

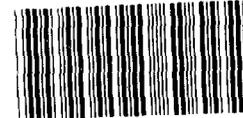
GAO

Report to the Honorable Edward J.
Markey
House of Representatives

February 1986

TELEPHONE BYPASS

Selected Information on Bypass of Local Telephone Companies



129304

**Resources, Community, and
Economic Development Division****B-222031**

February 14, 1986

The Honorable Edward J. Markey
House of Representatives

Dear Mr. Markey:

Your January 30, 1986, letter requested our assistance in preparing for the upcoming telecommunications hearings to be held by the House Subcommittee on Telecommunications, Consumer Protection, and Finance. Your letter cited our ongoing review related to bypass of local telephone company services and asked for information that we have to date on bypass. The information that follows provides our preliminary observations on selected bypass issues. Included as appendix I are questions for your consideration. Detailed information is provided relating to (1) two Federal Communications Commission (FCC) reports on bypass (app. II), (2) two nationwide bypass simulation studies and their results (app. III), and (3) FCC and state bypass monitoring activities (app. IV and V).

As a matter of background, bypass occurs when customers (usually large businesses) do not use the local telephone company facilities that are widely used by the general public to meet all or a portion of their communications needs. Instead, they use alternative facilities for their telecommunications services and thus bypass the local telephone company. The revenues from these large business customers comprise a sizable share of local telephone company revenues. An issue raised in the literature indicates that revenues lost from these large customers could induce the local telephone company to recover its costs through increased rates to remaining customers. The literature notes that increased rates may reduce the likelihood of the nation's maintaining two of its telecommunications goals—"universality of service" and "reasonable charges."

During 1982 bypass was a central issue in a major FCC proceeding that dealt with the pricing of access for interstate long-distance services. In December 1982, FCC adopted its access charge decision, which changed its method for recovering certain interstate telephone costs, in part as a way of limiting bypass. This decision permits local telephone companies to add, to their regular charges, a monthly charge ranging up to \$6 for each telephone line. This line charge allows local telephone companies to recover a part of their costs from all subscribers rather than recovering these costs only from those making interstate long-distance calls as was done previously.

FCC officials have stated that the access charge decision will deter customers who use large volumes of interstate services from bypassing the local telephone company because the decision permits a reduction in interstate long-distance usage charges. State regulatory commissions, consumer representatives, many small and rural telephone companies, and others voiced concerns about the monthly line charge because it increases telephone bills for customers who do little or no interstate calling and potentially reduces the affordability of telephone service.

FCC has released two reports that provide primarily descriptive information on bypass. The first report, Status Report on Near-Term Local Bypass Developments (Feb. 1983), was prepared as part of FCC's access charge decision. FCC described it as a staff study that represented the Common Carrier Bureau's efforts to identify and understand bypass through the available literature and telephone interviews of users, suppliers, government officials, and consultants. FCC stated that this report was not a definitive analysis of bypass activity and issues. This report concluded that both local and long-distance bypass was occurring and would continue to grow regardless of regulatory actions. It identified microwave transmissions as the primary bypass technology and government, large financial organizations, universities, and large corporations as the key bypassers. It also concluded that bypass would not threaten the viability of the local telephone companies.

The second FCC report, Bypass of the Public Switched Network (Jan. 1985), was prepared after FCC postponed implementing subscriber line charges for residential and single-line businesses in February 1984. This report included a wide variety of data and comments provided FCC in response to public notices. On the basis of the record generated for the report, FCC stated that it confirmed the findings of its prior report and drew several additional conclusions. These include that service bypass¹ would be the most prevalent form of bypass and that the amount of future bypass is likely to increase rates for other customers. Appendix II details the principal conclusions of both reports.

¹Service bypass is a form of bypass that uses local telephone company private lines to connect customers to the long-distance facilities of interexchange carriers.

In 1984 the FCC and Bell Communications Research (BCR) each developed simulation models² that can be used to provide estimates of 1984 revenue loss due exclusively to bypass of local telephone company access services. The models have widely differing estimates—the FCC model estimates a \$4 billion loss and the BCR model estimates a \$10 billion loss in revenue to recover certain interstate costs. The variance occurs because the models use different assumptions about (1) who bypasses and which bypass options are available and (2) how the costs of bypass options determine which options are adopted by customers. The models have three important common assumptions:

- Full and fair competition exists among interexchange carriers.
- Customers and interexchange carriers base their decisions exclusively on access costs and will immediately change access services to minimize costs.
- The financial incentives to bypass are based on prevailing facility bypass costs and services.

The authors of both studies acknowledge that their models are not meant to be forecasts of local telephone company revenue loss due to bypass of access services in either the immediate or long term. Both authors also acknowledge that the three common assumptions did not fully reflect the telecommunications industry as it existed in 1984. In addition, both authors suggest that developing technologies, which can improve bypass services and reduce bypass costs, can create added incentives to bypass in the future. Thus, both authors suggest that their models provide an opportunity to understand how bypass could decrease local telephone company revenues.

FCC does not have a formal bypass monitoring program, though FCC officials have stated that they plan to monitor and evaluate bypass in mid-to-late 1986. (See app. V.) In conjunction with our ongoing assignments, we have found that since the access charge decision, FCC has focused its monitoring efforts primarily on monitoring universal service. FCC officials stated that by tracking the percentage of residential telephone customers, they are monitoring one of the most important policy concerns—continued residential subscribership. As part of its current formal monitoring program, FCC is tracking several types of data. These include data on the changes in the percent of the residential population

²Bypass of Local Exchange: A Quantitative Analysis, Gerald Brock, FCC Office of Plans and Policy, September 1984 and The Impact of Access Charges on Bypass and Universal Telephone Service, Bell Communications Research (BCR), September 1984.

with a household phone, the costs of telephone service relative to other consumer goods and services, and state rate cases. FCC officials told us that the data collected to date show no significant decrease in residential telephone subscribership and suggest that the vital signs of universal service are, in fact, healthy. Appendix IV details some results of FCC's monitoring activities.

During the last several months, we have collected information from state public utility commissions (including the District of Columbia) regarding bypass-related activities. Thirteen of the 51 commissions reported that they were monitoring bypass, and 6 of these had specific bypass monitoring guidelines or plans. These plans included having local telephone companies report to the state public utility commission when a major customer bypasses or is likely to bypass (Missouri, North Carolina, and Wisconsin), monitoring the number of lines disconnected (Kansas), receiving quarterly reports on telephone company efforts to prevent bypass (Florida), and requiring providers of private bypass systems to register with the commission (Utah).

While we have not completed our examination of the bypass issues, available information suggests that bypass will continue to grow in the future. Thus, the local telephone companies face a potential revenue loss due to bypass. None of the studies provide a precise nationwide estimate of past, current, or future bypass revenue loss or determine how the revenue loss might affect local telephone rates. In addition, FCC is not actively monitoring bypass, though it indicates its plans to monitor and evaluate bypass in mid-to-late 1986.

We have not attempted to determine the efficacy of a formal FCC bypass monitoring program. However, there are several areas regarding bypass monitoring which could serve as a first step in beginning a dialogue with FCC on this issue. These include (1) FCC's specific plans to monitor bypass; (2) types of data available to monitor bypass; (3) ways to determine how much revenue has been lost to bypass in the last year and would be lost in the future; (4) extent to which FCC has data on state bypass monitoring activities and their applicability to nationwide monitoring; (5) cooperation required among local telephone companies, inter-exchange carriers, and state public utility commissions to monitor bypass at a nationwide level; (6) FCC resources required to monitor nationwide bypass; and (7) cost versus benefit of a formal bypass monitoring program.

We hope you find this information and the questions useful in planning for the upcoming hearings on this topic. As agreed, we plan no further distribution of this report for 30 days or until you publicly release the report.

Sincerely yours,

A handwritten signature in cursive script that reads "J. Dexter Peach". The signature is written in black ink and is positioned above the printed name and title.

J. Dexter Peach
Director

Contents

Letter Report		1
Appendixes		
	Appendix I: Questions for the FCC	8
	Appendix II: Conclusions of FCC Bypass Reports	14
	Appendix III: Information on the FCC and Bell Communications Research (BCR) Studies (Simulation Models)	16
	Appendix IV: A Summary of Key Observations That FCC Has Reported From Its Monitoring Activities	18
	Appendix V: FCC's Intentions to Monitor Bypass As Stated in Its Publications	19
Glossary		21

Abbreviations

AT&T	American Telephone & Telegraph Company
BCR	Bell Communications Research
CPI	Consumer Price Index
FCC	Federal Communications Commission
GAO	General Accounting Office
RCED	Resources, Community, and Economic Development Division
SDN	Software Defined Network
WATS	Wide Area Telecommunications Service

Questions for the FCC¹

1. Does FCC have any definitive analysis of bypass?
2. Does FCC know which telephone company services are being bypassed and the amount of this bypass? What amount of local telephone company revenues is being lost to bypass? How will this affect the price of residential telephone service?
3. What models has FCC developed or analyzed that provide estimates of the potential extent of nationwide local telephone company revenue loss due to bypass?
4. To what extent do these models provide different estimates of the extent of revenue loss? If they provide different estimates, can you explain why?
5. To what extent can the models be relied on to provide actual forecasts of local telephone company revenue loss in the immediate future?
6. Can the models be used to provide accurate long-run forecasts of nationwide local telephone company revenue loss? What factors in the models could limit their ability to provide long-run forecasts of nationwide revenue loss for the local telephone company?
7. What factors, beside relative costs of access options, affect the access choice by large customers and interexchange carriers? To what extent do the nationwide models include noncost factors? How might the inclusion of noncost factors change the estimates of the models?
8. To what extent would customer concerns about reliability of microwave-based bypass systems and other limits of bypass alternatives reduce the probable extent of bypass in the future? How do the models include such factors? How would the inclusion of such factors affect the models' estimates?
9. In practice, large customers or interexchange carriers take time to consider, plan, and ultimately adopt bypass alternatives even after they are convinced that bypass is financially attractive. How do the models address the time it takes to actually adopt and implement a bypass option? How would the inclusion of time to implement a bypass alternative affect the models' estimates?

¹The technical terms used in these questions and elsewhere in the report are explained in the Glossary, appendix VI.

10. How do these models deal with the actual level of competition in access markets as compared to the expected effects of full and fair competition on bypass revenue loss? How would the current extent of competition affect the models' estimates of revenue loss due to bypass?

(At present, full competition does not exist in the marketplace for access services. For example, AT&T enjoys the advantage of name recognition and better local telephone company services in nonequal access areas while its competitors are more free to bypass the local telephone company and reduce their access costs.)

11. How do the nationwide models deal with bypass of services that do not provide access for interstate traffic? How much revenue loss could occur due to bypass of noninterstate access services? What would happen to the models' estimates if bypass of other services were also considered?

12. What assumptions do the nationwide models make on the interstate access charges as compared to the intrastate access charges? How does this affect the revenue losses due to intrastate access bypass? What would happen if intrastate access charges no longer matched interstate access charges? How could this affect recovery of the intrastate access revenue requirements?

13. Many experts suggest new technologies will improve services and reduce costs on bypass systems in the future. What evidence does the FCC have to evaluate the extent to which new technologies, such as shared telecommunications services, teleports, and fiber optics, will increase the amount of bypass in the future? What assumptions do the nationwide models make about the future costs of bypass systems? What are the long-run policy implications of these decreasing bypass costs and improved bypass services?

14. Many experts contend that bypass is especially attractive at locations that generate high levels of interstate traffic. What proportion of interstate traffic is generated by high volume locations? Do the models' assumptions on the extent to which traffic is generated at a few locations agree with the available evidence? Does FCC expect traffic to continue to be concentrated at a few locations in the future? What are the long-run implications of traffic being concentrated at only a few locations?

15. In FCC's 1985 bypass report, FCC's conclusions continually point to the importance of service bypass and indicate that it will be the most prevalent form of bypass in the next few years. FCC has indicated that the likely amount of future bypass is large enough to cause increased rates for other customers. Given the apparent concerns about service bypass, what specific plans does FCC have to monitor service bypass levels and track the effects of service bypass on rates?

16. To what extent will local telephone companies suffer lost access revenues as customers switch to Megacom and SDN services? On what basis has FCC reached this conclusion? What studies are available that indicate the rate at which large customers of the local telephone company might cross over to Megacom and SDN? Will the extent of the revenue loss due to the two tariffs increase through time?

17. FCC mentioned in its SDN Order that it plans to continue with its investigation of SDN. What additional investigation has FCC done since approving SDN? What types of information has FCC collected? What does this information say regarding bypass of switched access services?

18. FCC's SDN and Megacom Orders state the existence and seriousness of bypass. Has FCC defined the boundaries of an acceptable bypass level? How does FCC plan to determine when and if bypass can cause harm to the local residential customer?

19. In FCC's Megacom Order, FCC noted that petitioners may assert that bypass options made available under a prepared tariff constitute unreasonable tariff practices. FCC stated in the order that broad brush bypass questions are addressed most appropriately in a comprehensive rule-making proceeding. Does FCC plan to conduct a proceeding on bypass?

20. FCC has indicated that bypass can have serious consequences and has allowed certain tariffs that will allow more bypass to occur. In approving these tariffs FCC has stated that the tariffs' opponents have not demonstrated that the potential effects of these services upon local exchange companies outweigh the potential benefits of making the service available to consumers. Can FCC provide more detailed information as to how it arrived at this conclusion?

21. To what extent is AT&T losing its market share? To what extent has this occurred because AT&T has been restricted in the access services it can use? Are any studies available to confirm this conclusion?

22. To what extent could a reversal of FCC decisions authorizing AT&T tariffs for Megacom and SDN affect AT&T's ability to compete with other interexchange carriers? What evidence supports this conclusion?

23. How does the FCC judge the relative importance of eliminating discrimination among local telephone company prices or services as opposed to ensuring local telephone companies retain adequate revenues to ensure they can continue to provide affordable local residential services?

24. To what extent will increased subscriber line charges and the allocation of local telephone company costs to the interstate jurisdiction increase residential rates? What studies are available to support your conclusion?

25. To what extent are other decisions by the FCC, such as changed depreciation rules and detariffing of customer premises equipment, increasing local telephone company costs and potentially local residential bills? What has the FCC done to ensure the sum total of its decisions does not endanger universal service?

26. FCC noted (in its Megacom Order) that the long-term solution to the bypass issue is to be found in the proper allocation of nontraffic sensitive costs among all users and not the disallowance of a new service. What are FCC's plans to study the proper allocation of nontraffic sensitive costs?

27. What analyses has the FCC done on alternatives to the access charge decision and subscriber line charge?

28. What is FCC doing to evaluate the effect of the proposed access charge waivers by the Bell operating companies on bypass and residential service charges?

29. What evidence is available to suggest that uneconomic bypass is actually occurring and that the rates in the access charge decision are actually going to affect the amount of uneconomic bypass? Does FCC have any efforts underway that would better identify and measure uneconomic bypass?

(A major rationale for the access charge decision with its subscriber line charge was the idea that prevailing 1984 local telephone company

access charges created uneconomic bypass, which decreased the efficient use of telephone facilities. However, in recent studies of bypass and in the access charge decision, FCC decided to define bypass in terms of the routing of services rather than the true economic costs of the service. This approach was taken because FCC found that properly defining uneconomic bypass was a difficult task.)

30. What evidence does FCC have to suggest traffic sensitive costs actually approximate variable costs and can on economic ground be appropriately recovered on a usage charge basis? Also, what evidence does FCC have to suggest that nontraffic sensitive costs are all fixed and not variable?

(Many observers including the FCC have suggested that traffic sensitive costs are economic or marginal costs while nontraffic sensitive costs are fixed economic costs. Based on this distinction, FCC originally proposed that all nontraffic sensitive costs assigned to the interstate jurisdiction be assigned to the subscriber as a fixed monthly subscriber line charge. Traffic sensitive costs, on the other hand, would continue to be collected on the basis of a usage charge, because they varied with the extent of traffic. But some analysts have suggested that traffic sensitive costs are really rather fixed and that the true extent of variable costs is much less than the costs allocated to the traffic sensitive categories.)

31. Experts have suggested that the FCC subscriber line charge in conjunction with local fixed monthly charges for telephone service will create a fixed bill high enough to stimulate bypass of both interstate and intrastate local telephone company services. To what degree has FCC considered such intrastate revenue loss in approving interstate tariffs?

32. To what extent can the FCC encourage states to develop new tariff structures that assist moderate income subscribers, such as local measured service or life line rates?

33. In order to understand the national implications of bypass, it seems necessary to understand state and regional situations. What does FCC know about state policies toward bypass and competition within their jurisdictions? To what extent do state policies diverge from federal policies and how does this affect both common carriers and customers?

34. Many in the telecommunications community have stated that bypass revenue loss of the local telephone company is not reversible. They indicate that once bypass occurs it will be hard if not impossible to get these

users to forego bypass services and return to local telephone company services. Is it possible to examine the bypass issue after a sizable amount of bypass has occurred and then be able to reverse its adverse effects?

Conclusions of FCC Bypass Reports

Status Report on Near-Term Local Bypass Developments, February 1983

1. Bypass, including local and long-haul, is taking place today.
2. Some forms of bypass will continue to grow regardless of regulatory actions.
3. Most local bypass technologies in use today are variations of microwave systems while other technologies (such as local area networks) will provide users with more efficient forms of local bypass.
4. Major classes of local bypassers include local, state, and federal governments; large financial organizations; universities; and large corporations with national distribution systems.
5. AT&T has the capability to become the major bypasser, but FCC says it has no clear picture of AT&T's intentions or plans.
6. No form of existing bypass can supply the ubiquity provided by the Public Switched Network.
7. No basis exists for the belief that the level of bypass that could be expected in an environment of cost-based access charges will threaten the viability of local telephone companies.

Bypass of the Public Switched Network, January 1985

This second report confirmed the findings of the prior report. In addition, on the basis of the record generated for the report, FCC said it had developed a better understanding of bypass and drew the following additional conclusions.

1. Bypass is not dependent on the development of new technology. Most of the bypass activities taking place today use private lines leased from telephone companies.
2. During the next few years, service bypass (i.e., the use of special access lines) will be the most prevalent form of bypass. The significance of service bypass must be emphasized for several reasons. First, the present amount of service bypass far exceeds bypass using private facilities. Second, studies filed in FCC's investigation consistently show far greater revenue losses expected from service bypass than from private bypass. Third, where bypass occurs in two stages (with companies first

leasing private lines and later constructing private systems) the impact of service bypass on other subscribers is far greater than the subsequent impact of private bypass.

3. The establishment of direct links between long-distance carriers and points with large concentrations of traffic now appears to be the most likely source of growth in bypass in the near future. Direct links between interexchange carriers (particularly AT&T) and large customers may divert virtually all WATS traffic and an indeterminate amount of ordinary long-distance calls from the public switched network. Carriers competing with AT&T already offer "WATS-like" services that avoid switched access charges, and AT&T is taking actions that will enable it to do so also.

4. The likely amount of future bypass is large enough to cause increased rates for other customers. An attempt to recapture the contributions lost when bypass occurs might take the form of higher long-distance rates—leading to still more bypass. Alternatively, if the contributions are recovered from local rates, the impact will be several dollars per month on each local line.

Information on the FCC and Bell Communications Research (BCR) Studies (Simulation Models)

What the Models Do

Both models estimate how 1984 local telephone company access revenues could have changed if different local telephone company switched access charges had been in place and if subscribers and interexchange carriers had minimized access costs.

Both models assume that interstate access markets were competitive so that AT&T and its competitors could obtain identical services from local telephone companies and use any form of access including facility bypass that minimized their own costs and those of their subscribers. Thus, they assume that equal access was in place and AT&T is free to choose its access option exclusively on the basis of access costs.

What the Models Estimate

The FCC Model

The FCC model asks whether the interstate revenue requirement for all local telephone companies can be recovered by increasing the switched access charge. This increase of the switched access charge increases financial incentives to bypass; but if enough traffic remains on local telephone company access services, the revenue requirement can still be met.

The model suggests that under many circumstances an increase in the switched access charge can generate enough revenues to meet the interstate access revenue requirement. For example, in one version of the model, it is assumed that the loss of traffic sensitive revenues will be matched by a decrease in traffic sensitive costs while a loss in nontraffic sensitive revenues will lead to a revenue shortfall because nontraffic sensitive costs remain constant. Given this assumption, the base case model suggests that an increase in the switched access charge from the 1984 base case of 8.45¢ to 12.11¢ per minute will permit the local telephone companies to meet the interstate nontraffic sensitive revenue requirement. However, the increases in the switched access charge creates bypass by large users and the increased charge is paid only by smaller users who do not find bypass financially attractive at 12.11¢ per access minute.

The BCR Model

The BCR model addresses two different pricing alternatives. In its base case the switched access charge is 8.48¢ per minute, with a \$6 subscriber line charge on multiline businesses. In its alternative case the switched access charge is reduced to 6.05¢ to reduce the incentive to bypass, with a \$4 subscriber line charge on residential and single-line businesses. It estimates the extent to which the alternative pricing policy can reduce bypass revenue losses.

BCR suggests that the extent of bypass will decrease as the switched access charge decreases. Total nontraffic sensitive revenue loss would be \$10.20 per residential line per month if the switched access charge was not reduced. With the use of a \$4 subscriber line charge and a reduction in the switched access charge, the total nontraffic sensitive revenue loss would decline to \$4.55 per residential line. As in the FCC model base case discussed above, BCR assumes that a decrease in traffic sensitive revenues results in a corresponding decrease in traffic sensitive costs.

The BCR model reports that in 1984 the total average residential bill of the Bell operating company was \$29.16 per month, of which \$12.72 was for local services. BCR reported that if bypass was occurring and switched access charges did not change, the total average residential bill would be \$39.36, of which \$22.92 would be for local services. With the subscriber line charge and reduced switched access charges, the total average residential bill would be \$35.78, of which \$21.08 would be for local services. Thus, BCR concluded that the implementation of a \$4 subscriber line charge actually reduces the residential bill because it deters revenue loss due to access bypass.

BCR also calculates that the existing 1984 prices permit 92.03 percent of all residences to have phone service. With no change in access charges, the BCR results show that the resulting level of bypass and increase in residential rates would permit 88.47 percent to have phone service. However, the imposition of a subscriber line charge and the resulting reduction in the actual residential bill would permit 89.38 percent to have phones.

A Summary of Key Observations That FCC Has Reported From Its Monitoring Activities

The percentage of U.S. households with a telephone in November 1985, as reported to the FCC by the Census Bureau, is 91.9 percent.

The Consumer Price Index (CPI) demonstrates that the cost of telephone services, including local, long-distance, equipment, taxes, and other charges, has risen at a lower rate than the costs of other consumer goods and services. The telephone services' CPI stood at 199.5 as of November 1985, compared to 326.6 for the total CPI. Both indexes are calculated from a 1967 base of 100.0.

The recent inflation in telephone service prices has declined from a 1984 rate of 9 percent to a level approximately equal to the current general inflation rate of slightly less than 4 percent.

The most specific measure of changes in residential local service rates, compiled by the Bureau of Labor Statistics, shows that at the national level local rates increased by 10 percent in 1984 and 3 percent in 1985, excluding the subscriber line charge. (Including the subscriber line charge, local rates increased by 11 percent in 1985.)

The amount of pending rate requests for intrastate rates has fallen off dramatically from a 1983 high of \$6.9 billion to \$1.7 billion as of December 1985, leaving substantially less pressure on the states to increase rates during 1986.

FCC Intentions to Monitor Bypass As Stated in Its Publications

Bypass of the Public Switched Network, January 1985

"Some of the bypass studies were creative and well-documented. Some, in contrast, had little documentation and the results could not be verified. Overall, the information generated will serve as a fertile data base for future research. We have not attempted a detailed analysis of the merits of individual studies here. Rather, we will simply discuss the major themes that run through these studies. ...Further analysis of these studies will be undertaken in connection with our monitoring of the impact of the access charge decisions."

Federal-State Joint Board Recommended Decision and Order, November 15, 1984

"We recommend a further Joint Board proceeding to examine the effect of subscriber line charges and the special anti-bypass tariffs on universal service, bypass, economic efficiency, and interexchange competition. This proceeding should be instituted in late 1986 and completed as soon as possible, consistent with the need for development of an adequate record. The purpose of this proceeding would be to recommend what, if any, further steps should be taken by the FCC."

(FCC adopted this and other Joint Board recommendations on December 19, 1984.)

FCC Memorandum Opinions and Orders Related to Software Defined Network (SDN) Service and Megacom, October 31, 1985

"We will monitor the actual shifts in demand and the extent of any bypass resulting from the introduction of SDN service. In order to do so, we will require, pursuant to the authority granted us under Section 218 of the Act, 47 U.S.C. §218, periodic reports from AT&T-C estimating the cumulative number of access minutes which its customers shift from WATS, MTS, EPSCS, and CCSA services to SDN service. We will also require those LECs with customers for SDN-related special and switched access lines to report periodically the number of special access lines customers order to obtain SDN service, the number of switched lines for which customers seek to substitute special access lines in order to take SDN service, and the number of switched lines that customers order to access SDN service. AT&T-C will be required to provide the LECs with such information regarding the special access lines it orders which may be necessary for the LECs to make their reports."

(FCC officials also have stated that they plan to monitor Megacom and will collect information from AT&T regarding actual revenue and demand for these services. Both orders state that FCC will begin to collect this information within a year of the effective date of these services to allow a reasonable period of time for data to be assembled. At the FCC meeting approving these tariffs, one commissioner raised concerns about FCC's bypass monitoring activities being focused in a tariff proceeding rather than a broader docket. FCC in its orders also recognized that "broad

brush bypass questions” could be addressed most appropriately in the comprehensive setting of a rule-making rather than tariff proceeding.)

Glossary

Access Charge	A fee charged by the local telephone company to cover local exchange costs directly associated with the origination and termination of long-distance services.
Access Charge Decision	FCC's decision on the computation and assessment of charges to cover local exchange costs associated with the origination and termination of interexchange services.
Access for Interstate Long-Distance Services	A service historically provided by the local telephone companies to enable subscribers to place interstate long-distance calls. Access for interstate long-distance services may also be provided by bypass facilities or services.
Customer Premises Equipment (Terminal Equipment)	Devices, ranging from simple telephones to computers, that are located on the customer's premises and are used to send or receive information over the telephone network.
Economic Bypass	A form of bypass whose economic cost and price are lower than that of an equivalent telephone company service.
Economic Costs	The costs incurred by increasing production by one unit. These could include the costs of material, labor, and services required to produce the added unit.
End-To-End Bypass	Customer-owned or provided communications systems that transmit messages that pass through neither the local exchange nor interexchange carrier facilities.
Facility Bypass	A form of communications that does not use local telephone company facilities. Facility bypass may be provided by the interexchange carrier, by the customer, or by a third party other than the local telephone company.

Jurisdictional Separations Procedures	The procedures for dividing the cost of telephone company facilities and services between interstate and intrastate jurisdictions.
Local Loop	The communications channel connecting a subscriber to a central office.
Megacom	An AT&T service, first offered in November 1985, that requires customers (predominately businesses) to arrange for access via their own facilities, AT&T private line service, or local telephone company special access service. It has both a flat minimum monthly charge and distance and usage sensitive charges. It differs from previous AT&T services in that it offers the access portion of the long-distance service separately.
Nontraffic Sensitive Costs	According to FCC, these are costs that do not vary with usage. Such costs are concentrated in the local loop, inside wiring, and customer premises equipment.
Private Line Service	A communications link between two or more designated points set aside for a particular customer's exclusive use.
Service Bypass	A form of bypass that connects customers to the long-distance facilities of interexchange carriers through the use of local telephone company private lines.
Shared Tenant Services	The sharing of a telephone company's services by tenants through the use of a private switch that concentrates and routes tenants' local and long-distance calls.
Software Defined Network (SDN)	A private line service that integrates use of AT&T's Message Telecommunications Service switched network and customized, computerized network features to create a private line network for customers. Customers identify the specific points they wish to connect via SDN service and have a specific numbering plan to call these locations. SDN also allows customers to call points off its network by dialing a single digit for off-network access. SDN customers receive access to this service via (1) their

own facilities, (2) special access service, or (3) a new type of switched access developed for SDN and referred to as "standard switched access."

Special Access

A service that provides users nonswitched access to local telephone company facilities over dedicated private lines. Special access services require a specified charge that is independent of usage and allow users to access long-distance carriers without paying a contribution to the switched portion of the local telephone company.

Subscriber Line Charge

A monthly charge paid by residential and business subscribers in order to cover local exchange costs associated with the origination and termination of interexchange services. This charge has also been referred to as the customer access line charge or the end user charge.

Subscriber Plant Factor

The allocator that until recently was used to assign nontraffic sensitive plant costs to the interstate jurisdiction.

Switched Access

Telecommunications services that provide users access to local and interexchange carrier facilities usually require charges based on level of use. Most switched access services provide a contribution to the local telephone company's rate base.

Traffic Sensitive Costs

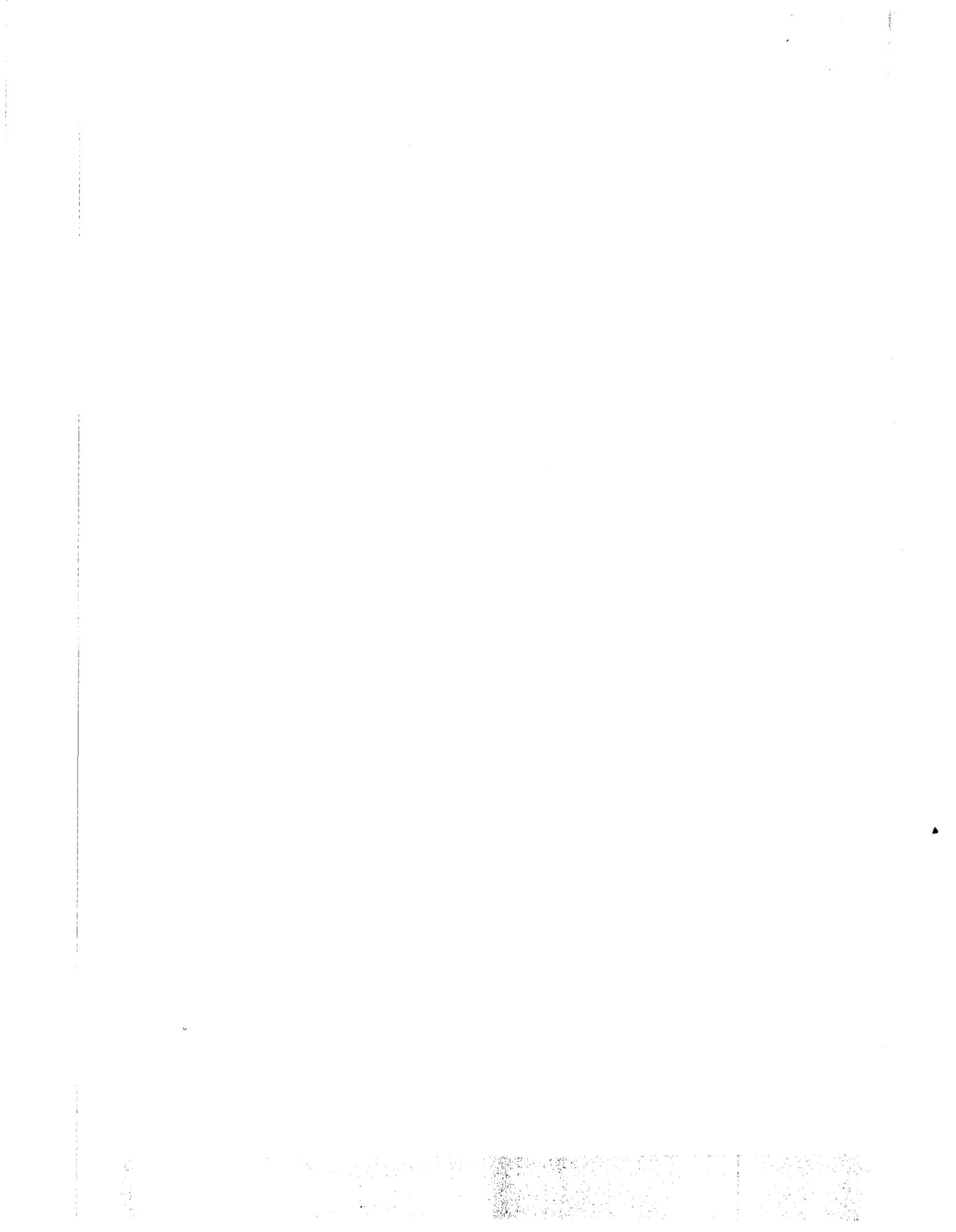
According to FCC, these costs vary according to usage. Such costs are concentrated in the switches and trunk lines of the local telephone company plant.

Uneconomic Bypass

A form of bypass whose economic cost is higher but price lower than that of an equivalent telephone company service.

Universal Service

The public service goal to make telephone service available to all people in the United States at a reasonable price.



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