

**ICCF
RECOMMENDED NOTIFICATION PROCEDURES TO INDUSTRY
FOR CHANGES IN ACCESS NETWORK ARCHITECTURE**

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**RECOMMENDED NOTIFICATION PROCEDURES TO INDUSTRY
FOR CHANGES IN ACCESS NETWORK ARCHITECTURE**

The following are recommended methodologies for Local Exchange Carriers to provide for timely notification to the Industry of changes in their access network architecture.

These recommended methodologies should apply to any access network reconfiguration which affects Access Customer routing or rating of calls such as:

- Tandem homing arrangements.
- Switch reconfigurations affecting rating or routing.
- New or changed NXX.
- New or changed NPA.
- Changes in rate centers.

Attachment A is a flow chart of the recommended notification procedures to the Industry for changes in access network architecture. Each of the steps in the flow chart is explained in the paragraphs that follow.

These procedures were prepared for the situation where an Independent Telephone Company (ITC) makes an access network reconfiguration which affects a Bell Operating Company (BOC). The same procedures apply to all access network reconfigurations that involve two ITCs, two BOCs, within an individual ITC or BOC, or between an ITC and BOC.

1. BUSINESS RELATIONSHIPS

- a. Both the ITC and the BOC are responsible for their individual business relationship with Access Customers.
- b. The company initiating the change (in this case, the ITC) is responsible for notification as outlined herein to the Industry of changes in its network architecture.

2. ITC REQUEST TO BOC FOR INFORMATION

At the time a decision is made to make a change, the ITC initiating the change writes BOC to:

- a. Preliminarily advise BOC of its planned changes.
- b. Advise BOC of estimated due date for each change, even though it may not have negotiated due dates with Access Customers.

- c. Determine if BOC has any problems with completing the change in the time frames suggested by the ITC.
- d. Request that BOC provide the ITC with contact information for all Access Customers that deliver traffic to the affected BOC tandem when the request involves a tandem homing arrangement or other changes that require Access Customer contact. The ITC should not request a listing of Access Customers from their State PUC/PSC, for the purpose of notification, as this would leave out many non-IC Access Customers not shown on the PUC/PSC list.

3. BOC RESPONSE TO ITC REQUEST FOR INFORMATION

In response to ITC's request for information, BOC responds in writing to ITC to:

- a. Provide ITC with a list of Access Customers that deliver traffic to the affected BOC tandem. Access Customers contact name and telephone number should be shared if available.
- b. Advise ITC if BOC has any problem with completing the changes in the time frame recommended by ITC and suggest alternate dates if appropriate.

4. ITC PRELIMINARY NOTIFICATION TO ACCESS CUSTOMER

ITC contacts in writing each Access Customer affected by change as soon as possible as indicated below. For cutover of an access or Feature Group B tandem, it is recommended that preliminary notification occur twenty months in advance of the estimated effective date. Specific intervals for reflecting this information in the Routing Data Base System (RDBS) are contained in Attachment B.

- a. Preliminarily advise Access Customer of desired change.

ITC can obtain Access Customer contact information through its normal relationship with the Access Customer, BOC and national or state telephone associations.

- b. Negotiate desired due date with Access Customer for access service changes.

Minimum time intervals for network changes are included in Attachment B. These intervals should be from the time the proposed changes would be entered into the Bellcore Routing Data Base System (RDBS).

The date recommended by an ITC should allow the minimum interval shown in Attachment B to be met.

If all Access Customers, ITCs and BOCs affected by the change cannot agree on a change date, a different date may be negotiated by the individual Access Customers, ITC and BOC as stated in paragraph 10.c.

If an ITC desires a date that does not allow the minimum interval to be met, all Access Customers, ITCs and BOCs affected by the change must agree on a date for the change.

5. ACCESS CUSTOMER RESPONSE TO ITC'S PRELIMINARY NOTIFICATION

Access Customers advise ITC if they have any problem with completing the changes in the time frame suggested by ITC, and suggest alternate dates if appropriate.

6. ITC FORMAL WRITTEN NOTIFICATION TO BOC AND ACCESS CUSTOMERS

ITC reviews the information it has received from BOC and Access Customers, and:

a. Writes BOC to:

1. Formally advise BOC as to what is being changed, added or disconnected.
2. Provide the effective date and time for each change.
3. Authorize BOC to make the necessary changes.
4. State that it has notified all Access Customers affected by changes of recommended effective date. Letter should list:
 - All affected Access Customers.
 - Effective date and time for each Access Customer.
 - Reasons for any Access Customer taking exception to recommended effective date and time.
 - If applicable, date and time end office NXX blocking should occur at affected BOC tandem.
 - If applicable, provide indication for permissive routing with end date and time.
5. Where appropriate, request the BOC to enter the necessary information into RDBS to formally notify the Access Customers of the pending changes. (See paragraph 7.a. following).
6. Provide ITC contact name and telephone number for any questions.

b. Writes Access Customers to:

1. Formally advise the FG B or D Access Customer as to what is being changed, added or disconnected, including NPA/NXXs, associated end office and old and new tandem CLLITM Codes, new homing arrangements and any other information deemed necessary.
2. Provide the effective date and time for each change.
3. Where applicable, provide date and time when blocking should occur.

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4. Where applicable, provide indication for permissive routing with end date and time.
5. Provide ITC contact name and telephone number for any questions.

The above should be communicated to the BOC and Access Customers to allow sufficient time for planning, ordering of access services, construction, updating of RDBS, etc., to proceed on schedule.

7. RDBS, BRADS AND NECA TARIFF FCC NO. 4 UPDATE RESPONSIBILITY

a. Routing Data Base System (RDBS)

ITC formally notifies all affected Access Customers of the pending changes. This notification is accomplished by ITC or BOC through updates to the Bellcore RDBS as follows:

1. ITC provides its own "on-line" access to RDBS (Bellcore will provide the necessary training to ITC to accomplish this. A letter of release by BOC and a letter of acceptance by ITC are required by Bellcore before "on-line" access will be allowed.), or
2. ITC channels its information to BOC, where, if mutual agreement exists, it is input to RDBS for ITC. Information required by BOC is contained in Attachment C, and includes RDBS Input Records such as SWITCHING ENTITY RECORD (SRD), SWITCHING ENTITY - OFFICE FUNCTIONALITIES (SOF), SWITCHING ENTITY - NETWORK SERVICES (SNS), DESTINATION CODE RECORD (DRD), RATE CENTER LOCALITY (LOC), and RATE CENTER RECORD (RRD). BOC should be responsible for inputting the data into RDBS as provided by ITC.

The ITC is responsible for providing the updates to the BOC in sufficient time to meet the minimum intervals outlined in Attachment B.

b. BELL RATING ADMINISTRATION SYSTEM (BRADS)

If a change in rating information is needed, these changes must be sent to the Bellcore Traffic Routing Administration (TRA) group. The ITC should use normal channels to report this information, e.g., either directly to TRA or through agreements with a BOC.

c. NECA TARIFF FCC NO. 4

ITC and BOC should update NECA Tariff FCC NO. 4 to reflect changes in wire center and billing percentage information resulting from network rearrangements. The effective dates of changes made in the NECA Tariff FCC No. 4 should coincide as closely as possible with the effective dates input to the Local Exchange Routing Guide (LERG), a report of the Bellcore RDBS.

8. RECEIPT OF FORMAL RDBS NOTIFICATION BY ACCESS CUSTOMERS

- a. Network change information is available through access to RDBS, or through RDBS output that is designed to identify such changes. RDBS output is available from Bellcore via:
 1. On-line access to RDBS.
 2. LERG magnetic tape issued monthly.
 3. LERG microfiche issued monthly.
 4. LERG paper copy (8 volumes for entire United States) issued quarterly in March, June, September and December.
- b. Emergency Notifications (ENs) are available through Bellcore for emergency situations where notification of any new code, rating change or hard to reach code must be made in less than 45 days. Emergency notification sheets are published on an as needed basis and distributed to all emergency notification subscribers.

9. BLOCKING NOTIFICATION TO ACCESS CUSTOMERS

Where blocking is to occur, BOC issues a blocking notification in writing to Access Customers.

- a. This notification should be an "All Users of Access" letter or a letter to individual FG B or D Access Customers and should provide the following information:
 1. Tandem blocking date and time identified in paragraph 6.a.(4) preceding.
 2. NPA/NXXs involved.
 3. A permissive routing notation indicating that traffic can continue to be routed through the losing tandem/end office for the annotated period which allow troubles encountered during cutover to be corrected.
 4. BOC contact name and telephone number for any questions. A sample notification letter is provided in Attachment D.
- b. Issuance of this blocking notification letter does not replace the requirement on ITC to formally notify Access Customers as indicated in paragraphs 6. and 7. preceding.

10. PROBLEM RESOLUTION

When problems that would delay the effective date for the proposed change (such as equipment changes, discrepancies between written notification and RDBS, or other actions) occur after the formal notification has been entered into RDBS, the following steps should be taken:

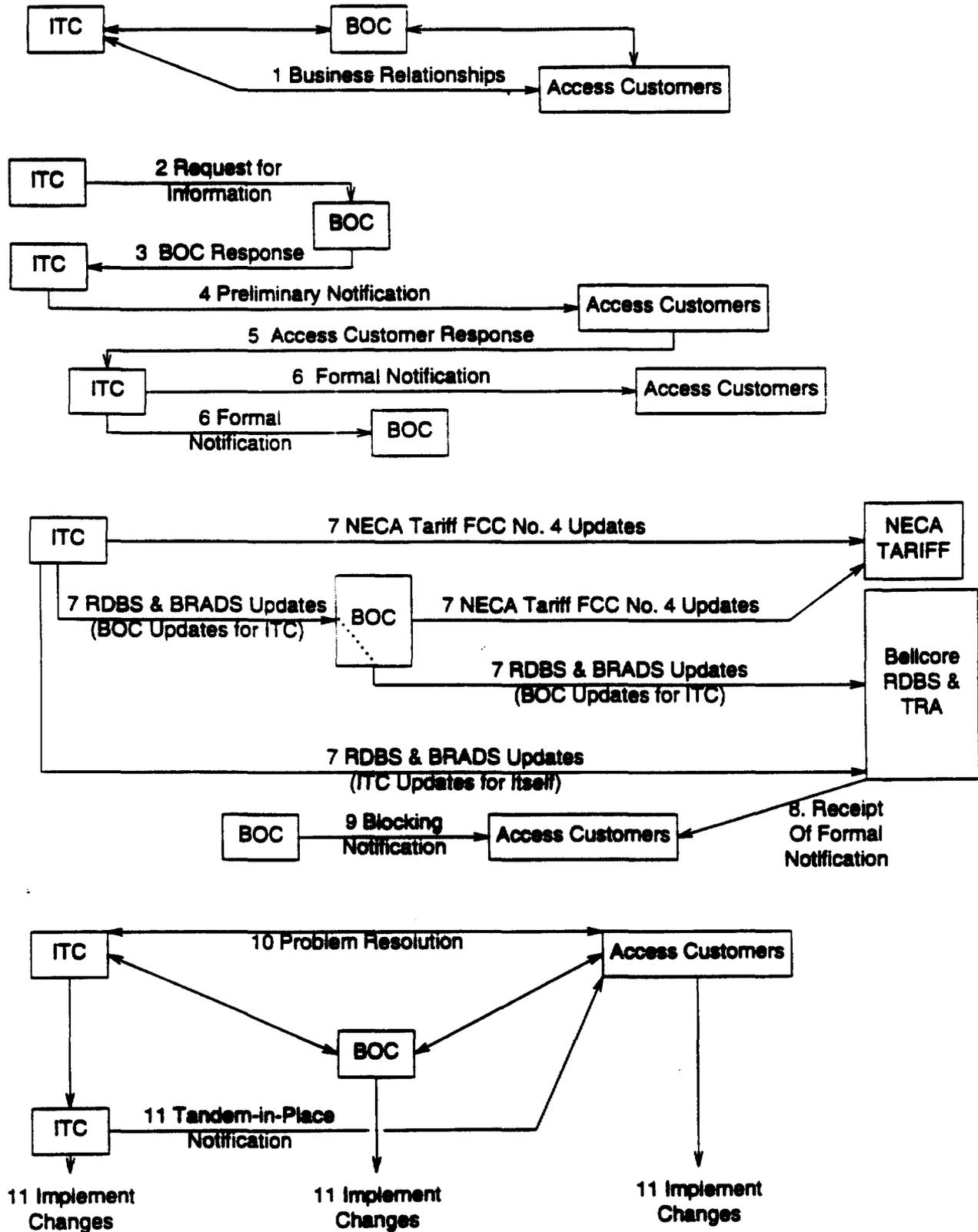
- a. The BOC, Access Customer or ITC experiencing the problem should first contact the ITC that initiated the network rearrangement and discuss the problem.

- b. The ITC that initiated the network arrangement should coordinate with all involved Access Customers and BOC to resolve the issue.
- c. If a change in the effective date for the network rearrangement is necessary, the notification procedures described in the preceding paragraphs should be repeated as appropriate to institute a new effective date. This may include negotiated temporary alternate routing schemes on an individual case basis where equipment, facilities or other problems are encountered.

11. IMPLEMENTATION OF ROUTING CHANGES

For tandem homing rearrangements, ITC with a new tandem should notify all Access Customers that the new tandem is in place and operational, for testing.

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RECOMMENDED NOTIFICATION PROCEDURES TO INDUSTRY
FOR CHANGES IN ACCESS NETWORK ARCHITECTURE
-FLOW CHART-



(NUMBERS INDICATE PARAGRAPH OF TEXT)

RDBS (LERG) MINIMUM TIME INTERVALS

1. **At least six months in advance of the effective date:**
 - All activity associated with a new or discontinued NPA or a change in the present boundaries of an existing NPA.
 - Finalized information on cutover of an access or Feature Group B tandem.
 - Finalized information on replacement of an end office with the latest equipment.
 - Changes in homing arrangements including SS7 interconnect relationships, downgrade or update of an existing office to access tandem or Feature Group B functions.
2. **At least three months in advance of the effective date: [This document establishes a minimum CO Code activation interval without regard to network infrastructure. There should be understanding that interconnection arrangements and facilities need to be in place prior to activation of a code. Such arrangements are outside the scope of these guidelines.]**
 - Changes in office capability, e.g., Feature Group changes and/or SS7 functionality
 - New or changed rate centers and localities.
 - Rate center V-H coordinate changes. **NOTE:** If the V-H coordinate change is a correction to an existing rate center, immediate notification is required.
 - All Destination Code changes, i.e., modifications involving new or changed rate centers and localities and rate center V-H coordinates.
3. **At least 45 days in advance of the effective date: [This document establishes a minimum CO Code activation interval without regard to network infrastructure. There should be understanding that interconnection arrangements and facilities need to be in place prior to activation of a code. Such arrangements are outside the scope of these guidelines.]**
 - All Destination Code changes, i.e., modification, disconnection, or establishment of new Central Office Codes (COCs), except activity listed in Item 2 above (3 months) and Item 5 below.
 - All Destination Code changes, i.e., modifications involving existing Central Office Codes (COCs) moving or rehoming to a different end office or access tandem. (except as listed in Item 1 above.)
 - All Destination Code changes related to changes in homing arrangements including SS7 interconnect relationships, downgrade or update of an existing office to access tandem or Feature Group B functions.

- All new codes (not currently assigned in RDBS except codes that are vacant because of an NPA split) in a new switch.
4. Applicable code activity that is reported in less than the above time frames should be avoided and may result in the following situations occurring:
- Credit cards that may not be able to go through for processing.
 - Call failure.
 - Hard to reach locations.
 - Network blockage.
5. Code activity involving multiple changes (modifications) to a COC, when all the changes are to become effective on the same date, should be reported using the time intervals for the activity that has the greatest required time interval. [This document establishes a minimum CO Code activation interval without regard to network infrastructure. There should be understanding that interconnection arrangements and facilities need to be in place prior to activation of a code. Such arrangements are outside the scope of these guidelines.]

ROUTING DATABASE SYSTEM (RDBS) INPUT RECORDS

ATTACHMENT C

Page 1 of 3

RESP CODE: _____ ROUTING DATABASE SYSTEM CURRENT DATE: _____

ACTN: _____ SWITCHING ENTITY RECORD (SRD) PREV VIEW: _____
 STATUS: _____ NEXT VIEW: _____
 EFF DATE: _____

SW IDENT
 SWITCH - TOWN: _____ ST: _____ BLDG: _____ UNIT: _____ EQPT TYPE: _____
 VC: _____ HC: _____ IDDD: _____

STREET: _____ CITY: _____ ST: _____ ZIP: _____

LATA: _____ NAME: _____ OCN: _____ NAME: _____

ORIG FG D TDM: _____ FG B TDM: _____ HOST: _____
 FG C TDM: _____ OS TDM: _____
 TERM FG D TDM: _____ FG B TDM: _____ HOST: _____
 FG C TDM: _____ OS TDM: _____
 STP STP 1: _____ STP 2: _____

NOTES: _____
 CMMD: _____ COPYRIGHT (C) 1991 BCR, INC.

SRD Record

RESP CODE: _____ ROUTING DATABASE SYSTEM CURRENT DATE: _____

ACTN: _____ SWITCHING ENTITY - OFFICE FUNCTIONALITIES (SOF) PREV VIEW: _____
 STATUS: _____ NEXT VIEW: _____
 EFF DATE: _____

SW IDENT
 SWITCH - TOWN: _____ ST: _____ BLDG: _____ UNIT: _____ EQPT TYPE: _____

ENTER AN 'X' IN ALL FIELDS WHICH APPLY

END OFC: - HOST: - REMOTE: - FG D ADJ EO: -
 FG D TDM: - FG B TDM: - FG C TDM: - FG D ADJ TDM: -
 DA TDM: - OS TDM: - STP: - CELLULAR TDM: -
 ISDN OFC: - PPSN OFC: - PBDS OFC: - EA CCS OFC: -
 CELLULAR OFC: - DA OFC: -

NOTES: _____
 CMMD: _____ CHANGE DATE: _____ COPYRIGHT (C) 1991 BCR, INC.

SOF Record

RESP CODE: _____ ROUTING DATABASE SYSTEM CURRENT DATE: _____

ACTN: _____ SWITCHING ENTITY - NETWORK SERVICES (SNS) PREV VIEW: _____

STATUS: _____ NEXT VIEW: _____

EFF DATE: _____

SW IDENT

SWITCH - TOWN: _____ ST: _____ BLDG: _____ UNIT: _____ EQPT TYPE: _____

FG A: _____ 800: _____ MARINE: _____ CLASS: _____ INFO PVDRO: _____

FG B: _____ WATS: _____ MOBILE: _____ ABS: _____

FG C: _____ UMAL: _____ CONF: _____ PVN: _____ ONA: _____

FG D: _____ COIN: _____ AIR-GND: _____ 700: _____ ONA F1: _____

ANI: _____ PAGING: _____ TOLL STA: _____ 900: _____

NOTES: _____

CMMD: _____ CHANGE DATE: _____ COPYRIGHT (C) 1989 BCR, INC.

SNS Record

RESP CODE: _____ ROUTING DATABASE SYSTEM CURRENT DATE: _____

ACTN: _____ DESTINATION CODE RECORD (DRD) PREV VIEW: _____

STATUS: _____ NEXT VIEW: _____

EFF DATE: _____

NPA: _____ LOC: _____

COC: _____ TYPE: _____ SSC: _____ DIND: _____ TR DIG: _____ TRF STATUS: _____

OCN: _____ LOCALITY: _____ COUNTY: _____ STATE: _____ RC: _____

OPER SVC CODE: _____

- - LINES - -				- - LINES - -			
FROM	TO	SWITCH	LATA	FROM	TO	SWITCH	LATA
----	----	-----	-----	----	----	-----	-----
----	----	-----	-----	----	----	-----	-----
----	----	-----	-----	----	----	-----	-----
----	----	-----	-----	----	----	-----	-----

NOTES: _____

CMMD: _____ COPYRIGHT (C) 1989 BCR, INC.

DRD Record

RESP CODE: _____	ROUTING DATABASE SYSTEM	CURRENT DATE: _____
ACTN: _	RATE CENTER RECORD (RRD)	PREV VIEW: _____
RC: _____	STATE: __ TYPE: _	NEXT VIEW: _____
	STATUS: _	EFF DATE: _____
TYPE DESC: _____		

RC NAME: _____		
	VC: _____	HC: _____
LATA: _____	NAME: _____	NPA: _____ LOC: _____
	BASE STATION: _____	STATE: __ TYPE: _
	OPER RC: _____	STATE: __ TYPE: _
NOTES: _____		
CMMD: _____	COPYRIGHT (C) 1984 BCR, INC.	

RRD Record

RESP CODE: _____	ROUTING DATABASE SYSTEM	CURRENT DATE: _____
ACTN: _	RATE CENTER LOCALITY (LOC)	PREV VIEW: _____
LOCALITY: _____	CNTY: __ STATE: __	NEXT VIEW: _____
	STATUS: _	EFF DATE: _____
LOC NAME: _____		
HOME RC: _____		
RC TYPE: _		
RC NAME: _____		
NOTES: _____		
CMMD: _____	COPYRIGHT (C) 1989 BCR, INC.	

LOC Record

Date

POC
Address
City, State Zip Code

Dear XXXXX,

[Text describing the network reconfiguration.]

<u>NPA NXX</u>	<u>CLLI</u>	<u>Action</u>	<u>Permissive</u>	<u>Start Date</u>	<u>Start Time</u>	<u>End Date</u>	<u>End Time</u>
200 942	ABCDTXPLDS0	A	N	12/25/93	00:01 EST		
200 993	ABCDTXPL01T	M	Y	12/25/93	00:01 EST	1/2/94	00:01 EST
200 998	ABCDTXPLDS0	D	N	12/25/93	00:01 EST		

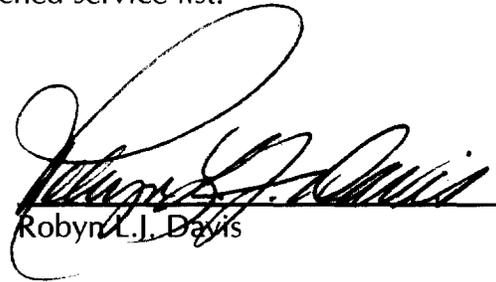
<u>End Office CLLI</u>	<u>Tandem CLLI</u>	<u>Direction</u>	<u>Feature Group</u>	<u>Act</u>	<u>Permissive</u>	<u>Start Date</u>	<u>Start Time</u>	<u>End Date</u>	<u>End T</u>
ABCDTXPLDS0	ABCDTXPL01T	T	B	M	Y	12/25/93	00:01 EST	1/2/94	00:01
ABCDTXPLRS0	ABCDTXPL01T	O	B	A	N				
ABCDTXPLRS0	ABCDTXPL01T	T	B	A	N				

[Closing text: POC Phone Number]

Signature

CERTIFICATE OF SERVICE

I, Robyn L.J. Davis, do certify that on May 20, 1996 comments of the United States Telephone Association were either hand-delivered, or deposited in the U.S. Mail, first-class, postage prepaid to the persons on the attached service list.



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