# COMMON LANGUAGE CIRCUIT IDENTIFICATION MESSAGE TRUNKS

	CONTENTS PAGE	principles provide a system standard that will be used in Business Information Systems (BIS) developed
1.	GENERAL 1	systems and in related applications.
2.	CODE DESCRIPTION AND MAKEUP 1	1.02 This section is reissued to reflect changes in the manner by which Message Trunks
3.	TRUNK NUMBER—CHARACTER POSITIONS	and Trunk Groups are identified. Since this reissue
	1 TO 4	covers a general revision, marginal arrows ordinarily used to indicate changes have been omitted.
4.	TRUNK TYPE—CHARACTER POSITIONS 5	
	TO 17	1.03 It is not the intent of this secton to provide definitions of traffic terms. The descriptions
	A. General	of the traffic terms used in this section are only
	D. Tarettia Class Channels Desiring F	to be used as an aid in understanding the codes.
	B. Traffic Class—Character Positions 5 and 6	Definitions and further clarification of these terms may be found in the Traffic Facilities Practices.
	and 6 2	may be found in the frame racincles fractices.
	C. Office Class (Traffic Switching Function)—Character Positions 7 and 8	1.04 Questions concerning these codes and requests for additional codes should be directed to
	3	the Common Language Department (Bell Laboratories BISP Area) via the appropriate Operating Company
	D. Traffic Use—Character Positions 9	Common Language Contact. Any changes in coding
	and 10 3	will require the approval of AT&T Company.
	E. Trunk-Type Modifier—Character Positions	1.05 For information concerning the identification
	11 to 17 5	of special service circuits, refer to Section
		795-402-100, Common Language Circuit Identification—
5.	OFFICE A (LOCATION IDENTIFICATION)—	Special Service Circuits.
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7.	OFFICE Z (LOCATION IDENTIFICATION)—	Message Trunks Code is a structured and
•	CHARACTER POSITIONS 31 TO 41 6	unique designation by which a particular trunk or
		trunk group may be identified.
8.	SELECTION OF OFFICE A AND OFFICE Z 6	
	entronomical de la companya del companya del companya de la compan	2.02 The Circuit Identification—Message Trunks Code is a variable length mnemonic code
1.	GENERAL	having a maximum of 41 characters. It consists of the code elements described in the remainder
1.01	This section describes the principles by which Message Trunks and Trunk Groups are	of this section. Specifically, these elements are as follows:
iden	tified through the use of the Common Language	an Ionows.

(a) Trunk Number—4 characters

Circuit Identification-Message Trunks Code. These

(b) Trunk Type—13 characters

Traffic Class—2 characters
Office Class—2 characters
Traffic Use—2 characters
Trunk-Type Modifier—7 characters

- (c) Location Identification (Office A)—11 characters
- (d) Type and Direction of Pulsing-2 characters
- (e) Location Identification (Office Z)—11 characters.
- 2.03 Frequently, there is a need to transfer message trunk identification elements from one functional area or application, or Company, to another. In such cases, where the interface is manual and where translation is required, the standard format of the Circuit Identification—Message Trunks Code elements will be as illustrated in Fig. 1. In the illustration, (A) represents an alpha character, (N) represents a numeric character, and (X) represents an alpha or numeric character or in some cases a hyphen.
- 2.04 The format of the Message Trunks Codes standard elements for an individual functional area or application may be dictated by user needs. For example, message trunk forecasters have traditionally used a format which has the Office A and Z location elements at the beginning of the code sequence, while circuit layout organizations have normally used a format which places the Office A and Z location elements at the end of the code sequence. The BIS Servicing and Estimating Systems and the BIS Trunks Integrated Records-Keeping System (TIRKS) process reflect the use of such functional formats.
- 2.05 It may not always be necessary to identify the 4-character Trunk Number of the Circuit Identification—Message Trunks Code. In these cases, the resultant 37-character code (maximum)

is known as the *Trunk Group Identification* Code.

- 2.06 To aid human understanding on input/output documents or display terminals, separation may be used between elements.
- 3. TRUNK NUMBER—CHARACTER POSITIONS 1
  TO 4
- 3.01 Trunk Number is the actual number used to identify a particular trunk. The Trunk Number Code is a variable length, 1 to 4 character, numeric code.
- 3.02 Trunk Number Codes for intertoll trunks and toll connecting trunks to a number 4 ESS machine are to be assigned according to the numbering plan outlined in Section 682-100-018, Circuit Layout Record Cards, Intertoll Trunks, and Miscellaneous Telephone Circuit Numbering. All other trunks are to be assigned Trunk Numbers according to local options, but within the 1 to 4 character format.

#### 4. TRUNK TYPE—CHARACTER POSITIONS 5 TO 17

#### A. General

- **4.01** Trunk type information consists of the following:
  - (a) Traffic Class
  - (b) Office Class
  - (c) Traffic Use
  - (d) Trunk-Type Modifier.

### B. Traffic Class—Character Positions 5 and 6

4.02 Traffic Class is any of the individual classifications into which a message trunk

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	TRUNK	TRUNK TYPE				LOCATION	TYPE &	LOCATION	
	NUMBER	TRAFFIC CLASS	OFFICE CLASS	TRAFFIC USE	TRUNK-TYPE MODIFIER	(OFFICE A)	DIRECTION OF PULSING	IDENTIFICATION (OFFICE Z)	
CHARACTER POSITION	1-4	5-6	7-8	9-10	11-17	18-28	29-30	31-41	
CHARACTER SET	NNNN	AA	xx	AA	xxxxxx	AAAAAA XXXXX	XX	AAAAA XXXXX	

Fig. 1—Format of Circuit Identification—Message Trunk Code

may be categorized. The *Traffic Class Code* is a 2-character, alpha-mnemonic code.

**4.03** Traffic Class Codes are described in Table A. The codes are as follows:

AF—Alternate Route Final

IF-Individual Final

DF—Direct Final (Non-Alternate Route)

FG—Full Group

PH-Primary High Usage

IH—Intermediate High Usage

TR—Trap

MI—Miscellaneous

#### C. Office Class (Traffic Switching Function)—Character Positions 7 and 8

- 4.04 Office Class is the classification of the terminal offices (Office A and Office Z) of a message trunk. (It may include both switching machines and/or switchboards.)
- 4.05 The Office Class Code is a 2-character mnemonic code, character set XX. The first character represents the A office class and the second character represents the Z office class. Office Class Codes for the Message Network are as follows:
  - 1—Regional Center Function
  - 2—Sectional Center Function
  - 3—Primary Center Function
  - 4—Toll Center Function
  - 5—End Office Function

0(zero)—Local Tandem Function

C—Concentrator Function

**Note:** A Local Tandem Function (Class 0) does not handle toll traffic. Centrex switching machines are considered Class 5 Offices.

- 4.06 Switching machines generally perform more than one traffic switching function. Therefore, when considering the Office A class or Office Z class of a trunk group, the office class selected is on the basis of the highest traffic switching function performed for the traffic on the group at each office.
- 4.07 When a terminal office (Office A or Office Z) is represented by a nonswitching entity (eg, an information desk, repair desk, etc), a hyphen is entered in character position 7 and/or 8, as appropriate.

#### D. Traffic Use—Character Positions 9 and 10

- **4.08** Traffic Use is any one of the categories of use into which message trunks may be classified. The Traffic Use Code is a 2-character, alpha-mnemonic code.
- **4.09** Traffic Use Codes may be grouped into the following categories:
  - (a) Intertoll
  - (b) Toll Connecting
  - (c) End-to-End Toll
  - (d) Interlocal
  - (e) Auxiliary Services
  - (f) Centrex
  - (g) Miscellaneous.
- 4.10 The Traffic Use Codes are described in Table B. Table C gives the correlation of Traffic Class to Traffic Use and may be used to find the authorized Traffic Class Codes for each Traffic Use. The various categories of Traffic Use are described in 4.11 through 4.17.
- **4.11** Intertoll: Trunks in this category interconnect offices with an Office Class of one to four inclusive and are further classified as primary or secondary intertoll.
  - (a) **Primary:** These are trunks which interconnect switching machines with an Office Class of one to four inclusive with or without switchboard

arrangements multipled (or bridged) at either end. The Primary Intertoll Code is IT.

(b) Secondary: These are trunks which interconnect toll switching machines and manually operated toll or assistance switchboards for the routing of operator completed traffic. The Secondary Intertoll Codes are as follows:

LW—Leave Word (Call Back, Operator Type 11XX)

OA—Operator Assistance (121)

OJ-Operator Junctor

TT-Toll Tandem

or intracity) which interconnect end offices (Class 5) and the intertoll DDD network (Office Class 1 to 4). These trunks may, however, carry varying amounts of local and multimessage unit traffic. For 2-way combination trunks, eg, CAMA in one direction and Toll Completing in the other direction, the Traffic Use Code field (character positions 9 and 10) will contain the use of the Office A to Office Z direction of traffic. The Traffic Use Code for the Office Z to Office A direction of traffic may be placed in the first two character positions (11 and 12) of the Trunk Type Modifier field. Toll Connecting Codes are as follows:

(a) Toll Access:

CA-CAMA

DD-DDD Access

MN-Manual

RC—Recording Completing

SP—Traffic Service Position

(b) Toll Completing:

OO-Operator Office

TC—Toll Completing

TM—Toll Completing and Toll Switching Combined

TS—Toll Switching.

4.13 End-to-End Toll: This is a trunk group provided to handle toll calls between local end offices (Class 5). This group may carry some local, multimessage unit, or extended area service traffic. The End-to-End Toll Code is TE.

4.14 Interlocal: Trunks in this category interconnect: subscribers in the same end office (Class 5); end offices (Class 5); local tandems (Class 0) or toll tandems acting as local tandems; end offices (Class 5) and toll tandems (any Class) for the routing of local and/or multimessage unit traffic only. Interlocal codes are as follows:

(a) Direct:

IA-Intraoffice

IE-Interoffice

IM-Intermarker Group

JT—Junctor

(b) Tandem:

MT-Intertandem

TG—Tandem Completing

TO—Tandem Originating.

4.15 Auxiliary Services: These are trunk groups which provide selected customer or operator services and which terminate at switchboards, desks, or announcement systems. The Auxiliary Service Codes are as follows:

DA—Directory Assistance (Local)

IN-Information (Directory Assistance-Toll)

IR-Intercept

OF-Official

RR-Rate and Route

RS—Repair Service

TI—Time

WE-Weather

4.16 Centrex: Trunks in this category interconnect Centrex switching machines with message network switching machines or attendant equipment. These trunks can be identified in either the message trunk format or the special service circuit format (Section 795-402-100) depending upon local administration. The Centrex Codes are as follows:

AD-Attendant

AI—Automatic Identified Outward Dialing

DI-Direct-In-Dial

DO-Direct-Out-Dial

**Note:** For 2-way Centrex Trunks, the Traffic Use field will contain the Traffic Use Code of the Office A to Office Z direction of traffic. The Traffic Use Code for the Office Z to Office A direction of traffic may be placed in the Trunk Type Modifier field.

4.17 Miscellaneous: Trunks in this category are generally provided for traffic administrative reasons, plant maintenance and administrative reasons, or do not fall into one of the other categories. Miscellaneous Traffic Use Codes are as follows:

AL—Alarm

AN—Announcement (Machine)

CB—Coin Box

CD—Customer Dial Instruction

CP—CAMA Office to CAMA Operator Desk

CS—Coin Supervision

CZ-Coin Zone

DS-Dial Tone Speed

EM—Emergency (911)

IP—Interposition

MA-Manual Assistance

MB—Mobile Radio

MI-Other Miscellaneous

NT-No Test

OW—Order Wire

PC—Peg Count (PC, Usage Ofl, etc)

PD—Plant Department

PS—Permanent Signal

SA—Speed of Answer

SC-Service Code

SO—Service Observing

TA-Toll Station

TK—Test Desk

TP-TSP Unit to the TSP Position

VC-Vacant Code

VR—Verification

## E. Trunk Type Modifier—Character Positions 11 to 17

4.18 The *Trunk Type Modifier* is used at the discretion of the Operating Telephone Companies to supply supplementary information to provide positive identification for certain trunk functions. Modifiers may describe, for example, such details of operation as extended area, coin, noncoin, one-party, two-party, flat rate, message rate, etc.

4.19 The Trunk Type Modifier Code, when used, is a variable length (1 to 7 character) code. It may consist of alpha or numeric characters or any combination of alpha and numeric characters.

## 5. OFFICE A (LOCATION IDENTIFICATION)—CHARACTER POSITIONS 18 TO 28

5.01 Office A is identified by the appropriate 11-character Common Language Location Identification (CLLI) Code. Refer to Section 795-100-100 for a description of the CLLI Code.

Sections 795-101-100 through 795-180-100 contain listings of CLLI Codes by State, Canadian Province or Territory, or Country.

- **5.02** Refer to Part 8 for details concerning the selection of Office A and Office Z.
- 6. TYPE AND DIRECTION OF PULSING—CHARACTER POSITIONS 29 and 30
- 6.01 Type and Direction of Pulsing reflects the type and direction of pulsing or signaling (other than supervisory signals) between the terminals of a circuit.
- 6.02 The Type and Direction of Pulsing Code is a 2-character, alpha-mnemonic code. The first character represents the type of pulsing outgoing from Office A to Office Z, and the second character represents the type of pulsing outgoing from Office Z to Office A. A hyphen may appear in either character position and indicates that no signaling function is performed. Codes are as follows:
  - A-Automatic
  - C—Common Channel Interoffice Signaling (CCIS)
  - D—Dial
  - F-Frequency Shift
  - J—TOUCH-TONE

    (12 button)
  - K—TOUCH-TONE (16: button)
  - M-Multifrequency
  - P-Panel Call Indicator (PCI)
  - R-Ringdown
  - S-Straightforward
  - T-Dial Selective Signaling, 2-Tone
  - V—Revertive

- - No Operation
- 6.03 Table D gives an explanation of each type of pulsing or signaling. Examples are as follows:

One-way Multifrequency  $(A \rightarrow Z)$  M—One-way Dial,  $(A \rightarrow Z)$  D—

Two-way, Ringdown, (A≠Z) RR

Two-way Pulsing, Dial (A $\rightarrow$ Z), Multifrequency (Z $\rightarrow$ A) DM

Two-way Multifrequency (A ≠ Z)

MM

- 7. OFFICE Z (LOCATION IDENTIFICATION)—CHARACTER POSITIONS 31 TO 41
- 7.01 Office Z is identified by the appropriate 11-character Common Language Location Identification (CLLI) Code. Refer to Section 795-100-100 for a description of the CLLI Code. Sections 795-101-100 through 795-180-100 contain listings of CLLI Codes by State, Canadian Province or Territory, or Country.
- 8. SELECTION OF OFFICE A AND OFFICE Z
- **8.01** A *one-way trunk group* (originates traffic from one terminal only) requires that the originating terminal be designated Office A.
- 8.02 A two-way trunk group (originates traffic from either terminal) requires that the terminal with the lower alphameric CLLI Code be designated Office A.
- 8.03 Divided trunk groups as described in Traffic Facilities Practice Division G, Section 2-d (5), may have subgroups of both one-way and two-way trunks. These subgroups are considered separately when determining which terminal is to be designated Office A or Office Z, as follows:
  - (a) The one-way subgroups of a divided trunk group require that the originating terminal be designated Office A.

- (b) The two-way subgroups of a divided trunk group require that the terminal with the lower alphameric CLLI Code be designated Office A.
- 8.04 Network administrative coordination must exist between terminals in order to establish the selection order of the trunks.

#### **TABLE A**

#### TRAFFIC CLASS CODES

#### CODE

#### DESCRIPTION

#### FINAL

- AF Alternate Route Final: A group provided as the "last resort" path in the final route chain. The group carries route-advance and/or switched overflow from high usage trunk groups. It may also carry calls which have not been routed over a high usage group of any type and which instead are first routed over the final group.
- IF *Individual Final*: A group that parallels the AF group and functions like a high usage group. It overflows directly to the AF group and is provided for the service protection of specified items of first routed traffic.

#### NONALTERNATE ROUTE

DF Direct Final: This group is commonly referred to as a "nonalternate" route trunk group and does not receive overflow. It is a group between two offices provided as the only route for the item of traffic it carries.

#### **FULL GROUP**

FG Full Group: This is a trunk group that would be high usage in the basic routing pattern but for some reason (service advantage or equipment limitations) is engineered for low incidence of blocking and is not provided with an alternate route.

#### **HIGH USAGE**

- PH Primary High Usage: A trunk group provided to carry only first routed or primary traffic between any two offices whenever the volume of traffic makes direct routing economical. It is designed to overflow a predetermined amount of offered load to an alternate route in the busy hour.
- IH Intermediate High Usage: A trunk group provided to carry route-advance and/or switched overflow traffic and usually some first route traffic between any two offices, whenever the volume of traffic makes direct routing economical. The group is designed to overflow a predetermined amount of offered load to an alternate route in the busy hour.

#### **OTHER**

- Trap: Intertoll trap circuits are trunks added to a high usage group in order to route a specified item of traffic on a final basis. The specified item of traffic has access to all other trunks in the high usage group and has sole access to the trap circuits. The specified item of traffic does not have an alternate route beyond the augmented high usage groups. Trap circuits are connected at the Control Switching Point.
- MI Miscellaneous: A group that is provided for Traffic administrative reasons, Plant maintenance and administrative reasons, or a group that does not fall into one of the other categories. For the types included in this category, see 4.17.

#### TABLE B

#### **TRAFFIC USE CODES**

#### CODE

- AD Attendant: A trunk group that interconnects a Centrex switching machine and a customer's attendant equipment and used to handle assistance type traffic to the customer's attendant.
- AI Automatic Identified Outward Dialing: A trunk group that connects a Centrex (CU) to a switching machine to identify outward dialed calls by the line number of the originating station.
- CA CAMA: A trunk group which carries customer dialed 7- or 10-digit toll calls to centralized automatic message accounting equipment where recording and timing of a connection are done automatically in addition to the switching function. Either CAMA operators or ANI may be used for number identification.
- DD Access: A trunk group which carries customer dialed 7- or 10-digit toll calls from end offices (Class 5) directly to toll switching machines (Class 1-4) using Local Automatic Message Accounting (LAMA) equipment for recording and timing of the call.
- DI Direct-In-Dial: A trunk group from a switching machine to a Centrex CU for completion of direct-in-dial traffic.
- DO *Direct-Out-Dial*: A trunk group from a Centrex CU to a switching machine for direct station access to the world.
- IA *Intraoffice:* A trunk group provided to handle calls between subscribers served by the same switching machine. No tandem traffic routes over this group.
- IE Interoffice: A trunk group provided to handle local and/or multimessage unit calls between end offices (Class 5) in the same or different buildings. No tandem traffic routes over this group.
- IM Intermarker Group: A trunk group that interconnects two No. 5 crossbar marker groups in the same building by Intermarker Group Operation.
- IT Intertoll: Trunks in this category interconnect switching machines with an Office Class of 1 to 4 inclusive with or without switchboard arrangements multipled (or bridged) at either end.
- JT Junctor: An intraoffice trunk group arrangement in an end office (Class 5) for such purposes as providing coin or billing supervision.
- LW Leave Word (Call Back, Operator Type 11XX): Trunk groups provided to perform special operator functions; such as, universal, call back, conference, etc. The access code for these groups is 11XX.
- MN *Manual:* A trunk group that interconnects manual end offices (Class 5) and switching machines or switchboards.

#### **TABLE B (Cont)**

#### CODE

- MT Intertandem: A trunk group that interconnects switching machines with an Office Class (Traffic Switching Function) of zero. Local tandem switching machines include those end offices (Class 5) serving both local and tandem functions.
- OA Operator Assistance (Inward Operator): A trunk group provided from a switching machine to a switchboard or desk which is accessed by operators to perform assistance functions. The access Code is 121.
- OJ Operator Junctor: A trunk group provided from a switchboard to a No. 1 or No. 5 crossbar unit in the same building over which the operator gains access to an outgoing trunk of the crossbar office (Toll only or a combination of Toll and Local).
- OO Operator Offices: A 2-way trunk group between community dial tributary offices and their operator offices which is used to complete outward and inward toll traffic. It generally constitutes the sole means that the CDO customer has of reaching an operator for any kind of assistance or emergency calls. (Outward traffic is operator handled; inward traffic can be machine and/or operator handled.)
- RC Recording Completing: A trunk group from an end office (Class 5) to an outward toll and/or assistance position. These groups carry traffic which requires the operator to complete the call.
- SP Traffic Service Position: A trunk group that carries customer-dialed traffic from an end office (Class 5) to a toll switching machine and is equipped to bring in an operator to aid in call completion.
- TC Toll Completing: A trunk group from a switching machine of Class 4 or higher rank to an end office (Class 5) regardless of location.
- TE End-to-End Toll: A trunk group provided to handle toll calls between local end offices (Class 5). This group may carry some local, multimessage unit, or extended area service traffic.
- TG Tandem Completing: A one-way or two-way trunk group from a local tandem switching machine to an end office (Class 5). Local tandem switching machines include those end offices used as tandem equipment arrangements.
- Toll Completing and Toll Switching Combined: A trunk group that combines the functions of Toll Completing and Toll Switching, ie, a trunk group from a combination of a switching machine (Class 4 or higher rank) and switchboard to a dial end office (Class 5).
- TO Tandem (Originating): A trunk group from an end office (Class 5) to a local tandem switching machine. Local tandem switching machine include those end offices used as tandem arrangements. Special Purpose Intermarker Groups are not considered as part of tandem arrangements.
- TS Toll Switching: A trunk group from a switchboard to an end office (Class 5) used to complete delayed outward calls, inward calls, and assistance traffic.
- TT Toll Tandem: A trunk group provided from a toll switchboard to a toll switching machine for operator access to the toll network.

TABLE C

CORRELATION OF TRAFFIC CLASS TO TRAFFIC USE
FOR ALL MESSAGE TRUNKS

TRAFFIC USE CATEGORY	TRAFFIC CLASS								
	CODE	AF	IF	DF	FG	PH	ŧН	TR	MI
Intertoll			T. 1						
Primary	$\mathbf{IT}$	X	<b>X</b>	X	X	X	X	X	
Secondary	LW	X		X	X	X			
	OA	X		$\mathbf{X}$	X	X			
	OJ	$\mathbf{X}$		$\mathbf{X}$	X	$\mathbf{X}_{\cdot}$			
	$\mathbf{TT}$	$\mathbf{X}$	•	X	X	X			
Toll Connecting									
Toll Access	$\mathbf{C}\mathbf{A}$	$\mathbf{X}$		X	X	$\mathbf{X}$			
	$\mathbf{D}\mathbf{D}$	$\mathbf{X}$	X	$\mathbf{X}$	$\mathbf{X}$	$\mathbf{X}$	$\mathbf{X}$		
	MN			X					
	$\mathbf{RC}$	X		X	$\mathbf{X}$	X	$\mathbf{X}$		
	SP	X		X	X	$\mathbf{X}$	X		
Toll									
Completing	00			X					
· · · · · · · · · · · · · · · · · · ·	TC	X		• X	X	X	$\mathbf{X}^{-}$	¥	
	TM	X		X	X	X	X		
	TS	X		X	X	X			
End-to-End Toll	TE			X	X	X			
Interlocal									
Direct	$\mathbf{IA}$	$\mathbf{X}$		$\mathbf{X}$	$\mathbf{X}$	$\mathbf{X}$	$\mathbf{X}$		
•	ΙE	$\mathbf{X}$		X	X	X	X		
	IM	X		X					
	m JT	X		X	X	X			
Mars 3 cm	MT	X	X	X	X	X	X		
Tandem	$\mathbf{T}\mathbf{G}$	X	Λ	X	X	X	X		
	TO	X	X	X	X	X	X		
	<del></del>		A		<del></del>	<del></del>		<del></del>	
Auxiliary Services	DA	X		X	X	X			
	IN	X		X	X	X			
	IR	X		X	X	X			
	OF	X		X	$\mathbf{X}$	X			
•	RR	$\mathbf{X}$		X	$\mathbf{X}$	$\mathbf{X}$			
	RS	$\mathbf{X}$		X	X	X			
	$\mathbf{TI}$	$\mathbf{X}$		X	X	$\mathbf{X}$			
•	WE	X	<u> </u>	X	X	X			
Miscellaneous	*	X	X	X	X	X		*	X

Special Service Circuits Which May Use The Message Format

Centrex AD X

Centrex AD X
AI X
DI X X X X X
DO X X X X X

<sup>\*</sup>See 4.17.

#### **TABLE D**

#### TYPE AND DIRECTION OF PULSING OR SIGNALING CODES

#### (OTHER THAN SUPERVISORY SIGNALS)

#### CODE

- A Automatic: The seizure of a trunk at a dial switching center automatically lights a lamp at the distant switchboard as a connect signal, and release of the trunk gives the disconnect signal.
- C Common Channel Interoffice Signaling (CCIS): A signaling arrangement between processor equipped switching systems which separates the signaling path from the message transmission path.
- D Dial: A system of pulsing in which the digits are transmitted to the called end. The number of pulses, one to ten, corresponds to the digits one to zero.
- Frequency Shift: A system of pulsing where identity of each digit is determined by changing the frequency of the detected tone. The frequency of the detected tone is changed by the on-hook or off-hook conditions of the loop of E & M leads at the transmitting end.
- J TOUCH-TONE (12 button): A signaling system which uses combinations of tones originating in a 12-button TOUCH-TONE unit.
- K TOUCH-TONE (16 button): A signaling system which uses the combinations of tones originating in a 16-button TOUCH-TONE unit.
- M Multifrequency: A system of pulsing where the identity of digits is determined by two frequencies out of five. A combination of a sixth frequency is used to provide priming and start signals.
- P Panel Call Indicator (PCI): A system of dc pulsing in which each digit is transmitted as a series of four marginal and polarized impulses (originally developed and used in connection with panel call indicator).
- R Ringdown: Use of a ringing voltage applied to a connection automatically or as a result of key operation by an operator or automatically for the purpose of transmitting supervisory signals between two points in a connection.
- S Straightforward: Insertion of a cord in a trunk jack automatically lights a lamp at the distant switchboard as a connect signal and removal of the cord gives the disconnect signal. (Usually an audible zip-zip tone is transmitted to the originating end when the trunk is in an answered condition at the receiving end.)
- Dial Selective Signaling, Two-Tone: Used on multipoint circuits. Two audio tones of 600 and 1500 Hz are controlled by a dial to transmit the desired digits. At the far end, the tones activate a selector which decodes and recognizes a predetermined combination of digits.
- V Revertive: A system of dc pulsing in which intelligence is transmitted in the following manner:

#### **TABLE D (Cont)**

#### CODE

- (a) The equipment at the originating location presets itself in a condition representing the number of pulses required and in a condition to count the pulses received from the terminating location.
- (b) The equipment at the terminating location transmits a series of pulses by the momentary grounding out of its battery supply until the originating location breaks the dc path to indicate that the required number of pulses has been counted.
- No Operation: A hyphen (-) is to be entered in character position 29 or 30, as appropriate, when no signaling function is performed.