

FEATURE DOCUMENT
COIN FIRST COIN SERVICE
NO. 3 ELECTRONIC SWITCHING SYSTEM

CONTENTS	PAGE	CONTENTS	PAGE
<i>INTRODUCTION</i>	3	9. INSTALLATION/ADDITION/DELETION	8
1. GENERAL INFORMATION	3	10. HARDWARE REQUIREMENTS	8
2. DEFINITION	3	11. SOFTWARE REQUIREMENTS	11
<i>DESCRIPTION</i>	3	12. DATA ASSIGNMENTS AND RECORDS	11
3. USER OPERATION	3	13. TESTING	12
4. SYSTEM OPERATION	5	14. OTHER PLANNING TOPICS	15
<i>CHARACTERISTICS</i>	7	<i>ADMINISTRATION</i>	15
5. FEATURE ASSIGNMENT	7	15. MEASUREMENTS	15
6. LIMITATIONS	7	16. CHARGING	15
7. INTERACTIONS	8	<i>SUPPLEMENTARY INFORMATION</i>	16
8. RESTRICTION CAPABILITY	8	17. GLOSSARY	16
<i>INCORPORATION INTO SYSTEM</i>	8	18. REFERENCES	16

NOTICE

Not for use or disclosure outside the
Bell System except under written agreement

Figures

CONTENTS	PAGE
Fig. 1—Coin Operation Possibilities	4
Fig. 2—Coin First Coin Service Feature Flow Diagram	9
Fig. 3—Translation of Intraoffice Coin Call	13
Fig. 4—Translation of Outgoing Coin Call	14

INTRODUCTION

1. GENERAL INFORMATION

1.01 There are two types of coin lines: dial-tone-first (DTF) and coin first. On dial-tone-first coin lines, a coin must be deposited unless the call is free or nonsent paid (collect, charge to third party, or credit card). This type of service is covered separately in another section (refer to Section 233-190-131). This section covers coin first service only and describes the various methods of charging, testing, and maintaining coin telephone service. The items defined in paragraphs 2.01 through 2.07 are all a part of coin first service although they can also be associated with the DTF feature. Figure 1 shows the relationship of the various aspects of coin first telephone service. Local untimed charging and local overtime charging are mutually exclusive methods of handling local charging. The stuck coin administration is part of all types of coin service. Optional methods of treating stuck coins are described in this section. Coin return or retain on dial "0", "411", or "911" is a standard central office option. Testing of stations, coin lines, and coin circuits can be done manually at a local test desk or test panel.

1.02 This document is being reissued to include 3E3 generic program information. Since this is a general reissue, no revision arrows will be used.

1.03 Basic coin service is generally available with all issues of the No. 3 Electronic Switching System (ESS) generic program.

2. DEFINITION

2.01 Coin first coin service is a telephone service paid for by the deposit of a coin (or coins) in a coin telephone usually located in a public place. Local and toll calls can be made from a coin telephone station set. Coin first service is available with the following features:

- Local untimed charging
- Local overtime charging
- Various operator handled calls
- Stuck coin administration

- Coin return or retain on dial "0", "411", or "911"

- Coin station testing.

2.02 Local untimed charging provides an unlimited talking period after receiving an initial deposit.

2.03 Local overtime charging provides for an overtime charge on local calls after an initial talk period has elapsed.

2.04 Operator handled calls are those that may be connected through a cord switchboard (3CL) or a Traffic Service Position System (TSPS) for completion through the toll network. In some cases, sent-paid coin toll calls are handled by Automated Coin Toll Service (ACTS) equipment at TSPS rather than an operator.

2.05 The stuck coin administration feature identifies lines with stuck coin indications.

2.06 Coin return or retain on dial "0", "411", or "911" is a central office option on coin telephone service and determines if the initial deposit is to be returned or retained on dial "0", directory assistance (411) calls, or emergency (911) calls. Coin return is the recommended mode of operation for dial "0" calls.

2.07 Operation of a coin telephone station and its associated circuits can be manually tested from available test facilities.

DESCRIPTION

3. USER OPERATION

3.01 Coin first coin telephone service is provided to the customer by coin telephone set. A coin or coins in the amount equal to the initial period rate must be inserted to obtain dial tone. Thereafter, the customer may dial any local call and may be allowed to dial toll calls depending on the charge options selected. The initial rate is set in the coin station set.

Local Untimed Charging

3.02 A local coin call is a call within the coin customer's local calling area. One or more coins (typically 10 to 25 cents, depending on the local initial rate) must be deposited before the call

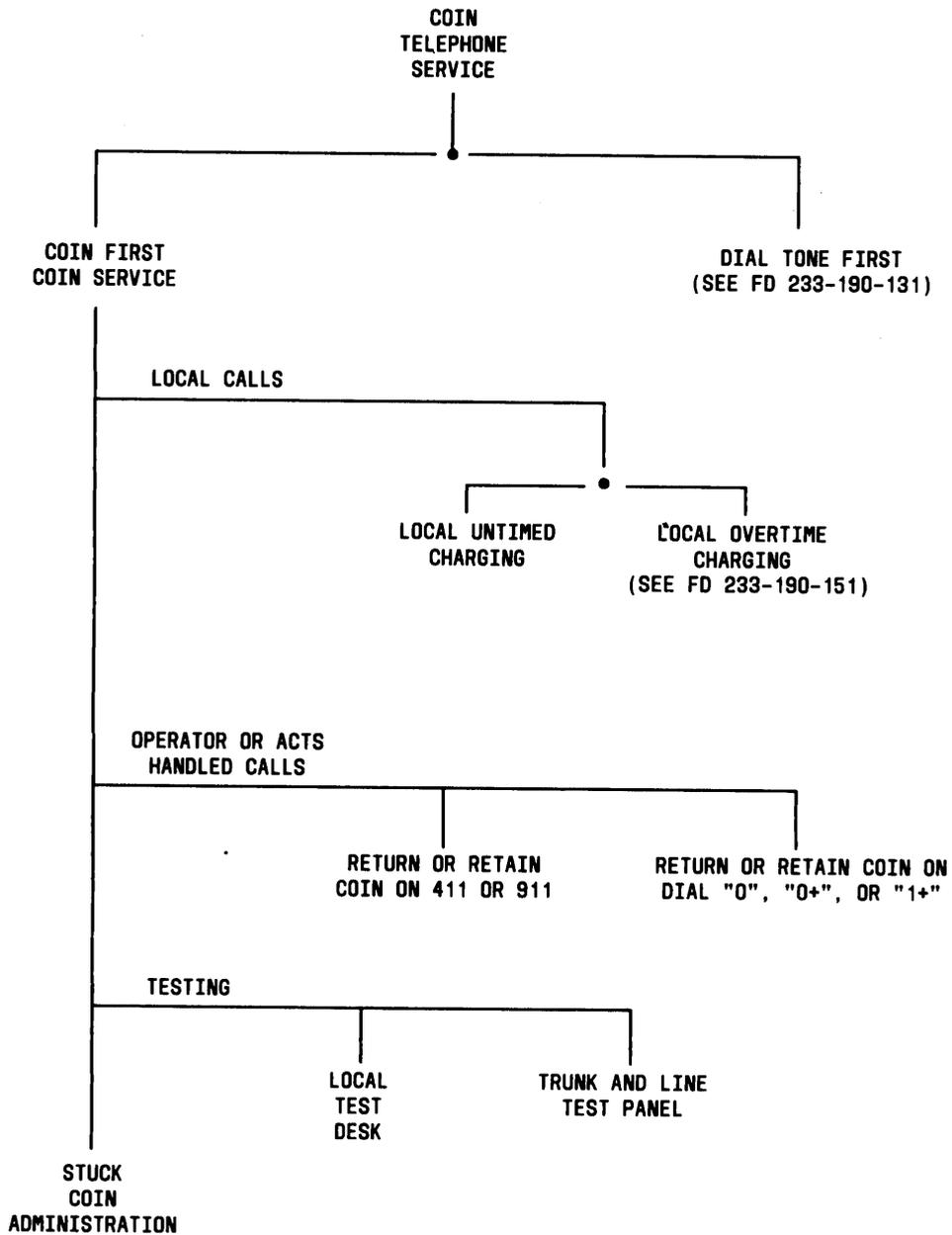


Fig. 1—Coin Operation Possibilities

is allowed to be completed. In coin first, the coin(s) must be deposited to obtain dial tone. There is no time limit on a local call. If the called customer does not answer, the deposit is returned upon disconnect.

Local Overtime Charging

3.03 A local coin call with overtime is divided into two distinct periods: initial and overtime. Both periods are defined by the operating company

and each may be from 1 to 7 minutes in 1-minute increments. The initial period begins when the called party answers. Thirty seconds before the end of the initial period, the initial deposit is automatically collected by the No. 3 ESS. This collection is an indication to the coin customer that the period is near completion and that an overtime deposit is required in order to continue the call.

3.04 At the expiration of the initial period, the No. 3 ESS tests the coin station for the coin deposit. If the deposit is present, the call is marked in overtime and is allowed to continue for the overtime period. If the coin is not present, the call is routed to a coin overtime announcement. If the overtime deposit is not present at the end of 30 seconds, the connection is torn down. With SO-2, the caller is then given overflow tone. With 3E3, the call is disconnected and an initial deposit is required to get dial tone.

Toll Charging

3.05 A call from a coin telephone to a point outside the local calling area is a toll call. The several methods of toll charging available interact with the customer in different ways as described in the following paragraph.

Operator Assisted Calls

3.06 All customers have access to an assistance operator by dialing "0". It is a No. 3 ESS option as to whether the initial deposit is returned or retained. The operator (either 3CL or TSPS) will place the call, request required coin deposits, and supervise the call for overtime or disconnect. If TSPS is available, the customer may dial the called number with a "1" prefix (sent-paid) or "0" prefix (nonsent-paid). Nonsent-paid calls include credit card, bill to third number, and collect calls.

Automated Coin Toll Service (ACTS)

3.07 Sent-paid toll calls completed via TSPS may be handled by ACTS equipment at the TSPS rather than an operator. With this option, announcements are provided to the customer for both the initial deposit and overtime deposits. The ACTS equipment monitors for the deposits and if the required deposit is not made, a TSPS operator is connected.

4. SYSTEM OPERATION

4.01 Coin first coin stations are wired to close a dc path between the ring and tip conductors when the handset is removed from the switchhook. When the initial deposit is made, a resistance ground is placed on the tip conductor. This is detected by the line ferrod which is wired for ground start operation. Scan point number and line translations identify the line by its originating major class as a coin first line. A customer dial pulse receiver (CDPR) is connected and dial tone is returned.

4.02 After the prefix digit and/or first three digits have been dialed, the 3-digit translator determines route index and charge index information. Dial "0", "0+", and "1+" calls are routed to a TSPS or 3CL operator who handles further routing and any charges which may apply (to be described later). Calls to directory assistance and to the emergency service bureau (911 service is described in Section 233-190-203) are handled similar to a local untimed call. Any initial deposit which had been made is automatically returned upon completion to a free number. For station-to-station calls, the charge index identifies the calls as local untimed or local overtime.

Local Coin Call

4.03 A local coin call is a call within the coin subscriber's local calling area which can be either timed or untimed. No time limit on the call exists when overtime charging is not required. The charge index in translations indicates if timing is required for the call.

Local Untimed Charging

4.04 A local untimed call proceeds as a normal call up to answer detection. At answer recognition, a 2-second charge delay interval is timed before the call is considered a chargeable call. If either subscriber disconnects before the end of the charge delay period, the coin deposit is returned and the call is removed from the system. Once the charge delay period is over and the calling and called subscribers are in the talking state, no further action is needed until recognition of a disconnect.

4.05 Upon disconnect, the talk path is removed and the coin station is connected to a coin

SECTION 233-190-112

control circuit (SD-3H411). The coin control circuit then applies a collect or return voltage (± 130 volts depending on an office option). The ferrod associated with the coin control circuit is scanned for a coin present indication. After determining that a coin is present, the scan is continued to watch for the coin to disappear (be collected or returned). After the completion of the coin disposal cycle, a coin present check is made. The presence of a coin indicates a failure to collect or return the coin and the required voltage is applied again. If the coin is still present, the following printout is made on the Repair Service Bureau (RSB) teletypewriter (TTY):

```
tt REPT LINE a bcde TN f g TRBL STUCK  
COIN
```

The tt designates the time past the hour in which the alarm occurred, a bcde is the office equipment number of the line, and f g is the telephone number of the line.

4.06 A maintenance TTY printout is also made:

```
tt REPT CKT TRBL SCC b c d
```

The b, c, and d are the contents of the error analysis input buffer. Item c (bits 12-0) is the coin line terminal and d (bits 12-0) is the coin control circuit scan point number.

Local Overtime Charging

4.07 This type of call is processed the same as local untimed charging until the end of the charge delay interval. After the charge delay, the No. 3 ESS initiates a timing entry in the terminal memory record (TMR) for an initial interval determined by the operating company. The initial interval is limited by local operating company option to 1 to 7 minutes in 1-minute increments. Thirty seconds before the timing interval ends, collect voltage is applied from a coin control circuit to collect the initial deposit (no check is made to see if the collect action was successful or not). This is done to alert the customer that an additional deposit is required if uninterrupted conversation is to continue. After the coin collect, the system continues timing the interval. This is to permit an additional deposit to be made, or for the parties to terminate their conversation. Should the call terminate during the last 30-second interval, and

an overtime deposit had been made, the overtime deposit is returned before the circuits are idled.

4.08 If the call remains in the talking state and the end of the timing interval is reached, a test is made for the overtime deposit. If the coin test shows that a coin is present, timing starts for the overtime period. This timing is also determined by the operating company and may be different than the initial rate timing period. If no coin was present, both parties are connected to a coin overtime announcement. The coin customer is given 30 additional seconds to deposit a coin for the overtime period. If the coin is not present after this 30-second period, the connection is torn down. Refer to Section 233-190-151 for details of local coin overtime.

Operator Handled Calls

4.09 Provision for completing toll calls may be made on a manual basis by providing a trunk group to a 3CL toll switchboard. Routing in the No. 3 ESS translations is arranged so a coin customer dialing "0" is connected to the switchboard via this trunk group. The operator completes the call and performs the timing and billing function on a manual basis. Local assistance, person-to-person, collect calls, bill to third party calls, and credit card calls can also be completed by a 3CL operator.

4.10 When TSPS is available, operator services involving toll calls may be provided by this means. A TSPS operator can handle "0-", "0+", and "1+" calls from coin stations. Alternatively, ACTS equipment at TSPS can handle "1+" (sent-paid) calls. When a customer places a toll call from a coin station, the instructions on the telephone direct that the called number (area code if any, and 7-digit telephone number) be dialed. The No. 3 ESS will connect the call to a TSPS trunk and forward the calling and called number to the TSPS. On a station-to-station non-ACTS call, the TSPS connects an idle position and gives the initial charge and time period for the call on a numerical display. The TSPS operator requests the deposit required for the initial talk period, monitors the coin tone signals for correct deposit, and releases the position from the call. After the called party answers, the TSPS times the call and at the end of the initial charge period signals the ESS to collect the initial deposit and routes the call to an idle TSPS position. (This need not be the same operator as before.) The operator is connected to the call and

instructs the customer to signal when finished. The position is released, and the TSPS continues to time the call automatically. When the customer flashes the switchhook at the end of a call, an idle TSPS position is connected. (If the calling customer is on-hook, the operator rings the station.) The operator requests a coin deposit in the amount displayed at the console, monitors the coin tone signals for the correct deposit, signals the ESS to collect the deposit, and releases the position. If the operator fails to collect the deposit, it is automatically collected by the ESS after the customer goes on-hook. Therefore, any return action must be accomplished by the operator before the operator releases the position. After a coin presence test is made, the station is idled and ready for another call. If a coin is present, a stuck coin action will occur (described in paragraph 4.15).

4.11 If ACTS is provided at TSPS, calls are handled as previously described, except that deposit request and monitoring are accomplished by a TSPS subsystem rather than an operator. Customers failing to deposit, or making a partial deposit, are provided prompting announcements and ultimately connected to an operator if a correct deposit is not forthcoming. With ACTS, customers depositing a coin of too large a denomination are automatically given credit toward overtime.

4.12 Person-to-person calls, collect calls, bill to third party calls, and credit card calls are handled by an operator who remains on the call as necessary to supervise the progress of the call and enter needed billing data.

4.13 The ESS may be optioned by the local operating company to either return or retain the initial deposit on recording completing (dial "0"), directory assistance (411) calls, or emergency (911) calls. Generally, the initial deposit is returned prior to connection to the operator. If the deposit is retained, it is figured into any subsequent charges and collected or returned upon customer disconnect. (Coin retention operation is not recommended.)

4.14 A feature flow diagram giving the functional operation of an originating coin call in No. 3 ESS is shown in Figure 2.

Stuck Coin Administration

4.15 After the collect or return action at the end of a call, a coin presence check is made.

If a coin is still present, a second collect or return action is initiated and the coin present check is made again. If the second collect or return action was successful, no further action occurs; but, if the coin is still present, a stuck coin printout is made on the RSB TTY, call status information is loaded into the error analysis buffer (this condition may indicate a bad coin control circuit), and the line is idled and given permanent signal treatment.

Testing

4.16 A limited amount of testing of coin stations can be performed in the No. 3 ESS using the trunk and line test panel. Tests such as line leakage, continuity, coin collect and return, and ringing may be performed. More complete testing of coin stations is performed at the No. 14 or No. 16 local test desk.

4.17 Manual testing of coin stations for operate and nonoperate current requirements of the coin relay must be performed from a No. 14 or No. 16 local test desk.

CHARACTERISTICS

5. FEATURE ASSIGNMENT

5.01 Coin first coin service is provided on a per-line basis to business and nonbusiness areas where public telephone service is desired or deemed to be necessary.

6. LIMITATIONS

Operational

6.01 Coin lines can work out to a maximum loop resistance of 1300 ohms. This assumes a minimum central office voltage of 47 volts and a maximum of 50-ohm central office resistance. To extend beyond this maximum loop resistance, dial long lines equipment must be used.

6.02 Coin station test line and coin zone calling are not presently provided in the No. 3 ESS.

6.03 In offices with the SO-2 generic program, the local coin overtime announcement is connected over one of two no-test circuits. The maximum number of coin lines in a local coin overtime area therefore should be limited to 96 per

SECTION 233-190-112

office. With the 3E3 generic program, the announcement is connected over a 3-port conference circuit and the line limitation does not apply.

Assignment

6.04 The coin control circuit service group must be assigned to trunk group number 71. Operator trunk groups must be assigned trunk group numbers 129 through 225.

6.05 Coin service directory numbers should, if possible, be assigned in the 9000 series (eg, NNX-9XXX). This enables toll operators to identify coin stations as such in the event of a collect toll call being attempted to the coin station.

6.06 Only those OENs that can be modified for ground start can be assigned to coin first coin lines. Refer to paragraph 10.02 for details.

7. INTERACTIONS

7.01 With SO-2, Issue 4, the TSPS operator coin control function has been removed from the test vertical and uses direct switching. With 3E3, the local coin overtime announcement, coin presence test, and coin collect function will no longer be performed through the no-test verticals. The resulting removal of coin call processing from the test verticals will improve the grade of service for coin services. Refer to Section 233-190-028, No-Test Vertical Access, and Section 233-190-151, Local Coin Overtime, for details.

8. RESTRICTION CAPABILITY

8.01 The use of coin telephone service can be restricted by the operating telephone company to those places where public telephone service is desired or otherwise deemed necessary. These lines can be denied termination by the appropriate TTY message.

INCORPORATION INTO SYSTEM

9. INSTALLATION/ADDITION/DELETION

9.01 The software part of this feature is available with all versions of the No. 3 ESS program. The translation changes required to retrofit coin first services are made using the RC messages and procedures described in Part 12.

9.02 Hardware requirements for adding coin first service are those listed in Part 10.

9.03 The step-by-step sequence for installing the Coin First Coin Services feature in a No. 3 ESS office is as follows:

- (1) Install the necessary number of new or additional SD-3H411 coin control circuits.
- (2) Provide any additional or associated circuits required for this feature.
- (3) Install a 7A or 13A announcement machine for the announcement required for local overtime charging.
- (4) Input all software data required to activate the hardware installed.

9.04 Deletion of this feature is accomplished by using the proper RC messages to remove the coin lines and for removal of any unneeded circuits.

10. HARDWARE REQUIREMENTS

10.01 Hardware items that must be considered when providing this feature are:

- Office equipment numbers (OEN)
- Coin control circuits
- Trunk circuits
- A 7A or 13A announcement machine (local overtime operation)
- Three-port conference circuits.

10.02 Each coin first coin line requires one OEN on the network frame modified for ground start. Only OENs assigned to the following input level and switch combinations (on all concentrators and switch groups) can be changed to ground start: 7-0, 6-1, 7-1, 6-2, 7-2, 7-3, 7-4, 6-5, 7-5, 6-6, 7-6, and 7-7.

10.03 Coin control circuits (SD-3H411, FB 423) must be provided. These circuits have one OEN appearance each and comprise service circuit trunk group 071 and have a circuit code of 15.

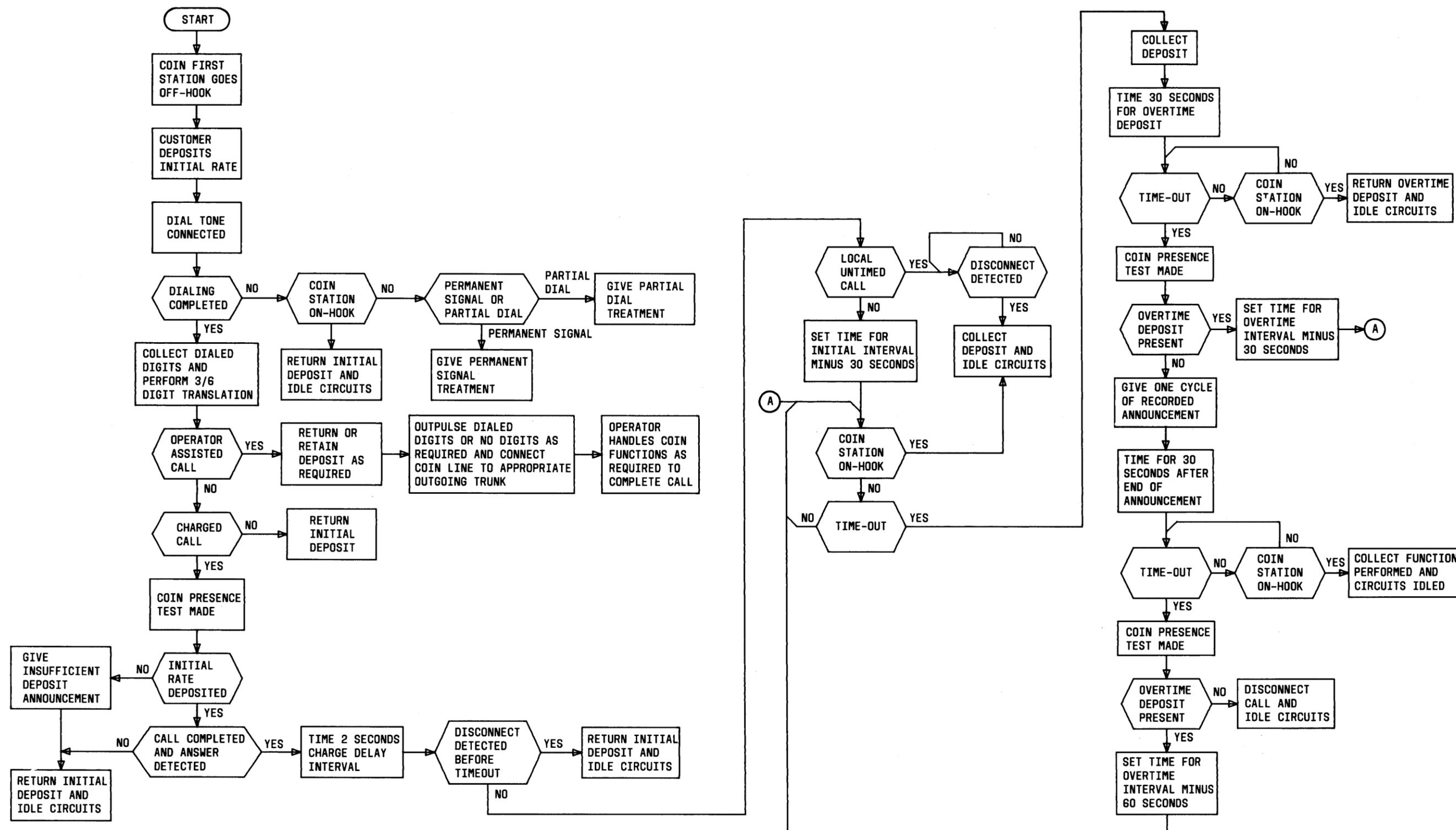


Fig. 2—Basic Coin Service Feature Flow Diagram

10.04 Various operator trunk groups needed will require a quantity of SD-3H220 trunk circuits to provide operator assistance.

10.05 A 7A or 13A announcement machine is required for the coin overtime announcement.

10.06 With the 3E3 generic program, 3-port conference circuits will be required to connect the coin overtime announcement if local overtime charging is required. Traffic engineering procedures for 3-port circuits should take into account an average announcement use of 0.5 per coin line and heavy announcement use of 1.5 per coin line per busy hour. An estimated 15 seconds holding time per announcement is expected.

10.07 Refer to the Network Switching Practices, Section 233-060-ZZZ series, for the type, order code, schematic drawing, and functional use of all circuits and trunks that may be used in a No. 3 ESS.

11. SOFTWARE REQUIREMENTS

11.01 System program requirements include parts of four common programs: Three-Digit Translations (XSL3DG) program, PR-3H181; Local Charging-Coin and Message Register (LCLCHG) program, PR-3H161; Completion of Incoming and Intraoffice Calls (TERM) program, PR-3H175; and Operator Calls (OPER) program, PR-3H164; and all of the Coin Cleanup Routine (COIN) program, PR-3H150.

11.02 For the SO-2 generic program, each coin line requires in translation store two words in the line subtranslator and two words in the terminating translator. For the 3E3 generic program, each coin line requires in translation store two words in the line subtranslator and three words in the terminating translator. For every 12 coin lines in either generic, one word of temporary store is needed for coin line status bits.

11.03 The service circuit group for the coin control circuits requires the following translation store words.

- Four words per service circuit group for trunk and service circuit group data.
- One and a half words per circuit for member list data.

11.04 Five words (minimum) of temporary store per service circuit group for a selection status block are required with one bit assigned per circuit for status.

11.05 Processor real-time data required by this feature will be supplied when the data becomes available.

11.06 Specific software requirements are provided in the applicable Network Switching Practices, Section 233-060-ZZZ series. Also refer to PA-3HXXX for specific word layout details.

12. DATA ASSIGNMENTS AND RECORDS

12.01 Software for coin first service is provided in any current issue of the system program. The following translation input forms must be completed when implementing this feature and submitted to the WECO Regional Center using normal schedule procedures for the initial office data administration (ODA) run. Refer to the Translation Guide, TG-3, for details concerning the completion of these forms.

FORM	TITLE
3100	Telephone Number Table
3107	Supplementary Information Table
3201	Trunk Assignment Table
3202	Trunk Group Table
3204	Trunk Feature Table
3300	Three & Six-Digit Translations
3301	Rate and Route Table
3302	Charge Table
3303	Route Index Expansion Table
3304	Code Index Table
3500	General Information Table.

12.02 Figures 3 and 4 show the interrelation of translation data involved in processing a call dialed from a coin first coin station. As an aid to understanding the translation process, the

flow is presented from the point of view of the translation forms rather than the actual structure of translations in program store. For referencing actual word layouts, refer to the applicable issue of PA-3H3XX, No. 3 ESS Office Data Layout Specifications.

12.03 The following RC messages are used to add to or change translations required for the Coin First Coin Service feature. Refer to the Input Message Manual, IM-3H300, for details of these messages and their associated keywords.

RC MESSAGE	EXPLANATION OF MESSAGE
RC:CDI/	Used to define, change, or remove a code index expansion entry.
RC:CHI/	Used to define a new charge index, to change an existing charge index, or to delete an existing charge index.
RC:CKT/	Used to associate SPNs, TENs, and member numbers with particular circuits of a service circuit group.
RC:DIG/	Defines the code index for a 3- or 6-digit translation or a default code index for an area translator.
RC:GRP/	Used to define the trunk or service circuit features for a group.
RC:LCC/	Used to associate an originating major class, a terminating major class, and a screening class with a line class code and rate area.
RC:LINE/	Used to add, change, or remove individual LINE information.
RC:OFFICE/	Defines the office options and the office identification used to assign collect and return voltages for coin stations and to allow or disallow 0+ calls.
RC:RTI/	Adds, changes, or deletes a route index expansion entry and its alternate route index expansion entry.

RC:SCR/ Used to add, change, or remove a screening class expansion entry.

13. TESTING

13.01 All trunks and service circuits associated with coin service can be tested at the No. 3 ESS maintenance center using the maintenance TTY and the trunk and line test panel (TLTP).

13.02 A limited amount of testing of coin stations and lines can be performed in the No. 3 ESS using the trunk and line test panel. Tests such as line leakage, continuity, coin collect and return, and ringing may be performed.

13.03 Testing of coin lines may also be performed at the No. 14 or No. 16 local test desk such as coin collect and return, ringing test, coin magnet test, and station ground test.

13.04 Manual testing of coin stations for operate and nonoperate current requirements of the coin relay must be performed from a No. 14 or No. 16 local test desk.

13.05 Tests to verify translation information in the No. 3 ESS consist of various verify messages at the TTY (listed in paragraphs 13.06 and 13.07). Refer to IM-3H300 and OM-3H300 for information pertaining to the variable fields of the messages and the interpretation for the response to these messages.

13.06 The following verification messages are used for SO-2 to verify the proper assignment of this feature:

- **VER:GRP** is used to verify assignment of group and member data.
- **VER:LCC** is used to verify the line class code assignments.
- **VER:LINE** is used to verify line information.
- **VER:OE** is used to verify customer line originating translations.
- **VER:OFFICE** is used to verify the office options and the terminal identification.
- **VER:SCR** is used to verify the screening table entries.

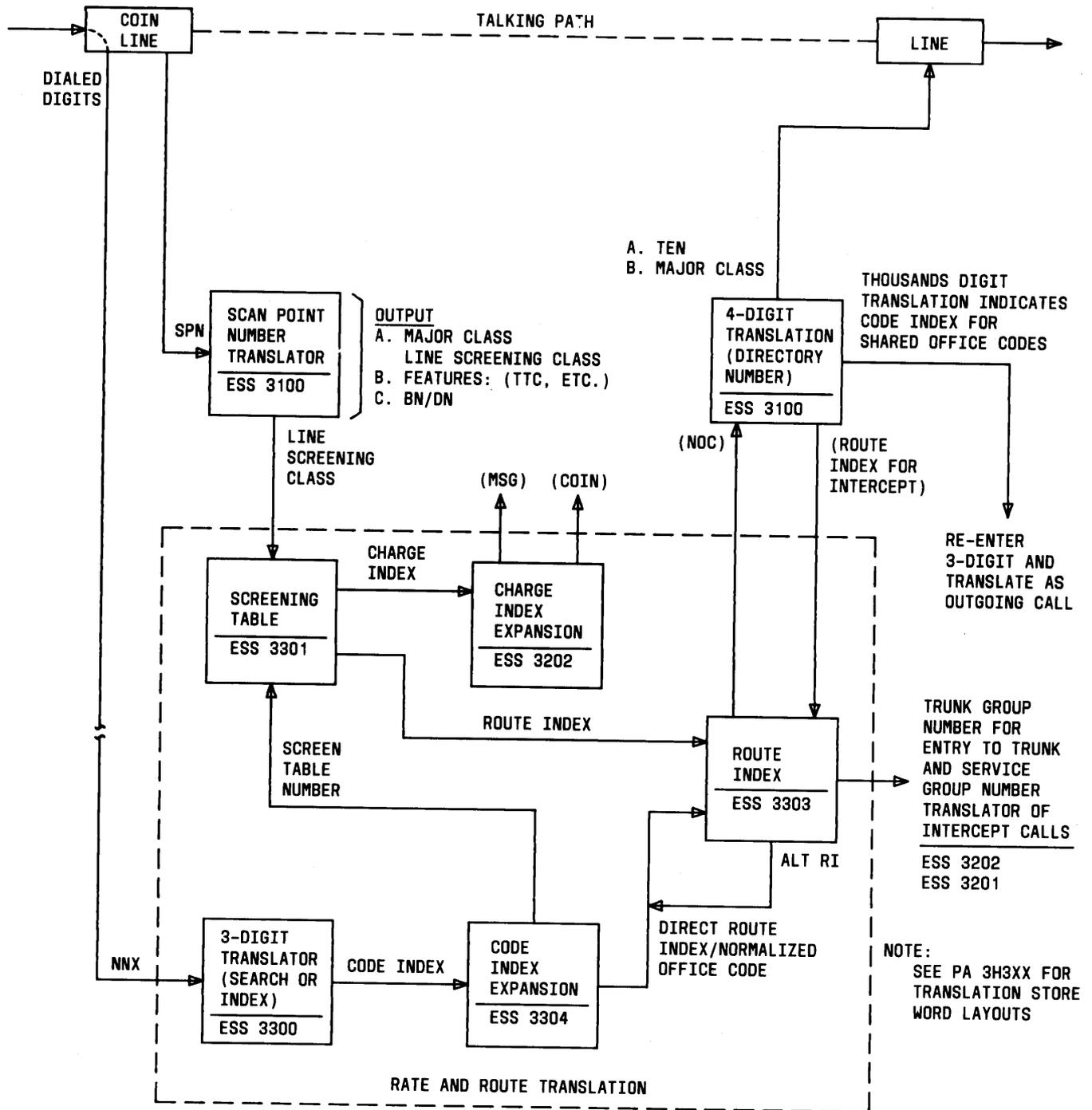


Fig. 3—Translation of Intraoffice Coin Call

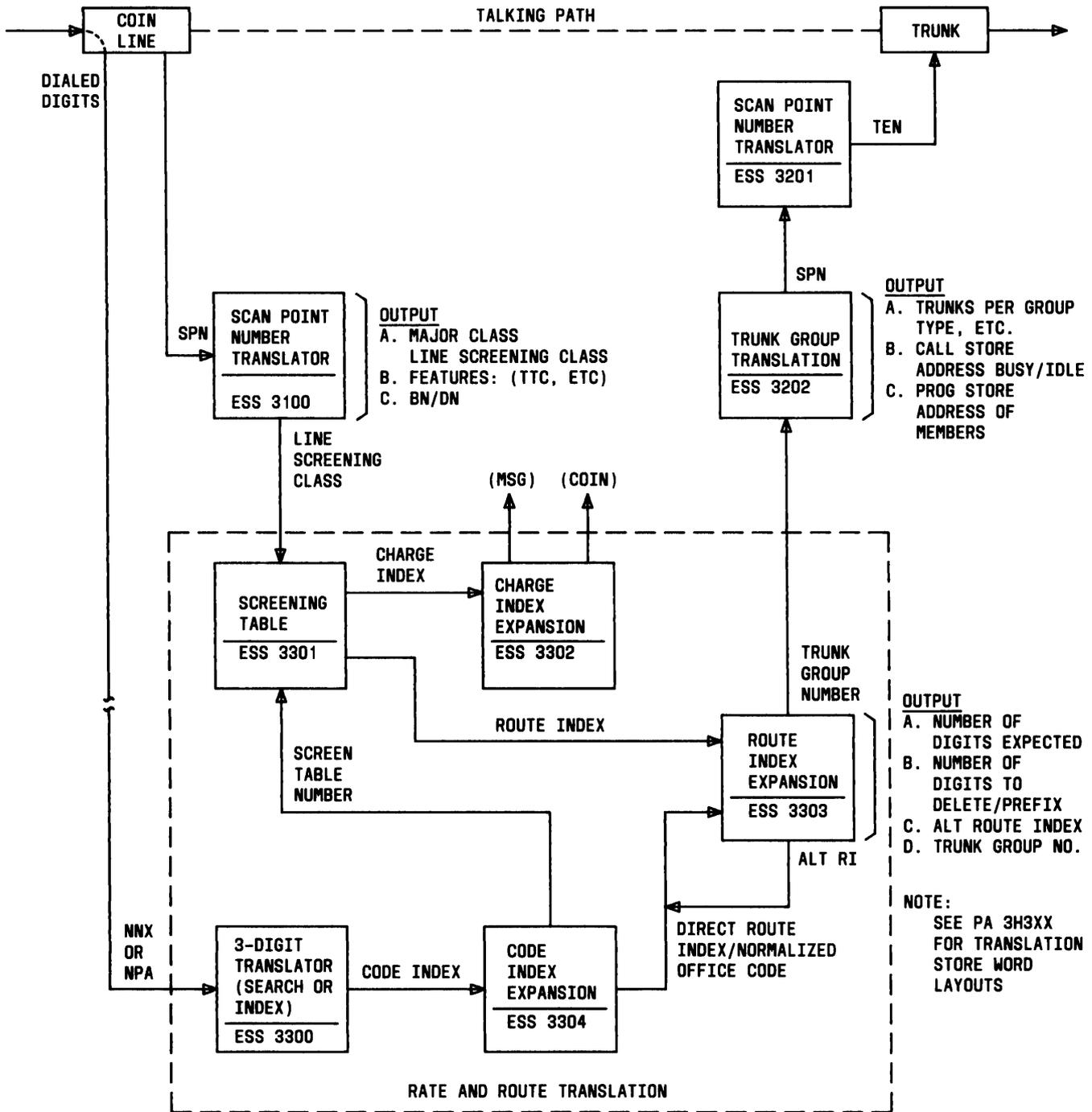


Fig. 4—Translation of Outgoing Coin Call

13.07 The following verification messages are used for 3E3 to verify the proper assignment of this feature:

- **OP:OFR** with keyword **GRP** is used to verify assignment of group and member data.
- **OP:OFR** with keyword **LCC** is used to verify the line class code assignments.
- **VER:LINE** and/or **OP:OFR** with keyword **TN** is used to verify line information.
- **VER:OE** and/or **OP:OFR** with keyword **OE** is used to verify customer line originating translations.
- **OP:OFR** with keyword **FORM** and specifying form 3500-1 is used to verify the office options and the terminal identification.
- **OP:OFR** with keyword **SCR** is used to verify the screening table entries.
- **OP:OFR** with keyword **DIG** is used to verify 3- and 6-digit translations.
- **OP:OFR** with keyword **CHI** is used to verify charge index entries.
- **OP:OFR** with keyword **CDI** is used to verify code index table entries.
- **OP:OFR** with keyword **RTI** is used to verify route index table entries.
- **OP:OFR** with keyword **THDIG** is used to verify office code table entries.

13.08 A general method to verify that a coin station is properly installed is described below:

- Verify the line translation information using a RC verify message and compare the TTY output to office records.
- Test the coin station from the TLTP for correct coin collect and return functions. In addition, check coin relay operate current and call thru functions via a No. 14 or No. 16 local test desk.

- All features of coin first coin service not directly related to coin stations may be tested by verification of all coin related trunk and service circuit groups using the messages referred to in paragraph 13.05. Compare the TTY response with office records to insure the proper data has been inputted to translations by recent change messages and/or ODA. Make overall trunk test on coin related trunks and service circuits using the TLTP and TTY.

14. OTHER PLANNING TOPICS

14.01 Those offices that are to be updated to 3E3 should plan for circuit changes required by the deloading of the no-test verticals as described in Part 7.

ADMINISTRATION

15. MEASUREMENTS

15.01 Peg count, usage, overflow, and maintenance busy traffic measurements are available for the lines, trunks, and service circuits associated with the Coin First Coin Service feature. The details of these measurements can be found in Section 233-152-135, Traffic and Plant Measurements No. 3 ESS.

16. CHARGING

16.01 The various coin charging arrangements are specified for a No. 3 ESS office on ESS form 3302. Initial deposit and overtime deposit amounts and initial talk period and overtime period time are entered on this form. Refer to the TG-3 for details.

16.02 Toll charging is handled by means external to the No. 3 ESS by various methods depending on the system of connecting the calls to the toll network. Either a 3CL or TSPS supervises the coin collect or return functions and the amount of deposit. Manual billing records must be prepared or automatic message accounting entries made (TSPS) in the case of a nonsent-paid call.

SUPPLEMENTARY INFORMATION**17. GLOSSARY**

17.01 The following list identifies terms used in this document.

- Automatic Message Accounting (AMA)—The overall facility for automatically recording on paper tapes or magnetic tapes the numbers of the calling and called customers and other information required for automatically computing charges for customer-dialed calls.
- Automatic Coin Telephone Service (ACTS)—A subsystem of TSPS that uses announcements to notify the coin customer of the proper initial and overtime deposits and also monitors these deposits for the proper amounts. An operator is not called in unless a problem occurs.
- Customer Dial Pulse Receiver (CDPR).
- Coin Clean Up Routine (COIN) Program—The No. 3 ESS program that collects or returns coins from coin stations and idles these lines after coin disposal.
- Coin First—Coin service requiring an initial deposit before a call can be initiated.
- Ground Start—A line which requires a ground on the ring conductor to saturate the line ferrod as a request for dial tone.
- Initial Period—The initial unit of time for which a call is charged a predetermined amount.
- Loop Start—A line which requires a short on the tip and ring conductors to saturate the line ferrod as a request for dial tone.
- Local Charged—Coin and Message Register (LCLCHG) Program—The No. 3 ESS program that controls timing and charging for coin calls.
- Office Equipment Number (OEN).
- Operator Calls Program (OPER)—The No. 3 ESS program that is used to access an operator and supervise the operator trunk

for control signals required to process the call.

- Three-Digit Translation (XSL3DG) Program—The No. 3 ESS program that translates a prefix digit and/or first three digits into the routing and charging information required to process a call origination from a No. 3 ESS office.
- Completion of Incoming and Intraoffice Calls (TERM) Program—The No. 3 ESS program that serves to complete all calls terminating to lines in the No. 3 ESS office. It is used in reference to this feature to make coin present test after a collect action.
- Overtime Period—The talking period after the initial period requiring an additional deposit.
- Teletypewriter (TTY).
- Trunk and Line Test Panel—(TLTP).

18. REFERENCES

18.01 The following documents may be referred to for supplementary information concerning the Coin First Coin Service feature.

- PA-3H3XX—No. 3 ESS Office Data Tables Layout Specifications
- PR-3H175—Completion of Incoming and Intraoffice Calls (TERM) Program
- PR-3H150—Coin Clean Up Routine (COIN) Program
- PR-3H181—Three-Digit Translation (XSL3DG) Program
- PR-3H161—Local Charging-Coin and Message Register (LCLCHG) Program
- PR-3H164—Operator Calls Program (OPER)
- SD-3H411, FB 423—Coin Control Circuit
- SD-3H205, FB 428—Dial-Tone-First Coin Line Circuit
- SD-3H220—Universal Trunk Circuit

- Translation Guide—TG-3
- Input Message Manual—IM-3H300
- Output Message Manual—OM-3H300
- Section 506-100-120—1C/2C-Type Coin Telephone Set
- Section 506-410-400—Single Slot Coin Telephone Sets
- Section 233-135-105—Trunk and Line Test Panel
- Section 233-152-120—Teletypewriter
- Section 233-152-135—Traffic and Plant Measurements
- Section 233-154-130—Recent Change Users Guide
- Section 233-190-131—Dial-Tone-First Coin
- Section 233-190-203—Universal Emergency Service No. 911
- Section 233-190-023—Announcement Systems
- Section 233-190-010—No. 3 ESS System Description
- Section 233-121-120—Low Profile Combined Distributing Frame Description
- Section 233-060-ZZZ Series—Network Switching Practices