20730 117444

REPORT BY THE U.S.

General Accounting Office

Can The Federal Communications Commission Successfully Implement Its Computer II Decision?

The Federal Communications Commission must carry out a variety of complex tasks to implement its Computer II decision, involving the regulatory problems raised by the convergence of data processing and communications technologies.

The Commission has made Computer II implementation its Common Carrier Bureau's highest priority and has established a task force with specific responsibility for implementation activities. Questions remain, however, as to whether the Commission has the resources and the capabilities to successfully carry out required tasks.

On January 8, 1982, the Department of Justice reached an agreement with the American Telephone and Telegraph Company to settle the antitrust suit. The Commission is in the process of evaluating the impact of the agreement on its ongoing and future activities, including the Computer II implementation.

UNITED STATES GENERAL ACCOUNTING OFFICE

117444

CED-82-38

JANUARY 29, 1982

520532

Request for copies of GAO reports should be sent to:

U.S. General Accounting Office
Document Handling and Information
Services Facility
P.O. Box 6015
Gaithersburg, Md. 20760

Telephone (202) 275-6241

The first five copies of individual reports are free of charge. Additional copies of bound audit reports are $3.25 each. Additional copies of unbound report (i.e., letter reports) and most other publications are $1.00 each. There will be a 25% discount on all orders for 100 or more copies mailed to a single address. Sales orders must be prepaid on a cash, check, or money order basis. Check should be made out to the "Superintendent of Documents".

UNITED STATES GENERAL ACCOUNTING OFFICE
WASHINGTON, D.C. 20548

COMMUNITY AND ECONOMIC
DEVELOPMENT DIVISION

B-206160

The Honorable Glenn English
Chairman, Subcommittee on
Government Information and
Individual Rights
Committee on Government
Operations
House of Representatives

Dear Mr. Chairman:

In response to your letter of October 26, 1981, we have reviewed the Federal Communications Commission's (FCC's) plan for implementing its Computer Inquiry II decision. This decision deals with the regulatory problems raised by the convergence of communications and data processing technologies. As requested, we have focused on (1) determining the major tasks which must be accomplished to implement Computer II and the time frame for completing them and (2) examining the organization which FCC has established and the resources which it has assigned to carry out these tasks.

Our review revealed that FCC has made implementing Computer II its Common Carrier Bureau's highest priority. In October 1981 FCC also created a task force with specific responsibility for implementation activities. Before that time, however, little had been done to plan for or deal with Computer II implementation.

While the scope of a number of the tasks which FCC will have to undertake as part of Computer II implementation will depend, in part, on future actions by common carriers, 1/ particularly the American Telephone and Telegraph Company (AT&T), the issues facing FCC are likely to be complex and difficult to resolve. Thus, given the fact that most of the tasks must be completed prior to, and in some cases well before, the January 1, 1983, deadline which FCC has established for carrier compliance with Computer II, questions exist concerning

--the adequacy of the resources assigned to implementing Computer II;

1/Definitions of this and other technical terms used in this report are included in appendix IV.

—FCC's ability to deal with problems relating to asset transfers, cost sharing, and intracorporate transactions existing under Computer II; and

—FCC's capability to effectively police the boundaries between regulated and unregulated services.

As agreed with your office, we are reporting on the results of our review which was completed prior to the announcement of the January 8, 1982, agreement to settle the Department of Justice's antitrust suit against AT&T; we have not attempted to analyze the effect of the agreement on Computer II implementation. FCC's Common Carrier Bureau is presently evaluating the impact of the agreement. In the interim, however, it is continuing to work on Computer II implementation tasks.

OBJECTIVES, SCOPE, AND METHODOLOGY

This assignment was performed in accordance with our current "Standards for Audit of Governmental Organizations, Programs, Activities, and Functions." Our work was conducted at FCC headquarters in Washington, D.C., during November and December 1981. We interviewed FCC staff members involved in implementing Computer II and reviewed FCC documents relating to Computer II as well as comments filed by members of the public and representatives of the industry in FCC's Computer II proceeding. We used as a starting point our September 24, 1981, report to the Congress, "Legislative and Regulatory Actions Needed To Deal with a Changing Domestic Telecommunications Industry" (CED-81-136).

Our objective was to provide a description and assessment of FCC's Computer II implementation plan and to identify the questions which are raised by it, particularly as they relate to the availability of resources to carry out Computer II implementation tasks. We did not attempt to analyze the policies which FCC has adopted in Computer II or the adequacy of the safeguards which FCC has chosen to adopt. In our September 1981 report we did, however, evaluate the use of separate subsidiaries as a procompetitive tool. We also made several recommendations to the Commission for using separate subsidiaries in connection with deregulating enhanced services and customer-premises equipment.

We have also not analyzed the impact on Computer II implementation of the January 8, 1982, agreement between the U.S. Department of Justice and AT&T to settle the antitrust action against the company. We did, however, discuss the matter with members of FCC's Common Carrier Bureau following the announcement of the agreement. Their comments are noted in the report.

BACKGROUND

In its Second Computer Inquiry, or Computer II as it is more popularly known, FCC attempted to deal with regulatory problems raised by the convergence of data processing and communications technologies. In Computer II FCC distinguished between basic communications services and enhanced services which involve more than the pure transmission of information. While basic services would continue to be regulated, FCC chose to refrain from traditional rate regulation of enhanced services provided by common carriers. FCC also chose to deregulate customer-premises equipment (equipment, such as telephones, which is located at the customer's premises and is attached to the communications network). FCC, however, required AT&T--the only common carrier which FCC considered to be dominant--to set up a separate subsidiary to offer such services and equipment and set forth certain conditions relating to the subsidiary's dealings with its parent firm.

In its October 7, 1981, Decision on Further Reconsideration in Computer II, FCC established a January 1, 1983, deadline for deregulating new customer-premises equipment and enhanced services, although it stated that carriers and regulators could carry out its order at an earlier date. Customer-premises equipment offered by carriers on a regulated basis prior to January 1, 1983, generally referred to as "embedded" customer-premises equipment, would continue to be regulated until FCC has resolved various problems surrounding its deregulation, such as how its value should be determined and how it should be transferred out of regulated service. A more detailed description of FCC's Computer II decisions is contained in appendix I.

FCC IMPLEMENTATION OF COMPUTER II

FCC's success in carrying out the tasks involved in implementing Computer II will, to a great extent, determine the success or failure of the regulatory scheme which FCC has created in its Computer II decisions. As we pointed out in our September 24, 1981, report and as FCC has recognized, the framework which it adopted in the Computer II inquiry cannot in and of itself ensure the absence of anticompetitive behavior by carriers which possess market dominance. While FCC has required dominant carriers to establish one or more separate subsidiaries to provide unregulated enhanced service and customer-premises equipment offerings, such subsidiaries do not represent a self-sufficient solution to the problem of market power and its abuse. Most importantly, a separate subsidiary requirement does not fundamentally alter the incentives of a firm to which it is applied. Thus, if a carrier has the incentive to exercise its market power to the disadvantage of consumers and competitors, it will have essentially the same incentive if it is subject to a separate subsidiary requirement.

Such a requirement can, to some degree, reduce a firm's ability to engage in anticompetitive behavior without detection--for example, by reducing joint and common costs between the affiliates and requiring that transactions move from one set of corporate books to another. However, the requirement clearly does not eliminate the need for regulatory scrutiny. For example, FCC will need to ensure that assets transferred to the subsidiary at the time of its creation are fairly valued and that the necessary costing and accounting systems are in place to ensure that any intracorporate transactions between the subsidiary and its parent firm are cost compensatory and that any shared costs are properly allocated. It will also need to develop auditing systems to monitor intracorporate transactions and investigate possible instances of abuse. As discussed below and in greater detail in appendixes II and III, many of the tasks involved in Computer II implementation will need to be carried out before carriers are allowed to offer enhanced services and customer-premises equipment on a deregulated basis.

In October 1980 FCC's Common Carrier Bureau established a task force which was to assume responsibility for the full range of actions needed to implement Computer II. Only two persons however, were assigned to the task force. Its main functions consisted of educating people inside and outside FCC on Computer II, working on various petitions related to Computer II, and tying up other "loose ends." It did little or nothing toward establishing the necessary accounting, costing, or auditing systems to implement Computer II, apart from beginning to draft an FCC notice dealing with how FCC should go about valuing customer-premises equipment and removing it from carriers' rate bases. Task force officials said the task force never functioned as intended because of a changeover in leadership at FCC.

Starting in October 1981, however, FCC began to focus its attention, in earnest, on implementing Computer II. A program review which FCC conducted in the fall of 1981 assigned the Common Carrier Bureau's highest priority to Computer II implementation. Further, in October 1981 the Bureau established a new task force charged with Computer II implementation responsibility. While the task force, which will be part of the Bureau's Enforcement Division, is to serve as the focal point for implementation activities, the Common Carrier Bureau Chief told us that it will be assisted by other divisions within the Bureau, as necessary. Primary front-office direction of task force activities is to be handled by the legal assistant to the Common Carrier Bureau Chief.

The new task force was set up with a six-person staff, consisting of two attorneys (one of whom serves as the task force leader), three economists, and one engineer. Present plans call for the task force to eventually be composed of 17 persons. FCC's Deputy Managing Director told us that the Office of Management and Budget had given FCC approval to include in its fiscal year 1983 budget request to the Congress the funds needed for the additional 11 task force members. Also approved was $1.5 million in contract support to aid FCC in valuing embedded customer-premises equipment and related assets, such as buildings and land. FCC plans to go ahead and bring the task force up to full strength as soon as possible through a reallocation of its existing fiscal year 1982 appropriation—rather than waiting for receipt of the fiscal year 1983 funding.

Until FCC brings these staff members on board, staff has been assigned from elsewhere in the Common Carrier Bureau to work with the task force on an interim basis. In mid-December the Bureau assigned a financial analyst and an accountant to the task force on a 120-day detail. In addition to these persons, the task force leader told us, two attorneys who had been assigned elsewhere in the Enforcement Division would be working with the task force on at least a part-time basis.

To help prepare itself to implement Computer II, the task force, along with other Bureau staff, put together in November and December 1981 a schedule outlining the major tasks to be accomplished and setting forth a timetable for accomplishing them. Among the tasks to be undertaken are

—reviewing and approving AT&T capitalization plans for the subsidiary it is to create under Computer II;

—reviewing and approving AT&T's plans for allocating costs for services which it will provide to its separate subsidiary, such as administrative services and installation and maintenance of customer-premises equipment for business customers;

--developing plans to monitor the acquisition of new customer-premises equipment and network equipment by the A&T subsidiary from other AT&T affiliates; and

—developing procedures to monitor and audit transactions between AT&T and its separate subsidiary.

A more detailed description of Computer II implementation tasks and FCC's plans for accomplishing them is contained in appendix II.

In addition to listing the tasks to be undertaken and the timetable for completing them, the schedule also indicates the staff which should be assigned to each task (for example, one engineer, two attorneys). It does not, however, attempt to assign precise work-year estimates to the various actions which relate to individual tasks, such as evaluating alternative approaches, reviewing a carrier's submission, developing a response, and designing an audit methodology. Task force and other Bureau officials who helped prepare it noted that while the schedule does provide the Bureau with a benchmark for implementing Computer II, plans would have to remain flexible and subject to adjustment for the time being, since carriers' plans for offering deregulated customer-premises equipment and enhanced services are not fully known. For example, the task force leader noted that AT&T was not scheduled to file its major capitalization plan for the subsidiary or subsidiaries to be created under Computer II until July 1, 1982. The resources needed to evaluate carriers' plans and to design and implement regulatory mechanisms to deal with them would depend, he noted, on such factors as the amount of sharing which will take place and the amount of assets, both financial and nonfinancial, which AT&T proposes to transfer to the subsidiary.

QUESTIONS RAISED BY FCC's COMPUTER II IMPLEMENTATION PLAN

While FCC in the last few months has begun to take actions necessary for it to implement its Computer II decisions, there is a question, in our opinion, as to whether FCC will be able to complete all of the tasks which must be carried out for it to meet its timetable for deregulating enhanced services and customer-premises equipment. Among the primary questions raised by FCC's Computer II implementation are the following: 1/

1. Will FCC's present resource plan ensure successful Computer II implementation?

Although FCC has developed a resource plan to aid it in implementing Computer II, this plan essentially represents a best guess of what might be needed. Carrier plans for carrying out many of the key aspects of Computer II implementation were not known at the time the FCC plan was formulated, and thus adjustments may prove necessary as implementation proceeds. Implementing Computer II is likely, under any circumstances, to prove complex and resource intensive; however, it will be increasingly

---

1/Each of these questions is discussed in greater detail in appendix III.

so to the extent that cost sharing and other interrelationships between a carrier's regulated and unregulated activities are allowed. While the unique nature of Computer II implementation makes it difficult to evaluate resource needs in light of past FCC activities, it should be noted that FCC employed a task force of about 50 persons in its only comprehensive effort to investigate AT&T activities (Docket 19129). Even then it experienced difficulty in fulfilling its regulatory responsibilities.

2. Will FCC be able to have all necessary costing and accounting systems in place in time to meet its Computer II implementation schedule?

In its Computer II decisions FCC chose to allow sharing of certain costs which carriers incur in providing regulated and unregulated services. For example, FCC has allowed AT&T to share with its subsidiary certain administrative services and, during an 18-month period, installation and maintenance services for the customer-premises equipment of business customers. Because of the potential for carriers to misallocate shared costs so as to subsidize competitive operations, costing, accounting, and auditing systems must be developed to ensure that such costs are properly allocated. Given, however, the problems which FCC has experienced in the past in allocating joint and common costs among carrier services and the short time frame which remains for FCC to carry out these tasks, it will be difficult for FCC to meet its implementation schedule in this area.

3. Can FCC ensure that AT&T's plans for capitalizing its separate subsidiary do not affect the costs of regulated services or provide the subsidiary an unfair advantage in competitive markets?

To implement Computer II, FCC will need to oversee the manner in which the separate subsidiary of a dominant carrier is capitalized so as to ensure that the capitalization does not adversely affect subscribers to the carrier's regulated services or give the subsidiary an unfair advantage in competitive markets. This will require FCC reviews of the valuation of assets to be transferred to the subsidiary, the arrangements to be established for financing subsidiary operations, and the costs incurred in setting up the subsidiary and in developing the equipment and services it will offer. One particular issue which FCC is to take up is the need for some amount of independent equity financing for the subsidiary. Given the multiplicity and complexity of these issues, FCC may experience some difficulty in addressing them, particularly if consideration of some of the more involved issues, such as outside equity financing, is deferred until mid-1982, when FCC expects to receive AT&T's major capitalization plan.

4. Will FCC be able to develop the necessary mechanisms to ensure that transactions and interrelationships between the separate subsidiary and its corporate affiliates take place on an arm's-length and cost-compensatory basis?

As part of Computer II implementation, FCC must oversee the transactions and interrelationships between a separate subsidiary and its corporate affiliates. For example, FCC must ensure that research and development costs incurred by AT&T's research affiliate are properly allocated between AT&T's regulated operations and those of its separate subsidiary. Likewise, FCC must ensure that transactions between AT&T's manufacturing affiliate and the subsidiary are cost compensatory and that the prices of equipment the subsidiary sells to its regulated affiliates are not inflated.

In the past FCC has experienced great difficulty in overseeing the activities of AT&T's research and manufacturing affiliates--for example, in ensuring that research and development costs for monopoly and competitive offerings are correctly assigned. Further, FCC has never required the kinds of accounting records and procedures for AT&T's manufacturing and research and development affiliates which are needed to monitor cost allocations within them. Thus, given the past problems which FCC has experienced and the complexity of the issues involved, it will be difficult for FCC to establish the necessary mechanisms to monitor the transactions and interrelationships between the subsidiary and its corporate affiliates by January 1, 1983.

5. Will FCC have the audit capability to effectively police the boundaries between regulated and unregulated activities of common carriers?

The ability of FCC to police separation conditions which it has imposed and to investigate claims of anticompetitive behavior is crucial to the success of the regulatory scheme created in Computer II. To be able to carry out these responsibilities, FCC will need to develop an audit capability as part of Computer II implementation. As we noted in our September 24, 1981, report, however, FCC's past audit activities have been very limited.

While FCC has recognized the need for audits in its Computer II implementation plan, it has not begun to design audit plans nor has it decided how they will be carried out--by FCC auditors, by outside firms, or through carrier self-certification. It appears likely, however, that carrier self-certification will be heavily relied on. Unless it has the ability to verify carrier reports, FCC may not, however, be able to attest to the reliability of the transactions between a dominant carrier and its affiliates.

ISSUES CONCERNING AT&T ANTITRUST SUIT

Some issues relating to Computer II implementation may arise as the result of the agreement reached on January 8, 1982, between the Justice Department and AT&T to settle the Federal Government's antitrust suit against the company. Under this agreement AT&T would be required to divest the local parts of its operating telephone companies.

In evaluating whether carriers should be subject to a separate subsidiary requirement, one of the factors which FCC considered was the carrier's ability to engage in anticompetitive activity through control over local exchange facilities, as well as toll transmission facilities, on a broad, national geographic basis. FCC also, however, considered other factors, such as (1) the carrier's ability to engage in cross-subsidization to the detriment of the communications ratepayer and (2) the integrated nature of the carrier and affiliated entities, particualrly research and manufacturing capabilities used in conjunction with or supported by communications-derived revenues.

As of January 20, 1982, FCC's Common Carrier Bureau is in the process of evaluating the impact of the antitrust agreement on its ongoing and future activities, including Computer II implementation. The Chief of the Bureau's Policy and Program Planning Division, who is heading this effort, stated that the precise impact of the agreement on Computer II has not been fully evaluated. The Bureau, however, expects to be discussing the subject with FCC Commissioners in the near future to determine what modifications, if any, of the Computer II provisions would need to be made when and if the agreement becomes final. In the interim, the Bureau is proceeding with Computer II implementation tasks. Among the implementation activities which appear most likely to be affected are the deregulation of embedded customer-premises equipment and the arrangements for shared installation and maintenance services.

At present, it is also unclear what role FCC will have in implementing the antitrust agreement. If FCC is called upon to become involved in activities which are not presently scheduled, an added demand may be placed on Common Carrier Bureau resources. Further, if the Congress enacts legislation (H.R. 5158 or S. 898) to revise domestic common carrier regulation, Computer II implementation will be directly affected since the legislation supersedes FCC's Computer II requirements.

- - - -

At your request we did not take the additional time to obtain agency comments on matters discussed in this report. However, material contained in the report was discussed with Common Carrier Bureau officials, and their comments were included where appropriate.

As arranged with your office, unless you publicly announce its contents earlier, we plan no further distribution of this report until 5 days from its issue date. At that time we will send copies to interested parties and makes copies available to others on request.

Sincerely yours,

Henry Eschwege

Henry Eschwege
Director

C o n t e n t s

ABBREVIATIONS

AT&T	American Telephone and Telegraph Company
FCC	Federal Communications Commission
GAO	General Accounting Office

COMPUTER II BACKGROUND

The FCC proceeding known as the Second Computer Inquiry, or more popularly as Computer II (Docket 20828), grew out of a decade-long effort by FCC to wrestle with the regulatory problems raised by the convergence of data processing and communications technologies. Changing communications and computer technologies had led to a situation in which common carriers were rapidly becoming equipped to enter the data processing field, if not by design, by virtue of the fact that computers used for conventional communications services could be readily programed to perform data processing services. Accordingly, FCC was faced with the problem of determining whether communications common carriers should be allowed to market data processing services and, if so, what safeguards should be imposed to ensure that such carriers would not engage in anticompetitive or discriminatory practices.

FCC first addressed this issue during the period 1966 through 1971 as part of its First Computer Inquiry. In the First Computer Inquiry, FCC attempted to distinguish between data processing services, which were to remain unregulated, and regulated common carrier communications services. More specifically, FCC adopted a set of definitions which it intended to use to distinguish between unregulated data processing and permissible common carrier utilization of computers in providing regulated communications services. In cases where common carriers were to offer data processing services, they were required to do so through a separate corporate entity. This requirement was aimed at restricting carriers' ability to favor their own data processing activities through cross-subsidization or other anticompetitive actions which could burden or impair the provision of regulated services.

Technological developments, such as distributed processing and "smart" terminals which perform both data processing and computer control functions, soon, however, rendered FCC's proposed definitional solution unworkable. Thus, FCC was forced to reexamine its approach to resolving regulatory problems arising from the interplay of data processing and communications. The mechanism which FCC chose to accomplish this was the Computer II Inquiry which it initiated in 1976.

In its April 1980 Final Decision in Computer II, FCC drew a boundary between "basic services" (traditional "pipeline" transmission services) and "enhanced services" made possible by rapidly evolving computer and electronic technology. The decision also provided for FCC forbearance from traditional price/earnings regulation in the case of enhanced services and customer-premises equipment offerings of common carriers under its jurisdiction. As an alternative, FCC set forth a regulatory scheme under which carriers which it deemed to be dominant would be required to establish separate corporate subsidiaries to provide such services and equipment. This requirement was to act as a regulatory tool which could be used by FCC to aid it in preventing anticompetitive conduct by such carriers.

FCC also set forth in its final decision and in two reconsiderations of the decision certain specific requirements relating to the relationships between dominant carriers and the separate subsidiaries which they were to establish under Computer II. For example, FCC prohibited enhanced service subsidiaries of dominant carriers from owning and operating their own transmission facilities. Instead, the subsidiaries were required to obtain transmission capacity from common carriers under tariff. This requirement was aimed at curbing potential abuse of market power by dominant carriers and assuring the continued availability and improvement of basic telecommunications facilities and services. FCC also attempted to guard against cross-subsidy and other anticompetitive dealings between a dominant carrier and its separate subsidiary by requiring that the subsidiary maintain separate books of account and do its own marketing. FCC requirements relating to separate subsidiaries, as well as other material relating to its Computer II decision, are discussed in greater detail in chapter 6 of our September 24, 1981, report.

FCC chose to apply the separate subsidiary requirement to only those carriers which it believed had significant market power and the ability to exercise it to the detriment of communications ratepayers and the competitive evolution of enhanced services on a national scale. Originally, FCC planned to apply the separate subsidiary requirement to the American Telephone and Telegraph Company and the General Telephone and Electronics Corporation. On reconsideration, however, FCC decided to apply it only to AT&T. FCC concluded, in this regard, that the benefits of maintaining separate subsidiary requirements for other carriers did not outweigh other public considerations. Nevertheless, FCC recognized that potential abuses involving other carriers existed. FCC chose, however, to deal with them through its authority to regulate carrier conduct, while reserving the right to reexamine its approach if abuses occurred or if circumstances changed generally.

In its October 7, 1981, Decision on Further Reconsideration in Computer II, FCC established a January 1, 1983, deadline for deregulating new customer-premises equipment and enhanced services--an extension of the original March 31, 1982, deregulation date in previous orders. FCC stated that carriers and regulators could, however, implement its order at an earlier date. Customer-premises equipment offered by carriers on a regulated basis prior to January 1, 1983, generally referred to as "embedded" customer-premises equipment, would continue to be regulated until FCC resolved various problems surrounding its deregulation, such as how its value should be determined and how it should be transferred out of regulated service.

MAJOR TASKS TO BE UNDERTAKEN

AS PART OF COMPUTER II IMPLEMENTATION

TASKS TO BE ACCOMPLISHED

Review of subsidiary capitalization plans

FCC is to review the capitalization plans submitted by AT&T for establishing a separate subsidiary to offer enhanced services and new customer-premises equipment. On November 30, 1981, AT&T filed a capitalization plan for the interim establishment of a subsidiary to offer Advanced Communications Service, an enhanced service. It is expected to file a plan for capitalizing other subsidiary operations around July 1, 1982. FCC is to review and approve each of these plans within 180 days. The primary tasks which FCC must carry out as part of this review include ensuring that

--assets to be transferred to the subsidiary are fairly valued,

--financing arrangements for the subsidiary do not burden communications ratepayers, and

--costs incurred by AT&T in establishing the subsidiary and developing the equipment and services to be provided by it are not borne by customers of its regulated services.

Development of a system to allocate shared installation and maintenance costs

FCC is to establish a system to ensure that the costs of installation and maintenance services for customer-premises equipment used in business systems are properly allocated between AT&T and its separate subsidiary. FCC has allowed AT&T affiliates to perform such services for customers of the separate subsidiary during an 18-month transition period. AT&T was required to inform FCC by January 13, 1982, of how shared costs will be allocated. 1/ FCC plans to have (1) an approved allocation system developed by the time AT&T files its major subsidiary capitalization plan and (2) an audit methodology developed by September 1982.

1/AT&T filed its sharing plans for administrative services and installation and maintenance services on January 13, 1982.

Development of a system to allocate costs for shared administrative services

FCC is to establish a system to ensure that the costs of any administrative services AT&T shares with its subsidiary are properly allocated. AT&T was required to advise FCC by January 13, 1982, of any administrative services which will be shared and explain how such service costs will be allocated. FCC plans to have (1) an acceptable allocation system developed before it approves AT&T's Advanced Communications Service capitalization plan and AT&T files its major capitalization plan and (2) an audit methodology developed by September 1982.

Development of customer-premises equipment and network equipment monitoring plans

FCC is to develop systems to monitor the acquisition of new customer-premises equipment and network equipment by AT&T's subsidiary from other AT&T affiliates to ensure that any such transactions are fully compensatory. FCC plans to have these systems developed by September 1982.

Development of a system to ensure that research and development costs are properly allocated

FCC will need to establish a system to ensure that research and development work products shared between AT&T and its subsidiary are financed on a cost-compensatory basis. Such a system should be in place before the subsidiary commences operations. FCC is to also reconsider, if necessary, its policy of allowing shared research and development at the conclusion of its current investigation of carrier license contract arrangements around April 1982.

Development of an auditing plan for carrier/subsidiary transactions

FCC is to develop procedures for auditing transactions between AT&T and its separate subsidiary. This effort, which is to include the development of a computerized auditing system, is to be in operation by December 1982.

Review of plans by carriers not subject to the separate subsidiary requirement to offer enhanced services and customer-premises equipment

FCC will need to review the plans of carriers under its jurisdiction which are not subject to its separate subsidiary requirement as is necessary to ensure that their offerings of enhanced services and customer-premises equipment do not affect the welfare of communications ratepayers. FCC has also stated its intention to monitor any requirements imposed by State regulatory agencies on carrier offerings of unregulated equipment and services to ensure that they are not inconsistent with FCC regulations.

Monitoring basic and enhanced service offerings

FCC is to develop a plan for monitoring AT&T's offering of new basic services and its subsidiary's offering of enhanced services to ensure that they conform to the classification scheme established in its Computer II orders. This plan is scheduled to be developed by September 1982.

Development of a means to oversee sales of equipment by a subsidiary to its affiliates

FCC will have to ensure that sales of equipment by the AT&T subsidiary to its affiliates do not result in ratepayers paying inflated prices. This is necessary to counteract the incentive to transfer corporate profits from regulated to unregulated activities through transfer pricing. FCC will need to develop a mechanism for accomplishing this before such sales are allowed.

Valuation and transfer of embedded customer-premises equipment and related assets

FCC will need to establish a means for valuing embedded customer-premises equipment and related assets and removing it from carrier rate bases. Under FCC's Computer II orders, only new customer-premises equipment is to be deregulated on or before January 1, 1983. Embedded customer-premises equipment will not be deregulated until after FCC addresses the following questions:

--What value should be assigned to embedded equipment to be removed from carriers' regulated asset accounts?

--How should such equipment be removed from carriers' rate bases--for example, by selling it to subscribers or allowing carriers to transfer it to unregulated accounts or, in AT&T's case, to its separate subsidiary?

Present plans call for establishing an advisory board to assist FCC in addressing these issues. No schedule has been established for this undertaking.

OTHER ACTIVITIES

In addition to these tasks, FCC will also be responsible for dealing with various petitions, complaints, and waiver requests relating to Computer II. Among the items now before FCC are (1) a petition from the National Telecommunications and Information Administration, Department of Commerce, which urges FCC to require AT&T to establish separate subsidiaries to perform all manufacturing and applied research and development functions related to its provision of enhanced services and customer-premises equipment and (2) an appeal of FCC's denial of the requests submitted by Cincinnati Bell, Inc., and Southern New England Telephone Company for relief from the structural separation conditions imposed upon affiliates of AT&T under Computer II.

Further, other FCC proceedings are related to, although not directly a part of, Computer II implementation. These include proceedings to

--determine whether FCC should relax its prohibition of carrier provision of protocol conversion within the basic communications network,

--investigate carriers' license contract arrangements,

--make changes in jurisdictional separations procedures which are necessitated by FCC's decision in Computer II to deregulate customer-premises equipment,

--consider deregulation of the inside wiring portion of carrier station connections, and

--revise the Uniform System of Accounts for domestic common carriers.

QUESTIONS RAISED BY FCC's COMPUTER II IMPLEMENTATION PLAN

While FCC has set forth in its implementation schedule plans for carrying out the major tasks necessary to implement Computer II, questions exist as to whether it will be able to successfully accomplish all of them before January 1, 1983. Among the questions raised are the following.

WILL FCC's PRESENT RESOURCE PLAN ENSURE SUCCESSFUL COMPUTER II IMPLEMENTATION?

Because carrier plans for carrying out FCC's Computer II decision are not yet fully known, questions exist as to whether FCC's present resource plan for its Computer II task force will provide the necessary resources to enable it to carry out successfully Computer II implementation. While, under any circumstances, the number and complexity of the tasks facing FCC are likely to be formidable if it is to ensure the absence of cross-subsidy and other forms of anticompetitive behavior, the work required to implement Computer II will be increasingly difficult to the extent that cost sharing and other interrelationships take place between a regulated dominant carrier and its separate subsidiary. Staff will be needed to, among other things, determine appropriate costing methodologies, set up necessary accounting systems, and design appropriate audit programs to ensure, for example, that shared costs are properly allocated between regulated and unregulated activities.

As of December 31, 1981, FCC had done relatively little to ascertain AT&T's plans for sharing costs between regulated and unregulated activities, for financing its separate subsidiary, and for carrying out other intracorporate transfers and transactions with the subsidiary. While the Computer II task force is beginning to focus its attention on these subjects, as of December 31, 1981, it had completed only some initial background work and held a few initial meetings with AT&T on its cost sharing proposals. Similarly, FCC has not yet solicited information from other carriers under its jurisdiction on the costing systems they will employ to provide unregulated services.

Because of this the Common Carrier Bureau's resource plan to implement Computer II is essentially a best guess of what might be needed. FCC may have to shift resources from elsewhere in the Common Carrier Bureau or from other FCC bureaus to help implement Computer II. The unique nature of Computer II implementation, as well as the uncertainty as to what precisely will be required, makes it difficult to evaluate Computer II resource needs. It should be noted, however, that past FCC efforts to regulate AT&T have been lengthy and resource intensive. For example, in its only comprehensive investigation of AT&T's rate of return, rate base, and expenses (Docket 19129), FCC employed a task force of some 50 persons, and the overall proceeding lasted about 6 years. Even with a task force of that size, FCC experienced considerable difficulty in fulfilling its regulatory responsibilities, as is discussed in chapter 3 of our September 24, 1981, report.

WILL FCC BE ABLE TO HAVE ALL NECESSARY COSTING AND ACCOUNTING SYSTEMS IN PLACE IN TIME TO MEET ITS COMPUTER II IMPLEMENTATION SCHEDULE?

In setting forth an approach for preventing anticompetitive behavior by a dominant carrier in its Computer II decisions, FCC chose to prohibit the sharing of various activities between such a carrier and the subsidiary it was required to establish for providing deregulated customer-premises equipment and enhanced services. However, in some areas, such as the provision of certain administrative services and (on a temporary basis) of installation and maintenance services for the customer-premises equipment of business customers, FCC determined that some sharing should be allowed. Given the problems which FCC has experienced in the past in allocating joint and common costs among carrier services, some doubt must be cast on FCC's ability to design the necessary costing, accounting, and auditing systems to ensure that the costs for these shared services are properly apportioned, particularly if these systems are to be designed by July 1, 1982, and in place by January 1, 1983.

In its April 1980 Computer II decision, FCC noted that the essential thrust of the structural approach it was taking was to separate joint and common costs associated with the provision of regulated and unregulated activities. Ideally, FCC stated, a parent and subsidiary should have no joint or common costs to allocate since the simplest method for transferring competitive market costs to the regulated market is the misallocation of such costs. Nevertheless, FCC determined that cost sharing would be allowed in certain areas. In the April 1980 order, FCC decided to allow a dominant carrier and its subsidiary to share administrative services on a cost-reimbursement basis--assuming "the existence of an accounting system which accurately reflects the costs of administrative services provided by an affiliated entity." Administrative services which could be shared include accounting, auditing, legal, personnel recruitment and management, finance, tax, insurance, and pension services. In its October 7, 1981, decision on further reconsideration, FCC also allowed a dominant carrier to perform for its subsidiary installation and maintenance services for customer-premises equipment for business services during an 18-month transition period. FCC required that all costs for such services be allocated on a fully distributed basis and that special accounts be established to record the services. FCC has also allowed joint institutional advertising.

In its October 7 order, FCC required AT&T to submit within 75 days of the order's release (i.e., by January 13, 1982) a detailed description of any administrative services which it planned to share with the subsidiary, along with an explanation as to how the costs of any shared services would be allocated between regulated and unregulated activities and a description of how installation and maintenance costs would be allocated and the accounting systems which would be employed. 1/ FCC's Common Carrier Bureau plans to have workable systems designed by July 1, 1982, when AT&T is to file its major capitalization plan for its separate subsidiary. The systems should be operational by January 1, 1983. In addition to approving these systems, FCC must also establish necessary arrangements or systems to ensure that carriers under its jurisdiction which are not subject to the separate subsidiary requirement cannot misallocate joint and common costs between regulated and unregulated services to the detriment of communications ratepayers. 2/

Computer II task force staff told us that they are now focusing much of their attention on how to deal with AT&T's cost sharing proposals. They acknowledged, however, that their ability to deal with the cost sharing plans would depend, to a great extent, on the amount of sharing which takes place--for example, whether, on one hand, the subsidiary performs most administrative services for itself as opposed to a general sharing of services between the subsidiary and AT&T's other operations. If sharing is extensive, the effort required by FCC staff would

---

1/On January 13, 1982, AT&T filed its installation and maintenance and administrative services sharing plans with FCC. The plans indicated that AT&T's operating companies would be performing installation and maintenance services for the subsidiary during the 18-month transition period. They also indicated that various administrative, corporate management, oversight, and support services would be provided to the subsidiary by AT&T's General, Long Lines, and Administrative Services Departments; Bell Laboratories; the 195 Broadway Corporation (which owns or leases real estate and provides real estate services for AT&T); and AT&T's operating companies. The plans also covered joint institutional advertising.

2/Fifty-nine telephone carriers reported to FCC in 1980.

appear to be considerable. Bureau officials also noted that if it proved impossible for them to accurately monitor cost assignments for these shared services, the need for structural separation would also have to be reconsidered--notwithstanding the Commission's previous determination not to require such separation.

Thus, given the work which remains to be done, FCC's past problems in developing workable costing and accounting methodologies (as discussed in detail in our September 24, 1981, report), and the relatively short time frame it has to carry out these tasks, it will be difficult for FCC to meet its schedule in these areas.

CAN FCC ENSURE THAT AT&T's PLANS FOR CAPITALIZING ITS SEPARATE SUBSIDIARY DO NOT AFFECT THE COSTS OF REGULATED SERVICES OR PROVIDE THE SUBSIDIARY AN UNFAIR ADVANTAGE IN COMPETITIVE MARKETS?

As part of its Computer II implementation effort, FCC must oversee the manner in which AT&T's separate subsidiary is capitalized. This oversight is needed to ensure that the carrier's capitalization plans do not have an adverse effect on subscribers to its regulated services or give the subsidiary an unfair advantage in competitive markets. Because of the relatively short time period within which FCC must address all of the complex issues which it may face in evaluating and approving these capitalization plans, it is not certain whether FCC can have all of them resolved in accordance with its Computer II implementation schedule.

In its April 1980 Final Decision in Computer II, FCC recognized the need for it to be concerned with the capitalization of a separate subsidiary. FCC said, specifically, that it would be concerned that transfers of assets during capitalization did not serve as vehicles for inappropriate subsidies to the detriment of basic service ratepayers and that the subsidiary, at the end of some determinate period, would be in a position to establish its financial independence and assume the risks associated with its competitive ventures. FCC also noted that it would be necessary in evaluating the capitalization plan to determine what costs the carrier had incurred in developing enhanced services to be offered by the subsidiary.

In its October 7, 1981, order on further reconsideration, FCC called for AT&T, the only carrier required to establish a separate subsidiary under Computer II, to file its capitalization plans at least 180 days before a subsidiary was to be formed--a modification of previous orders requiring that such a plan be filed 120 days before the subsidiary's formation. In the order FCC also stated that while January 1, 1983, was the date by which carriers must comply with its Computer II order, carriers could take implementation action earlier if they wished to do so. For example, FCC said AT&T was free to establish a separate subsidiary before the January 1, 1983, date, subject to its compliance with the necessary Computer II requirements.

On November 30, 1981, AT&T took advantage of FCC's offer and submitted a capitalization plan for the transitional operation of a separate subsidiary to offer an enhanced service known as Advanced Communications Service. The plan calls for an initial transfer of a cash advance of $3 million and of net plant and equipment totaling $56 million to the subsidiary. 1/ This is to be financed primarily through the issuance of common stock (equity capital). AT&T also asked for authority to provide $434 million in subsequent financing to the subsidiary. This financing is also to be in the form of equity capital and cash advances. In addition, AT&T indicated that $134 million in developmental costs had been incurred in forming the subsidiary which were to be borne by AT&T shareholders until recovered in earnings. Task force officials expect that AT&T will file another capitalization plan for new customer-premises equipment and the other enhanced services to be offered through a separate subsidiary on or about July 1, 1982. They expect the amount of assets involved in that plan to be substantially larger than those in the November 30 plan.

In evaluating and approving these capitalization plans, FCC may have to deal with a variety of complex issues which will be difficult to accomplish within 180 days, particularly if adequate preparations have not been made in advance. For example, in approving the transfer of physical assets to the subsidiary, FCC will have to determine that they are fairly valued, so that communications ratepayers are not adversely affected by the transfer. In the case of embedded assets, FCC may have to determine the economic value of an asset if its value is not adequately measured by its net book value. This problem may arise, for example, if

---

1/These figures presume a June 1, 1982, startup date. AT&T requested in its capitalization plan, however, that FCC approve the plan in 120 days, thus enabling it to begin offering the service on March 31, 1982.

land or buildings are transferred whose values may have actually increased rather than decreased over time. 1/

In evaluating the capitalization plan, FCC will also have to deal with difficult issues relating to the financing of the separate subsidiary. In this regard, FCC will have to consider whether financing of the subsidiary may adversely affect communications ratepayers by inhibiting AT&T's ability to obtain capital or by increasing its capital costs. This may involve questions such as (1) how the financing of the subsidiary might affect AT&T's overall capital structure and its debt and equity costs and (2) how to insulate communications ratepayers from bearing the costs of any losses which the subsidiary might suffer, for example, during its initial operation. 2/

In addition to examining any effects of the capitalization plan on ratepayers, FCC will also need to evaluate whether the financing for the subsidiary will provide it with unfair advantages in obtaining capital as compared to other firms with which it will be competing. Further, FCC has stated that in evaluating the capitalization plan it will consider the question of whether the infusion of some independent equity financing is needed. As we noted in our September 29, 1981, report, such a requirement may have a salutary impact on the incentives of a subsidiary as well as aiding FCC in carrying out its oversight tasks. We noted in this regard that

> "The added visibility which securities law disclosure requirements would impose on separate subsidiaries with publicly held securities, (disclosure of financial and operating information (15 U.S.C. Chapter 2A)), coupled with securities market evaluations of the potential and actual performance of the separate subsidiaries with publicly held securities, would facilitate FCC's as well as competitors' monitoring of the separate subsidiaries' market conduct and provide needed benchmarks for

---

1/FCC has attempted to reduce the need for accomplishing this task before January 1, 1983, by adopting a bifurcated approach under which embedded customer-premises equipment will remain regulated for an interim period.

2/The difficulty of dealing with issues involving capital costs can be partly illustrated by the amount of time and effort which it has taken FCC to address them in the context of rate-of-return proceedings for AT&T. The most recent proceeding, for example, lasted about 2 years and took over 53 person-months of effort.

measurement of competitive performance of fully separated entities."

Apart from issues relating to asset transfer and financing, FCC will also be faced with cost allocation questions in evaluating the capitalization plans. Specifically, it will be required to evaluate information submitted by AT&T on the separate subsidiary's developmental costs. In this evaluation, FCC will be required to ensure that all relevant costs relating to the subsidiary's establishment have been identified and accounted for so that none will be improperly charged to the customers of regulated services. Task force members acknowledge that this is likely to be a complicated undertaking. Thus, given the probable complexity of this and other issues involved in evaluating the capitalization plans, compounded by the fact that FCC (1) has relatively little experience in dealing with these issues and (2) has devoted relatively little attention to them before the receipt of the November 30 plan, it is questionable whether FCC can adequately address all of the issues before the Computer II implementation date. This appears particularly true if some of the more involved issues, such as that of outside equity financing, are deferred until AT&T submits its major capitalization plan in mid-1982.

WILL FCC BE ABLE TO DEVELOP THE NECESSARY MECHANISMS TO ENSURE THAT TRANSACTIONS AND INTERRELATIONSHIPS BETWEEN THE SEPARATE SUBSIDIARY AND ITS CORPORATE AFFILIATES TAKE PLACE ON AN ARM'S-LENGTH AND COST-COMPENSATORY BASIS?

In its Computer II orders, FCC decided to allow the subsidiary of a dominant carrier to interact with its parent firm and with the parent's other affiliates in a number of respects. For example, FCC chose to allow sharing of research and development between AT&T's separate subsidiary and the corporate entities with which it is affiliated, at least until it completes an investigation into carrier license contract arrangements. FCC also allowed the subsidiary to obtain equipment, including customer-premises equipment, from Western Electric, AT&T's manufacturing affiliate, and to contract with Western Electric to install and maintain the equipment. Further, FCC allowed the subsidiary to sell equipment which it manufactured to affiliates.

In each of these areas a potential exists for cross-subsidy or other forms of anticompetitive behavior. Thus, safeguards are needed to protect ratepayers and ensure fair competition. While FCC has recognized the need for action in these areas, at present it is unclear precisely what action it will take or when the necessary safeguards will be in place. As of December 31, 1981, little had been done in any of these areas.

Regarding research and development, FCC has stated that it may reevaluate its determination to allow cost sharing at the conclusion of its investigation into carrier license contracts. This investigation is still underway and is not scheduled to come before the Commission for further action until spring 1982. Common Carrier Bureau officials were hopeful that this would still allow them time to make any changes in their research and development policies as may be warranted before January 1, 1983; however, they stated that meeting that schedule would be difficult. In addition to reconsidering the need for changes in its policy regarding research and development under Computer II, FCC will also have to develop, before January 1, 1983, the necessary accounting records to enable it to monitor cost allocations within AT&T's research affiliate to ensure that charges to the subsidiary for shared research and development services are cost compensatory.

FCC will also have to establish mechanisms to oversee transactions between the separate subsidiary and its corporate affiliates. In this regard, it will need to have developed the necessary systems to ensure that the costs of equipment provided to the subsidiary by its manufacturing affiliate are properly allocated so that communications ratepayers do not subsidize competitive offerings. Similarly, FCC will need to establish procedures to oversee the sales of equipment by the subsidiary to its regulated affiliates since an incentive exists for the subsidiary to overprice such equipment as part of an effort to transfer corporate costs to regulated and profits to unregulated activities.

In each of these areas FCC has recognized the need for action as part of implementing Computer II; however, it is unclear precisely what that action will be, how effectively it will function, and when it will be completed. Common Carrier Bureau officials have noted that a major problem which they face in this area is their ability to regulate the activities of Western Electric and Bell Telephone Laboratories, AT&T's manufacturing and research affiliates. They noted that problems relating to the interrelationship between these organizations and other AT&T affiliates have confronted the Commission for years and have never been fully resolved.

For example, in its November 25, 1980, Notice of Inquiry on carrier license contract arrangements, FCC noted, regarding research and development (R&D), that

> "* * * there has been little accountability that the charges paid by the monopoly ratepayer are reasonable

either in terms of the absolute amount paid or in terms of whether competitive activities of the telephone systems have been subsidized by monopoly services. This is, of course, not surprising since the allocation task performed by management is almost inevitably subjective. Thus, the regulatory task of assuring that costs assigned to monopoly R&D are accurately segregated from costs incurred in competitive R&D is extraordinarily difficult."

FCC further noted that Western Electric's prices might not reflect its actual costs because monopoly ratepayers, through the license contract, might be subsidizing under the label "basic research and development" what was really specific research and development performed by Bell Laboratories for Western Electric.

Several years earlier in Docket 19129, concerns were also expressed about the activities of Western Electric and its relationship with other AT&T affiliates. For example, the administrative law judge who presided over the proceeding noted that Western Electric's costing and pricing methods left much to judgment and discretion "* * * so as to possibly result in what could be characterized as a hodge-podge of so-called cross-subsidization * * *." Further, the Commission pointed out the narrow scope of regulation which had been applied to Western Electric, adding in this regard that it had "* * * no direct regulatory responsibility for the non-operating activities of the Bell System or over its non-operating affiliates."

Given these past problems, FCC is likely to experience difficulty in dealing with all of the issues relating to the interaction between the separate subsidiary and its affiliates, particularly given the relatively short time which it has to carry out these activities.

WILL FCC HAVE THE AUDIT CAPABILITY TO EFFECTIVELY POLICE THE BOUNDARIES BETWEEN REGULATED AND UNREGULATED ACTIVITIES OF COMMON CARRIERS?

Since the separate subsidiary approach embodied in FCC's Computer II decisions does not fundamentally alter the incentives of dominant firms or totally eliminate all joint and common costs between regulated and unregulated activities, FCC regulatory action will be needed to prevent cross-subsidy and anticompetitive behavior. One of the fundamental tools which will be required in this regard is the ability to audit carrier records and to police the boundaries between regulated and unregulated activities. Given, however, the limited nature of past FCC audit efforts, questions exist as to whether FCC will have on hand by January

1983 the trained audit staff necessary to enforce its Computer II requirements.

Throughout its Computer II decisions FCC has pointed out the need to monitor the boundaries between carriers' regulated and unregulated activities, to oversee transactions between a dominant carrier and its affiliated companies, and to investigate possible instances of anticompetitive behavior. For example, in its April 1980 final decision, FCC set forth the requirement that any transaction between a subsidiary and any other affiliate which involves the transfer (either directly or by accounting or other record entries) of money, personnel, resources, or other assets be recorded in auditable form. Further, FCC required that all contracts between a subsidiary and its affiliates be filed with FCC and stated its intention to monitor the contracts and to reexamine its determinations as to the need for separation if abuses occur.

In its December 1980 decision on reconsideration, FCC again pointed out the crucial nature of its monitoring activities. Recognizing the incentives for cross-subsidy which existed, FCC stated:

> "It is imperative, however, that all parties to this proceeding understand that the primary method to detect and police cross-subsidization and other anticompetitive behavior, once the structural safeguards for AT&T have been erected, is to have a written account of all transactions, agreements and other arrangements between the parent, affiliates and separate subsidiaries. This affords the Commission and interested parties the ability to analyze the firms' behavior to ascertain whether they are performing within permissible guidelines."

Even more recently in its October 1981 further reconsideration decision, FCC reiterated its need to police compliance with the various separation conditions imposed on AT&T and to respond to and investigate claims of anticompetitive conduct. In addition, FCC has recognized in its Computer II decisions the need (1) to be concerned with the activities of carriers not subject to its separate subsidiary requirement who have the ability to engage in anticompetitive behavior and (2) to impose structural separation requirements on them if necessary.

While auditing activities have always been a key element in common carrier regulation, as we pointed out in our September 24, 1981, report, FCC's past audit activities have been extremely limited. The Common Carrier Bureau's auditing experience has been increased somewhat by its audit in 1980 of the conditions imposed by FCC in connection with its approval of a merger between

General Telephone and Electronics Corporation and Telenet. This audit, which took five persons about 6 weeks to plan and execute, was carried out by individuals in the Common Carrier Bureau's Enforcement Division--some of whom are now assigned to the Computer II implementation task force. While this experience is undoubtedly useful, its scope and complexity would appear to be quite limited in comparison to the audit work which will be required to implement Computer II.

As of December 31, 1981, FCC had not begun to design the audit procedures which will be necessary under Computer II. In our discussions of the establishment of such procedures with the Common Carrier Bureau Chief and other top Bureau officials, they noted that FCC has three primary alternatives from which it can choose to carry out its audit responsibilities: (1) use FCC staff, (2) hire an outside firm, or (3) rely on carrier self-certification. Because of the shortage of auditing resources, they believed that it would probably be necessary to rely on carrier self-certification as much as possible. Unless it has the ability to verify carrier reports, FCC may not, however, be able to attest to the reliability of the transactions which take place between a dominant carrier and its affiliates.

GLOSSARY

Advanced communications service	An enhanced service proposed by AT&T which is designed to enable users to make compatible various terminal and computer devices.
Common carrier	A company, organization, or individual providing wire or electronic communications services for hire.
Cross-subsidy	The contribution of profits by one telecommunications service priced above its cost made to defer the cost of another telecommunications service priced below its cost.
Customer-premises equipment	Equipment, ranging from telephones to computer terminals, which is located at the customer's premises and attached to the communications network.
Dominant	Used in relation to a firm in an industry which controls a significant portion of total industry output.
Embedded customer-premises equipment	Equipment which has been offered by carriers under tariff or was otherwise subject to the jurisdictional separations process prior to January 1, 1983--as opposed to new customer-premises equipment.
Enhanced service	A service which involves more than the pure transmission of information.
Fully distributed cost allocation	A method of allocating total costs among various telecommunications services based on the services' historical cost responsibility.

Institutional advertising	Advertising which is designed to enhance a firm's image, as opposed to advertising designed to promote a specific product or service or purely informative advertising.
Joint Board	A board composed of Federal Communications Commission and State commission members, created under Section 410 of the Communications Act of 1934.
Jurisdictional separations procedures	The procedures for dividing the cost of common carrier facilities and services between interstate and intrastate jurisdictions.
License contract	An arrangement in which an organization within a major telephone system provides certain services to associated telephone companies on a cost-allocative basis.
Price/earnings regulation	Regulation which aims at (1) determining a firm's total revenue requirements, (2) determining revenue contributions by user group, and (3) designing rate structures.
Rate of return/rate base regulation	A method of regulation allowing a regulated firm to earn revenues equal to its cost of service, including a fair return to stockholders and bondholders. Such regulation attempts to prevent firms from receiving monopoly profits but still allows them to attract new capital.
Station connections	That part of depreciable telephone property from the telephone pole to the customer's premises (outside) and the inside wiring within the premises (inside).