UNITED STATES COAST GUARD
LOCAL AREA NETWORK (LAN)
FEASIBILITY ANALYSIS

SUPPLEMENTAL ANALYSIS
SURVEY OF C&P TELEPHONE INSIDE WIRING

OCTOBER 1, 1986

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Prepared for:

U.S. Department of Transportation
United States Coast Guard
Washington, D.C. 20593
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THIS DOCUMENT IS BEST QUALITY PRACTICABLE. THE COPY FURNISHED TO DTIC CONTAINED A SIGNIFICANT NUMBER OF PAGES WHICH DO NOT REPRODUCE LEGIBLY.
This report investigates ownership and use rights of C&P Telephone Company's pre-divestiture inside wiring in the Coast Guard Headquarters building Washington DC. The investigation was initiated to evaluate the feasibility and costs of using C&P inside wiring for a pilot local area network. If the FCC reaffirms its current position, C&P will relinquish ownership of pre-divestiture inside wiring on 1 January 1989. At that time, ownership will transfer to the building owner or U.S. Coast Guard, depending on local property laws.
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1.0 EXECUTIVE SUMMARY

1.1 Introduction

This document contains the results of a survey conducted by Wilson Hill Associates, Inc. of the C&P Telephone installed inside wiring in the U.S. Coast Guard Headquarters.

1.2 Background

Use of the existing inside wiring in the Transpoint Building for a pilot local area network (LAN) might be convenient and economical for the USCG. However, since divestiture of the Bell operating companies from AT&T, the status of inside wiring has been unclear.

1.3 Analyses

The physical wiring status was surveyed and the regulatory environment examined. The FCC and District of Columbia Public Service Commission documents were reviewed and employees of those organizations consulted. Key employees of C&P Telephone were contacted for extended discussions.

1.4 Results

The survey findings are:

- Ownership of inside wiring will be relinquished by C&P Telephone on 1 January 1989.
- Ownership will be transferred to the USCG or the Transpoint Building owner, depending on the local (DC) property laws.
- In the interim, USCG can:
  - Purchase some or all of the wiring
  - Lease or "isolate" the inside wiring on a time and materials basis
- Have the wiring removed at a substantial cost
- Install its own inside wiring
- Take no action; continue as presently.

- Lease of the inside wiring is the most feasible course of action at this time.

2.0 BACKGROUND

2.1 Overview

Recently, a Northern Telecom SL-100 PBX was installed in the USCG Headquarters Transpoint Building, along with a new wire network, to replace the existing telephone system. The C&P wiring will remain in place with sharply reduced utilization approaching zero over time of its available lines, unless another use is found for it.

The USCG has been studying its Headquarters local area network (LAN) requirements and the feasibility of installing a LAN in the Transpoint Building. At this stage of the LAN study, a pilot LAN is planned. If the pilot LAN can utilize portions of the existing C&P inside wiring, there may be a dollar savings as well as a convenience to the Government both at the time of the pilot LAN connection and in the future.

The installation of the required wiring for a local area network can account for a major portion of its overall expense. The existing inside telephone wiring in the Transpoint Building is already there, it goes everywhere in the building and is easily accessible. However, as a result of divestiture, there have been a multitude of unanswered questions about it such as: Who owns the inside wiring? Who has access to it? What is its physical and electrical condition? Are accurate and current wiring records available? What is the USCG legally allowed to do with it? What costs are involved? What other options does USCG have?
While these appear to be simple, straightforward questions, the answers are complicated. Since divestiture, the "inside" or customer premises telephone wiring status has been unclear. Yet, as with other divestiture related issues, the fog is finally lifting as recent Federal Communications Commission and District of Columbia Public Service Commission decisions begin to clarify the ownership of, and customers' rights with regard to, inside wiring.

3.0 PURPOSE

The primary purpose of this survey is to clarify, in the simplest and most practical terms, the status of the C&P Telephone installed inside wiring in the Transpoint Building in relation to its possible use by the Coast Guard for the pilot LAN.

4.0 SCOPE

The scope of the survey includes:

- An examination of the Coast Guard's options under current regulatory circumstances in the District of Columbia in connection with the use of the existing C&P Telephone installed wiring in the Headquarters Building for a LAN pilot.

- Some explanation of the regulatory environment at the federal (FCC) and local (District of Columbia Public Service Commission) levels where reference to regulatory matters is appropriate to the readers' understanding of the subject matter.
5.0 ANALYSIS

5.1 Regulatory Environment

5.1.1 Federal Communications Commission (FCC)

The FCC first allowed customers to provide their own inside "system" wiring in 1978. See Figure 5-1. By 1981 expensing of inside wiring was ordered as well as deregulation of customer inside wiring. This was followed in 1983 by the establishment of the concepts of "complex" and "simple" inside wiring. See Annex A. The FCC defines inside wire as cable/wire on the customer side of the demarcation point. See Figure 5-2. By the fall of that year (1983), all new installations of complex wiring were deregulated. The FCC defined the point of demarcation between customer premises and telephone company facilities in 1984.

In 1985, among other actions favorable to deregulation and detariffing of inside wiring, the FCC proposed to detariff installation of inside wiring, detariff the maintenance of all inside wiring, treat all inside wiring as customer premise equipment and pass ownership to the customer or building owner when amortized. In 1986 the proposals were ordered to become effective on 1 January 1987.

These proposals followed a course established in Docket 79-105, Expensing of Inside Wiring (1981), which was designed to ensure that all costs of inside wiring are borne by the customer incurring the cost (causative customer). See Annex B. FCC's objectives for proposing these changes are to increase competition, to promote new entry into the market, to produce cost savings which would benefit rate payers, and to create an unregulated competitive marketplace environment for the development of telecommunications.
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<th>Year</th>
<th>Action (Docket Number)</th>
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<td>1978</td>
<td>Amendment of Part 68 of FCC rules.</td>
<td>First allowed customers to provide own inside &quot;system&quot; wiring.</td>
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<td>1984</td>
<td>Amendment to Part 68 Rules for Connection to Telephone Network. First Report and Order (CC 83-216).</td>
<td>Allowed customers to augment existing simple wiring. Allowed users to obtain new simple wiring from sources other than local telephone company. Defined point of demarcation between customer premises and telephone company facilities.</td>
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<td>1985</td>
<td>Rights of Users to Access Embedded Complex Wiring. Memorandum and Opinion (FCC 85-343).</td>
<td>Establishes users rights: To access embedded wiring. To obtain records and diagrams of inside wiring from local telephone companies. To ask telephone company to move demarcation point limit user access to house cabling in multitenant buildings.</td>
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FIGURE 5-1. CHRONOLOGY OF KEY FCC INSIDE-WIRING DECISIONS

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<td>1986 - DETARPPING THE INSTALLATION AND MAINTENANCE OF INSIDE WIRING. SECOND REPORT AND ORDER (CC 79-105)</td>
<td>DETARIFF INSTALLATION OF INSIDE WIRING. DETARIFF THE MAINTENANCE OF ALL INSIDE WIRING. TREAT ALL INSIDE WIRING AS CUSTOMER PREMISE EQUIPMENT. PASS OWNERSHIP OF IMBEDDED INSIDE WIRING TO CUSTOMER OR BUILDING OWNER WHEN AMORTIZED WITH RESOLUTION THROUGH APPLICATION OF LOCAL PROPERTY LAW.</td>
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FIGURE 5-2

USCG HEADQUARTERS
TRANSPONT BUILDING
INSIDE WIRING CONFIGURATION

GRAY CABLE/WIRE
EXTENDS FROM BLACK CABLE

TO 6th FLOOR

3rd FLOOR

2nd FLOOR

1st FLOOR

BLACK CABLE

DEMARCATION
POINT

TO C&P TELEPHONE
CENTRAL OFFICE

MDF ROOM WHERE
C&P TELEPHONE OWNED
PROTECTOR DEVICE
IS LOCATED
The implementation of Docket 79-105 has been appealed by a number of organizations since it was released. The FCC will respond to those appeals during the fall of 1986 and, presumably, either reaffirm the order as it stands or modify it, in both instances with appropriate comments.

Apropos of USCG's interest in utilizing the complex wiring in the Transpoint Building, paragraph 50 of Docket 79-105 is quoted in its entirety:

"50. Although we are requiring the telephone companies to abandon any claim of ownership in wiring that has been expensed or fully amortized, we have concluded that this Commission should not attempt to determine ownership of the abandoned wiring. Conflicting claims may arise if the subscriber is not the owner of the premises. Such questions are best resolved through the application of local property law. No federal interest would be furthered by attempting to establish a national standard that must be applied in all instances".

5.1.2 Public Service Commission (PSC), District of Columbia

The Public Service Commission of the District of Columbia, issued an Opinion and Order (Order 8300) dated August 9, 1985 part of which, from pages 17 and 18, is quoted below:

"With regard to the Company's (C&P Telephone) recovery of its investment in inside wire, we have noted that the Company currently is amortizing that investment over a ten-year period, consistent with FCC policy. There is evidence of record, however, that a three-year period of amortization of the remaining unrecovered investment would better avoid the problems of intergenerational inequities than the current schedule, under which seven years remain for full recovery. Moreover, it is important to note that none of the parties has disputed that evidence. Accordingly, we shall authorize the Company to seek approval from the FCC to implement a three-year amortization schedule for complex inside wire investment".

8
The D.C. PSC subsequently received FCC approval for the three year amortization schedule. Effective 1 January 1989, C&P Telephone will relinquish ownership of inside cable/wiring. This assumes that FCC Docket 79-105 is reaffirmed.

5.2 **TELEPHONE COMPANY**

C&P Telephone in the District of Columbia defines inside wiring as consisting of black and gray cables/wire, all of which presently belongs to C&P, except if installed since the fall of 1983. See Figure 5-2. C&P does not intend to abandon inside wiring, particularly black cable, benevolently or under any other circumstances, unless directed to do so by competent authority (FCC and DC PSC). If USCG does not use C&P cable/wire, C&P will not remove it, except as noted below.

The following is a summary of the inside wiring circumstances at the Transpoint Building from C&P Telephone's perspective:

- Legally, USCG/DOT must request use of C&P owned cable/wire and facilities from C&P.
- C&P no longer maintains on premises wiring records. Copies of "stick" diagrams are maintained at C&P Engineering Department, a copy of which is found in Annex C. This shows only black cable.
- USCG can utilize gray cable/wire without charge but cannot remove it or damage it.
- It is USCG/DOT's responsibility to notify C&P that some or all of the inside cable/wire will not be used. This presumably has been done since C&P is not applying recurring charges to the U.S. Coast Guard Headquarters.
- USCG has the following options regarding the use of existing C&P owned inside cable/wire:
1. Negotiate the purchase of some or all of the inside (black) wiring, with or without a maintenance agreement. Total purchase price is $50,431. Negotiate the purchase of some or all of the inside (gray) wiring with or without a maintenance agreement. USCG then installs, changes or alters purchased facilities as it sees fit. See Annex D. Facilities can be purchased incrementally as needed. If purchased, C&P provides no guarantee of inside wiring. However, since C&P wire has, until recently, been utilized throughout the Headquarters Building for telephone service, it can be presumed that the physical and electrical properties are substantially intact. In addition, the C&P Telephone station supervisor responsible for the Transpoint Building C&P facilities claims they are in good condition.

2. Request service order of C&P for use of individual pairs of wires. Invoiced on a time and materials basis. If USCG desires to perform its own installations, negotiate the isolation of black wiring in 25 pair groups.

3. In the event negotiations for purchase, isolation or lease are unsuccessful:
   a. USCG can request C&P to remove inside gray wiring at a cost of approximately $66/hr, or
   b. Inside wiring remains in place, unused, and is disabled by C&P by cutting cable/wire on the station side leaving two foot tails to be utilized by USCG to pull wire, if required in the future. Because of possible adverse customer reaction, it is doubtful if C&P Telephone would exercise this option, or
c. USCG installs own wires,
   or
d. USCG takes no action.

5.3 DISCUSSION

In the event FCC Docket No. 79-105 is reaffirmed, the ownership of the amortized inside wiring in the Transpoint Building will be relinquished by C&P Telephone effective 1 January 1989. Depending upon the application of the District of Columbia property laws, the inside wiring will become the property of the USCG/DOT or the Headquarters Building owners. It is not possible to predict which it will be at this time. Since the possibility remains that USCG/DOT might assume ownership in approximately 27 months, purchase of the inside wiring is not indicated.

USCG utilization of the inside wiring for the LAN pilot, both black and gray, can proceed with the leasing or isolation of appropriate twisted pairs from C&P Telephone at no great expense or long range commitment.

6.0 SUMMARY

The status of the inside wiring is being clarified by the actions of the FCC and the DC PSC. IF the FCC reaffirms its current position, then on 1 January 1989 ownership of the inside wiring will pass to either the USCG/DOT or the Transpoint Building owner; the transfer will be determined by local property laws. Until that time, USCG can lease the few wiring pairs required for the LAN pilot at a reasonable cost and without a long-range commitment.
ANNEX A

DEFINITIONS
DEFINITIONS

1. Black cable - In-house distribution cable. Also called house or riser cable. Derives its name from the black sheathing material used in its manufacture. Usually 50 pair or larger. Extends from demarcation point on the subscriber side of main distribution frame (MDF) on first floor of the Transpoint Building. Connects on its station end to gray or station cable/wiring. A telephone company definition.

2. Complex wiring - Multiline in nature (3 or more pair) and serving non residential businesses or workplaces. Defined by FCC as "intrasystem" wiring that includes cable and wire and its associated components (for example, connecting blocks, terminal boxes, conduit between buildings on the same customer's premises, etc.) located on the customer's side of the demarcation point, that connect station components to one another or to common equipment of a PBX or key system. Over the years, complex wiring has also been called "intrasystem", "system" and "multiwiring" in FCC proceedings. These are all synonymous.

3. Demarcation point - The telephone network's customer premises interface point. In a single tenant building, the minimum point of penetration. Usually on the station side at the MDF beyond the protector. According to C&P Telephone, the Transpoint Building is considered a single tenant building (federal government) with several accounts with a single demarcation point in the 1st floor frameroom.
4. Embedded wiring - Wiring that is carried in capitalized telephone company accounts rather than expensed. Inside wiring installed by the telephone company before the 1983 decision which deregulated all new installations of multiline telephone wiring. Remains regulated and tariffed at this time.

5. Gray cable - In-house distribution cable/wiring. Also called station cable/wiring. Derives its name from the gray sheathing material used in its manufacture. Usually 25 pair or smaller. Extends from station end of black cable to customer premises equipment. A telephone company definition.

6. House cable - Distribution cable. Also called black or riser cable.

7. Protector - A device generally located at or near the telephone cable's point of entry into the subscriber's premises as a means of safeguarding the subscriber's premises and telephone network from atmospheric or other electrical discharges through the outside telephone plant. Responsibility for the protector (and its associated grounding) on the network side of the demarcation point rests with the telephone company.

8. Riser cable - Distribution cable. Also called black or house cable.

9. Simple wiring - One or two-line business or residential telephone wiring. Remains regulated and under tariff at this time. Not germane to this wiring survey.
ANNEX B

FCC DOCKET NO. 79-105
DEPARTMENT OF THE INSTALLATION
AND MAINTENANCE OF INSIDE WIRING
BETFRE THE
FEDERAL COMMUNICATIONS COMMISSION
Washington, D. C. 20554

In the Matter of
Detariffing the Installation and Maintenance of Inside Wiring

CC Docket No. 79-105

Second Report and Order

Adopted: January 30, 1986
Released: February 24, 1986

By the Commission:

I. INTRODUCTION

1. On April 5, 1985, we released a Further Notice of Proposed Rulemaking (Further Notice). CC Docket 79-105, FCC 85-148, 50 Fed. Reg. 13991 (April 9, 1985), proposing to detariff the installation of simple inside wiring and also to detariff the maintenance of all inside wiring (both simple and complex). In addition, we proposed that the telephone companies relinquish all claims to ownership of the inside wiring.

1 Inside wiring consists of telephone plant, including materials and labor, installed on the customer's side of the demarcation point as set forth in our First Report and Order in CC Docket 81-216, Amendment of Part 68, 97 FCC 2d 527 (1984), and recorded in account 232, "Station connections-inside wiring."

2 Complex wiring, also called intrasystem wiring, includes all cable and wire and its associated components (e.g., connecting blocks, terminal boxes, conduit) located on the customer’s side of the demarcation point, when this wiring is inside a building located on the same or contiguous property not separated by a public thoroughfare, which connect station components to each other or to the common equipment of a PBX or key system. However, wire meeting the other criteria for complex inside wire and crossing a public thoroughfare may be considered intrasystem wiring if approved by an appropriate state or local authority. Simple inside wiring is any inside wiring other than complex wiring.
amortized over a ten year period. While this change in accounting practices from capitalization to expensing could provide reasonable assurance that cost causative customers of one period would not have their costs borne by ratepayers of later periods, it could never assure that particular cost causative customers separately and completely paid their own costs. Therefore, the Commission instituted a Further Notice of Inquiry (FNOI) in CC Docket 79-105, 86 FCC 2d 885 (1981), to explore other measures to accomplish this goal.

5. As a result of comments received in response to the FNOI this Commission decided to distinguish between simple and complex inside wiring in CC Docket 82-681. In CC Docket 82-681, we established the intrasystem concept and detariffed the installation of intrasystem wiring. However, we stopped short of deregulating newly installed simple inside wire. As matters now stand with inside wiring, the installation and maintenance of simple inside wire and the maintenance of complex wiring are generally provided under tariff, but some states have already elected to detariff these services.

III. SUMMARY OF PROPOSAL

6. In our Further Notice we proposed detariffing the installation of simple inside wiring as a means of having those customers who incur installation charges bear these costs. Further, as a means of effecting payment by those customers who give rise to maintenance and repair costs for inside wiring, we proposed to detariff the maintenance of all inside wiring. Both of these proposals were made as a way to generate cost savings from a reduction in regulatory burdens and an expansion of the competitive environment for the installation and maintenance of inside wiring.

6 Modification to the Uniform System of Accounts for Class A and Class B Telephone Companies required by the detariffing of customer premises equipment and proposed detariffing of customer provided cable/wiring installed as a part of an intrasystem of PBX’s and key systems, FCC 83-457, (released November 2, 1983).

7. The regulatory status of inside wiring was also addressed to a certain extent in CC Docket 81-216. We concluded that customers should be permitted to augment existing simple inside wiring without purchasing it from the telephone company. Amendment of Part 68, 97 FCC 2d 527 (1984).
telephone companies, federal agencies, state regulators, trade and consumer associations and others. While not all parties addressed each aspect of the proposal, most favored detariffing the installation of simple inside wire and detariffing the maintenance of both simple and complex inside wire. In relation to detariffing, comments both for and against raised issues dealing with service availability, intrastate and interstate cost shifts, structural separation, possible redefinitions of demarcation points, and the accounting treatment of unamortized investment in inside wire in detariffed circumstances. Comments differed greatly on the question of ownership.

**Detariffing the Installation of Simple Inside Wire and the Maintenance of Simple and Complex Inside Wire.**

9. Most parties who addressed detariffing the installation of simple inside wire and detariffing the maintenance of simple and complex inside wire were supportive of this approach as a means of having these costs borne by cost causative customers. Support for detariffing was strong among carriers and their associations10 and consumer associations.11 Among state regulators, only North Dakota supported detariffing of simple and

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9 Reply comments were received from ARINC; AT&T; Anchorage; Bell Atlantic; BellSouth; Kenneth J. Brown; Continental Telecom, Inc.; FEA; GTE; Independent Data Communications Manufacturers Association (IDCMA); ICA; Combined comments of NTW, RPB and FNB; Multi-Tenant Telecommunications Association (NTTA); Combined comments of NTCA and OPASTCO; NAYA; NYNEX; The Pacific Companies; SNWT; and Southwestern Bell. NAYA filed reply comments on May 29, 1985 together with a motion to accept late filed comments. There were no objections to the motion and the filing will be accepted.

10 Ameritech; AT&T; Bell Atlantic; Centel; Continental Telecom; GTE; MTN, NBW, and PNB; NTCA and OPASTCO; NYNEX, The Pacific Companies; SNWT; Southwestern Bell, and USTA.

11 International Communications Association, IDCMA with respect to single occupant buildings, and Universities.
11. AT&T submitted with its comments a detailed market study to support its contention that the market for installing and maintaining simple inside wiring is fully competitive. In its reply comments, Continental Telecom states that parties expressing concern over rural service areas did not demonstrate that these areas were without adequate service. Continental notes that most rural applications are not complex and mentioned the growing availability of "do it yourself" customer purchased kits. MTN, NWB, and PNB, in comments, identify a major source of inside wiring as self installation and maintenance by the customer. Much of their business is rural and many states in which MTN, NWB, and PNB operate (i.e., Arizona, Colorado, Idaho, New Mexico, Oregon, Utah, Wyoming, Iowa, Nebraska, and Washington) have detariffed or deregulated the installation of inside wiring. Furthermore, MTN, NWB, and PNB state that maintenance of inside wire is competitive and should not be regulated. They submit that many firms and individuals offer to repair inside wiring, and that customers can and do repair their own inside wiring as well.

12. Rate Impact and Jurisdictional Separation. BellSouth, in comments and reply comments, states that the Commission should not order detariffing in states in which the costs of installation and maintenance are already being borne by the cost causative customer. If cost-compensatory programs exist, the Commission should defer to the state regulatory bodies and not preempt them with action in this area.

13. Other parties express opposition to detariffing of installation and maintenance out of concern over cost shifts that deregulation could produce. Alabama, Michigan, NYSDPS and PRTC were foremost among them. PRTC states that its economic environment (the Commonwealth of Puerto Rico) would make it difficult to rely on cost causative customers to cover the full expense of installing and maintaining inside wiring. If PRTC cannot spread the installation and maintenance costs among the general body of ratepayers as is now the case, it states that Puerto Rico's goal of universal telephone service will be threatened. Like PRTC, Michigan states that if installation costs become too high, low income customers may not be able to obtain services. The best approach according to Michigan, would be to continue the current phase-out of inside wire capital costs and allow regulated companies to provide inside wire under state regulation.

14. Alabama states that if the real concern of the Commission is to reduce interstate costs, it should not use its preemptive powers to detariff a monopolistic or uncompetitive service. Instead, Alabama

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confusion and inconvenience. BellSouth and NYNEX suggest segregated accounting as an alternative to structural separations.16

17. NATA, in its reply comments, indicates that it does see some logic in the single entity provision of installation and maintenance for residential and single line business telephones particularly in rural areas. Beyond this, NATA believes there are no compelling reasons to waive structural separation requirements. NATA believes that opportunities for cross subsidization are great and extremely difficult to police. Furthermore, NATA believes that complex wire accounts form a large portion of the total expense in the acquisition of telecommunications systems and this provides strong incentive for cross subsidization. NATA states that the arguments of the BOCs in support of disregarding separate subsidiary requirements are the same as those that were rejected by this Commission in Computer II17 and the BOC Separate Subsidiary Order.18 NATA believes they should be rejected again here.

18. Demarcation Points. Even though the Further Notice did not propose any change in the definition of the telephone network’s customer premises interface or demarcation point set forth in the First Report and Order in CC Docket 81-216, several parties commented on the need for clarification or redefinition. In comments and reply comments, Anchorage asserts that unless this Commission establishes precise definitions in this proceeding, telephone companies will experience confusion in maintaining connecting plant, interfacing with customers, and charging for facilities. Anchorage urges us to establish definitions for simple inside wiring, house and riser cable, stub runs, and interbuilding intrasystem wiring. GTE, Wisconsin and Kenneth J. Brown also urge clarification, and Florida’s comments indicated that Florida was considering expanding the definition of inside wire to include house and riser cable. NATA, in its comments, also states that the status of wire located between the common protector

16 We have noted the suggestion of some states that once detariffed, unamortized costs in Account 232 should be removed from the rate base. These states have not presented any persuasive reason to change the status of embedded wiring.

17 See n. 3 supra.

Ownership

20. Parties filing comments and reply comments were almost evenly divided on the ownership questions. Fifteen parties supported our proposal to transfer ownership of fully amortized inside wire, or stated they were not opposed to it. We also note that among these parties, three favored transfer or relinquishment of ownership before full amortization—FEA, Florida and MTTA. Twelve parties opposed the transfer of ownership or indicated that this problem need not be addressed at the present time.

21. A considerable number of those who favored transfer of ownership or expressed no opposition to transfer took no position on whether the customer or premises owner should receive title to the inside wiring. NATA proposed a five-year public domain transition period and ARINC believed ownership should pass to the customer. The Universities, Centel and FEA believed it would be appropriate to transfer ownership to owners of the premises.

22. ARINC expresses the view that the customer and not the premises owner, has been paying rates designed to recover telephone company costs. NATA believes that premises wire should be placed in the public domain under the control of the customer occupying the premises for a period of five years after amortization has been completed. The control would be accompanied by a prohibition against destruction, damage or removal. After the five year period, and following a vacation of the premises, ownership would transfer to the owner of the premises. Such a process NATA believes, will prohibit abuses by premises owners, such as additional charges for use of the wire which would unjustly enrich building owners. It would also allow users to adjust to the realities and responsibilities of owning and maintaining inside wire. NATA believes that title to house and riser cable should be transferred to building owners. However, NATA believes that during a five year transition period after transfer of ownership, tenants of multi-unit buildings should be allowed to maintain these existing

19 ARINC; Ameritech; Bell Atlantic; Centel; Universities; Continental Telecom; FEA; Florida; GTE; ICA; MTTA; North Dakota; SNIT; USTA, and MTTA (reply comment)

20 AT&T; Alabama; BellSouth; Michigan; MTN, NWS, and FNB; NTCA/OFASTCO; the Pacific Companies; NYSDPS; NYNEX; Southwestern Bell; UTS, and Anchorage (reply comments)

21 Here NATA distinguishes between premises wire and house or riser cable.
In its reply comments, Anchorage agrees. BellSouth states that Constitutional guarantees of due process prohibit the confiscation of property. BellSouth and the Pacific Companies state there is nothing in the Communications Act of 1934 or any other statute which gives the Commission such sweeping authority. MTW, NWB, and FNB state that the mere recovery of one's investment in property through depreciation or amortization, does not direct one's ownership in property. MTCA/OPASTCO states that recovery of costs is an issue that should not be related to ownership. Like BellSouth, MTCA/OPASTCO raises the issue of Constitutional guarantees and asserts that this Commission's proposal to transfer ownership is confiscatory. Further, they state that if the transfer of ownership is in the public interest, exchange carriers are still entitled to "just compensation".

26. Michigan, in opposition to this Commission's proposal, states that the ownership question should be left to the states. The NYSDPS believes that we should not now decide where ownership should reside after the amortization period. Rather, it argues, the states should be allowed to choose the best option. NYSDPS does believe, however, that after the end of the amortization period, ownership should not rest with the telephone company. Logically, it should be transferred to the party who has borne the cost of the investment—the customer. At this time, however, there may be no equitable solution according to NYSDPS. NYNEX, Southwestern Bell, and UTS believe this Commission should defer any determination of ownership pending further examination of the issues. AT&T also indicated that questions of ownership need not be resolved now and should not delay detariffing.

27. A number of commenting parties both in favor of and opposed to this Commission's proposal indicated that transfer of ownership (or abandonment) should not take place until investment tax credits are fully recovered. Continental Telecom and others noted that connections not in service for a full five years will be subject to recapture and urged that the Commission give full consideration to this matter. Florida, in its comments, indicated that there would be minimal problem with recapture of any investment tax credit since the embedded base was frozen in 1981 and subsequent additions expensed. In Florida's view any unamortized amount should be recognized as an expense for tax purposes in the year of transfer.

24 Continental Telecom, while indicating it was prepared to transfer ownership at no charge, did not agree that the telephone company has no ownership interest or that the Commission can summarily order the transfer of telephone company assets.

25 Centel, Continental Telecom, GTE, MTCA, NYNEX, and UTS.
V. DISCUSSION

30. **Service Availability.** In CC Docket 82-681, this Commission left all questions relating to deregulation of simple inside wire to later orders because, at that time, there appeared to be no alternative sources for the provision of simple inside wiring, particularly in rural areas. Many of the comments received in this proceeding maintain this is no longer the case. Alabama and Michigan have expressed concern that installation and maintenance services may not be available after detariffing and Florida and Kentucky have expressed concern that simple inside wire maintenance might not be available. Nevertheless, AT&T, Continental Telecom, and MTN, NWB, and PNB offered persuasive evidence that an expanding competitive market exists, even in rural areas.

31. The Market Study supplied by AT&T consisted of a survey of potential inside wire providers in both urban and rural areas, and indicated that 52 percent of the companies surveyed in rural areas offered inside wire services. Further, 87 percent of those providing inside wiring services also offered repair or rearrangement services. Continental noted the proliferation of inside wiring "do it yourself" kits. More persuasive, however, is the fact that many states have already proceeded with the detariffing and/or deregulation of simple inside wire. MTN, NWB, and PNB comments identified eight states in their service areas, which have already taken action on installation and maintenance of simple inside wire (see para. 11). Many of these states encompass large geographical areas which can be considered rural. Based on these comments and the fact that we are not prohibiting companies from continuing to provide these services as an unregulated activity, we have decided that service availability is not a consideration which should prevent detariffing of simple inside wire installation and maintenance.

32. With respect to detariffing the maintenance of complex inside wiring, we do not believe the problems of service availability are significant. First, as some comments noted, most rural applications are simple rather than complex. Second, as will be discussed later in connection with demarcation points, the detariffing issues in this order do not apply to all complex wiring. House cable for example, now accounted for in Account 242 will continue to be included in the regulated service.

28 These types of companies were selected—electrical contractors, telephone equipment and system suppliers, and cable television/CATV providers.
35. Although deregulation will not alter the jurisdictional allocation formula for the remaining regulated activity costs, deregulation will have an indirect impact upon charges for the remaining regulated activities. The elimination of interstate expenses attributable to new inside wiring installation and all inside wiring maintenance from interstate revenue requirements for the Carrier Common Line and Special Access elements will, of course, require reductions in those charges. Similar reductions will occur in rates for intrastate transmission services if the intrastate wiring expense has been bundled into transmission charges, but increases will occur if the current inside wiring charges exceed the intrastate share of inside wiring costs. This is likely to be the case in most states because inside wiring charges in most state tariffs have been increased in recent years to recover all or most of the cost from the cost causative customers. Since the full cost reflects the interstate as well as the intrastate share of the wiring costs, carriers have been obliged to underprice other intrastate services in order to avoid collecting revenues that exceed the intrastate revenue requirement. Deregulation will accordingly require some upward revisions in intrastate service charges that do not reflect the full costs of those services.

36. Most commenters agree that such a realignment of rates should occur, but some believe the realignment should occur in incremental steps. This Commission did adopt a transitional adjustment in jurisdictional separations in order to phase in an analogous rate realignment that was produced by our decision to deregulate CPR.\textsuperscript{33} We have decided that such a transitional adjustment would not be desirable under the present circumstances. Such an adjustment would necessarily defer decreases in Carrier Common Line charges. Excessive Carrier Common Line charges contribute to the uneconomic bypass problem that has become more acute during the years that have elapsed since the CPR adjustment was adopted. The public interest would not be served by deferring such Carrier Common Line reductions beyond the current calendar year.

37. State regulators have alternatives to make necessary changes in intrastate rates without creating any threat to universal service. If they choose to do so, state regulators have the flexibility to adjust intrastate toll and/or business local exchange charges. State regulators can also devise or revise lifeline rates to ensure that none of the burden of any increased residential charges falls upon ratepayers who might elect to cancel service or who might experience real hardships in order to retain local exchange service. We are confident that state regulators will use their powers wisely in order to ensure that greater economic efficiency is

\textsuperscript{33} CC Docket 80-286, Amendment of Part 67, 89 FCC 2d 1 (1982).
We decline here to reengage in elaborate discussions of demarcation points and access considerations in light of the fact that we have acted upon petitions for reconsideration as recently as July 5, 1985. We refer interested parties to our decision in CC Docket 81-216 which provides the following definition of the point at which telephone company facilities end and customer owned premises wiring begins:

**Network Interface or Demarcation Point:** The point of interconnection between telephone company communications facilities and terminal equipment, protective apparatus or wiring at a subscriber's premises. The network interface or demarcation point shall be located on the subscriber's side of the telephone company's protector, or the equivalent thereof in cases where a protector is not employed, as provided under the local telephone company's reasonable and nondiscriminatory standard operating practices.

41. This includes the flexibility for location or relocation of the demarcation point by the involved parties, subject to the nondiscriminatory practices of the telephone company, and as subject to applicable state requirements. As we said in CC Docket 81-216, we believe this flexibility is both necessary and desirable to accommodate the variety of conditions and circumstances that exist. Thus we are rejecting the suggestions which would have us reconsider the demarcation point. Also, we do not believe that any new requirement with respect to installation of interface devices is necessary at this time.

42. Here it would be appropriate to reiterate the kind of wiring that is the subject of our detariffing and ownership proposals discussed in the Further Notice. In the Further Notice, we contemplated wiring currently included in Account 232, "Station connections-inside wiring" and the costs of installation and maintenance of inside wiring (both simple and complex) now being expensed to Account 605, "Installation and repairs of station equipment." House cable which is located on the telephone company's side of the demarcation point (see para. 32) is not the subject of this proceeding.

43. In sum, there is nothing in the record which compels us to defer detariffing for an extended period. The comments are generally supportive of this decision. Service availability problems have diminished since we last considered detariffing and are continuing to diminish. Structural separation seems unnecessary. Current definitions of demarcation points provide the kind of flexibility required to provide the widest range

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more than hinted at a lack of telephone company control over inside wiring.38

45. Against this backdrop, we proposed in the Further Notice that telephone companies relinquish ownership of inside wiring when their inside wiring costs have been fully amortized, i.e., when they have a zero net investment in inside wiring. Used in this context, the term "investment" relates to the accounting treatment of basically labor-intensive costs--an asset value being amortized to expense over current and succeeding periods. Under the First Report and Order, inside wiring costs capitalized in Account 232 up through October 1, 1981, and as allowed during a four-year phase-in period, were to be amortized to Account 608 over a ten-year period. Already, 18 companies in 18 jurisdictions have requested and received permission to amortize these costs over shorter periods. Thus for different companies, embedded inside wiring costs will reach their zero net "investment" point at different times, but in no circumstance later than September 30, 1994. Inside wiring costs incurred after October 1, 1981, not capitalized during the four-year phase-in period, have been expensed to Account 605. For this expensed inside wire, the costs of which have already been recovered through specific charges or in revenue requirements, there is already a zero net "investment".

46. We shall deal first with the matter of ownership as it relates to inside wiring costs that have been expensed to Account 605 (expensed inside wire). In connection with expensed inside wire, the costs of which have already been recovered by specific charges or general revenue requirements, we see no essential difference between this wiring installed by the telephone companies who may claim a continuing ownership interest and inside wiring installed by other nonregulated parties who do not claim a continuing ownership interest. In both cases, the costs considered in terms of time, labor, and materials have been recovered. In both cases the investment is labor intensive and the value of the wire itself is low in relation to the total cost of installation; and with respect to the wire itself, the physical in-service characteristics are the same with respect to low salvage value and location—on the premises of someone other than the telephone company and, in many cases, permanently affixed. Moreover, in many cases, the costs of removal exceed the salvage value of the wire. In such circumstances, prudent business practice would dictate abandonment of the wire. In view of full recovery and the absence of any characteristics which would distinguish it from wiring installed by others, valid ownership claims already seem to have been surrendered. In fact, some companies have

38 Even in this proceeding, the Pacific Companies and Ameritech have urged that we refrain from requiring any process which forces the formulation of cost or location data.
"public use". The court there held that the government has the power to take property even if it ultimately inures to the benefit of a private interest so long as the taking is in furtherance of a valid public purpose. The court stated, 104 S. Ct. at 2329-30, that:

where the exercise of the eminent domain power is rationally related to a conceivable public purpose, the [U.S. Supreme] court has never held a compensated taking to be proscribed by the [Fifth Amendment's] Public Use Clause. See Berman v. Parker, 348 U.S. 26 (1954); Fink v. Los Angeles, 262 U.S. 700, 43 S. Ct. 639, 67 L. Ed. 1186 (1923); Block v. Hirsh., 256 U.S. 135, 41 S. Ct. 458, 65 L Ed. 865 (1921).

49. As we have already stated we are not ordering the abandonment of ownership claims until such time as costs have been fully recovered and thus the companies will have had an opportunity to earn a reasonable return. 40 Aside from authority to order the relinquishment of ownership, we believe that any ownership claim extending beyond full recovery fails to consider fully the nature of the property and the capability of telephone companies to reuse it or exert a continuing control. The main value of this property to the extent it exists is associated with labor costs and not its physical attributes. While there may be some attribution of value to the copper, as some parties suggest, in most cases it cannot be reused without the incurring of additional costs for removal and reinstallation which outweigh its value. We believe this attribute of limited reusability distinguishes it from other telephone company and business property parties have cited as analogous in their comments. 41 More compelling is that the telephone companies cannot identify the value or location of the property in many instances without considerable additional effort. We believe our

40 In the CPE Detariffing Order, 95 FCC 2d at 1306-1310 and in subsequent proceedings, we determined that net book value adequately approximated the economic value of the embedded base of CPE and supporting assets which were transferred to nonregulated entities. Our actions here are consistent with previous determinations. When fully amortized the net book value will be zero and that will adequately approximate the economic value of the embedded wiring to the telephone company. Carriers will have received "just compensation" because they will have been fully compensated for their investment. The shareholders were never entitled to the benefits of any appreciation in the value of the inside wiring because the ratepayers had the risk of loss when the wiring was regulated.

41 For example, NTCA comments that the government has no right to order the transfer or relinquishment of ownership in an automobile by a rental company once its original costs have been fully recovered.
Account 232.42 Inside wiring expenses now being recorded in Account 605 and associated revenues shall, concurrent with the detariffing effective date of this order, be recorded in Account 106, Nonregulated investments. In 47 C.F.R. Part 31 we are amending the instruction for Account 605 only to reflect that companies should make this reclassification concurrent with detariffing. We are also not making any detailed changes to Items identified in Account 605 since, in certain circumstances, descriptions may apply to other services telephone companies may still offer under tariff. We are deferring such changes in view of the likelihood that other modifications may also be made in the Revision of the Uniform System of Accounts proposed in CC Docket 78-196.

VI. OFFICE OF MANAGEMENT AND BUDGET

54. The proposal contained herein has been analyzed with respect to the Paperwork Reduction Act of 1980 and found to impose modified requirements of burden upon the public. Implementation of any new or modified requirement of burden will be subject to approval by the Office of Management and Budget as prescribed by the Act.

VII. ORDERING CLAUSES

55. Accordingly, IT IS ORDERED, That, under the authority contained in Sections 1, 201-205, and 221(c) of the Communications Act of 1934, as amended, 47 U.S.C. Sections 151, 201-205, 221(c), subject to the exceptions discussed herein, the installation and maintenance of inside wiring shall not be offered pursuant to tariff after December 31, 1986. States may not impose common carrier tariff regulation on installation or maintenance of such inside wiring.

56. IT IS FURTHER ORDERED, That under the authority contained in Section 4(i), 4(j) and 220 of the Communications Act of 1934, as amended, 47 U.S.C. 154(i), 154(j) and 220, Part 31 Uniform System of Accounts for Class A and Class B Telephone Companies, of the Commission's Rules is amended as shown in Appendix A to reflect that the installation of simple inside wiring will be performed on a detariffed basis effective January 1, 1987, and the maintenance of both simple and complex inside wiring shall be performed on a detariffed basis. This amendment will become effective January 1, 1987.

Appropriate distinctions will be made for inside wiring in the final rule emanating from CC Docket 78-196, Revision of the Uniform System of Accounts for Class A and Class B Telephone Companies (50 F.R. 1590, January 11, 1985).
APPENDIX A


2. Section 31.605 "Installation and repairs of station equipment", paragraph (a) is amended to read:

§31.605 Installation and repairs of station equipment

(a) This account shall include the cost of installing items of station apparatus (included in 231) and the cost of inside wiring under either the phase-in or flash-cut approach until such time as inside wiring has been de tariffed pursuant to Commission order, whereupon new installation and maintenance costs of inside wiring shall be recorded in appropriate subaccounts of Account 106, Nonregulated investments. Under the phase-in approach this installation activity shall be charged to this account on the following basis: 25% between October 1, 1981, and September 30, 1982, 50% between October 1, 1982, and September 30, 1983; 75% between October 1, 1983, and September 30, 1984; and 100% after September 30, 1984. Under the flash-cut approach all costs of installation activity shall be charged to this account. Carriers shall maintain the cost of installing wiring under either of the above approaches in a separate subaccount. This account shall also include the cost of reconnecting customers' lines at customers' premises (Note also account 103, account 232 and account 316).
ANNEX D

C&P TELEPHONE
INSIDE WIRING PURCHASE QUOTATION
Mr. Lee Kerson  
Senior Associate  
1220 "L" Street, N.E.  
Suite 200  
Washington, D.C.

Dear Sir:

We have completed an inventory of (Telephone Company) house cable as requested in your letter of August 4, 1986.

Following is a summary of the (Telephone Company) house cable at U.S. Coast Guard Building, 2100 - 2nd Street, S.W.

Our estimate of the current value of these facilities is $50,431.00. This quoted price is guaranteed for a period of sixty (60) days from the date of this letter. Any sale would be subject to state sales tax unless you can establish exemption.

Should your customer wish to purchase the wiring based on the above inventory, please contact me on (202)-392-3396. Please advise your customer that no one except C&P employees will have access to or work with or upon any of the property until such property has been purchased.

Sincerely,

G. A. Farry  
District Manager - Engineering