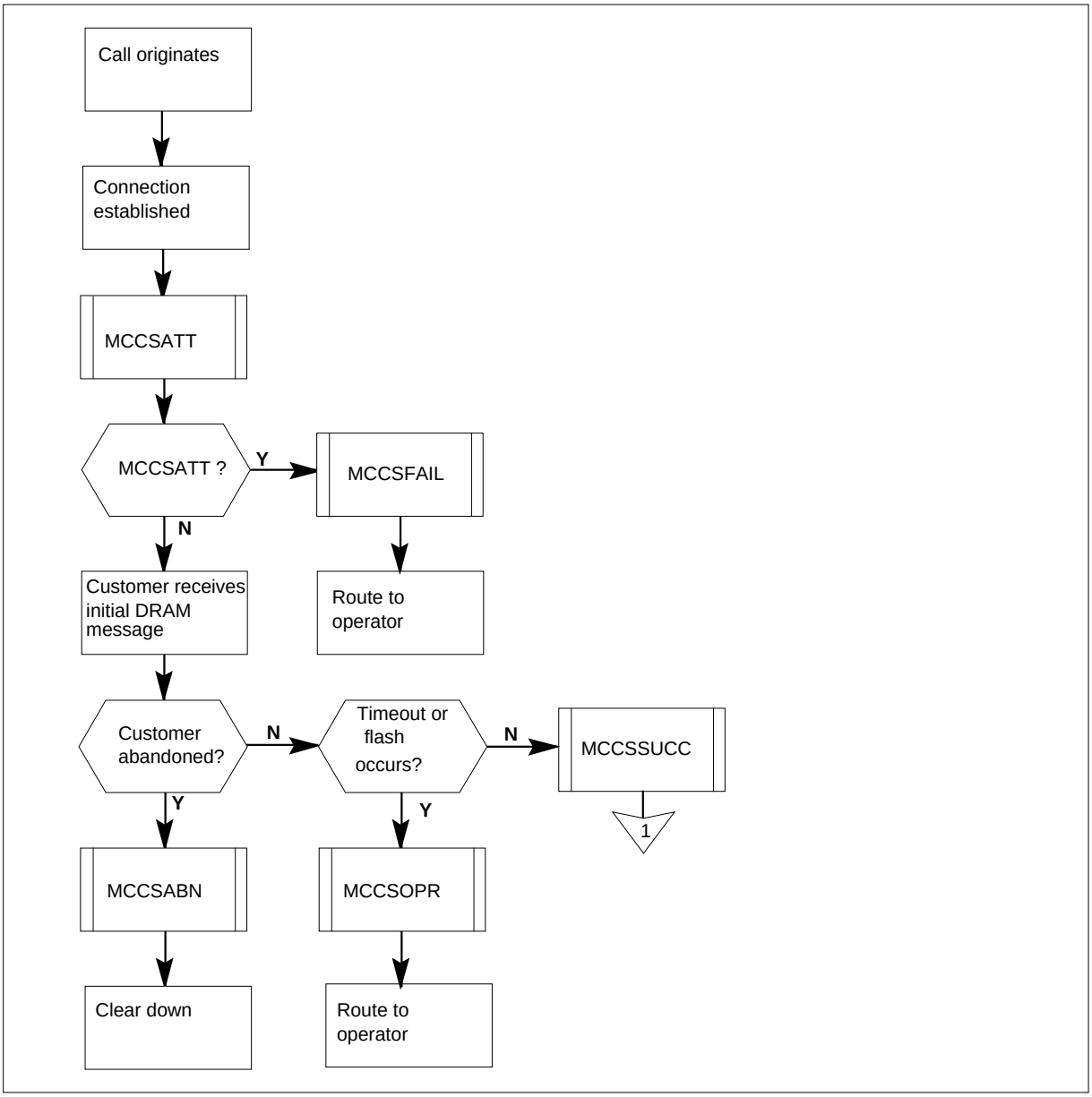
- MCCS Mechanized Calling Card Service

Associated functionality codes

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

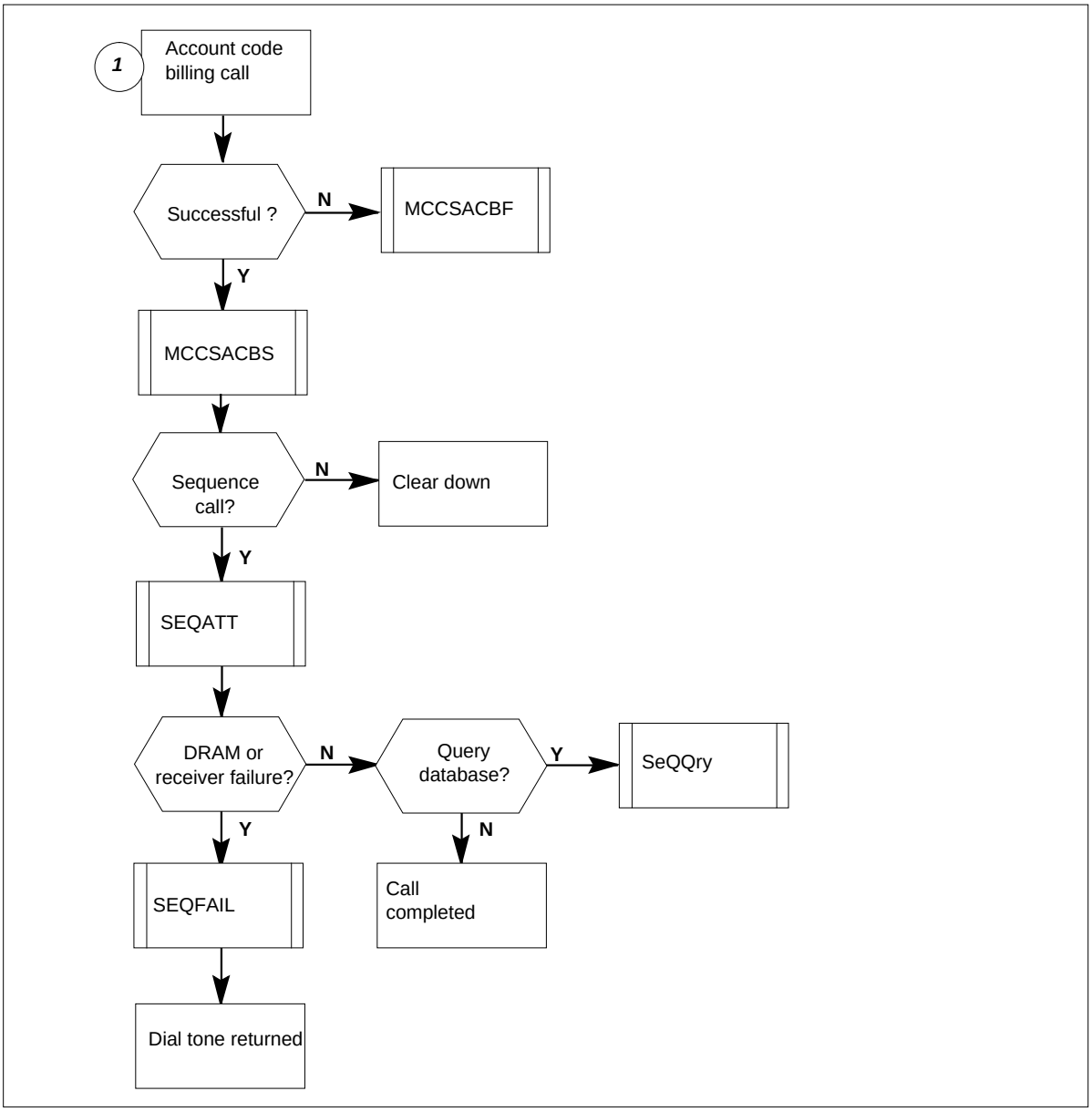
Functionality	Code
MCCS Call Processing	NTX171CA
TOPS Expanded Calling Card Format--CCS7 Validation (U. S.)	NTXE72AA

OM group CDMCCS registers



OM group CDMCCS (continued)

OM group CDMCCS registers (continued)



Register MCCSABN

Abandoned subscriber-dialed mechanized calling card service (MCCS) calls (MCCSABN)

Register MCCSABN increases when a subscriber abandons a MCCS call while call connects to the first DRAM message.

Register MCCSABN release history

MCCSABN was introduced in BCS21.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Register MCCSACBF

Account code billing call failures (MCCSACBF)

MCCSACBF increases when the MCCS cannot complete an account code billing call. The system cannot complete the call because of an account code or an error condition the DMS switch detects.

Register MCCSACBF release history

Register MCCSACBF was introduced in BCS33.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Register MCCSACBS

Account code billing calls (MCCSACBS)

Register MCCSACBS increases when the MCCS completes an account code billing call.

Register MCCSACBS release history

Register MCCSACBS was introduced in BCS33.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Register MCCSATT

Subscriber-dialed mechanized calling card service (MCCS) call attempts (MCCSATT)

OM group CDMCCS (continued)

Register MCCSATT increases when a subscriber dials a 0+ call on a line and receives MCCS. The value in this register includes 0+ calls the system routes over trunks that have MCCS. If hardware problems occur with either the DRAM or an MCCS receiver, the system routes the call to a traffic operator position system (TOPS) operator.

Register MCCSATT release history

Register MCCSATT was introduced in BCS20.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Register MCCSFAIL

Subscriber-dialed mechanized calling card service (MCCS) call failures

MCCSFAIL increases when subscriber-dialed MCCS calls fail. Failure occurs because of hardware problems with the digital recorded announcement machine (DRAM) or with an MCCS receiver. If a hardware problem occurs with the DRAM or an MCCS receiver, the system routes the call to a (TOPS) operator.

Register MCCSFAIL release history

Register MCCSFAIL was introduced in BCS20.

Associated registers

There are no associated registers.

Associated logs

The system generates TRK106, CKT trkid (where trkid indicates the identification of the suspected trunk equipment), when a diagnostic test on the trunk equipment fails. The trunk maintenance subsystem generates the report.

Register MCCSOPR

Subscriber-dialed mechanized calling card service (MCCS) calls that the system routes to an operator

Register MCCSOPR increases when the system routes a call to an operator because of a timeout. Register MCCSOPR also increases because the subscriber flashes the switchhook.

Register MCCSOPR release history

Register MCCSOPR was introduced in BCS21.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Register MCCSSUCC

Successful subscriber-dialed mechanized calling card service (MCCS) calls

Register MCCSSUCC increases when a subscriber successfully completes a credit card call.

Register MCCSSUCC release history

Register MCCSSUCC was introduced in BCS21.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Register SEQATT

Subscriber-dialed mechanized calling card service (MCCS) sequence call attempts (SEQATT)

Register SEQATT counts subscriber-dialed MCCS sequence call attempts [that is, the number of times that the subscriber keys an octothorpe (#) after the called party disconnects].

If hardware problems occur with the DRAM or an MCCS receiver, the call receives dial tone.

Register SEQATT release history

Register SEQATT was introduced in BCS20.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

OM group CDMCCS (end)

Register SEQFAIL

Subscriber-dialed mechanized calling card service (MCCS) sequence call failures (SEQFAIL)

Register SEQFAIL counts failed subscriber-dialed MCCS sequence calls caused by hardware problems with the DRAM or an MCCS receiver. A dial tone returns if hardware problems occur with the DRAM or with an MCCS receiver.

Register SEQFAIL release history

Register SEQFAIL was introduced in BCS20.

Associated registers

There are no associated registers.

Associated logs

The system generates TRK106, CKT trkid (where trkid indicates the identification of the suspected trunk equipment), when a diagnostic test on the trunk equipment fails. The trunk maintenance subsystem generates the report.

Register SEQQRY

Subscriber-dialed mechanized calling card service (MCCS) sequence call database queries (SEQQRY)

Register SEQQRY counts calling card validation queries the system sends to the billing validation database on sequence calls.

Register SEQQRY release history

Register SEQQRY was introduced in BCS31.

Associated registers

Register ACCSCCV_CCVTOTAL counts queries sent to the calling card validation database.

Register DSMCCS_MCCSQRY counts MCCS queries sent to the billing validation center database.

Associated logs

There are no associated logs.

OM group CF3P

OM description

Three-port conference circuits (CF3P)

Lines that use the Three-way Calling (3WC) feature request three-port conference circuits. Calls that go to service analysis positions after the activation of the position request three-port conference circuits. Trunk test positions request three-port conference circuits when a request to monitor talking is issued.

The registers in CF3P provide information on the use of a three-port conference circuit. The information includes the number of times the system seized a circuit. The information also incudes the number of times that a circuit was not available. The information also includes the queue overflows and abandons.

Multiple usage registers monitor conference circuits in different busy states. Registers also monitor three-port conference circuits assigned to TOPS positions.

The USNBD feature uses the registers in OM group CF3P to monitor the usage of 3-way conference bridges used for combined CCRs.

Release history

The OM group CF3P was introduced before BCS20.

NA011

Supports use of this OM group by the USNBD feature.

APC005

Functionality is added to support Meridian Digital Centrex (MDC) features, like as 3WC, on Global Peripheral Platform (GPP) lines for the following groups.

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

BCS33

The system can convert registers CNFTRU, CNFSBU and CNFMBU from hundred call seconds (CCS) to deci-erlangs. The system uses the command OMSHOW on the ACTIVE class to convert the regiter before they appear.

OM group CF3P (continued)

BCS21

Registers CNFTRU, CNFSBU, and CNFMBU are modified. The method of calculating erlangs changes to provide average traffic values over a given time period.

BCS20

Registers CNFTRU, CNFSBU, and CNFMBU are modified. The output can be specified to be in deci-erlangs or CCS.

Registers

The OM group CF3P registers appear on the MAP terminal as follows:

```
CNFSZRS     CNFOVFL     CNFQOCC     CNFQOVFL
CNFQABAN    CNFTRU      CNFSBU      CNFMBU
```

The second variant applies to TOPS offices with toll and combined local/toll. This OM group has eleven registers:

```
CNFSZRST    CNFOVFLT    CNFQOCCT    CNFQOVFT
CNFQABNT    CNFTRUT     CNFSBUT     CNFMBUT
TOPSZRS     TOPSOVFL    TOPSTRU
```

Group structure

The OM group CF3P provides one tuple for each office.

Info field:
CONF_MEM_NUMBER This field indicates the number of software-equipped conference circuits in the office.

Key field:
COMMON_LANGUAGE_NAME. This field contains the external identifier CF3P.

The OM group CF3P is available for non-TOPS environments and for TOPS offices with toll or combined local/toll capabilities. To obtain the correct OM outputs for TOPS offices with toll, you must set office parameter OFFICETYPE in table OFCSTD to OFF200TOPS. For combined local/toll with TOPS offices, you must set office parameter OFFICETYPE in table

OFCSTD to OFF200TOPS, OFFCOMBTOPS, OFFEADAS, OFFCOMBITOPS or OFF500.

To detect the three-port conference use in a remote office, you must set the office parameter. You must set the office parameter OFFICETYPE in table OFCSTD to OFF200TOPS or OFFCOMBTOPS.

An office that uses three-port conference circuits to serve TOPS positions uses office parameter TOPS_THRESHOLD. Office parameter TOPS_THRESHOLD in table OFCENG gives the percentage of in-service three-port circuits reserved for TOPS use. The system translates this percentage into a number of circuits each time an audit of conference circuit data occurs. The office parameter AUDIT_INTERVAL in table OFCSTD defines the audit frequency.

Associated OM groups

There are no associated OM groups.

Associated functional groups

The functional group TOPS is associated with OM group CF3P.

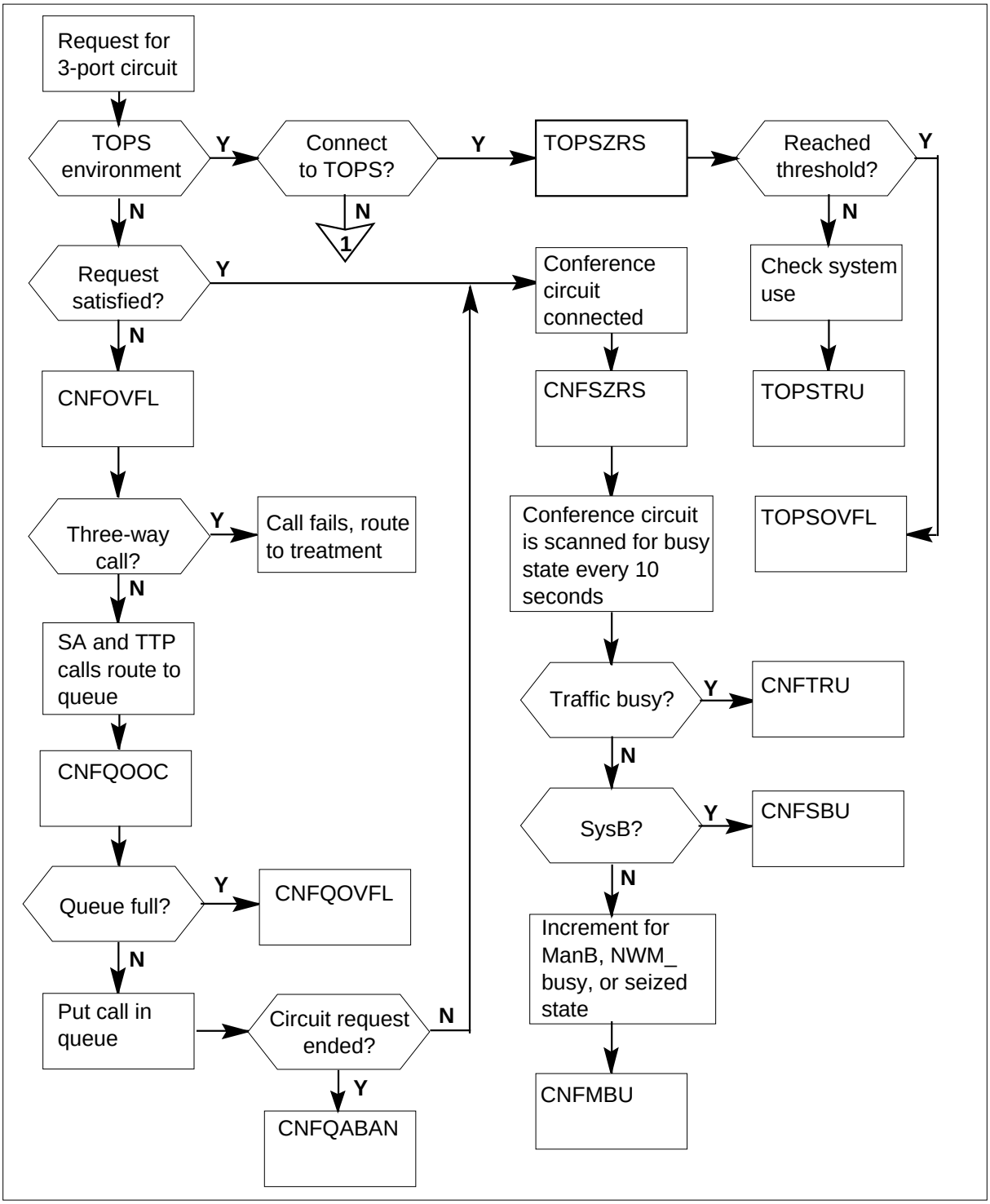
Associated functionality codes

The associated functionality codes for OM group CF3P appear in the following table.

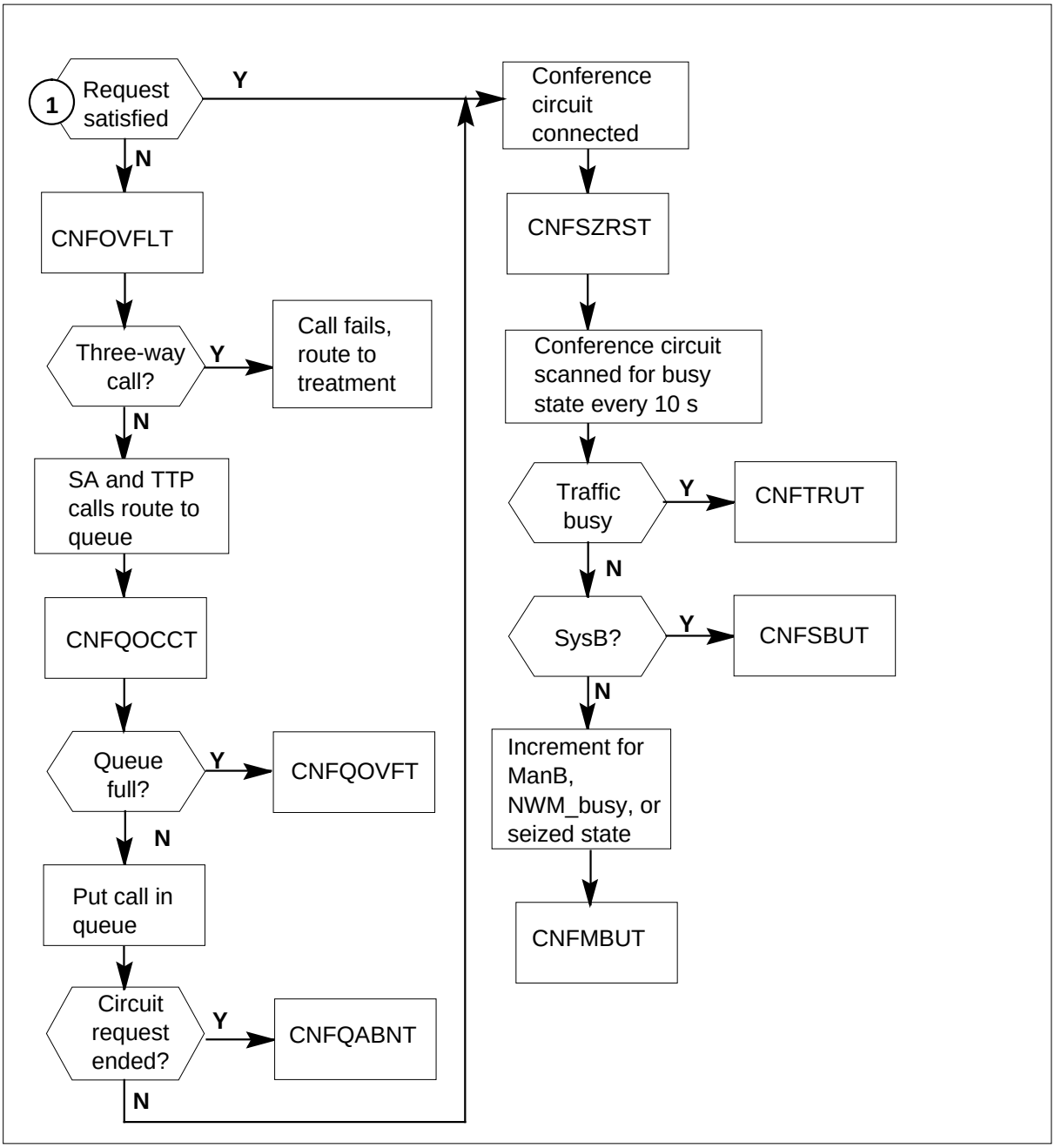
Functionality	Code
Common Basic	NTX001AA

OM group CF3P (continued)

OM group CF3P registers



OM group CF3P registers (continued)



Register CNFMBU

CF3P manual busy usage (CNFMBU)

OM group CF3P (continued)

Register CNFMBU is a usage register. Every 10 s CNFMBU scans the conference circuits. CNFMBU records the number of conference circuits that are in any of the following states during the last OM transfer period:

- manual busy
- seized
- network management procedures

Maintenance personnel can seize a circuit for diagnostic tests while working from the trunk test position at the MAP terminal. Personnel also can be working by the automatic trunk test (ATT) system can seize a circuit for diagnostic tests. A system audit on the conference ports can also seize a circuit for diagnostic tests.

The system updates the active register every 10 s with the number of CF3Ps that are in any of the previously listed states. For example, if one conference port is manual busy, the active register increases by 1 every 10s. The register will continue to increase for as long as the port is in this state. The register also increases if the system seizes one of the ports for a system audit. The system copies the accumulated count to the holding register (CNFMBU) every 30 min (and erases the previous value). If no ports are in these busy states, CNFMBU will show a value that is not zero. Values that are not zero will only appear if the system counted a port during the last OM transfer period (30 min).

Non-TOPS environments use this register.

Register CNFMBU release history

Register CNFMBU was introduced before BCS20.

BCS33

When you set office parameter OMINERLANGS to Y, the usage count converts from CCS to deci-erlangs. THe system uses the OMSHOW command on the ACTIVE class to convert usage counts before they appear. The value held in the active register does not change and remains in CCS.

BCS20

Register modified to allow the system to record the usage count in deci-erlangs rather than CCS.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Register CNFMBUT

Register CF3P manual busy usage TOPS environment (CNFMBUT)

Register CNFMBUT is a usage register. Every 10 s CNFMBUT scans the conference circuits. CNFMBUT records the number of conference circuits that are in any of the following states during the last OM tranfer period:

- manual busy
- seized
- network management procedures

Maintainence personnel that work from the trunk test position at the MAP terminal can seize a circuit for diagnostic tests. The ATT system can also seize a circuit for diagnostic tests.

The system updates the active register every 10 s with the number of CF3Ps that are in any of the previously listed states. For example. if one conference port is manual busy, the active register increases by 1 every 10 s. The register will continue to increase for as long as the port is in this state. The system copies the accumulated count to the holding register (CNFMBUT) every 30 min, (and erases the previous value). CNFMBUT shows a value that is not zero if the system counted any port during the last OM transfer period of 30 min. CNFMBUT shows a value that is not zeo while the ports are not in theses busy states.

Register CNFMBUT release history

Register CNFMBUT was introduced before BCS20.

BCS20

Register modified to allow the system to record the usage count in deci-erlangs or CCS.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Register CNFOVFL

CF3P overflows (CNFOVFL)

OM group CF3P (continued)

Register CNFOVFL increases when the system can not satisfy a request for a three-port conference circuit immediately because conference circuits are busy.

Three way callig attempts fail and the system routes the calls to treatment. Service analysis and trunk test position requests attempt to queue.

The register applies to non-TOPS environments.

Register CNFOVFL release history

Register CNFOVFL was introduced before BCS20.

Associated registers

Register CNFOVFL equals the number of calls that attempt to enter the conference circuit work queue.

Number of calls that enter the queue = CNFOVFL - CNQOVFL.

Associated logs

The all trunks busy (ATB) subsystem generates ATB100 for each blocked attempt to seize a trunk to a exact numbering plan area (NPA) or central office. The system advanced the call to another route.

Register CNFOVFLT

CF3P overflows TOPS environment (CNFOVFLT)

Register CNFOVFLT counts requests for three-port conference circuits in a TOPS environment that the system can not satisfy immediately. The system can not satisfy the requests because all conference circuits are busy.

Three-way Calling attempts fail and the system routes the calls to a treatment. Service analysis and trunk test position requests attempt to queue.

Register CNFOVFLT release history

Register CNFOVFLT was introduced before BCS20.

Associated registers

Register CNFOVFLT equals the number of calls that attempt to enter the conference circuit work queue.

Number of calls that enter the queue = CNFOVFLT - CNQOVFL.

Associated logs

The ATB subsystem generates ATB100 for each blocked attempt to seize a trunk to a specified NPA or central office. The system advances the call to another route.

Register CNFQABAN

Register CF3P queue abandons (CNFQABAN)

Register CNFQABAN counts circuit requests abandoned while the requests wait in the conference circuit queue.

The system uses this register in non-TOPS environments.

Register CNFQABAN release history

Register CNFQABAN was introduced before BCS20.

Associated registers

There are no associated registers.

Associated logs

The line maintenance subsystem generates the following logs when the system encounters problems during call processing: LINE104, LINE105, LINE109, and LINE204.

Register CNFQABNT

Register CF3P queue abandons TOPS environment

Register CNFQABNT counts circuit requests abandoned while the requests wait in the conference circuit queue.

Register CNFQABNT release history

Register CNFQABNT was introduced before BCS20.

Associated registers

There are no associated registers.

Associated logs

The line maintenance subsystem when the system generates the following logs when the system encounters problems during call processing:

- LINE104
- LINE105

OM group CF3P (continued)

- LINE109
- LINE204

Register CNFQOCC

CF3P queue occupancy (CNFQOCC)

Register CNFQOCC is a usage register. Every 10 s the system scans conference circuits, and CNFQOCC records. The system scans if requests for a conference circuit are waiting in the queue. The queue consists of waiting service analysis and trunk test position requests only.

The system uses this register in non-TOPS environments.

Register CNFQOCC release history

Register CNFQOOC was introduced before BCS20.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Register CNFQOCCT

CF3P queue occupancy TOPS environment

Register CNFQOCCT is a usage register. Every 10 s the system scans the conference circuits, and CNFQOCCT records. The system scans if requests for a conference circuit are waiting in the queue. The queue consists of waiting service analysis and trunk test position only.

Register CNFQOCCT release history

Register CNFQOCCT was introduced before BCS20.

Associated registers

The are no associated registers.

Associated logs

There are no associated logs.

Register CNFQOVFL

CF3P queue overflows (CNFQOVFL)

Register CNFQOVFL counts attempts to enter the wait queue when the queue is full. Only requests from trunk test or service analysis positions increase this register. Other requests do not attempt to wait.

The system uses this register in non-TOPS environments.

Register CNFQOVFL release history

Regsiter CNFQOVFL was introduced before BCS20.

Associated registers

There are no associated registers.

Associated logs

The line maintenance subsytem generates LINE 138 when the system routes a call to a treatment after being call processing busy.

The trunk maintenance subsystem generates LINE 138 when the system routes a call to a treatment after being call processing busy.

Register CNFQOVFT

CF3P queue overflows TOPS environment (CNFQOVFT)

Register CNFQOVFT counts attempts to enter the wait queue when the queue is full. Only requests from trunk test or service analysis positions increment this register, since other requests do not attempt to wait.

Register CNFQOVFT release history

Register CNFQOVFT was introduced before BCS20.

Associated registers

There are no associated registers.

Associated logs

The line maintenance subsystem generates LINE 138 when the system routes a call to a treatment after being call processing busy.

The trunk maintenance subsystem generates TRK 138 when the system routes a call to a treatment after being call processing busy.

Register CNFSBU

CF3P system busy usage (CNFSBU)

OM group CF3P (continued)

Register CNFSBU is a usage register. Every 10 s the system scans conference circuits. CNFSBU records if the conference circuits are remote busy, peripheral module busy, system busy, carrier failed, or unloaded. A conference request that originated in the system can place the conference circuits in these states.

The system uses this register in non-TOPS environments.

Register CNFSBU release history

Register CNFSBU 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.

BCS20

Register modified to allow the system to record the usage count in deci-erlangs or CCS.

Associated registers

There are no associated registers.

Associated logs

The trunk maintenance subsystem generates TRK106 when a diagnostics test on trunk equipment fails.

Register CNFSBUT

CF3P system busy usage TOPS environment (CNFSBUT)

Register CNFSBUT is a usage register. Every 10 s the system scans the conference circuits, and CNFSBUT records. The system scans if they are remote busy, peripheral module busy, system busy, carrier failed, or unloaded. A conference request that originated in the system can place these circuits in this state.

Register CNFSBUT release history

Register CNFSBUT was introduced before BCS20.

BCS20

Register modified to allow the system to record the usage count in deci-erlangs or CCS.

Associated registers

There are no associated registers.

Associated logs

The trunk maintenance subsystem generates TRK 106 when a diagnostics test on trunk equipment fails.

Register CNFSZRS

CF3P seizures (CNFSZRS)

Register CNFSZRS increases when the system assigns a circuit in response to a request. The system assigns the circuit before an attempt to set up network paths to the three ports.

The system uses this register in non-TOPS environments.

Register CNFSZRS release history

Register CNFSZRS was introduced before BCS20.

Associated registers

There are no associated registers.

Associated logs

The are no associated logs.

Register CNFSZRST

CF3P seizures TOPS environment (CNFSZRST)

Register CNFSZRST increases when the system assigns a circuit in response to a request. The system assigns the ciruit before an attempt to set up network paths to the three ports.

Register CNFSZRST release history

Register CNFSZRST was introduced before BCS20.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Register CNFTRU

CF3P traffic busy usage

OM group CF3P (continued)

Register CNFTRU is a usage register. Every 10 s the system scans the conference circuits, and CNFTRU records if the circuits are call processing busy, unloaded, or locked out.

The system uses this register in non-TOPS environments.

Register CNFTRU release history

Register CNFTRU 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.

BCS20

Register modified to allow the system to record the usage count in deci-erlangs or CCS.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Register CNFTRUT

CF3P traffic busy usage TOPS environment (CNFTRUT)

Register CNFTRUT is a usage register. Every 10 s the system scans conference circuits, and CNFTRUT records if the circuits are call processing busy, deloaded, or locked out.

Register CNFTRUT release history

Register CNFTRUT was introduced before BCS20.

BCS20

Register modified to allow the system to record the usage count in deci-erlangs or CCS.

Associated registers

There are no associated registers.

Associated logs

There are no assocaited logs.

Register TOPSOVFL

CF3P overflows by TOPS positions (TOPSOVFL)

Register TOPSOVFL increases when a call that attempts to connect to a TOPS position cannot request a conference circuit. The request fails because circuits are not available for TOPS calls.

If this is the second attempt to obtain resources

- on an operator-initiated call, the operator does not observe a response and must re-initiate the call
- on a first operator-handled (that is, 0+, 0-, 1+ coin/hotel) call, the system routes the call to no service circuit (NOSC) treatment
- on a system-initiated recall, the system floats the call and does not use the recall indication.

Register TOPSOVFL release history

Register TOPSOVFL was introduced before BCS20.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Register TOPSTRU

CF3P TOPS traffic busy usage(TOPSTRU)

Register TOPSTRU is a usage register. Every 10 s the system scans the conference circuits. Register TOPSTRU records if the system assigned the circuits to calls being served at a TOPS position in non-CAMA mode.

Register TOPSTRU release history

Register TOPSTRU was introduced before BCS20.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Register TOPSZRS

CF3P seized by TOPS positions (TOPSZRS)

OM group CF3P (end)

Register TOPSZRS increases when the system assigns a three-port conference circuit to a call at a TOPS position. TOPSZRS increases when the system assigns the circuit before any attempt to set up the required network paths. TOPSZRS can increase a second time for the same call. TOPSZRS increases again if the call fails on the first attempt to obtain all the required resources.

The CAMA ONI/RONI and ANIF calls to TOPS positions do not use a conference circuit.

Register TOPSZRS release history

Register TOPSZRS was introduced before BCS20.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

OM group CF6P

OM description

Six-port conference bridge measurements (CF6P)

The OM group CF6P provides information on the use of a six-port conference circuit.

Registers increase when:

- the system seizes a circuit
- the system makes a circuit not available
- a queue overflows
- the system abandons a queue

The following items request six-port conference circuits:

- lines that use the Six-way Conference (6WC) feature
- calls that go to service analysis positions after the activation of the position
- trunk test positions (TTP) when the user issues a request to monitor talking.

Release history

The OM group CF6P was introduced before BCS20.

APC005

Functionality is added to support Meridian Digital Centrex (MDC) features, like 6WC, on Global Peripheral Platform (GPP) lines for:

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

BCS33

The system can convert registers CF6TRU, CF6SBU, and CF6MBU from hundred call seconds (CCS) to deci-erlangs before the register appears. Use the OMSHOW command on the active class to display the register.

Registers

The OM group CF6P registers appear on the MAP terminal as follows:

OM group CF6P (continued)

CF6SZRS	CF6OVFL	CF6QOCC	CF6QOVFL
CF6QABAN	CF6TRU	CF6SBU	CF6MBU

Group structure

The OM group CF6P provides one register for each office.

Key field:
COMMON_LANGUAGE_NAME

Info field:
CONF6_OM_INFO

Associated OM groups

There are no associated OM groups.

Associated functional groups

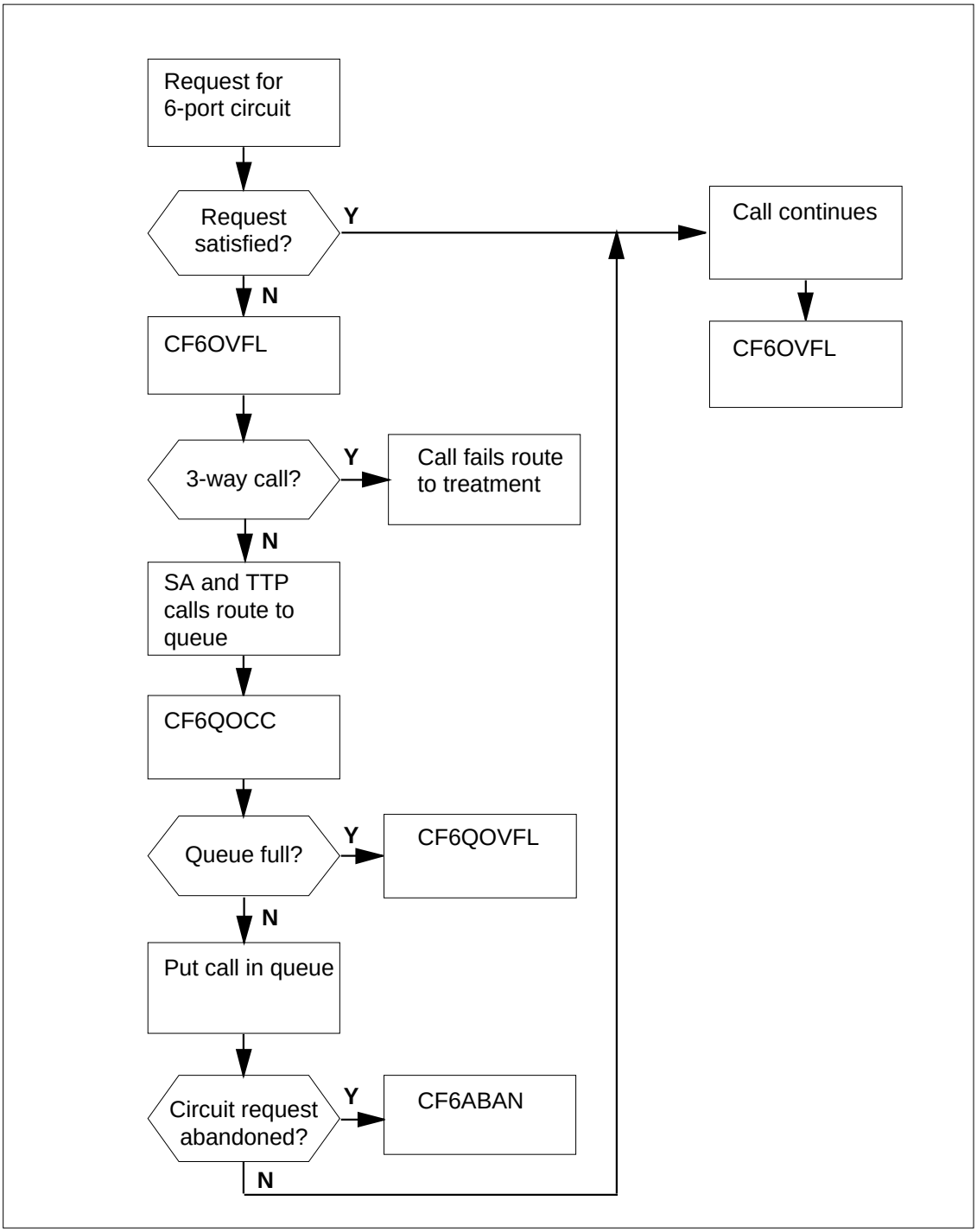
There are no associated functional groups.

Associated functionality codes

The associated functionality codes for OM group CF6P appear in the following table.

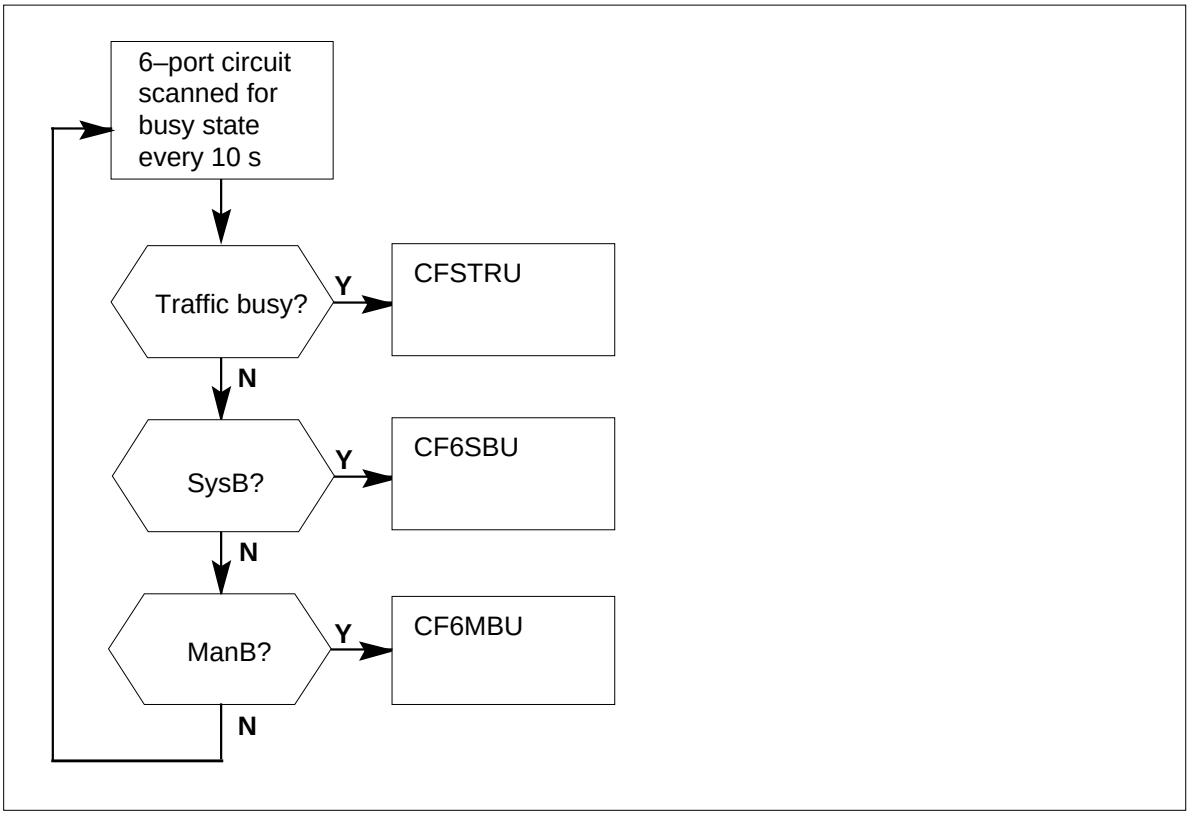
Functionality	Code
Integrated Business Networks-Basic (IBN)	NTX100AA
DMS-250 Translation Verification	NTX238AA

OM group CF6P registers



OM group CF6P (continued)

OM group CF6P registers (continued)



Register CF6MBU

CF6P manual busy usage (CF6MBU)

Register CF6MBU is a usage register. Every 10 s, the system scans conference circuits. Register CF6MBU records the number of conference circuits in any of the following states during the last OM transfer period:

- manual busy
- seized
- busy (because of network management procedures (NWM))

The items in the following list can seize a circuit for diagnostic tests:

- maintenance personnel that work from a trunk test position at the MAP terminal
- the automatic trunk test (ATT) system
- a system audit on the conference ports.

The system updates the active register every 10 s with the number of CF6Ps that are in any of these states. If one conference port is manually busy, the register increases. The register also increases if the system seizes one of the ports for a system audit, The register increases by 1 every 10 s for as long as the port is in this state. The system copies the accumulated count to the holding register (CF6MBU) every 30 min (and erases the previous value). Register CF6MBU shows a value that is not zero if the system counts a port during the last OM transfer period (30 min). Register CF6MBU displays this value when ports are not in busy states.

Register CF6MBU release history

Register CF6MBU was added before BCS20.

BCS33

When you set office parameter OMINERLANGS to Y, the system converts 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.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register CF6OVFL

CF6P overflow (CF6OVFL)

Register CF6OVFL counts calls that cannot locate enough conference bridges.

Register CF6OVFL release history

Register CF6OVFL was introduced before BCS20.

Associated registers

There are no associated registers.

Associated logs

The system generates ATB100 when an attempt to seize a trunk to a exact numbering plan area or central office blocks.

OM group CF6P (continued)

Extension registers

There are no extension registers.

Register CF6QABAN

CF6P queue abandons

Register CF6QABAN counts calls that abandon while waiting in queue for the system to connect the calls to a conference circuit.

Register CF6QABAN release history

Register CF6QABAN was introduced before BCS20.

Associated registers

There are no associated registers.

Associated logs

The system generates LINE104 when the system encounters problems during call processing.

The system generates LINE105 when the system encounters problems during call processing.

The system generates LINE109 when the system encounters problems during call processing.

The system generates LINE204 when the system encounters problems during call processing.

Extension registers

There are no extension registers.

Register CF6QOCC

CF6P queue occupancy (CF6QOCC)

Register CF6QOCC is a usage register. The scan rate is 10 s. Register CF6QOCC records if requests are in queue for the system to assign a conference circuit. The queue consists of waiting service analysis and trunk test position requests only.

Register CF6QOCC release history

Register CF6QOCC 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 CF6QOVFL

CF6P queue overflow (CF6QOVFL)

Register CF6QOVFL counts requests for a conference circuit that encounter a circuit queue full condition.

Register CF6QOVFL release history

Register CF6QOVFL was introduced before BCS20.

Associated registers

There are no associated registers.

Associated logs

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

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

Extension registers

There are no extension registers.

Register CF6SBU

CF6P system busy usage (CF6SBU)

Register CF6SBU is a usage register. The scan rate is 10 s. Register CF6SBU records if conference circuits are in one of the following states. The circuits are in this state as a result of a busying that originated in the system:

- remote busy
- peripheral module busy
- system busy

OM group CF6P (continued)

- carrier fail
- unloaded

Register CF6SBU release history

Register CF6SBU was introduced before BCS20.

BCS33

When office parameter OMINERLANGS is set to Y, the system converts the usage count from CCS to deci-erlangs. Conversion is done before to their display using the OMSHOW command on the ACTIVE class. The value held in the active registers is not altered and remains in CCS.

Associated registers

There are no associated registers.

Associated logs

The system generates TRK106 when a diagnostic test on trunk equipment fails.

Extension registers

There are no extension registers.

Register CF6SZRS

CF6P Seizures (CF6SZRS)

Register CF6SZRS counts calls that seize a conference circuit.

Register CF6SZRS release history

Register CF6SZRS 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 CF6TRU

CF6P traffic busy usage (CF6TRU)

Register CF6TRU0 is a usage register. The scan rate is 10 s. CF6TRU records if conference circuits are in the following states:

- call processing busy
- call processing busy unload
- lockout

Register CF6TRU release history

CF6TRU is added prior to BCS20.

BCS33

When the office parameter OMINERLANGS is set to Y, the system converts the usage count from CCS to deci-erlangs. Conversion takes place before to their display using the OMSHOW command on the ACTIVE class. The value held in the active registers is not altered and remains in CCS.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

OM group CFRA

OM description

Call forward remote access (CFRA)

The OM group CFRA measures the use of the call forward remote access (CFRA) feature and failures. Separate registers count attempts to use CFRA and failures caused by:

- not enough hardware resources
- not enough software resources
- missing entries
- subscriber dialing that is not correct

Release history

The OM group CFRA was introduced in BCS27.

Registers

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

```
CFRAATT         CFRASWOV        CFRAHWOV        CFRALIMT
CFRADENY        CFRAFAIL
```

Group structure

The OM group CFRA provides one tuple for each office.

Key field:
There is no key field.

Info field:
There is no key field.

Register CFRA_CFRALIMT uses the value in MAX_PROGRAMMERS in table OFCENG. MAX_PROGRAMMERS defines the number of users that can use CFRA at the same time.

Register CFRA_CFRASWOV depends on the no_of_ftr_data_blks office parameter in table OFCENG. Feature blocks are software resources required for CFRA to operate.

If table CUSTSTN and AUTHPART are not entered, CFRA will not operate and CFRAFAIL increases.

Associated OM groups

There are no associated OM groups.

Associated functional groups

The MDC CLASS CMS RES functional group increases with OM group CFRA.

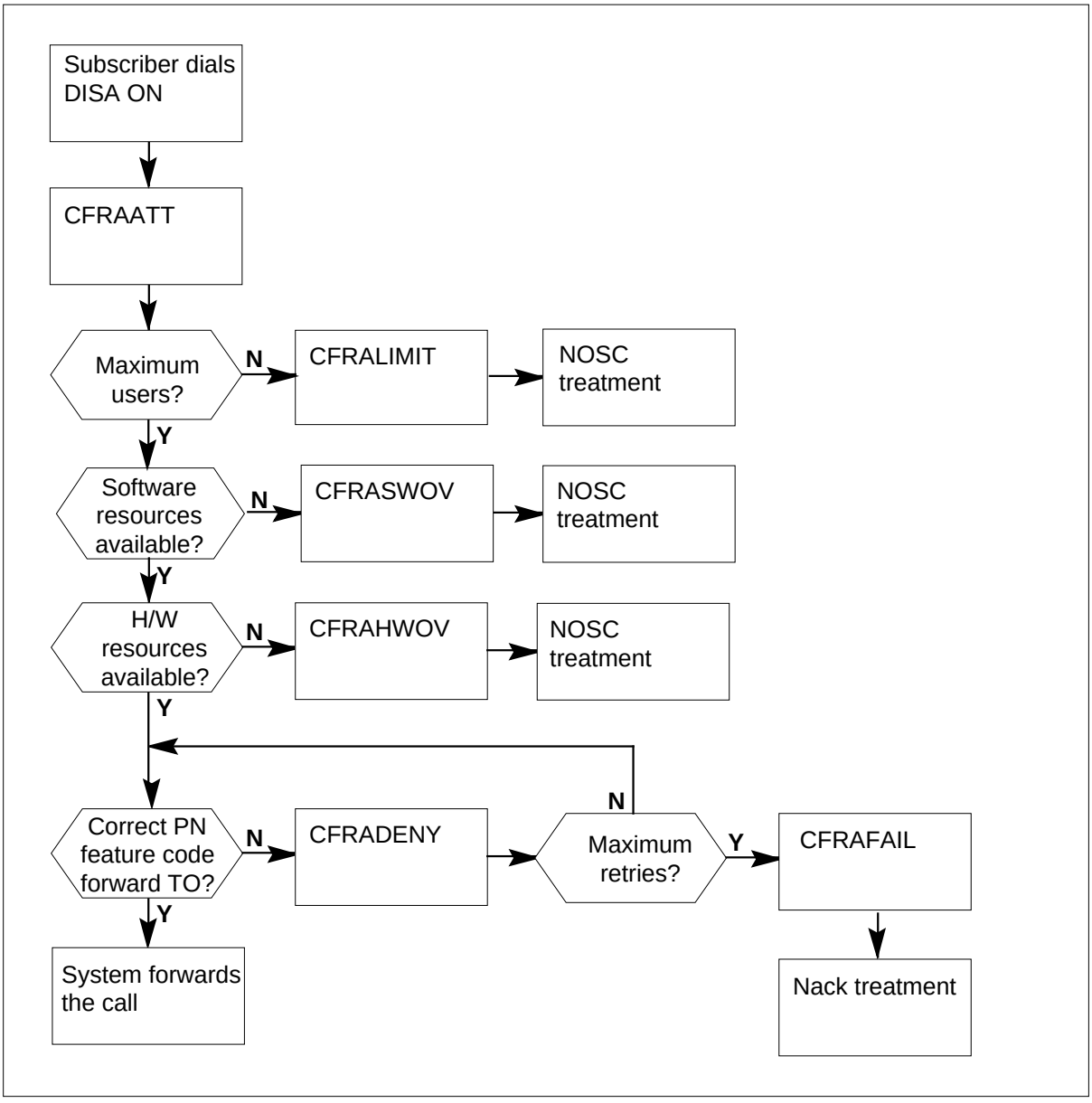
Associated functionality codes

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

Functionality	Code
Call Forward Remote Activation	NTXA43AA

OM group CFRA (continued)

OM group CFRA registers



Register CFRADENY

Call forward remote access denied (CFRADENY)

Register CFRADENY counts the number of times the following conditions prevent the use of the (CFRA) feature:

- personal identification number (PIN) is not correct
- feature code is not correct
- forward to number is not correct; like 911, 0, or a number that does not translate.

Register CFRADENY release history

Register CFRADENY 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 CFRAFAIL

Call forward remote access failures (CFRAFAIL)

Register CFRAFAIL counts the number of times the following events prevent access to the call forward remote access to the (CFRA) feature. The number of retries of directory number (DN), personal identification number (PIN), feature access code, or `forward' to numbers exceeds the maximum. Register CFRAFAIL also counts errors that the system cannot recover like missing entries for CUSTSTN or AUTHPART. The caller receives NACK treatment.

Register CFRARAIL release history

Register CFRAFRAIL was introduced in BCS27.

Associated registers

There are no associated registers.

Associated logs

The system generates LINE138/TRK138 when subscriber receives NACK treatment.

The log report identifies date, time, and type of treatment.

OM group CFRA (continued)

Extension registers

There are no extension registers.

Register CFRAHWOV

Call forward remote access hardware resources overflow (CFRAHWOV)

Register CFRAHWOV counts the number of times not enough hardware resources prevents the use of the CFRA feature. The caller receives NOSR treatment.

Register CFRAHWOV release history

Register CFRAHWOV was introduced in BCS27.

Associated registers

There are no associated registers.

Associated logs

The system generates LINE138/TRK138 when the subscriber receives NOSR treatment.

The log report identifies date, time, and type of treatment.

Extension registers

There are no extension registers.

Register CFRALIMT

Call forward remote access limit (CFRALIMT)

Register CFRALIMT counts the number of times the CFRA feature cannot operate when the maximum number of subscribers use the CFRA feature.

The caller receives NOSR treatment. The system defines the number of concurrent users by office parameter MAX_PROGRAMMERS in table OFCENG.

Register CFRALIMT release history

Register CFRALIMT was introduced in BCS27.

Associated registers

There are no associated registers.

Associated logs

The system generates LINE138/TRK138 log when the subscriber receives NOSR treatment.

The log report identifies date, time, and type of treatment.

Extension registers

There are no extension registers.

Register CFRASWOV

Call forward remote access software resources overflow (CFRASWOV)

Register CFRASWOV counts the number of times not enough software resources prevents the use of the CFRA. The caller receives NOSR treatment.

Office parameter NO_OF_FTR_DATA_BLKS in table OFCENG defines the feature data blocks available

Register CFRASWOV release history

Register CFRASWOV was introduced in BCS27.

Associated registers

There are no associated registers.

Associated logs

The system generates LINE138/TRK138 when the subscriber receives NOSR treatment.

The log report identifies date, time, and type of treatment are identified in the log report.

Extension registers

There are no extension registers.

Register CFRAATT

Call forward remote access attempts (CFRAATT)

Register CFRAATT counts the number of times a subscriber attempts to use the CFRA feature. To use the CFRA feature, the subscriber can dial a direct inward system access (DISA) directory number with the CFRA option. The subscriber can dial the CFRA activation code to use the CFRA feature.

OM group CFRA (end)

Register CFRAATT release history

Register CFRAATT 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 CFWPOTS

OM description

Call forwarding in the POTS environment (CFWPOTS)

Register CFWPOTS counts attempts and failures to activate the following features.

- Call Forwarding Fixed
- Call Forwarding Programmable
- Call Forwarding Usage Sensitive Pricing
- Call Forward Busy Line
- Call Forward Don't Answer

The OM group CFWPOTS contains 21 peg registers. These registers are used to determine feature use. These registers are also used to determine if there are enough extension blocks, HEAP store, or system resources.

Release history

The OM group CFWPOTS was introduced in BCS20.

BCS23

Registers CFWSOV, CFBPATT, CFBPDENY, CFBPOVFL, CFBPSOV, CFDPATT1, CFDPATT2, CFDPDENY, CFDPOVFL, CFDPCNC1, CFDPCNC2, CFDPSOV, CFDPFAIL were introduced. Registers CFWPAATT, CFWPSUC1, CFWPSUC2, CFPAOVFL, CFPADENY, CFWPFATT, CFPFOVFL, CFPFDENY increased on activation attempt for Call Forwarding Usage Sensitive Pricing. Register CFPFOVFL increases if a CFW_EXT_BLOCK or a CFZ_EXT_BLOCK is not available.

Registers

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

```
CFWPAATT        CFWPSUC1        CFWPSUC2        CFPAOVFL
CFPADENY        CFWPFATT        CFPFOVFL        CFPFDENY
CFWSOV          CFBPATT         CFBPDENY        CFBPOVFL
CFBPSOV         CFDPATT1        CFDPATT2        CFDPDENY
CFDPOVFL        CFDPCNC1        CFDPCNC2        CFDPSOV
CFDPFAIL
```

OM group CFWPOTS (continued)

Group structure

The OM group CFWPOTS provides one tuple for each office. Each tuple consists of 21 peg registers.

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 POTS Call Forwarding feature functional group associates with OM group CFWPOTS.

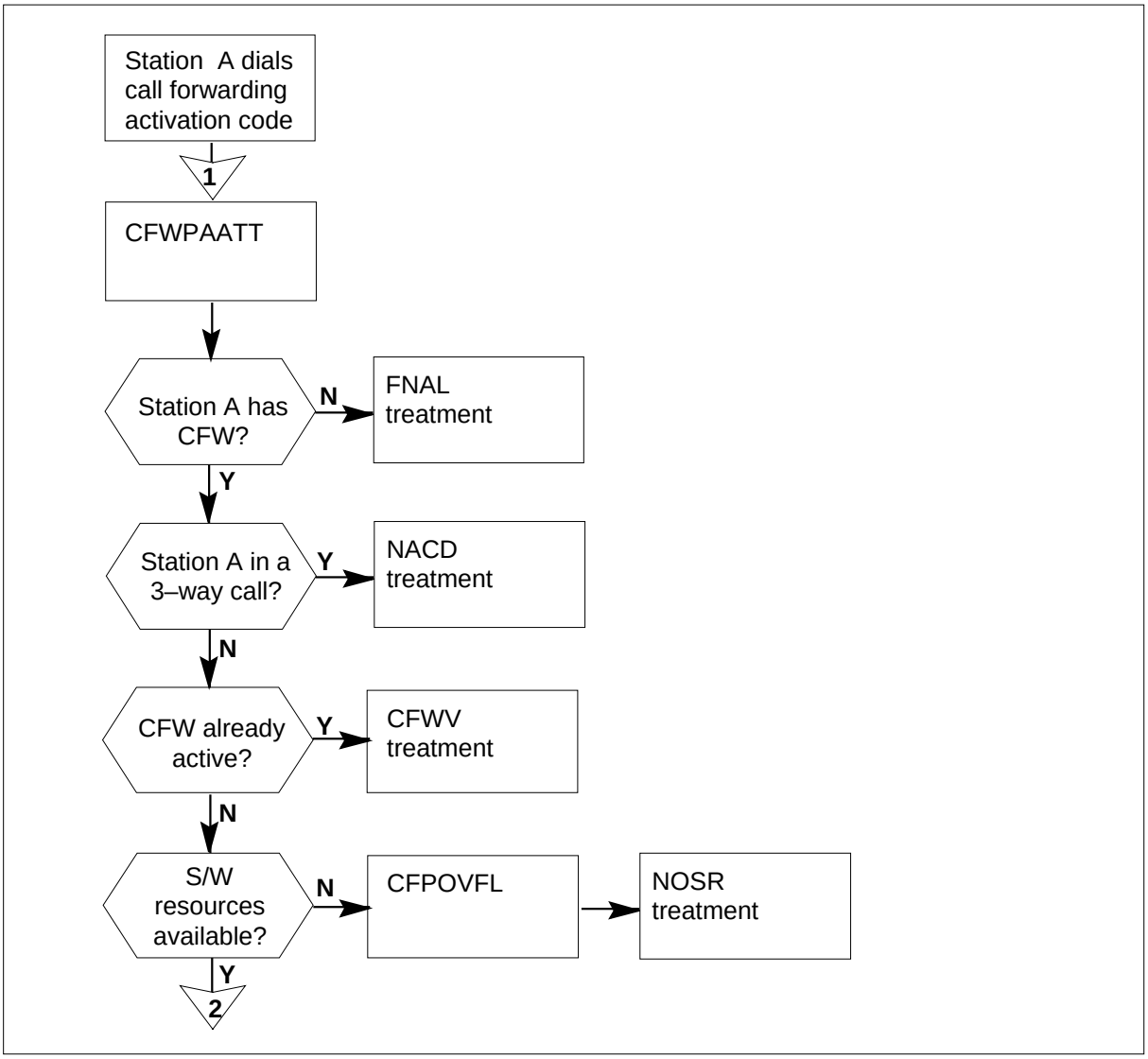
Associated functionality codes

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

Functionality	Code
Vertical Services I	NTX020AC
Vertical Services I	NTX020AD
Enhanced Call Forwarding POTS	NTX806AA
Usage Sensitive Pricing	NTXO45AA

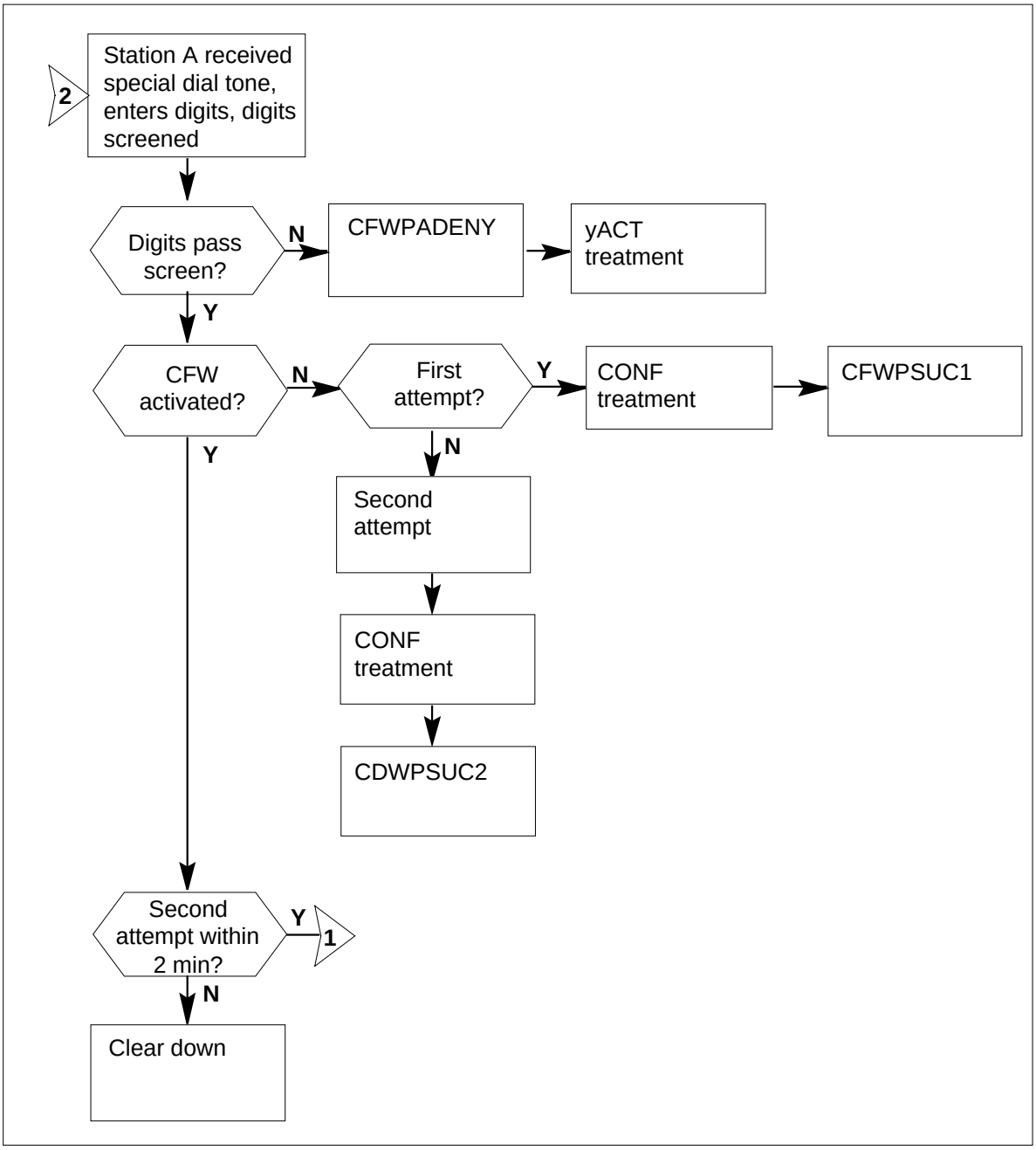
OM group CFWPOTS (continued)

OM group CFWPOTS registers: activation attempt

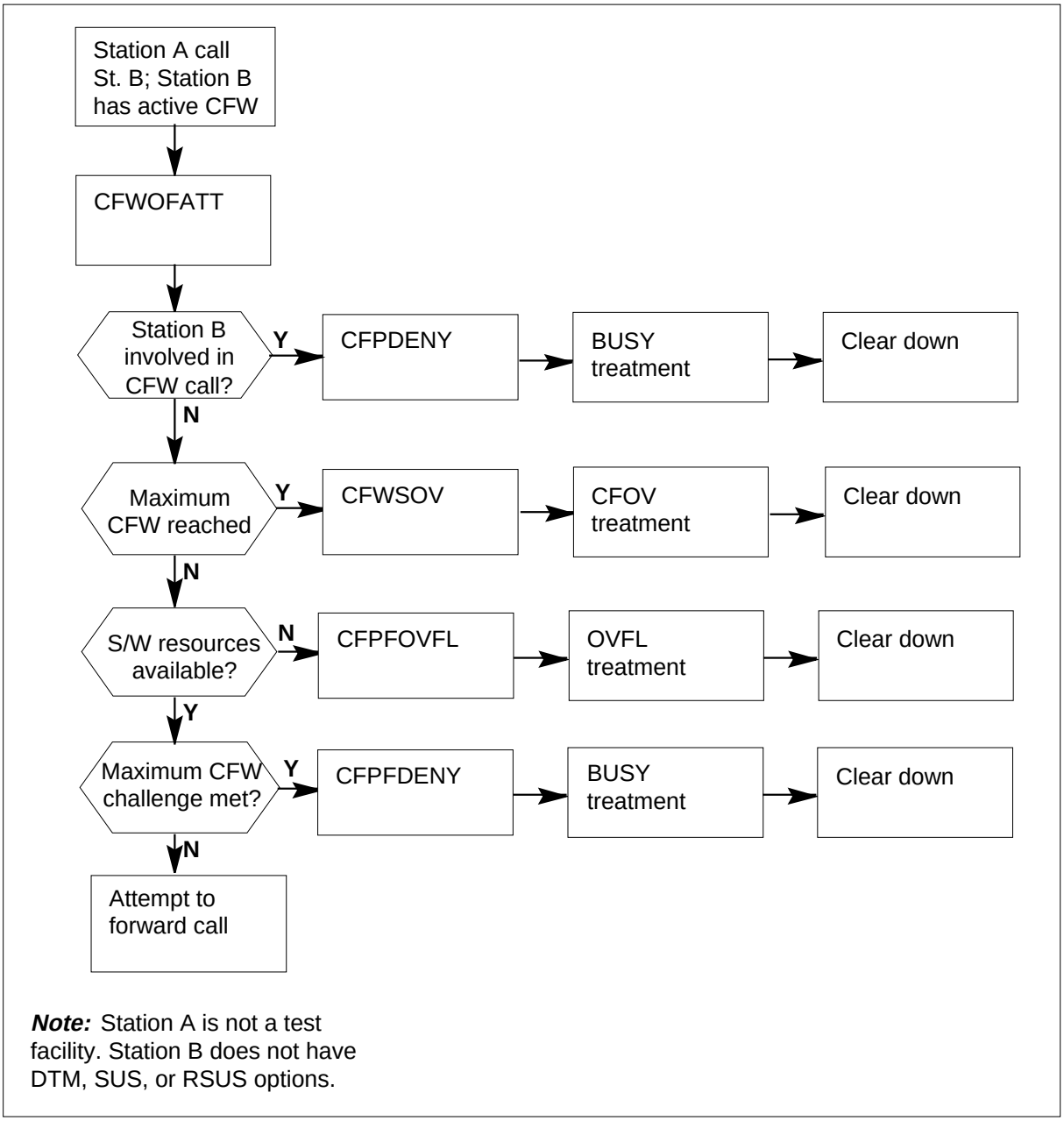


OM group CFWPOTS (continued)

OM group CFWPOTS registers: activation attempt (continued)



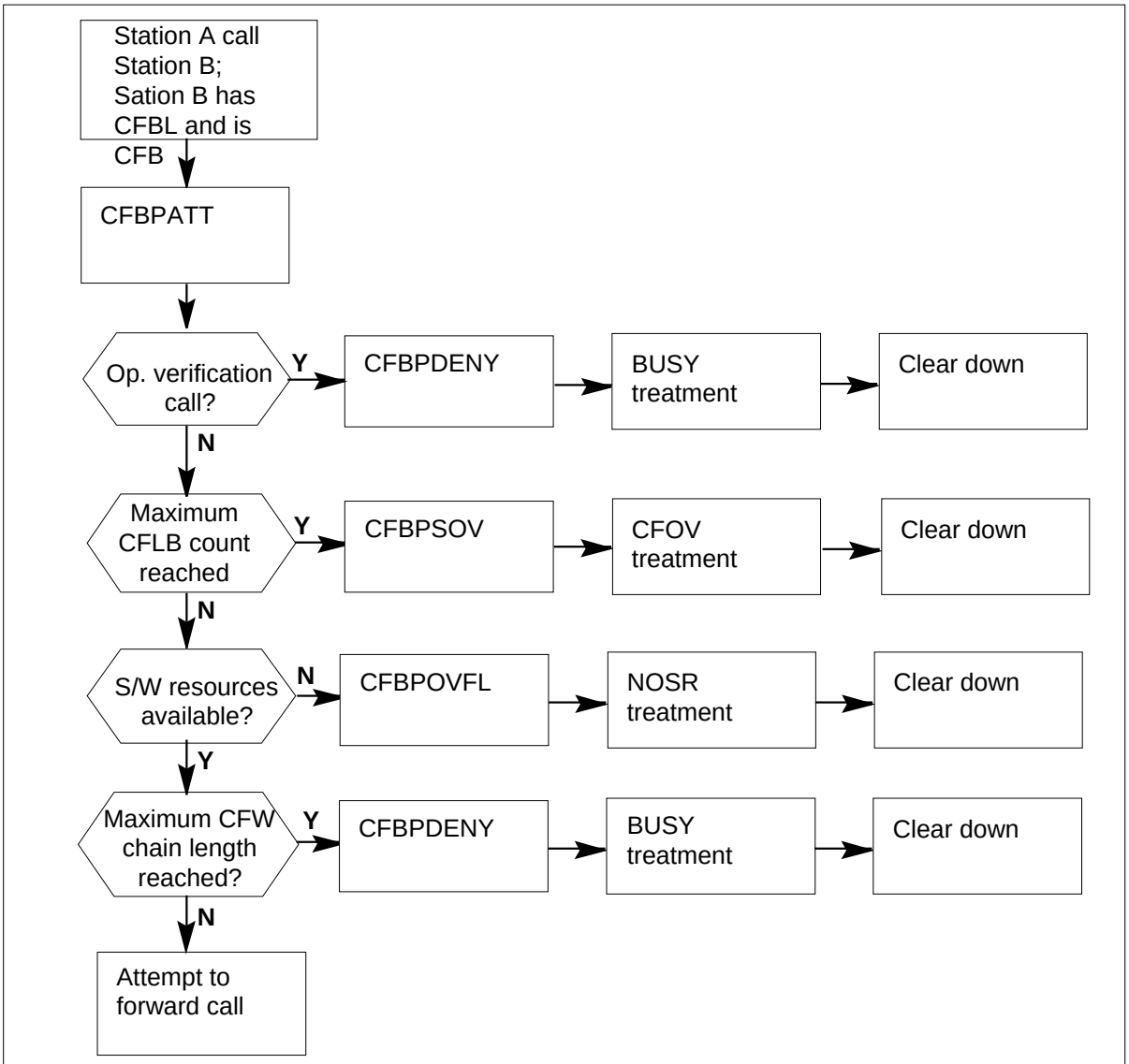
OM group CFWPOTS registers: function fixed



Note: Station A is not a test facility. Station B does not have DTM, SUS, or RSUS options.

OM group CFWPOTS (continued)

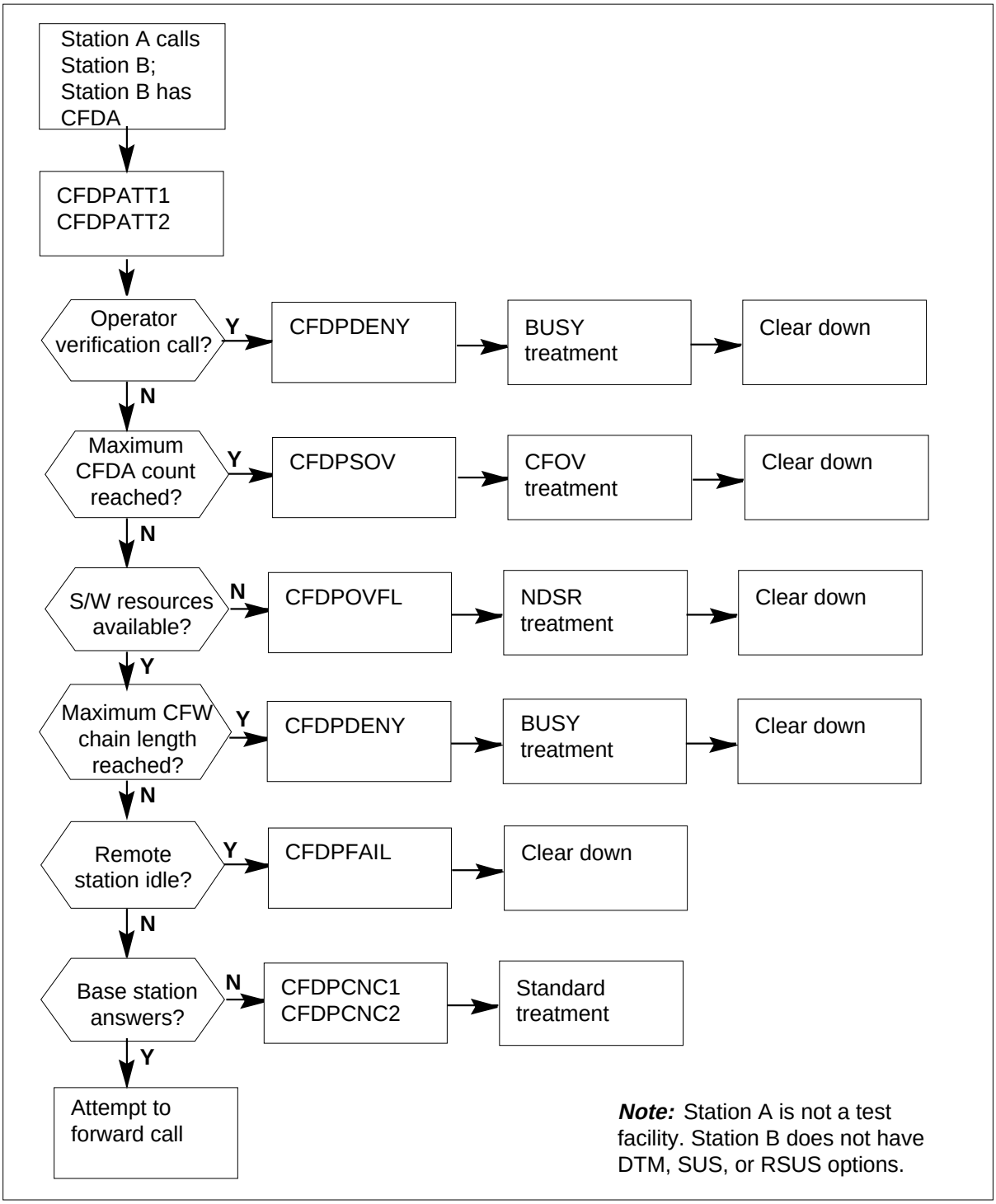
OM group CFWPOTS registers: busy line



Note: Station A is not a test facility. Station B does not have DTM, SUS, or RSUS options.

OM group CFWPOTS (continued)

OM group CFWPOTS registers: do not answer



OM group CFWPOTS (continued)

Register CFBPATT

Call forward busy line attempts (CFBPATT)

Register CFBPATT counts attempts to use the Call Forward Busy feature.

A call qualifies for Call Forward Busy when the original agent is not a test facility. A call also qualifies for call forward when the call forwarding base station does not have the following line options.:

- Denied Termination
- Suspended Service
- Remote Suspended Service line options

Register CFBPATT release history

Register CFBPATT 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 CFBPDENY

Call forward busy line, denied (CPBDENY)

Register CFBPDENY counts calls that the system denies when the calls attempt to use the Call Forward Busy feature. The system denies calls if the call type is operator verification. The system also denies calls if they exceed the maximum call forwarding chain size when the system forwards the call.

A call qualifies for Call Forward Busy when the original agent is not a test facility. A call also qualifies for Call Forward Busy when the call forwarding base station does not have the following line options:

- Denied Termination
- Suspended Service
- Remote Suspended Service

Register CFBPDENY release history

Register CFBPDENY was introduced in BCS23.

Associated registers

There are no associated registers.

Associated logs

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

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

Extension registers

There are no extension registers.

Register CFBPOVFL

Call forward busy line failure, lack of software resources (CFBPOVFL)

Register CFBPOVFL increases when the Call Forward Busy feature fails. The CFB feature fails because the system cannot obtain a CFW_EXT_BLOCK or a CFZ_EXT_BLOCK.

A call qualifies for Call Forward Busy when the original agent is not a test facility. A call also qualifies for Call Forward Busy when the call forwarding base station does not have the following line options:

- Denied Termination
- Suspended Service
- Remote Suspended Service

Register CFBPOVL release history

Register CFBPOVL was introduced in BCS23.

Associated registers

There are no associated registers

Associated logs

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

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

Extension registers

There are no extension registers.

OM group CFWPOTS (continued)

Register CFBPSOV

Call forward busy line failure, simultaneous limit exceeded (CFBPSOV)

Register CFBPSOV counts attempts to use the Call Forward Busy feature that the system denies. Denial occurs because the call will exceed the maximum Call Forward Busy Line limit if the system forwards the call. The operating company enters the number of forwarding permitted in Table CFW. The operating company enters this information when the system assigns the Call Forward Busy line feature to a POTS line.

A call qualifies for Call Forward Busy when the originating agent is not a test facility. A call also qualifies for Call Forward Busy when the call forwarding base station does not have the following line options:

- Denied Termination
- Suspended Service
- Remote Suspended Service

Register CFBPSOV release history

Register CFBPSOV was introduced in BCS23.

Associated registers

There are no associated registers.

Associated logs

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

The system generates TRK138 when the system routes a call to treatment after being call processing busy.

Extension registers

There are no extension registers.

Register CFDPATT1

Call forward don't answer attempts (CFDPATT1)

Register CFDATT1 counts system attempts to terminate a call to a POTS line that has CFDA. Register CFDATT1 also counts attempts to activate the CFDA feature.

Register CFDPATT1 release history

Register CFDPATT1 was introduced in BCS23.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

CFDPATT2

Register CFDPCNC1

Call forward don't answer, cancellations (CFDPCNC1)

Register CFDPCNC1 counts cancellations of the Call Forward Don't Answer feature. Cancellations occur when the base station answers before Call Forward Don't Answer timeout.

Register CFDPCNC1 release history

Register CFDPCNC1 was introduced in BCS23.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

CFDPCNC2

Register CFDPDENY

Call forward don't answer, denied (CFDPDENY)

Register CFDPDENY counts calls denied when the calls attempt to use the Call Forward Don't Answer feature. The system denies calls if the call type is operator verification. The system also denies calls if they exceed the maximum call forwarding chain size when the system forwards the call.

A call qualifies for Call Forward Don't Answer when the original agent is not a test facility. A call also qualifies for Call Forward Busy when the call forwarding base station does not have the following line options:

- Denied Termination
- Suspended Service
- Remote Suspended Service

OM group CFWPOTS (continued)

Register CFDPDENY release history

Register CFDPDENY was introduced in BCS23.

Associated registers

There are no associated registers.

Associated logs

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

Extension registers

There are no extension registers.

Register CFDPFAIL

Call forward don't answer failure (CFDPFAIL)

Register CFDPFAIL increases when the system denies the Call Forward Don't Answer feature because the remote station is not idle. Denial can occur if remote station has the Denied Termination, Suspended Service or Remote Suspended Service line options.

Register CFDPFAIL release history

Register CFDPFAIL was introduced in BCS 23.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register CFDPOVFL

Call forward don't answer failure, lack of software resources (CFDPOVFL)

Register CFDPOVFL increases when the Call Forward Don't Answer feature fails because the system does not have enough software resources.

Register CFDPOVFL release history

Register CFDPOVFL was introduced in BCS23.

Associated registers

There are no associated registers.

Associated logs

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

Extension registers

There are no extension registers.

Register CFDPSOV

Call forward don't answer failure, simultaneous limit exceeded (CFDOSOV)

Register CFDPSOV counts attempts to use the Call Forward Don't Answer feature that the system denies. Denial occurs because the call exceeds the maximum Call Forward Don't Answer simultaneous limit if the system forwards the call.

The operating company enters the number of simultaneous forwardings permitted. The company does this when the system assigns the Call Forward Don't Answer feature to a POTS line.

Register CFDPSOV release history

Register CFDPSOV 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 CFPADENY

Call forwarding activation attempt failure, invalid number (CFPADENY)

Register CFPADENY counts directory numbers (DNs) that are not correct. The DNs are not correct as call forwarding DNs because the call is operator assisted. The DNs are also not correct because the number has a minimum of two, or a maximum of four digits.

OM group CFWPOTS (continued)

Register CFPADENY applies to the Call Forwarding Programmable and Call Forwarding Usage Sensitive Pricing features only.

Register CFPADENY release history

Register CFPADENY was introduced in BCS20.

BCS23

The register increases when an attempt to activate the Call Forwarding Usage Sensitive Pricing feature occurs.

Associated registers

There are no associated registers.

Associated logs

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

Extension registers

There are no extension registers.

Register CFPAOVFL

Call forwarding activation attempt failure, lack of software resources (CFPAOVFL)

Register CFPAOVFL increases when a call forwarding extension block is not available. Register CFPAOVFL also increases if not enough HEAP store reserved for the Call Forwarding feature are present.

Register CFPAOVFL applies to Call Forwarding Programmable and Call Forwarding Usage Sensitive Pricing features only.

Register CFPAOVFL release history

Register CFPAOVFL was introduced in BCS20.

BCS23

The register increases when an attempt to activate the Call Forwarding Usage Sensitive Pricing feature occurs.

Associated registers

There are no associated registers.

Associated logs

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

Extension registers

There are no extension registers.

Register CFPFDENY

Call forwarding attempt, denied (CFPFDENY)

Register CFPFDENY counts attempts to use the Call Forwarding feature that the system denies for one of the following reasons:

- the originator is a test facility
- the base station forwarded an operator verification call and receive another request to forward an operator verification call
- the forwarding directory number has Denied Termination, Suspended Service, or Remote Suspended Service
- the number of calls reach the maximum call forwarding chain size

Register CFPFDENY applies to the Call Forwarding Fixed, Call Forwarding Programmable, and Call Forwarding Usage Sensitive Pricing features.

Register CFPFDENY release history

Register CFPFDENY was introduced BCS20.

BCS23

Register increases when an attempt to activate the Call Forwarding Usage Sensitive Pricing feature occurs.

Associated registers

There are no associated registers.

Associated logs

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

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

Extension registers

There are no extension registers.

Register CFPFOVFL

Call forwarding attempt failure, lack of software resource (CFPFOVFL)

OM group CFWPOTS (continued)

Register CFPFOVFL increases when a CFW_EXT_BLOCK or a CFZ_EXT_BLOCK is not available.

Register CFPFOVFL applies to the Call Forwarding Fixed, Call Forwarding Programmable, and Call Forwarding Usage Sensitive Pricing features.

Register CFPFOVFL release history

Register CFPFOVFL was introduced in BCS20.

BCS23

Register CFPOVFL increases when an attempt to activate the Call Forwarding Usage Sensitive Pricing feature occurs. The system increases CFPFOVFL if a CFW_EXT_BLOCK or a CFZ_EXT_BLOCK is not available.

Associated registers

There are no associated registers.

Associated logs

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

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

Extension registers

There are no extension registers.

Register CFWPAATT

Call forwarding activation attempts (CFWPAATT)

Register CFWPAATT counts attempts to activate the Call Forwarding Fixed, Call Forwarding Programmable, and Call Forwarding Usage Sensitive Pricing features.

Register CFWPAATT release history

Register CFWPAATT was introduced in BCS20.

Associated registers

There are no associated registers.

Associated logs

The system generates CFW102 if the journal file is inactive when a subscriber dials the access code. The subscriber does not have a Call Forwarding option.

The access code adds or removes the Call Forwarding Usage Sensitive Pricing feature.

Extension registers

There are no extension registers.

Register CFWPFATT

Call forwarding attempts (CFWPFATT)

Register CFWPFATT counts attempts to use the Call Forward feature.

A call qualifies for call forwarding when the originating agent is not a test facility. A call also qualifies for Call Forward Busy when the call forwarding base station does not have the following line options:

- Denied Termination
- Suspended Service
- Remote Suspended Service

Register CFWPFATT applies to the Call Forwarding Fixed, Call Forwarding Programmable, and Call Forwarding Usage Sensitive Pricing features.

Register CFWPFATT release history

Register CFWPFATT was introduced in BCS20.

BCS23

Register CFWPFATT increases when an attempt to activate the Call Forwarding Usage Sensitive Pricing feature occurs.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

There are no extension registers.

Register CFWPSUC1

Call forwarding successful activation, first attempt (CFWPSUC1)

OM group CFWPOTS (continued)

Register CFWPSUC1 counts successful activations of the following features by a first activation attempt.

- Call Forwarding Fixed
- Call Forwarding Programmable
- Call Forwarding Usage Sensitive Pricing

Register CFWPSUC1 release history

Register CFWPSUC1 was introduced in BCS20.

BCS23

Register CFWPSUC1 increases when an attempt to activate the Call Forwarding Usage Sensitive Pricing feature occurs.

Associated registers

There are no associated registers.

Associated logs

The system generates CFW100 when the journal file is inactive, and a subscriber activates or deactivates the Call Forwarding feature.

The system generates CFW102 if the journal file is inactive when a subscriber dials the access code. The subscriber does not have a Call Forwarding option. The access code adds or removes the Call Forwarding Usage Sensitive Pricing feature.

The system generates LINE138 when the system routes a call to treatment after it is call processing busy. The system issues LINE138 for the Call Forwarding Fixed and Call Forwarding Usage Sensitive Pricing features only.

Extension registers

There are no extension registers.

Register CFWPSUC2

Call forwarding successful activation, second attempt (CFWPSUC2)

Register CFWPSUC2 counts successful activations of the Call Forwarding Programmable and Call Forwarding Usage Sensitive Pricing features by a second activation attempt.

A second activation attempt is an attempt to activate the features a second time to the same directory number. This attempt occurs in two minutes of the first attempt.

Register CFWPSUC2 release history

Register CFWPSUC2 was introduced in BCS20.

BCS23

Register CFWPSUC2 increases when the activation of the Call Forwarding Usage Sensitive Pricing feature occurs.

Associated registers

There are no associated registers.

Associated logs

The system generates CFW100 when the journal file is not active, and a subscriber activates or deactivates the Call Forwarding feature.

The system generates LINE138 when the system routes a call to a treatment after it is call processing busy. The system issues LINE138 for the Call Forwarding Fixed and Call Forwarding Usage Sensitive Pricing features only.

Extension registers

There are no extension registers.

Register CFWSOV

Call forwarding attempt failure, simultaneous limit exceeded

Register CFWSOV counts attempts to use the Call Forward feature that the system denies. Denial occurs because the call exceeds the maximum Call Forwarding Fixed or Call Forwarding Programmable simultaneous limit. The call will exceed the simultaneous limit if the system forwards the call.

The operating company enters the number of simultaneous forwards permitted in table CFW.

A call qualifies for Call Forwarding when the original agent is not a test facility. A call also qualifies for Call Forwarding when the call forwarding base station does not have the following line options:

- Denied Termination
- Suspended Service
- Remote Suspended Service

Register CFWSOV applies to the Call Forwarding Fixed and Call Forwarding Programmable features.

OM group CFWPOTS (end)

Register CFWSOV release history

Register CFWSOV was introduced in BCS23.

Associated registers

There are no associated registers.

Associated logs

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

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

Extension registers

There are no extension registers.

OM group CM

OM description

Computing module (CM)

The OM group CM provides information on the performance of the computing module (CM). The computing module is the control component of a DMS SuperNode switch. The CM performs call processing and maintenance functions. The computing module consists of the following duplicated central processing units (CPU), memory, message controllers (MC) and subsystem clocks (SSC).

Twenty-three peg registers count:

- manual and system requests for switches of activity (SWACT)
- SWACTs that a routine exercise test (REx) cause
- warm restarts that a system or manual action cause
- cold restarts that a system or manual action cause
- transient mismatches
- loss of sync that mismatch interrupts cause
- fault traps
- faults in the CPU, memory, or SSC
- aborted REx tests
- system busy MCs
- system-busy peripheral module controller (PMC) nodes or ports
- failed REx tests of a CPU, memory, LINK or PMC class
- failed SSC section of LINK class REx

CM has three usage registers that record which of the following reasons causes the CM to operate out-of-sync:

- manual or system action
- REx tests

The system uses data that the CM provides to assess the performance of the computing module. The system also uses the data to monitor fault interrupts and resource outages.

Release history

OM group CM was introduced in BCS22.

OM group CM (continued)

BASE06

The system deletes CMRMCFL and CMRSSCFL from registers of MAP display and from flow chart.

BCS30

The system deletes CMRMCFL and CMRSSCFL.

BCS28

The system sets CMRMCFL and CMRSSCFL to zero and adds CMRLNKFL.

BCS25

The system adds CMRPMCFL.

BCS24

The system adds PMCNDBSY and PMCLKBSY.

Registers

The OM group CM registers display on the MAP terminal as follows:

```
CMSSWACT    CMMSWACT    CMRSWACT    CMSWINIT
CMMWINIT    CMSCINIT    CMMCINIT    CMTRMISM
CMDPSYNC     CMTRAP     CMCPUFLT    CMMEMFLT
CMSSCFLT    CMMCSBSY    CMREXFLT    CMRCPUFL
CMRMEMFL    CMSSMPXU    CMMSMPXU    CMRSMPXU
PMCNDBSY    PMCLKBSY    CMRPMCFL    CMRLNKFL
CMRBASFL    CMRFULFL
```

Group structure

The OM group CM 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 SLM provides information on the system load module (SLM).

Associated functional groups

There are no associated functional groups.

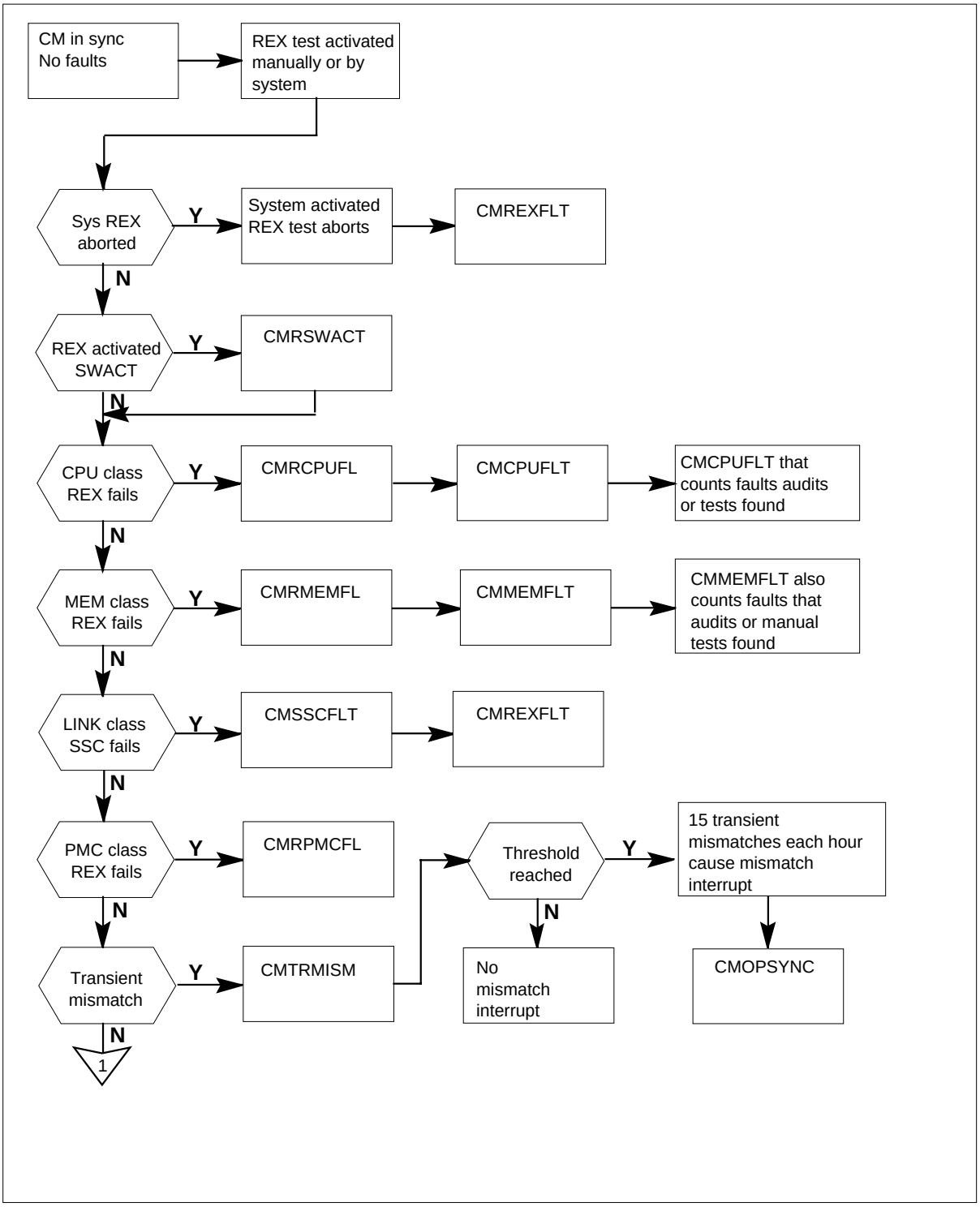
Associated functionality codes

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

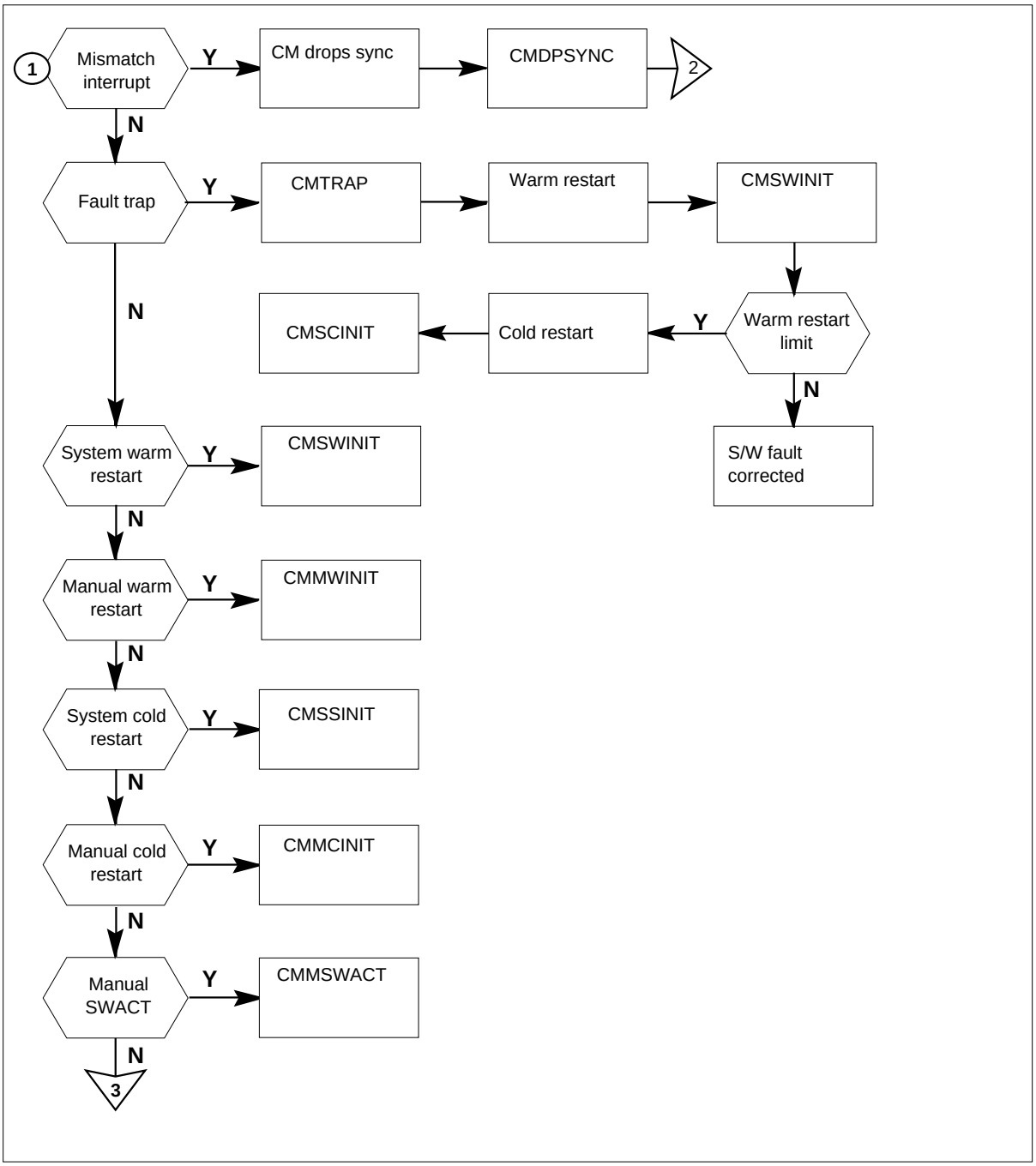
Functionality	Code
SuperNode SN-20 Processor	NTXF70AA
DMS SuperNode System Load Module	NTX942AA

OM group CM (continued)

OM group CM registers

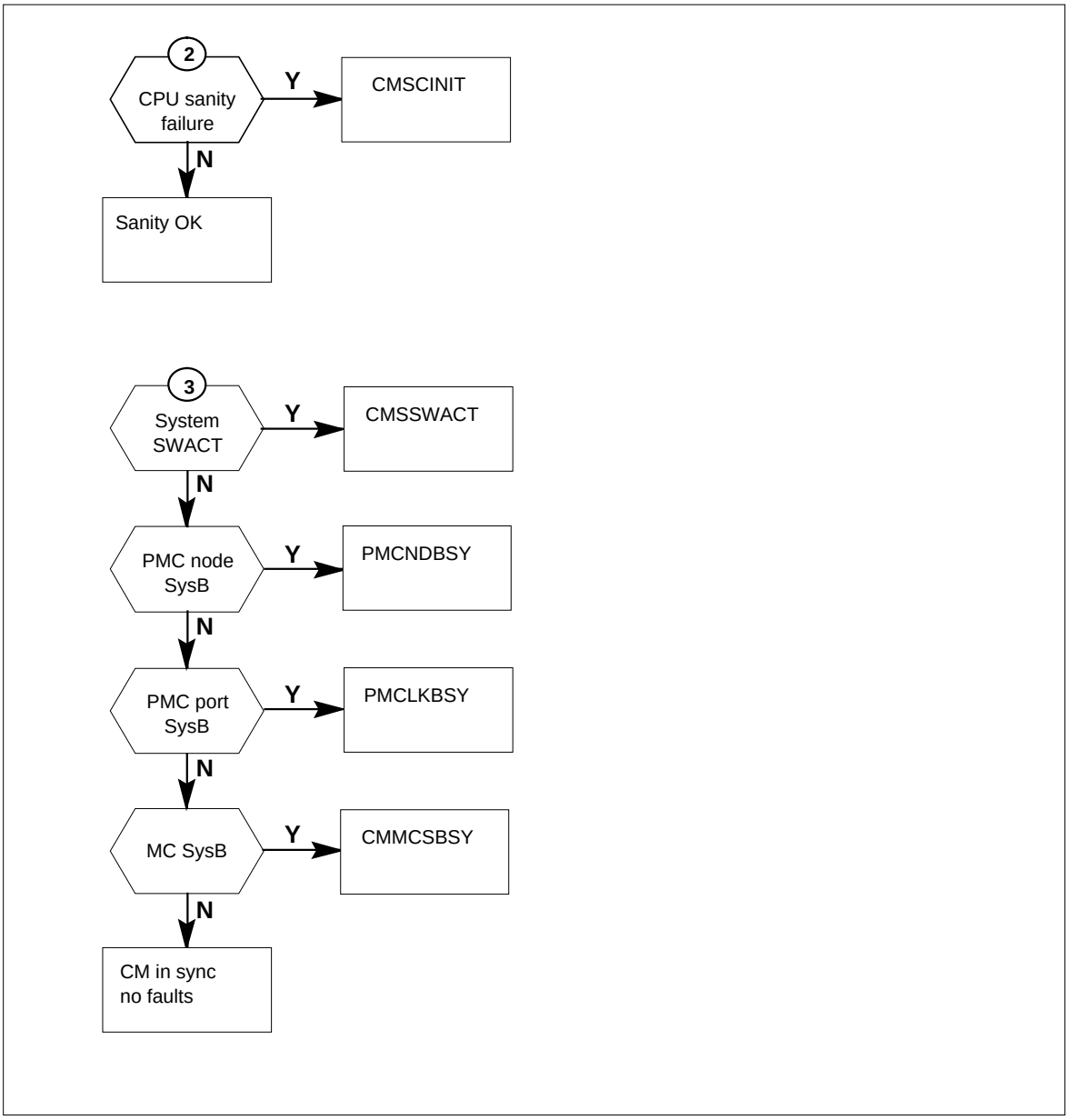


OM group CM registers (continued)

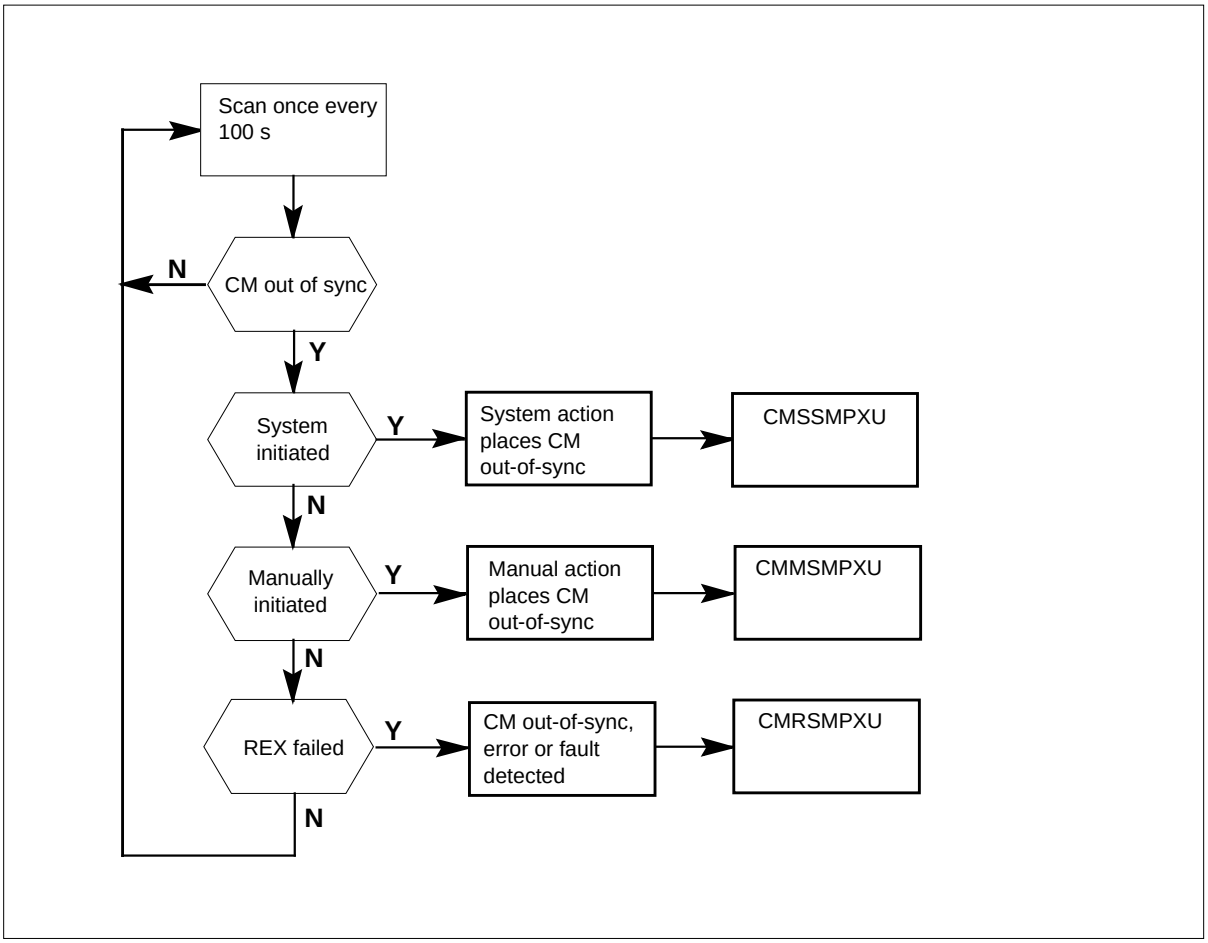


OM group CM (continued)

OM group CM registers (continued)



OM group CM registers (continued)



Register CMCPUFLT

Computing module central processing unit faults (CMCPUFLT)

Register CMCPUFLT increases when the system deletes a fault in a CPU.

Register CMCPUFLT release history

Register CMCPUFLT was introduced in BCS22.

Associated registers

Register CMMEMFLT increases when the system detects a memory fault in the CM.

Register CMSSCFLT increases when the system detects a subsystem clock (SSC) fault in the CM.

OM group CM (continued)

Register CMREXFLT increases when a system-activated CM REx test aborts.

Associated logs

The system generates CM125 when a CPU test fails.

Register CMDPSYNC

Computing module dropped sync (CMDPSYNC)

Register CMDPSYNC increases when the CM loses synchronization because of a mismatch interrupt. A mismatch interrupt occurs when one of the following occurs

- a fault mismatch
- 15 transient mismatches in one hour

Register CMDPSYNC release history

Register CMDPSYNC was introduced in BCS22.

Associated registers

Register CMTRMISM counts transient mismatches in the CM.

Associated logs

The system generates MM101 when a transient mismatch occurs.

Register CMMCINIT

Computing module manual cold initialization (CMMCINT)

Register CMMCINIT when a manual request causes a cold restart of CM software and memory.

Register CMMCINIT release history

Register CMMCINIT was introduced in BCS22.

Associated registers

Register CMMWINIT increases when a manual request causes a warm restart of CM software and memory.

Register CMSCINIT increases when a system request causes a cold restart of CM software and memory.

Register CMSWINIT increases when a system request causes a warm restart of CM software and memory.

Associated logs

The system generates CM120 when a system-initiated restart occurs.

Register CMMCSBSY

Computing module message controller system busy

Register CMMCSBSY increases when makes a message controller (MC) system busy. This increase will occur because of faults or because both MC links are system busy.

Register CMMCSBSY increases when an MC changes state to system busy during the execution of a REx test.

Register CMMCSBSY release history

Register CMMCSBSY was introduced in BCS22.

Associated registers

There are no associated registers.

Associated logs

The system generates CM104 when an MC change state to system busy.

Register CMMEMFLT

Computing module memory faults

CMMEMFLT counts memory faults in the CM that:

- affect a memory module or the complete memory card
- require system or manual interruption

The following cause memory faults:

- test failures
- defective store
- transient soft errors

Register CMMEMFLT release history

CMMEMFLT was introduced in BCS22.

Associated registers

Register CMCPUFLT increases when the system detects a CPU fault.

OM group CM (continued)

Register CMSSCFLT increases when the system detects a fault in the CM subsystem clock (SSC).

Register CMREXFLT increases a system-activated CM REx test aborts.

Associated logs

The system generates CM112 when a memory card fails a test.

The system generates CM113 when a memory card changes state to in-service trouble (ISTB).

Register CMMSMPXU

Computing module manual out-of-sync usage

Register CMMSMPXU is a usage register. The scan rate is slow: 100 s. Register CMMSMPXU records if the CM is out of sync (simplex mode) because of a manual request.

The system places CM in simplex mode. To place the CM in a simplex mode, the system inputs the DPSYNC or IMAGE commands at the MAP terminal.

Register CMMSMPXU release history

Register CMMSMPXU was introduced in BCS22.

Associated registers

Register CMSSMPXU records if the CM is out-of-sync because of a system action.

Register CMRSMPXU records if the CM is out-of-sync because of errors or that a REx test detected.

Associated logs

The system generates CM102 every hour while the CM is out of sync.

The system generates CM117 when a successful image test completes.

Register CMMSWACT

Computing module manual switch of activity (CMMSWACT)

Register CMMSWACT increases when a manual request causes a switch of activity (SWACT) in the CM.

The system initiates manual switches of activity when the system performs the following actions at the MAP terminal:

- inputs the SWACT command
- complete tests of a message controller (MC) or time of day (TOD) clock

Register CMMSWACT release history

Register CMMSWACT was introduced in BCS22.

Associated registers

Register CMSSWACT increases when a system request causes a switch of activity in the CM.

Register CMRSWACT increases when a REx test causes a switch of activity in the CM.

Associated logs

The system generates CM101 when a switch of activity is present in the CM.

Register CMMWINIT

Computing module manual warm initialization (CMMWINT)

Register CMMWINIT increases when a manual request causes a warm restart of CM software and memory.

To produce a manual restart, the system inputs the restart command at the reset terminal interface (RTIF). To perform manual restart, you can also input non-menu commands at the command interpreter (CI) level.

Register CMMWINIT release history

Register CMMWINIT was introduced in BCS22.

Associated registers

Register CMSCINIT increases when a system request causes a cold restart of the CM.

Register CMSWINIT increases when a system request causes a warm restart of the CM.

Register CMMCINIT increases when a manual request causes a cold restart of the CM.

Associated logs

The system generates CM120 when a system-initiated restart occurs.

OM group CM (continued)

Register CMRCPUFL

Computing module routine exercise test central processing unit class failure

The system increases CMRCPUFL when a system or manually activated CPU class REx test fails.

Scheduled REx tests run daily. The data that CMRCPUFL collects are meaningful only when accumulated over a period of a week or a month.

Register CMRCPUFL release history

Register CMRCPUFL was introduced in BCS22.

Associated registers

The system increases CMREXFLT when a system activated CM REx test aborts.

Register CMRMEMFL increases when a CM memory REx test fails.

Register CMRSSCFL increases when an SSC REx test fails.

Register CMRMCFL increases when an MC REx test fails.

Register CMRPMCFL increases when a PMC REx test fails.

Associated logs

The system generates CM122 when a system or manually requested REx test fails.

Register CMREXFLT

Computing module routine exercise test fault

Register CMREXFLT increases when a system-activated CM REx test aborts because of one of the following:

- the system jams the mate CPU to the inactive state
- the mate CPU is already under test
- the CM is out-of-sync
- the system disables the REx test

The system does not increase CMREXFLT when a manually requested REx test aborts. REx tests run daily. The data that CMREXFLT collects are meaningful only when accumulated over a period of a week or a month.

Register CMREXFLT release history

Register CMREXFLT was introduced in BCS22.

Associated registers

The system increases CMRCPUFL when a CPU REx test fails.

The system increases CMRMEMFL when a CM memory REx test fails.

The system increases CMRSSCFL when an SSC REx test fails.

The system increases CMRMCFL when an MC REx test fails.

The system increases CMRPMCFL when a PMC REX test fails.

Associated logs

The system generates CM122 when a system or manually activated REx test fails.

Register CMRLNKFL

Computing module link class routine exercise test failures

Register CMRLNKFL counts failures of the link class (REx) test in the computing module of the DMS-core. The system can manually initiate this test with the RexTst command at the MAP terminal. The system can initiate the test according to a schedule set by the operating company. The link class REx test class includes the subsystem clock and message controller.

Register CMRLNKFL release history

Register CMRLNKFL was introduced in BCS28.

Associated registers

Register CMRLNKFL replaces CMRSSCFL and CMRMCFL.

Associated logs

The system generates CM122 reports when any REx test fail.

Register CMRMEMFL

Computing module routine exercise test MEM class failure (CMRMEMFL)

The system increases CMRMEMFL when a system or manually activated CM MEM class REx test fails.

OM group CM (continued)

REx tests are scheduled to run daily. The data collected in CMRMEMFL is only meaningful when accumulated over a period of a week or a month.

Register CMRMEMFLrelease history

Register CMRMEMFL was introduced in BCS22.

Associated registers

Register CMREXFLT increases when a system-activated CM REx test aborts.

Register CMRCPUFL increases when a CPU REx test fails.

Register CMRSSCFL increases when an SSC REx test fails.

Register CMRMCFL increases when an MC REx test fails.

Register CMRPMCFL increases when a PMC REx test fails.

Associated logs

The system generates CM122 when a system or manually requested REx test fails.

Register CMRPMCFL

Computing module routine exercise test PMC class peripheral module controller failures (CMRPMCFL)

Register CMRPMCFL increases when a system or manually activated PMC class REx test fails.

Register CMRPMCFL release history

Register CMRPMCFL was introduced in BCS25.

Associated registers

Register CMREXFLT when the system aborts a system activated CM REx test.

Register CMRCPUFL increases when a CPU REx test fails.

Register CMRMEMFL increases when a CM memory REx test fails.

Register CMRMCFL increases when an MC REx test fails.

Register CMRSSCFL increases when an SSC REx test fails.

Associated logs

The system generates CM122 when the system runs a REx test correctly.

Register CMRSMPXU

Computing module routine test out-of-sync usage.

Register CMRSMPXU is a usage register. The scan rate is slow: 100 s. Register CMRSMPXU records if the computing module (CM) is out-of-sync because of errors or faults that a routine exercise (REx) test detected.

Register CMRSMPXU does not increase when the CM drops sync during a normal REx test.

Register CMRSMPXU release history

CMRSMPXU was introduced in BCS22.

Associated registers

Register CMSSMPXU records if the CM is out of sync because of a system action.

Register CMMSMPXU records if the CM is out of sync because of a manual request.

Associated logs

The system generates CM102 every hour while the CM is out of sync.

The system generates CM121 when the system runs a REx test correctly.

Register CMRSWACT

Computing module routine exercise switch of activity

The system increases CMRSWACT when a REx test causes a switch of activity in the CM.

The REx test switches CPU activity daily to make sure that both sides of the CM hardware work. Three activity switches occur during a CM REx test.

Register CMRSWACT release history

Register CMRSWACT was introduced in BCS22.

Associated registers

Register CMSSWACT increases when a system request causes a switch of activity in the CM.

OM group CM (continued)

Register CMMSWACT increases when a manual request causes a switch of activity in the CM.

Associated logs

The system generates CM101 when there is a switch of activity in the CM.

Register CMSCINIT

Computing module system cold initialization (CMSCINT)

The system increases CMSCINIT when a system request causes a cold restart of CM software and memory.

The system initiates a cold restart if one of the following occurs:

- the system isolates the CM by closed MC links
- the system drops synchronization and must test the inactive CPU image
- a CPU is off-line and is about to receive activity
- a CPU sanity test fails after a mismatch interrupt occurs
- the system reached the allowed limit for warm restarts and the system requires a restart
- damage of the permanent store area
- the queues are defective

Register CMSCINIT release history

Register CMSCINIT was introduced in BCS22.

Associated registers

Register CMMWINIT increases when a manual request causes a warm restart of the CM.

Register CMSWINIT increases when a system request causes a warm restart of the CM.

Register CMMCINIT increases when a manual request causes a cold restart of the CM.

Associated logs

The system generates CM120 when a system-initiated restart occurs.

Register CMSSCFLT

Computing module subsystem clock faults (CMSSCFLT)

Register CMSSCFLT increases when a subsystem clock (SSC) fault is detected in the CM.

Register CMSSCFLT release history

CMSSCFLT was introduced in BCS22.

Associated registers

Register CMCPUFLT increases when the system detects a CPU fault.

Register CMMEMFLT increases when the system detects a memory fault in the CM.

Register CMREXFLT increases when system-activated CM REx test aborts.

Associated logs

There are no associated logs.

Register CMSSMPXU

Computing module system out-of-sync usage (CMSSMPXU)

Register CMSSMPXU is a usage register. The scan rate is 100 s. Register CMSSMPXU records if the CM is out of sync (simplex mode) because of a system action.

The system places the CM out-of-sync when:

- the system detects a mismatch defect
- the number of transient mismatches reaches the threshold

The CM remains out-of-sync until system or manual action completes.

Register CMSSMPXU release history

Register CMSSMPXU was introduced in BCS22.

Associated registers

Register CMMSMPXU records if the CM operates out-of-sync because of a manual request.

Register CMRSMPXU records if the CM operates out-of-sync because a REx test deleted errors or faults .

Associated logs

The system generates CM102 every hour while the CM is out of sync.

OM group CM (continued)

The system generates CM120 when a system restart occurs.

The system generates MM100 when a fault mismatch occurs in the CM.

The system generates MM101 when the CM is out of sync.

Register CMSSWACT

Computing module system switch of activity (CMSSWACT)

Register CMSSWACT increases when a system request causes a switch of activity (SWACT) in the CM. The SWACT preserves processor sanity after a mismatch interrupt occurs.

Register CMSSWACT release history

CMSSWACT was introduced in BCS22.

Associated registers

The system increases CMMSWACT when a manual request causes a switch of activity in the CM.

The system increases CMRSWACT when a REx test causes a switch of activity in the CM.

Associated logs

The system generates CM101 when a switch of activity is present in the CM.

The system generates MM100 when a fault mismatch occurs.

Register CMSWINIT

Computing module system warm initialization (CMSWINT)

The system increases CMSWINIT when a system request causes a warm restart of CM software and memory.

System-initiated warm restarts correct the following problems:

- software traps
- failure to create system processes
- death of system processes
- corrupt or insufficient store
- errors
- time-outs

Register CMSWINIT release history

Register CMSWINIT was introduced in BCS22.

Associated registers

Register CMMWINIT increases when a manual request causes a warm restart of the CM.

Register CMSCINIT increases when a system request causes a cold restart of the CM.

Register CMMCINIT increases when a manual request causes a cold restart of the CM.

Associated logs

The system generates CM120 when a system-initiated restart occurs.

Register CMTRAP

Computing module trap

Register CMTRAP counts trap interrupts in the CM. Trap interrupts occur when the system detects an error that causes a trap.

Register CMTRAP release history

Register CMTRAP was introduced in BCS22.

Associated registers

There are no associated registers.

Associated logs

The system generates CM100 each day at 0900 h. CM 100 provides a summary of CM status information.

The system generates CM103 when a large number of traps occur in the CM.

The system generates CM119 when a trap occurs in the CM.

Register CMTRMISM

Computing module transient mismatches (CMTRMISM)

Register CMTRMISM counts transient mismatches in the CM.

Transient mismatches occur when the system cannot isolate faults. These mismatches do not cause the CM to go out-of-sync unless 15 mismatches

OM group CM (continued)

occur within one hour. When the system reaches this threshold, the CM goes out-of-sync until you correct the problem.

Register CMTRMISM release history

Register CMTRMISM was introduced in BCS22.

Associated registers

There are no associated registers.

Associated logs

The system generates MM101 when a transient mismatch occurs.

Register PMCLKBSY

Peripheral module controller link system busy (PMCLKBSY)

Register PMCLKBSY increases when the system makes a peripheral module controller (PMC) port system busy.

Register PMCLKBSY increases when the system makes a PMC port system busy during the execution of a REx test.

Register PMCLKBSY release history

Register PMCLKBSY was introduced in BCS24.

Associated registers

Register PMCNDBSY increases when the system makes a PMC node system busy.

Associated logs

The system generates CM137 when the system makes a PMC port system busy.

Register PMCNDBSY

Peripheral module controller node system busy (PMCNDSBY)

Register PMCNDBSY increases when the system makes a peripheral module controller (PMC) node system busy.

Register PMCNDBSY does not increase when the system makes a PMC node system busy in a REx test.

Register PMCNDBSY release history

PMCNDBSY was introduced in BCS24.

Associated registers

Register PMCLKBSY increases when the system makes a PMC port system busy.

Associated logs

The system generates CM133 when a system makes a PMC node system busy.

Register CMRBASFL

Computing Module Routine Exercise BASE Class Fault (CMRBASFL)

Register CMRBASFL increases when a test fails within the BASE class.

The BASE class is a small group of tests that make sure the inactive processor is sane. Complete the test before the system moves the activity over to the mate. If a fault is present on the inactive plane, the system pegs a fault against the OM for each failed test.

Register CMRBASFL release history

Register CMRBASFL was introduced in BAS05.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Register CMRFULFL

Computing Module Exercise FULL Class Fault (CMRFULFL)

Register CMRFULFL increases when a test fails in the FULL class.

The FULL class encompasses the measure of REx tests that include CPU, MEM, LINK, PMC, and BASE. If any of these tests fail while the system executes a full class, faults will be individually pegged against this OM.

Register PMCNDBSY release history

Register CMRFULFL was introduced in BAS05.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

OM group CMC

OM description

Central message controller maintenance summary

The CMC counts faults the system detected in the central message controller (CMC) link to a network module (NM). The CMC also detects faults in the CMC link to the input/output (I/O) controller The CMC counts errors in the CMC or the associated clock. The CMC also records if the CMC link, CMC or the associated clock are system busy or manual busy.

The CMC analyzes central message controller maintenance. The system provides CMC for all DMS offices with a central control (CC) and central message controller configuration.

Release history

The OM group CMC was introduced in BCS20.

BCS33

The system converts registers CMCLKSBU, CMCLKMBU, CMCSBU, and CMCMBU from CCS to deci-erlangs before the system displays registers. Use the OMSHOW command on the ACTIVE class to perform the conversion.

BCS21

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

Registers

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

```
CMCLERR     CMCERR      CMCFLT   CMCDIAG
CMCLKSBU    CMCLKMBU    CMCSBU   CMCMBU
```

Group structure

The OM group CMC provides one tuple for each central message controller.

Key field

CMC_INDEX consists of an index and the associated

identifier. The fixed CMC_INDEX for CMC are:

CMC0

Central message controller

0 CMC1
Central message controller 1

Info field:
There is no Info field

Associated OM groups

There are no associated OM groups.

Associated groups

There are no associated groups.

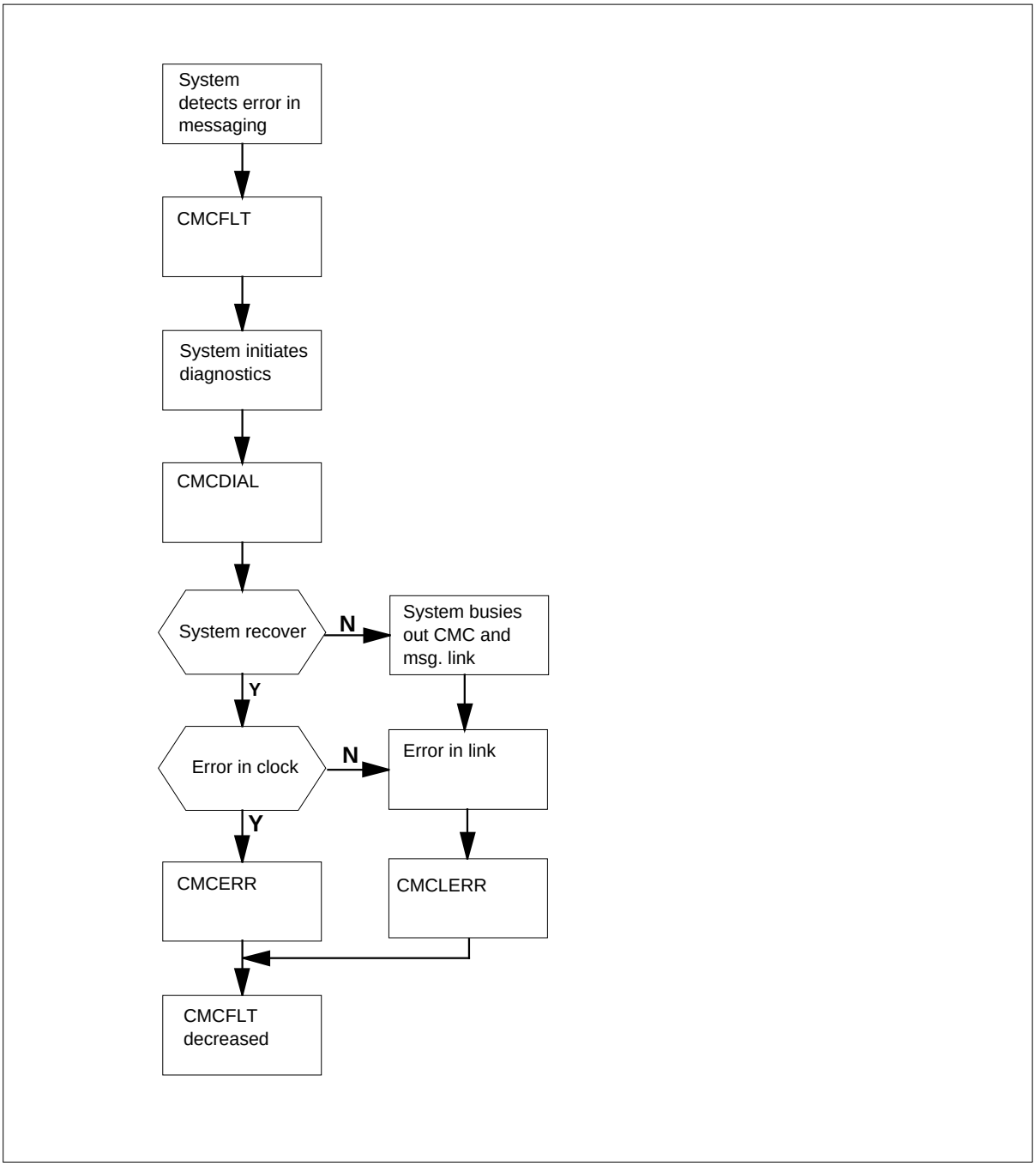
Associated functionality codes

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

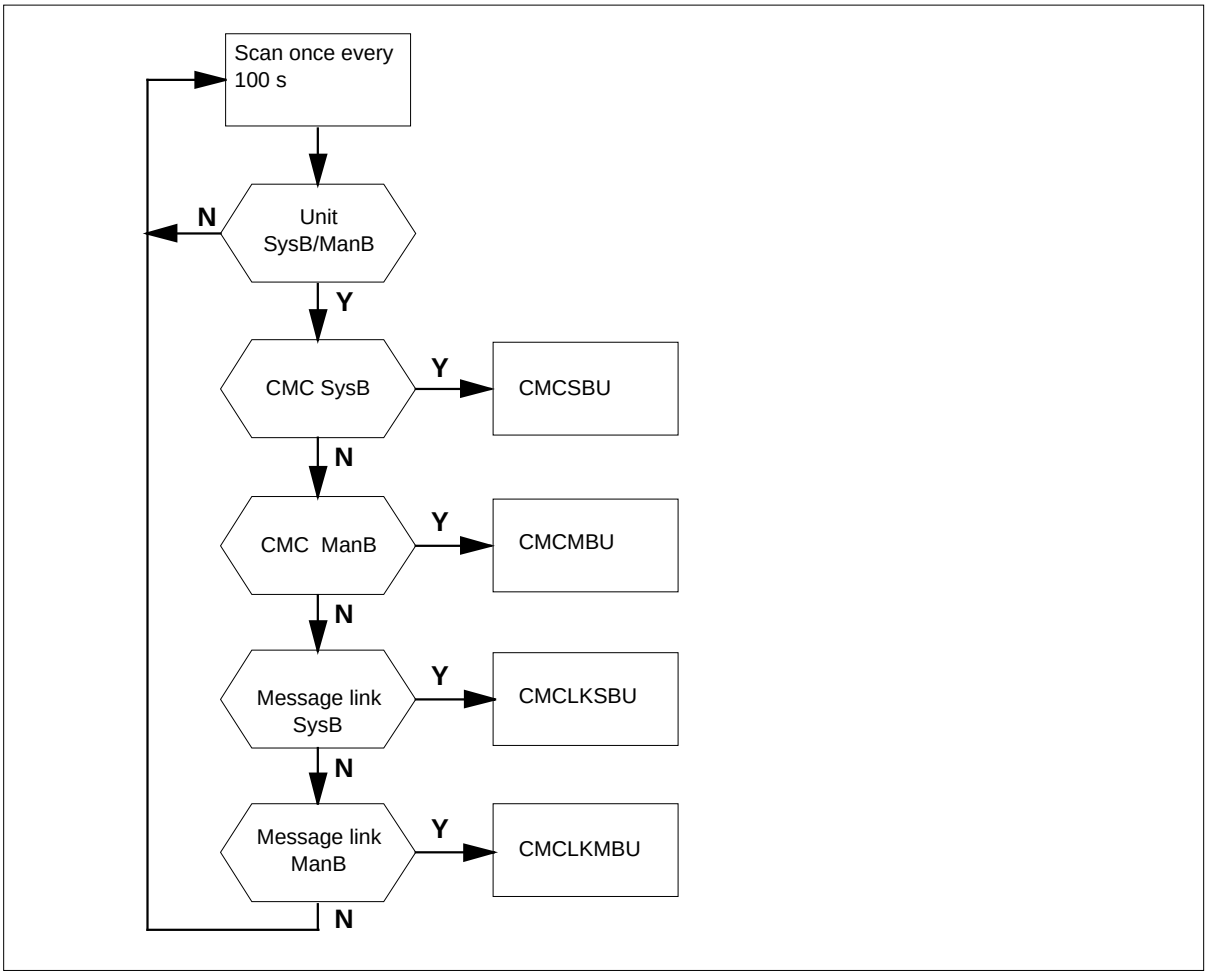
Functionality	Code
Common Basic	NTX001AA
OMs in Erlangs	NTX664AA

OM group CMC (continued)

OM group CMC registers



OM group CMC usage registers



Register CMCDIAG

Central message controller (CMC) total system diagnostics (CMCDIAG)

Register CMCDIAG counts system-initiated diagnostics.

Register CMCDIAG release history

Register CMCDIAG was introduced in BCS20.

Associated registers

Register CMCLERR counts errors in the CMC link to a network module or I/O controller.

Register CMCERR counts errors in the CMC or the associated clock.

OM group CMC (continued)

Register CMCFLT counts errors from which the CMC or the associated clock could not recover.

The relationship between CMCDIAG and these registers is:

CMCDIAG = CMCLERR + CMCERR + CMCFLT

Associated logs

The system generates CMC107 when a port and a card are system busy.

The system generates CMC113 for diagnostic purposes. CMC113 can associate with a CMC107 report.

Register CMCERR

Central message controller (CMC) errors (CMCERR)

CMCERR counts errors in the CMC or the associated clock.

Register CMCERR release history

CMCERR was introduced in BCS20.

Associated registers

CMCDIAG counts system-initiated diagnostics.

CMCLERR counts errors in the CMC link to a network module or I/O controller.

CMCFLT counts errors from which the CMC or the associated clock cannot recover.

The relationship between CMCERR and these registers is:

CMCDIAG = CMCLERR + CMCERR + CMCFLT

Associated logs

The system generates LOST101 when the system loses an outgoing DS30 message. The system loses the message because the system no route could be found to the destination node. The system also generates LOST101 when the system sends an outgoing message back to the CC because the route is wrong.

The system generates LOST102 when the system loses an outgoing DS30 message. The system loses the message because the system did not allocate a buffer to send the message.

The system generates LOST104 when the system loses an outgoing DS30 message. The system loses the message because the terminal identification (TID) specified in the message is invalid.

The system generates LOST105 when the system loses an outgoing DS30 message. The system loses the message because the route specified in the message header is invalid. The system also generates LOST105 when the system sends the message back to the CC because the routing is wrong.

The system generates LOST107 when the system loses an outgoing DS30 message because the TID is not bound to any agency.

The system generates CMC102 when the CMC is system busy.

Register CMCFLT

Central message controller (CMC) faults

Register CMCFLT counts errors from which the CMC or the associated clock cannot recover. This register increases before the system tries to recover the CMC. If the system can recover the CMC, the system removes the count from this register and adds it to CMCLERR or CMCERR.

Register CMCFLT release history

Register CMCFLT was introduced in BCS20.

Associated registers

Register CMCDIAG counts system-initiated diagnostics.

Register CMCLERR counts errors in the CMC link to a network module or I/O controller.

Register CMCERR counts errors in the functioning of the CMC or its associated clock.

The relationship between CMCFLT and these registers is:

CMCDIAG = CMCLERR + CMCERR + CMCFLT

Associated logs

The system generates SYNC103 when the system detects a fault condition in the synchronous clock system of the CMC.

The system generates SYNC104 when the synchronous clock system fails an automatic or manual test.

OM group CMC (continued)

The system generates CMC107 when a port and a card are system busy.

The system generates CMC110 when a clock sync failure occurs. The system then removex the faulty clock in the specified CMC from standby mode.

The system generates CMC111 when the CMC clocks differ in synchronization by more than 1 s. The system then removes the clock in the specified CMC from standby mode.

The system generates CC104 when the system detects a fault in the CMC. This log is like CC103, but relates only to CMC traps.

Register CMCLERR

Central message controller (CMC) link error (CMCLERR)

Register CMCLERR counts errors in a CMC link to a network module or I/O controller.

Register CMCLERR release history

CMCLERR was introduced in BCS20.

Associated registers

Register CMCDIAG counts system-initiated diagnostics.

Register CMCERR counts errors in the functioning of the CMC or its associated clock.

Register CMCFLT counts errors from which the CMC or the associated clock cannot recover.

The relationship between CMCLERR and these registers is:

CMCDIAG = CMCLERR + CMCERR + CMCFLT

Associated logs

The system generates LOST103 when the system sends an outgoing DS30 message back to the CC. The CC cannot reroute the message because the reroute inhibit flag is set. The system lost the message.

The system generates LOST106 when the system sends an outgoing DS30 message back to the CC. The IOERROR handler discovers that the message header specified a wrong node number.

The system generates IOD119 when the system detects a fault in the IOD subsystem. The system checks for a fault while the system transfers a message. The message transfers between a console and the I/O controller (IOC) or between the IOC and CMC.

The system generates CMC107 when a CMC port and a card are system busy.

The system generates IOAU102 when the system detects an error in an I/O message during route audit.

Register CMCLKMBU

Central message controller (CMC) links manual busy usage

Register CMCLKMBU is a usage register. The scan rate is 100 s. Register CMCLKMBU records if the peripheral side CMC message links are manual busy.

Register CMCLKMBU release history

Register CMCLKMBU was introduced in BCS20.

BCS33

When the office parameter OMINERLANGS is Y, the system converts usage count from CCS to deci-erlangs. Conversion occurs before the system displays the count. Use the OMSHOW command on the ACTIVE class to perform the conversion. The value held in the active registers does not change and remains in CCS.

BCS21

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

Associated registers

There are no associated registers.

Associated logs

The system generates CC113 when a link is manual busy.

The system generates CMC106 when the system receives a request to make a CMC PS link manual busy.

Register CMCLKSBU

Central message controller (CMC) link system busy usage (CMCLKSBU)

Register CMCLKSBU is a usage register. The scan rate is 100 s. Register CMCLKSBU records if the P-side CMC message links are system busy.

OM group CMC (continued)

Register CMCLKSBU release history

Register CMCLKSBU was introduced in BCS20.

BCS33

When the office parameter OMINERLANGS is Y, the system converts the usage count from CCS to deci-erlangs. Conversion occurs before the system displays the count. Use the OMSHOW command to perform the conversion on the ACTIVE class. The value in the active registers does not alter and remains in CCS.

BCS21

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

Associated registers

There are no associated registers.

Associated logs

The system generates CC114 when the CC system places a CC link out of service. The link is out of service because the mismatch or a trap occurred while the link accesses a CMC. The link can also be out of service because of a system arrangement after an initialization that was not complete.

The system generates CC115 when CMC maintenance requests CC maintenance to close a link.

The system generates CMC107 when a CMC port and a card are system busy.

The system generates ICMO101 when a device sends more messages to the CMC than the CMC can handle. The quantity of messages triggers the overload of the CMC is set in advance.

Register CMCMBU

Central message controller manual busy usage

Register CMCLKMBU is a usage register. The scan rate is 100 s. Register CMCMBU records if the CMC is manual busy.

Register CMCMBU release history

Register CMCMBU was introduced in BCS20.

BCS33

When the office parameter OMINERLANGS is set to Y, the system converts the use count from CCS to deci-erlangs. Conversion occurs before the system displays the count. Use the OMSHOW command on the ACTIVE class to

perform the conversion on the ACTIVE class. The value in the active registers does not alter and remains in CCS.

BCS21
Software changes provide use counts either in CCS or in deci-erlangs.

Associated registers

There are no associated registers.

Associated logs

The system generates CMC101 when the system makes a central message controller manual busy.

Register CMCSBU

Central message controller (CMC) system busy usage (CMCSBU)

Register CMCSBU is a usage register. The scan rate is slow 100 s. Register CMCSBU records if the CMC is system busy because of the failure of the CMC or the associated clock.

Register CMCSBU release history

Register CMCSBU was introduced in BCS20.

BCS33
When the office parameter OMINERLANGS is Y, the system converts usage count from CCS to deci-erlangs. Conversion occurs before the system displays the count. Use the OMSHOW command on the ACTIVE class to perform the conversion. The value held in the active registersdoes not alter and remains in CCS.

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

Associated registers

There are no associated registers.

Associated logs

The system generates CMC102 when the central message controller is system busy.

OM group CMG

OM description

OM group Call Management Group (CMG)

This OM group monitors the use of CMG functionality.

Release history

OM group CMG was introduced in NA010.

Registers

The following OM group CMG registers display on the MAP terminal as follows:

```
HOLDATT      ANSWATT      BSYMNATT      RINGATT
```

Group structure

OM group CMG

Key field:
None

Info field:
OMIBNGINFO. This field is the customer group as defined in field CUSTNAME in table CUSTENG. This field can have only one customer name for each customer group (maximum 4095).

Associated OM groups

None

Associated functional groups

None

Associated functionality codes

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

Functionality	Code
RES Dual Line Call Management	RES00087

Register ANSWATT

Register Answer Attempt

This register increases when a CMG member attempts to answer a call when simultaneous ringing is disabled. See the figure “OM group CMG registers HOLDATT and ANSWATT" in the “Register HOLDATT" section.

Register ANSWATT release history

Register ANSWATT was introduced in NA010.

Associated registers

None

Associated logs

None

Extension registers

None

Register BSYMNATT

Register Busy Monitor Attempt

Register BSYMNATT release history

Register BSYMNATT was introduced in NA010.

This register increases when the switch attempts to monitor a busy CMG associate line.

Associated registers

None

Associated logs

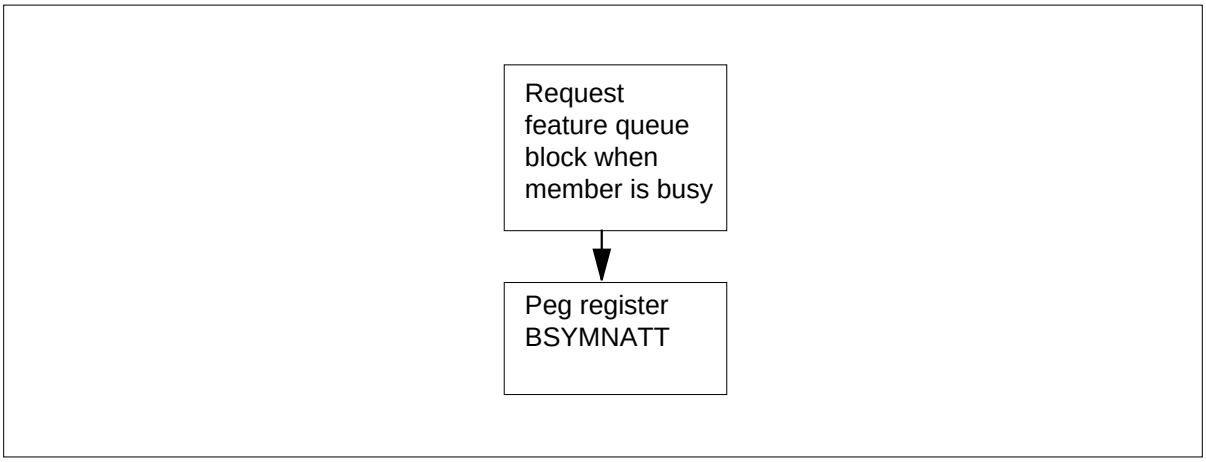
None

Extension registers

None

OM group CMG (continued)

OM group CMG register BSYMNATT with feature queue (FTRQ) block



Register HOLDATT

Register Hold Attempt

This register increases when a CMG member attempts to place a call on hold.

Register HOLDATT release history

Register HOLDATT was introduced in NA010.

Associated registers

None

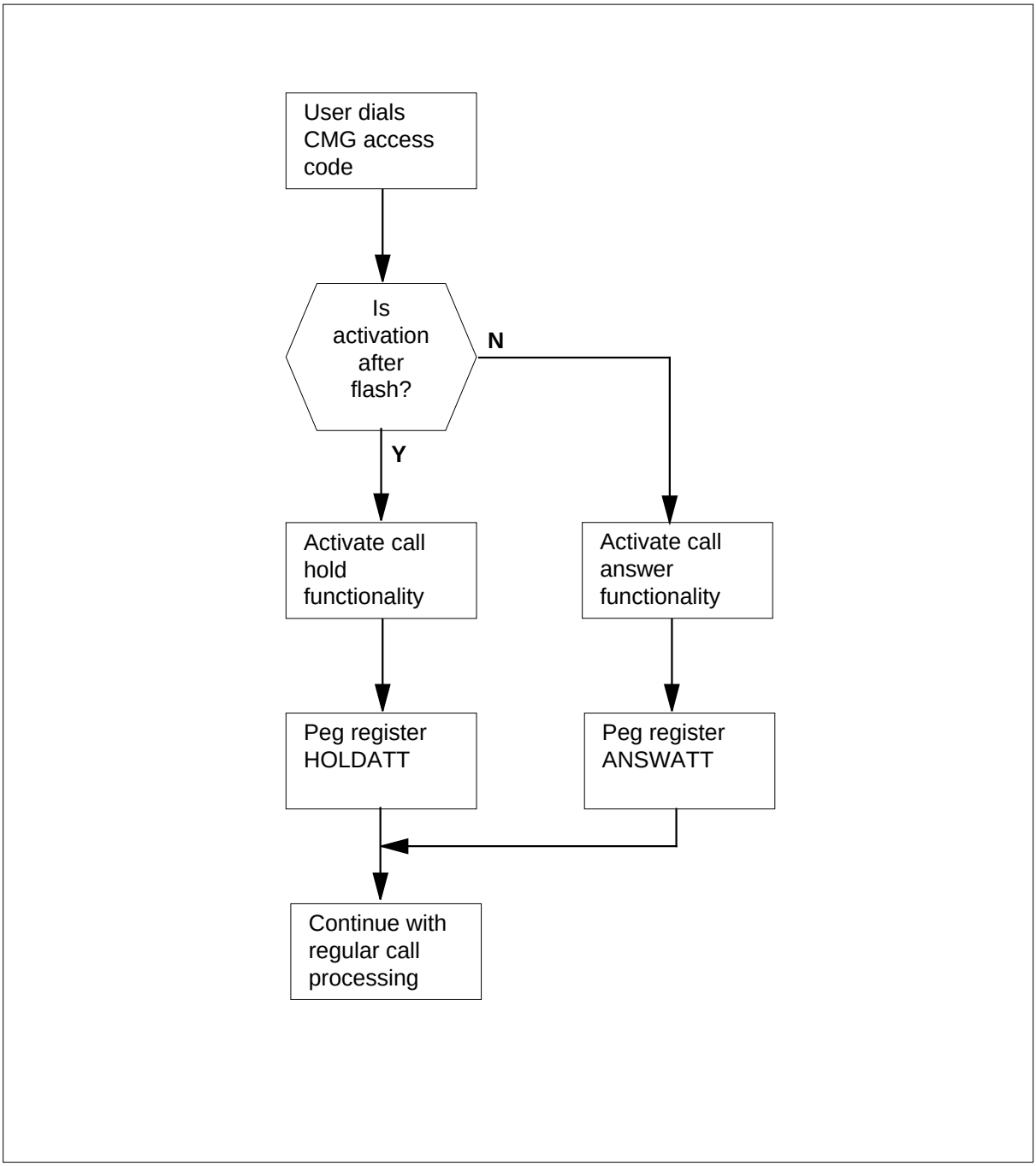
Associated logs

None

Extension registers

None

OM group CMG registers HOLDATT and ANSWAT



Register RINGATT

Register Simultaneous Ringing Attempt

OM group CMG (continued)

Register RINGATT release history

Register RINGATT was introduced in NA010.

This register increases when the switch attempts to apply simultaneous ringing to a CMG associate line.

Associated registers

None

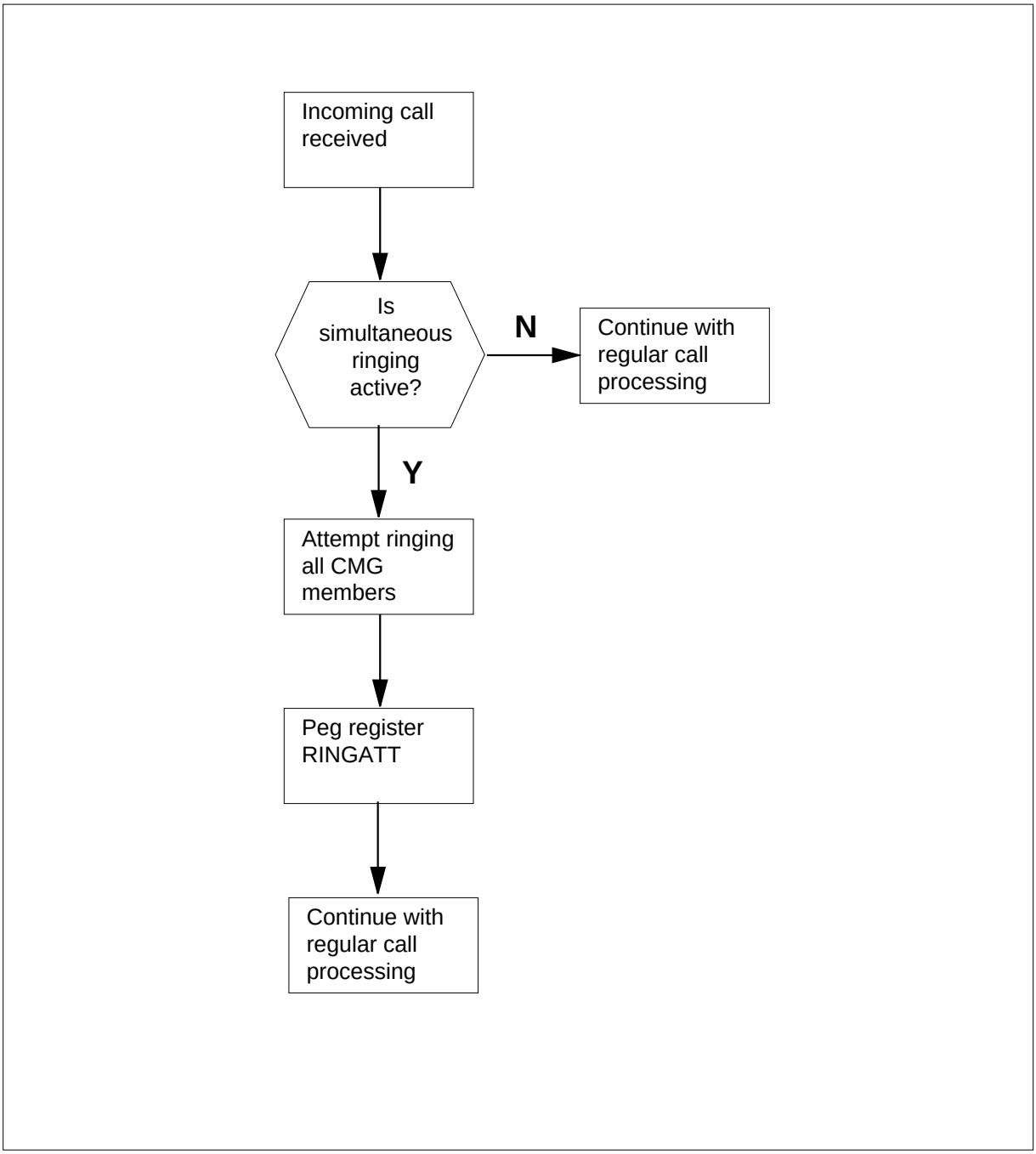
Associated logs

None

Extension registers

None

OM group CMG register RINGATT with Simultaneous Ringing



OM group CMSGCARR

OM description

Call Messenger Carrier (CMSGCARR)

The OM group CMSGGEN monitors Call Messenger carrier-specific events.

Release history

The OM group CMSGCARR was introduced in NA002.

Registers

The MAP terminal displays the OM group CMSGCARR registers as follows:

```
CMSGCRTE
```

Group structure

The OM group CMSGCARR

Key field:
There is no key field.

Info field:
There is no info field.

Associated OM groups

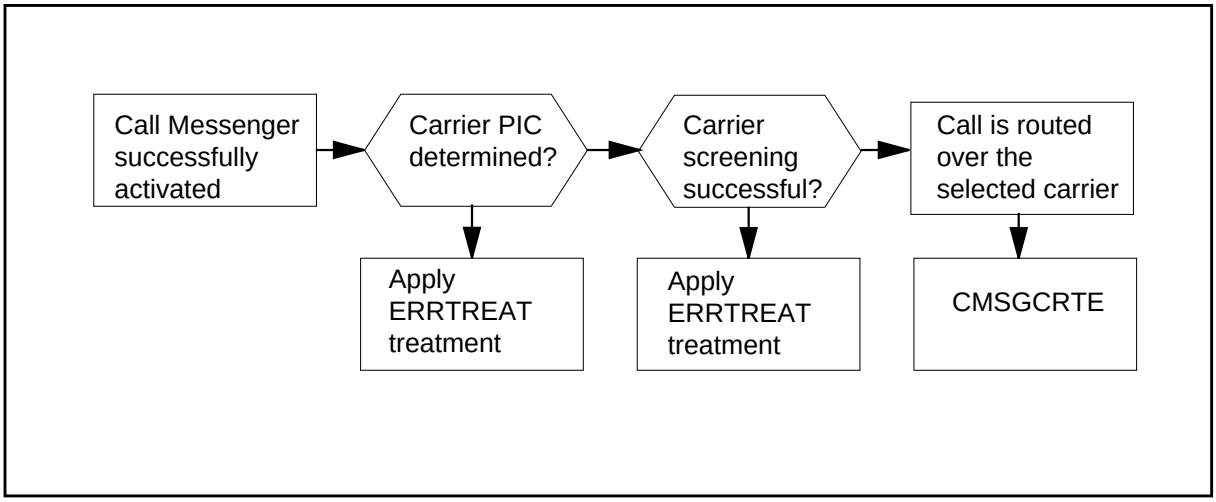
There are no associated OM groups.

Associated functional groups

The following functional groups are associated with OM group CMSGCARR:

- MDS00001 Message Delivery System

OM group CMSGCARR registers



Register CMSGCRTE

Call Messenger To Toll Recipients (CMSGCRTE)

Register CMSGCRTE release history

Register CMSGCRTE was introduced in NA002.

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 CMSGGEN

OM description

Call Messenger General (CMSGGEN)

The OM group CMSGGEN monitors common Call Messenger events.

Release history

The OM group CMSGGEN was introduced in NA002.

Registers

The MAP terminal displays the OM group CMSGGEN registers as follows:

```
CMSGATT
```

Group structure

The OM group CMSGGEN

Key field:
There is no key field.

Info field:
There is no info field.

Associated OM groups

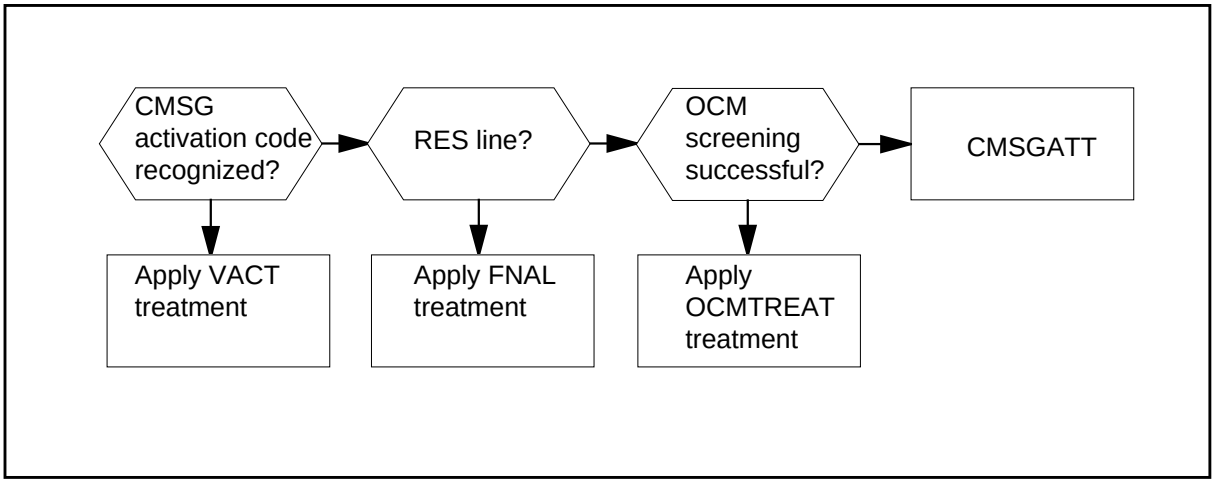
There are no associated OM groups.

Associated functional groups

The following functional groups are associated with OM group CMSGGEN:

- MDS00001 Message Delivery System

OM group CMSGGEN registers



Register CMSGATT

Call Messenger Successful Attempts (CMSGATT)

Register CMSGATT release history

Register CMSGATT was introduced in NA002.

Associated registers

There are no associated registers.

Associated logs

There are no associated logs.

Extension registers

Extension registers do not apply to this register.

DMS-100 Family

North American DMS-100

Operational Measurements Reference Manual

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OM Groups AABS-CMSGGEN

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