

*Article***REGULATION OF ALTERNATIVE OPERATOR SERVICES***By Frank P. Darr †***table of Contents**

- I. Introduction 28
- II. Telephone Deregulation In General 30
- III. Defining Alternative Operator Services 32
 - A. Technical Structure 32
 - B. Regulatory Structure 32
 - C. Economic Structure of the Industry 33
 - D. Regulatory Problems: Pricing and Access to Competition 34
- IV. Rationale for AOS Regulation: Perceived Market Failure 37
 - A. Rationales for Regulation 37
 - B. Defining the AOS Market Failure 39
 - C. The Myth of the Captive Customer 42
- V. Regulatory Responses to AOS Complaints 44
 - A. The FCC's Initial Approach 45
 - B. The Telephone Operator Services Improvement Act of 1990 45
 - C. State Restrictions: Bans 48
 - D. State Restrictions: Price Caps and Open Access 49
- VI. Freeing Captive Customers and Other Market Myths 51
 - A. Regulating AOS: The Appropriate Paradigm 52
 - B. Wrong Moves: Capping Rates 53
 - C. Other Regulations and Enforcement 55

I. Introduction

Businesses, hotels, and airports often have large numbers of telephones but do not provide a direct connection to the national telephone network for each individual telephone. Instead, all calls from these telephones are routed through special equipment, known as a private branch exchange (PBX), which connects the call to the local telephone company. In addition, the PBX connects any calls that involve operator assistance, calling card numbers, and credit card numbers to an operator services company which then connects the call to a long distance carrier. While these operator services can be provided by traditional long distance companies such as AT&T, many businesses, hotels, and airports contract directly with Alternative Operator Services (AOS) companies to provide these services.¹

Federal and state authorities have extensively regulated AOS and have ignored the competitive forces already working in the market. Unlike other long distance service alternatives, which have gained credibility with regulators, AOS companies have faced general hostility from utility regulators. In part, this reaction is understandable, because the introduction of AOS was marked by high rates, blocked calls and billing errors.² While the FCC initially took a measured response to AOS in the *Telecommunications Research and Action Center (TRAC)* decision,³ state agencies have often attacked AOS with fervor.⁴ This strict state regulation has been inconsistent with many states' generally positive reaction to competition in the telephone market.⁵ At the same time, Congress, consonant with the demands of state regulators,⁶ pushed forward legislation to regulate AOS.⁷ Faced with political pressure to increase regulation, the FCC initially announced a rule explicitly extending the *TRAC* decision to all AOS companies and added a few new wrinkles as well.⁸ Despite the FCC's attempt to prevent legislation, in October 1990 Congress passed the Telephone Operator Consumer Services Improvement Act of 1990.⁹ The Act sets out specific requirements for access and billing.¹⁰ More importantly, it directs the FCC to investigate (and potentially set) rates of AOS providers.¹¹

Indeed, it appears that the regulatory commissions are likely to maintain monopolies in operator services by either excluding competition or setting rates for the service at levels that will not be profitable. Yet, the rationale for asserting the full panoply of regulation is far from clear. The best argument for regulation is based on some sort of informational failure.¹² However, the available evidence indicates that most-if not all-of the regulation of AOS is inappropriate since normal market mechanisms should rectify the apparent concerns about rates and access.¹³ By assisting customer choice rather than dictating it, the commissions could effect their regulatory goal of reasonable prices and protect against other unseemly practices.

Section II of this article reviews the history of telephone deregulation in general. Section III describes AOS and the problems that gave rise to the demand for regulation. Section IV discusses the alleged market failure associated with AOS and compares it with the rationales used to justify price and entry regulation. Section V considers the various forms of regulation adopted by the FCC and state commissions. Section VI then suggests a limited approach to the regulation of AOS that relies on effective enforcement of open access, as well as on the competitive forces already evident in the marketplace.

II. Telephone deregulation in general

The emergent AOS market became possible as a result of the deregulation of two components of the telecommunications network. The FCC first directed its efforts at deregulating AT&T's monopoly control over equipment attached to the public phone system. In 1956, the Commission approved the attachment of a cup-like device that shielded conversation noise, in spite of a challenge by AT&T that the attachment threatened the integrity of the telephone system.¹⁴ In the 1968 *Carterfone* case,¹⁵ the FCC opened the door to real competitive entry in the equipment market by permitting the attachment of foreign electronic equipment (non-Bell owned) to the network. However, seven more years passed before the FCC approved a process for licensing attachments.¹⁶ The *Computer II* decision deregulated all equipment located on the customer's premises and allowed end users to seek out the most appropriate provider on an unbundled basis. In addition, the decision permitted some competitive activity on the part of AT&T through separate subsidiaries.¹⁷

Parallel with the decisions concerning equipment, the FCC, with prodding from the courts, opened the way for the introduction of competitive carriers in the interstate interexchange market. First, the FCC permitted creation of microwave facilities for private use in the *Above 890* docket.¹⁸ It then approved point-to-point service between St. Louis and Chicago by MCI in 1969.¹⁹ "This approval prompted a deluge of applications seeking authorization of similar microwave facilities."²⁰ The FCC responded with a rule that permitted the entry of carriers providing private line services.²¹ Court action broadened the effect of the rule-making as MCI sought interstate common carrier service. The FCC initially sought to restrict the scope of the service by prohibiting MCI from offering two-way common carriage through its system.²² The Court of Appeals reversed the Commission and later directed it to approve the tariff filing²³ authorizing the service.²⁴ Finally, the FCC approved the sale of competitive common carrier services in 1981.²⁵ Thus, by the end of 1981, the FCC had deregulated both components necessary to support AOS: equipment and transmission.

III. Defining Alternative Operator Services

A. Technical Structure

A combination of technological and regulatory changes produced the AOS structure. The private branch exchange (PBX) provides the basic capacity to capture calls at the aggregator and route them to a particular operator. "A PBX is a small local telephone office—a private switching system located in an office, business complex, campus, government agency or apartment building."²⁶ The PBX connects a call with the local public exchange and provides the signaling to connect the call with a long distance carrier.²⁷ In the AOS arrangement, the PBX is programmed to direct all calls requesting operator assistance ("0" plus the desired phone number, or simply "0" for full operator assistance) to a particular AOS company.²⁸

Once the call is initiated and routed by the PBX, its completion through an AOS system is relatively simple. The aggregator routes its operator-assisted calls²⁹ to the AOS company, usually over transmission facilities of other long distance carriers. The AOS operator provides the desired assistance and completes the call through additional rented long distance transmission facilities.³⁰ For example, an AOS call from a hotel in the Bronx, New York, to Columbus, Ohio starts when the traveler picks up his phone and dials 0 plus the number. The hotel's PBX routes the call to an AOS operator in Georgia over a long distance line. The AOS operator takes the billing information, such as the caller's calling card or credit card number, and routes the call to the Columbus destination. The AOS company then charges the call to the caller's credit card at the AOS company's rates. In effect, transmission of an operator assisted call is the completion of two resales, the first from the aggregator to the operator and the second from the operator to the call's destination.

B. Regulatory Structure

Under the regulated tariffs that existed before deregulation, the FCC permitted AT&T to return to hotels, hospitals, and similar large institutions a part of the service fee to cover the costs of providing each guest (or "end user") telephone service.³¹ After deregulation, the FCC suspended this practice and permitted aggregators to sell telephone services and directly add a surcharge to the customer's room bill. Some aggregators sought out contracts for this service from those companies willing to continue rebating a portion of the fees, rather than directly surcharging their guests. As the Tennessee commission sarcastically explained, "Into this market niche stepped the AOS companies, promising to pay the institutions large commissions on operator-assisted calls and offering them the convenience of hiding their surcharges among the pages of the ratepayer's next telephone bill."³²

C. Economic Structure of the Industry

AOS is a relatively small portion of the total operator services market, despite the extensive state and federal interest. Currently, total revenues from all operator services are about \$11 to \$12 billion, but AOS companies have only five percent of the total, with the rest falling to AT&T and the local exchange monopolies.³³ This small share is then spread among at least thirty-five companies, primarily resellers of other companies' facilities, which provide some form of operator assistance.³⁴

In addition to these resellers, the other large carriers, such as MCI and Sprint, which own their own transmission facilities, are entering the operator services field.³⁵ Furthermore, AT&T also has attempted to structure a service to compete with AOS by providing for five to thirty cent rebates for calls placed from an aggregator's premises.³⁶ This basic overview implies that the market is potentially competitive.³⁷

D. Regulatory Problems: Pricing and Access to Competition

The perceived regulatory problem was created by the division of the end user, usually transient,³⁸ from the service provider.³⁹ Unless modified by regulation, the AOS company generally contracts with an aggregator,⁴⁰ but bills the end user for providing operator-assisted calls.⁴¹ Furthermore, to encourage aggregators to contract for an AOS service, the AOS company may offer the aggregators rebates of as much as twenty percent of the customer charge and also provide the aggregator with the option of an additional surcharge for each call.⁴² The unusual nature of the service leads to several kinds of complaints and regulatory interests.

Repeated complaints⁴³ concerning AOS fall into several areas: problems with rates,⁴⁴ access to other local and interexchange carriers and operator service providers,⁴⁵ identification and billing practices,⁴⁶ and revenue losses due to improper use of interstate facilities for intrastate service.⁴⁷ A recent FCC audit indicates that many of these problems continue despite FCC and state regulatory action.⁴⁸

The most common complaint voiced against AOS is that the rates charged are too high.⁴⁹ Though the variance is apparently less dramatic in recent studies,⁵⁰ the difference between AT&T's charges and those of AOS companies was startling in some of the early complaints.⁵¹ Additionally, rates were not very flexible. In one instance, a commission found that the rate proposed by the AOS company was higher than that of the dominant carrier even without any additional surcharge for the aggregator, and fell farther out of line because it did not provide for time-of-day discounts offered by dominant carriers.⁵² Other than the FCC, most regulatory agencies found the rates to be abnormal and evidence of monopolistic behavior under the unusual conditions of AOS provision.⁵³

2. Blocking

Blocking is a procedure by which the aggregator prevents the end user from accessing a carrier other than the one subscribed to by the aggregator.⁵⁴ The aggregator may limit the completion of calls to its carrier and block access to local or other interexchange carriers or operators, thus facilitating use of the AOS subscribed to by the aggregator.⁵⁵ Commissions have uniformly found blocking unreasonable.⁵⁶

3. Identification and Billing

A third category of problems involved the failure of the AOS company to identify itself and to disclose its billing arrangements. First, end users often complained that they were not aware that an AOS company was carrying their calls.⁵⁷ Second, end users complained about slow billing or improper charges for uncompleted calls.⁵⁸ One study in Tennessee reportedly found that AOS companies improperly billed 40,000 calls during a six month period.⁵⁹ Third, end users complained about the threat of having their basic telephone service terminated for failure to pay improper bills levied through the local exchange carrier on behalf of the AOS company.⁶⁰

4. Splashing

"Splashing" is the practice of billing calls from a point other than where a call is commenced. For example, a customer at a pay telephone in Nashville that presubscribed to an AOS provider may ask to be connected to an AT&T operator to call Memphis. The AOS operator located at the AOS operator center in Atlanta then transfers the caller to the nearest AT&T operator in Atlanta. Since AT&T is unaware of the origin of the call, it simply treats it as a call between Atlanta and Memphis. Therefore, the customer is charged for an Atlanta to Memphis call even though the call originated in Nashville and terminated in Memphis.⁶¹ Since calls are billed on the basis of distance,⁶² the customer is overcharged for the call if the call is not properly monitored.

5. Contribution to Local Access

Lost local revenues for intrastate providers is a related problem associated with the use of interstate lines to connect the caller with the AOS provider. For example, a call from Cleveland to Columbus, Ohio, is an intrastate call. However, if the call is connected by an operator in Dallas, Texas, it appears to the network as the completion of two interstate calls, one from Cleveland to Dallas and a second from Dallas to Columbus. An intrastate call completed over an interstate line in this manner is treated as an interstate call⁶³ and diverts revenues to interstate carriers and away from the local exchange companies that possess intrastate toll monopoly. State commissions perceive the diversion as a threat to universal service since local rates might have to be increased to recover the lost toll revenue.⁶⁴

IV. Rationale for AOS Regulation: Perceived Market Failure

The significant number and tone of the complaints, as well as the congressional reaction to them, suggested that regulation was likely. Nevertheless, none of the rationales usually justifying regulation provides a strong basis for imposing regulatory oversight over AOS.

A. Rationales for Regulation

In the traditional model of welfare economics, regulation is justified to correct market failures that lead to inefficiency.⁶⁵ First, an industry may be regulated so that its prices reflect the full costs, both internal and external, of its production. For example, regulation of polluting industries is designed to internalize the external costs imposed by pollution.⁶⁶ Second, direct price regulation is often used against monopolies that developed due to scale production factors or specific government decree. In the case of a natural monopoly, the government may intervene to prevent the monopolist's market power being used to raise prices above competitive levels.⁶⁷ Third,

regulation may be used to reverse the effect of informational difficulties. For example, "[a] role for government may arise if workers remain ignorant of [a] risk to their health. . . . [G]overnment may exploit its coercive sanction and economies of scale in the collection, analysis, and dissemination of information to overcome this problem."⁶⁸

The first and second rationales for regulation are not relevant to AOS. AOS does not create any external costs that would need to be internalized. In addition, both federal and state regulators recognize that AOS providers do not possess the type of market power that would generate traditional natural monopoly concerns.⁶⁹ Resellers, which include AOS providers, probably represent the most competitive segment of telecommunications transmission services.⁷⁰ Moreover, the number of real and potential players in the AOS submarket indicates that this submarket should also be highly competitive.⁷¹ Thus, if regulation is justified, it must be on the basis of informational failures in the existing market.

B. Defining the AOS Market Failure

A basic assumption of a competitive marketplace is the existence of sufficient information for the consumer to make an informed choice. However, choices about how much information is necessary are economically driven.⁷² Information is a commodity and is costly to produce. For the consumer to be informed, she must incur search costs; likewise, the seller incurs costs to research, label, and advertise its products.⁷³ Thus, there is a limit to the amount of information that will be available to the consumer. "In well-functioning markets, one would expect to find as much information available as consumers are willing to pay for in order to lower the cost or to improve the quality of their choices."⁷⁴

The fact that information is costly has significant implications. First, efficient markets may not operate on the basis of total information to all parties. Second, the consumer will not demand perfect information. The incentive to search for additional information is tied to the likelihood that additional information will lower costs successfully.⁷⁵ In turn, the likelihood of success depends on the dispersion of prices and the cost of the item being consumed; as each increases, the consumer will exert more effort to determine the best buy.⁷⁶ Third, "[a] seller who wishes to obtain continued patronage of those buyers who value the gains of search more highly or have lower costs of search must see to it that he is quoting relatively low prices."⁷⁷ This implication derives from the simple fact that those buyers are most likely to secure the most information to make a choice. Finally, inexperienced buyers will probably pay higher prices since their searches are not likely to be as complete as the searches of more experienced buyers.⁷⁸

The information market, like other markets, may fail in one of several ways. First, the high initial cost of producing information may preclude its development if the benefits can be lost to free riding.⁷⁹ No one will produce information if its cost is high and the next party can use it with little or no cost. Second, sellers may provide misleading information if the costs of traditional forms of consumer remedies, such as litigation, are too high compared to possible benefits of enforcement.⁸⁰ For example, a consumer is not likely to sue to recover an overcharge for a single call since the expense of litigation is far more than the expected recovery. Third, the information the seller provides may not be easy for the consumer to evaluate.⁸¹ Finally, there may be insufficient competition among sellers to provide information.⁸² In each of these cases, regulation may benefit the consumer by providing information that otherwise would not exist, recasting information in a usable form, or creating a remedy that would otherwise be too expensive to pursue privately.

Both federal and state regulators recognize informational problems with AOS, and some of the rationales for regulation appear to be based on market failures such as the ones just described. Yet neither the details of the failures nor the mechanisms that sustain the failures are clear. For example, the FCC premised its decision to open access, but to avoid price regulation, on the belief that resellers could not exert market power due to low barriers to entry and significant real and potential competition.⁸³ Nonetheless, the FCC recognized that it had to "ensure that consumers are provided access to necessary information."⁸⁴ The Commission perceived that informational problems combined with lack of open access might prevent the operation of a competitive market.⁸⁵ Thus, the FCC focused its efforts on informing the consumer and assuring that the consumer could exercise his choice.⁸⁶ However, the FCC provided no explanation of how AOS companies maintained these informational barriers.

In contrast to the FCC's focus on informational barriers, state commissions have focused on structural inefficiencies that lead to higher prices. Some commissions concluded that the aggregator is not under any pressure to limit the prices charged to end users.⁸⁷ The aggregator will attempt to secure the highest amount it can from the AOS company either through surcharges or rebates. However, even if this argument is correct, it does not follow that regulation of AOS is appropriate. Since it is the aggregator that is sustaining higher prices, only the aggregator should be subject to direct price regulation under this theory. Moreover, the basic theory of aggregator market power is fundamentally flawed since aggregators themselves are reasonably competitive.⁸⁸

Some state commissions have also argued that presubscription and blocking prevent customers from making a choice among potential carriers. The Georgia commission explained:

[U]nlike the traditional interexchange telephone market, the customer in the AOS setting is the traffic aggregator and not the end user. It is the traffic aggregator . . . that makes the decision as to which interexchange carrier it will subscribe to. Therefore, the attribute of a free market, choice by the consumer among competing providers, is absent. This problem is exacerbated by the fact that many subscribers to AOS services block access to local exchange company operators and to other interexchange carriers.⁸⁹ Thus, the effects of choice are eliminated though there are literally hundreds of alternative providers for long distance service, of which a sizeable number provide operator services.⁹⁰

However, this argument does not explain how the arrangement can be maintained if there is no informational failure. If the aggregator does not block calls, then nothing prevents the consumer from dialing around the presubscribed system. If blocking remains, informed consumers will not give any repeat business to an aggregator who engages in blocking. In the case of large hotel chains which rely on informed repeat customers, competitive pressures will force these hotels to stop engaging in blocking.

Finally, some commissions have advanced a more potent argument for regulation that focuses on the customer's inability to receive sufficient information from the carrier to make an informed choice.⁹¹ Absent some sort of identification and explanation, the customer may not know who provides the long distance or operator services. Moreover, even if informed, the customer may not be able to use that information effectively due to blocking and high transaction costs resulting from the transient nature of customer usage. Since many aggregators, such as airports and hotels, will only be used once by an individual customer "the price charged by the AOS provider will not impact the customer's future choice."⁹² This problem has been recognized by the Missouri commission:

The end user is generally a transient customer for whom the usual telephone arrangements are, practically speaking, unavailable. He is the traveler at the airport, the guest at the hotel, the patient in the hospital, the driver at the truck stop, the soldier at the military base and the student at the university. Operator services from the provider of his choice may be entirely unavailable without traveling to another location. Traveling to another location might be difficult or impossible for some of these customers such as the hospital patient, the soldier and the air traveler.⁹³

Thus, the rationale for fully regulating rates is premised on the lack of choice offered to the transient customer under these situations. In this sense, the commissions conclude that the customers are captive because of lack of information or high transactional costs. Once again, however, the argument fails to demonstrate why better choices would not emerge as customers become more experienced and demand better service from aggregators. Moreover, it does not explain why end users would remain ignorant.

The various arguments advanced by state commissions thus rest on some very odd assumptions. In an infrequent number of cases in which there is only one provider of the aggregator's service (for example, a city with one convenient airport), the end user is left without significant choices if blocking occurs. However, in the more general case, the state commissions assume that the customer will continue to use the same aggregator, despite available alternatives or the ability to dial around the AOS provider, even after the customer learns that he is being gouged by high prices. This assumption is simply not supported by the available evidence.⁹⁴ Moreover, even if "captive customers" do exist, this informational failure can be addressed by a relatively narrow regulatory response.⁹⁵

C. The Myth of the Captive Customer

Aggregators undoubtedly possess some market power over transient end users since such users frequently face limited sources of products and services. A traveler in an airport pays a premium for a drink because of the restricted number of cocktail lounges. Likewise, a driver on an interstate highway may pay a premium for gasoline purchased near the highway. In each case, the seller has market power to extract extra profits because of its successful choice of location. However, price regulation is certainly not the solution to these common examples of market power.⁹⁶ The appropriate solution for these sorts of problems is to open the market to other competitors. The high profits, if they exist, will draw new competitors to the field. The resulting competition eliminates supracompetitive pricing.

Moreover, the end user cannot be held captive for any significant time. First, the conception of the captive consumer is theoretically naive. It assumes that customers are a static, inattentive, and unresponsive lot. Yet, the very existence of complaints demonstrates that customers are attentive and responsive.⁹⁷ In fact, the complaints are evidence of the very processes one would expect to find when customers encounter new services. The process will not be seamless or painless. As with the introduction of competitive interexchange service,⁹⁸ there is a period in which the industry and the customers learn about each other.⁹⁹ While the level of information is low, there may be some excess profit taking. As end users become more knowledgeable, this informational failure will correct itself.

Second, the view that end users are captive is factually wrong. In practice, the aggregator already is under some pressure to lower rates

where it faces consumer pressures. For example, major repeat customers, such as airlines at airports and corporate clients of hotels, have pressured aggregators to provide inexpensive, open phone service or face the loss of the customers' business.¹⁰⁰ The effect on prices should be universal since there is no evidence that the aggregator can effectively discriminate among its customers. Thus, both experienced and inexperienced customers should benefit.

Finally, the myth of the captive customer ignores the apparent tightening in prices that has occurred. The FCC in congressional hearings indicated that AOS prices generally were in a range between ten percent below to sixty percent above comparable AT&T rates.¹⁰¹ Others have noted that rates in general are declining.¹⁰² In effect, the available evidence supports the prediction that prices will continue to decrease.

These declining prices reflect several market forces which should drive the AOS market to price competitively. The apparent weak link, the aggregator who controls the transient end user, is subject to competitive pressures. If the aggregator is not responsive, the aggrieved customer will take his business elsewhere. If cost is a significant consideration, employers likewise may teach their employees how to bypass the overly expensive presubscribed AOS. This process is furthered by competitors, such as AT&T, who advertise ways end users can connect with its operators.¹⁰³ As a result, the aggregator will be unable to maintain high rates since they will lose repeat business from end users. These competitive pressures can overcome the ability to take advantage of the transient status of some end users and thereby eliminate the need for strict regulation.

V. Regulatory Responses to AOS Complaints

Given the relatively poor justifications for regulation, the range of responses surveyed below is remarkable. The FCC has attempted to open the channels for effective customer choice, which would appear to be the most effective immediate and long term solution. Despite some early indications otherwise, Congress has also refrained substantially from imposing price regulation. In contrast, state action has ranged from open entry with price regulation to outright bans of AOS. The federal experiment in dual regulation of communications is problematic in this area.¹⁰⁴

A. The FCC's Initial Approach

As previously noted,¹⁰⁵ the FCC approached the problem as an informational failure and devised a response that is essentially consistent with that appraisal. In *TRAC*,¹⁰⁶ the FCC placed three requirements on an AOS provider. First, the AOS company must place certain information near any telephone presubscribed to them. This information must include the company's identity and a statement that its rates will be quoted upon request. Contracts with call aggregators must contain provisions to this effect.¹⁰⁷ Second, an AOS company must identify ("brand") itself before it connects a call. The company then must give a caller enough time before connecting the call to permit him to hang up or advise the operator to transfer the call to the customer's preferred carrier (such as AT&T, MCI, or Sprint).¹⁰⁸ Third, the FCC directed the elimination of blocking.¹⁰⁹

In a subsequent rule-making order, the FCC proposed to extend the results of the *TRAC* decision to all carriers.¹¹⁰ As expected, the rule-making would codify the branding and disclosure requirements as well as the prohibitions on call blocking.¹¹¹ In addition, the Commission sought to facilitate access to alternative carriers through improved notice to end users and the installation of equipment that would prevent call blocking.¹¹² There was no provision for monitoring rates in the proposed rule-making.

B. The Telephone Operator Services Improvement Act of 1990

In October, Congress redefined the debate by asserting authority over both operator services and aggregators in the Telephone Operator Services Improvement Act. Initially, it followed the lead of the FCC by directing AOS companies to provide open access and bill properly. In addition, the Act required aggregators to provide systems that permitted access to the end user's carrier of choice and outlawed the installation of equipment that failed to meet that standard. Most importantly, Congress reopened the issue of rate levels. The Act directed the FCC to accept informational tariffs, review them for their reasonableness, and open proceedings for setting rates if the market failed to control rate levels. Although the Act did not immediately endorse regulated rates for operator services,¹¹³ it nonetheless retained some bite by threatening the imposition of some undefined form of rate-setting.

The Act covers a broad range of services. Operator service providers subject to the terms of the Act include "any common carrier that provides operator services or any other person determined by the [FCC] to be providing operator services."¹¹⁴ "Operator services" is defined to include "any interstate telecommunications service initiated from an aggregator . . . [including] any automatic or live assistance to a consumer to arrange for billing or completion or both," other than calls automatically completed or those covered by the end user's prior subscription to a particular carrier.¹¹⁵ Finally, an aggregator is defined as "any person that, in the ordinary course of its

operations, makes telephones available to the public or to transient users of its premises, for interstate telephone calls using a provider of operator services."¹¹⁶

The Act then addresses each of the major areas of concern: identification, blocking, splashing, and rates. Initially, it requires operator service providers to brand their services. The provider must identify itself at the beginning of the connection, permit the user to terminate the call at no charge prior to connection, and disclose rates, collection processes, and the available complaint process upon request.¹¹⁷ Additionally, the provider must identify itself again prior to completing the call.¹¹⁸ In concert with the providers, the aggregators are directed to furnish information containing the name of the provider, the right to request rates and access to another carrier, and the right to direct complaints to the FCC's Common Carrier Bureau.¹¹⁹

Congress also attacked blocking by regulating the aggregators directly. The Act requires aggregators to provide connections with "800" and "950" calls to interstate carriers and prohibits them from discriminating in the rates charged for calls that bypass the aggregator's presubscribed provider.¹²⁰ Moreover, the Act requires aggregators to install equipment capable of meeting the new access standards within eighteen months after enactment.¹²¹

The Act directs providers to bill correctly but recognizes some of the limitations that exist due to unavailable technology. In those service areas that can provide for accurate call monitoring,¹²² the Act prohibits a provider from billing for uncompleted calls.¹²³ Where equal access is not available, the provider may not knowingly bill for an uncompleted call.¹²⁴

Congress also dictated specific procedures to be followed by providers to deal with the problem of splashing. Under the Act, "splashing" is

the transfer of a telephone call from one provider of operator services to another such provider in such a manner that the subsequent provider is unable or unwilling to determine the location of the origination of the call and, because of such inability or unwillingness, is prevented from billing the call on the basis of such location.¹²⁵

The Act directs the provider to avoid splashing unless the consumer requests the transfer, the consumer is informed that the rates may not reflect the charge from the originating point, and the consumer consents.¹²⁶ Furthermore, the provider may not bill a call that does not reflect its origination unless it has the consumer's prior consent to splash the call.¹²⁷

These reforms are strengthened by the Act's threat of rate regulation. Within thirty days of enactment of the Act, AOS providers must file tariffs stating rates, terms and conditions of service, and surcharge levels.¹²⁸ The tariffs must contain an estimate of the amount of traffic associated with each tariffed service.¹²⁹ Any change in a tariff must be filed no later than the first day that the change is effective.¹³⁰ With this information in hand, the FCC is directed to review the tariffs to determine if they are just and reasonable.¹³¹ If the FCC believes that the rates are unreasonable, it can order the AOS company to demonstrate the reasonableness of the rates or order the company to announce its rates at the beginning of each call.¹³²

The Act also initiates additional monitoring of AOS. It directs the FCC to begin a proceeding within sixty days of enactment to monitor rates, check service quality, report on complaints, study the effects of surcharges on rates, and monitor compliance.¹³³ The FCC will then issue a series of reports to Congress based on the studies. The final report, due within 23 months of enactment, will control the rule-making procedures for establishing rate standards. Within 180 days after the final monitoring report, the FCC must complete a rule-making decision to establish "that rates and charges for operator services [are] just and reasonable. Such regulations shall include limitations on the amount of commissions or any other compensation given to aggregators by providers of operator service."¹³⁴ The rule-making decision is suspended, however, if the FCC determines in its final report that the market is functioning properly.¹³⁵

As an overall approach, the Congressional solution primarily provides better information and access for the consumer while simultaneously threatening price regulation if AOS behavior does not respond accordingly.

C. State Restrictions: Bans

State regulation reflects an often strange divergence between perceived problems and solutions. Several states view AOS as evil incarnate and have either banned the service outright or imposed regulations tantamount to a ban. In initially banning AOS, the Alabama commission found that the service did not promote competition, did not provide any unique benefits, charged apparently excessive rates, and caused the local exchange companies to lose revenues.¹³⁶ The North Carolina commission followed a similar course and added its concern that AOS companies, based on their past performance, would tax the commission's limited regulatory

resources to maintain compliance.¹³⁷

In the same vein, several commissions permitted the introduction of AOS but restricted contracting with aggregators. The Missouri commission, for example, refused to permit the sale of operator services through aggregators and provided for highly structured, capped rates in sales to end users.¹³⁸ Similarly, the Tennessee commission ruled that the AOS company must establish a contractual relationship with the end user before billing for operator services.¹³⁹ The effect of each of these decisions was to eliminate the standard AOS arrangement.

D. State Restrictions: Price Caps and Open Access

More typically, state commissions have addressed AOS on two related levels. First, the commissions set rates by capping them to the dominant interstate or local carrier's rates. Second, they require the AOS company to guarantee the end user's access to the carrier of her choice. In effect, the commissions adopt a self-contradictory theory that says choice will regulate price through open access, but because choice alone does not work, the commissions will set prices.

1. Price Regulation

The most common form of regulation is to cap the rates of the AOS company at the same level as the dominant carrier's rates.¹⁴⁰ Those commissions adopting rate caps must have explicitly or implicitly concluded that the rates of the dominant intrastate and interstate operators are reasonable.¹⁴¹ Commissions have also combined price caps with restrictions on surcharges and the provision of time of day discounts.¹⁴²

While some regulations do not technically cap rates, they do impose rate caps as a practical matter. For example, the Massachusetts commission concluded that an AOS company may charge rates up to the levels of the dominant carrier without undergoing full rate of return review. However, an AOS company desiring a higher rate must endure a full-blown rate case.¹⁴³ Since the small entrants are not likely to seek rate of return regulation and incur the costs that it entails, their rates are effectively capped.

2. Blocking Bans and Call Branding

In addition to setting rates, some commissions have imposed disclosure and open access requirements to promote better purchasing decisions on the part of consumers. Georgia, for example, capped rates that AOS companies might charge without suffering a rate review, but also required AOS providers to brand their services by identifying themselves to the end user, providing tent cards or stickers to identify the AOS company contracting with the aggregator, and providing rate disclosure on request.¹⁴⁴ To make the choice effective, the commission further directed that the AOS companies ensure, by contract with the aggregator or other arrangement, that the end user have access to the carrier of his choice.¹⁴⁵

3. Other State Restrictions

Finally, state commissions have imposed a variety of additional operating requirements. Using a financial prod to enforce certification and tariff requirements, the Arkansas commission directed local exchange carriers to refuse billing and collection services to uncertificated AOS companies.¹⁴⁶ The Idaho commission directed AOS companies to discontinue splashing by ordering them to hand off calls to an appropriate interexchange carrier, announce that calls might be splashed, or state that they could not complete calls as dialed.¹⁴⁷ The Idaho commission also prohibited local exchange companies from disconnecting customers for failure to pay AOS accounts.¹⁴⁸

In addition, some commissions have sought to protect local exchanges from revenue losses. The Georgia commission directed that all local service pass through the local exchange operator.¹⁴⁹ Likewise, New Jersey required AOS providers to complete intrastate calls through the local exchange companies.¹⁵⁰ The commission further required direct access to the local exchange operator by dialing "0" and connection to the AOS provider by some other dialing code.¹⁵¹ The requirement of direct connection thus routed all emergency calls through the local network.¹⁵² Idaho, Indiana, and Kentucky have adopted similar requirements.¹⁵³

VI. Freeing Captive Customers and Other Market Myths

Choosing among the various regulatory tools requires an accurate assessment of the market and its ability to correct apparent inefficiencies.¹⁵⁴ In the case of AOS, regulation cannot be justified on the basis of internalizing costs or containing natural monopoly

since AOS imposes no external costs and is not a natural monopoly.¹⁵⁵ As a result, the only remaining justification for regulation is improving information flows and preserving customer choice. If effective choice is available and the information is relevant and understandable, the informed end user will force both the aggregator and the AOS company to price competitively.¹⁵⁶ The former will fear the loss of business to other aggregators. The latter will set prices to attract both the end user directly and the aggregator who is sensitive to the end user's concerns and therefore generates high volumes of AOS calls. Once the problem is correctly defined, a regulatory approach stressing open access and providing the consumer with accurate information is much more appropriate than outright bans or rate setting and entry regulation.

A. Regulating AOS: The Appropriate Paradigm

1. Banning Blocking

If sustainable, blocking poses an obvious barrier to the development of a competitive marketplace. In the first instance, the customer is prevented from exercising any choice in selecting an operator or carrier for her call. If the informed customer cannot exercise that choice, there is limited pressure on the AOS companies to charge competitive rates. The market mechanism is frustrated to the detriment of the end user.

However, as a practical matter, blocking may not be as significant a problem as feared by regulators. In the long run, someone will make unblocked service available, if there exists enough demand for it. Others will follow if unblocked service is significant to the choice of the end user. If it is not significant, an assumption that seems to be grossly at odds with that of every regulator, then regulating open access is wasted effort. No amount of open access would be relevant since the end user would not take advantage of it in any case.

Nonetheless, regulating open access may be justified in the shorter run. The eventual development of unblocked services does not help the end user who currently lacks the ability to connect with a desired carrier. Moreover, since the divestiture of AT&T, substantial regulatory and legislative effort has been expended to create a competitive telecommunications market and there is a certain amount of unfairness in not enabling end users to access that carefully created market.

In addition, technical limitations do not appear to be a significant obstacle to this form of regulation. While providing open access may be hampered by the limited capabilities of some aggregators' equipment,¹⁵⁷ and AT&T has voiced concerns about providing the number identification necessary for proper billing,¹⁵⁸ these technical limitations are not likely to be insurmountable or long-lived.¹⁵⁹

2. Customer Information

In an effectively working market, competitive pressures would force the AOS provider to identify itself and disclose its rates on request. Both of these requirements are frequently a part of current state and federal regulation and are consistent with improving the AOS market.

Nevertheless, there does not appear to be any significant market failure that currently prevents the development of this information. Competitors have strong incentives to expose high priced providers. Customers learn about ways to bypass the expensive AOS system. Aggregators are pressured to provide accurate information or lose customers.¹⁶⁰ Taken together, real competitive pressures already exist and should facilitate the move to efficient pricing disclosure without the need for regulation.

Moreover, one particular aspect of informational regulation, posting rates either at telephones or in tariff filings, ironically appears inappropriate. If rates are competitively set, then the information on cards or tariffs could become quickly out of date and necessitate expensive substitutions.¹⁶¹ Moreover, critics of regulation frequently point to posted rates as a source of non-competitive pricing.¹⁶² "Since all price reductions are public, they can be quickly matched by competitors. This reduces the incentive to engage in price cutting."¹⁶³ Posting thus may lead to generally higher prices due to higher costs and lost incentives to cut rates.

B. Wrong Moves: Capping Rates

Price caps are inherently inefficient in light of strong evidence that economic forces can drive prices to reasonably competitive levels.¹⁶⁴ While many states use the rates charged by the traditional carriers to set AOS rates, this type of regulation presents several problems that undermine its rationale.¹⁶⁵ To the extent that the traditional carrier's rates are too high, then the use of the high rate encourages uneconomic development of competing services. Two alternative forms of waste are possible. First, as a strategic matter, the rate set by the commission makes it easier for firms to implicitly collude by simply matching the regulated rate. Regulation thus

reduces the incentive of each AOS provider to engage in aggressive competition since the process used to set rates provides a simple and legal mechanism for AOS providers to achieve an implicit agreement on pricing. As a result, supracompetitive rates and returns can be maintained by several AOS providers at the expense of consumers and an efficient market. Second, the excessively high rates set by this type of regulation may cause excessive resources to be directed into AOS. When competitive forces eventually force prices downward, there are costs associated with the ultimate failure of the less efficient providers. In either situation, there is no apparent gain to society.

Nor is this type of regulation justified when the traditional carrier's rates are too low. This low price level will stifle competition among AOS providers by not providing sufficient remuneration to the new competitors. Moreover, the rate set for the traditional carrier may not reflect the true cost of providing operator services. Since the allocation of costs among different services provided by the traditional carrier is a difficult problem and subject to much discretion,¹⁶⁶ the traditional carrier can often shift costs generated by operator services to its monopoly local exchange business and use those costs to raise its regulated rates for monopoly services. As a practical matter, AOS providers face the possibility that operator rates charged by traditional carriers are being subsidized by revenues from their traditional monopoly services.¹⁶⁷ The cost ceiling imposed on the AOS competition thus unfairly excludes costs that the traditional carrier is incurring but recovering through other services. The resulting low rates set for operator services discourages sufficient entry by AOS providers to ensure a competitive marketplace. Any gains to consumers through the low rates charged by the traditional carrier are necessarily offset by increased rates for local exchange monopoly services.

C. Other Regulations and Enforcement

The remaining problems presented by AOS, such as billing and collection involving uncompleted calls, splashing, and the appropriate allocation of local to interstate calls, can be resolved by the installation of appropriate technology. The repeated problems associated with billing uncompleted calls should be eliminated by answer supervision, a technological advance that is available with the conversion to equal access.¹⁶⁸ The newer switches being installed by the Bell companies and the independent phone companies provide for answer supervision that "enables a carrier to ascertain the precise time between call placement and connection so as to distinguish between completed and uncompleted calls."¹⁶⁹ The FCC reported that ninety-three percent of all domestic lines should be connected to these switches by the end of 1989.¹⁷⁰ Although total conversion is impractical since the cost of such a change is relatively high compared to the probable benefits of universal call supervision,¹⁷¹ on balance, the problem of improper billing should be substantially resolved by the conversion to equal access switching.

Splashing presents a more difficult technical problem. In 1989, the FCC ordered the AOS companies to stop call splashing to the extent that such action is technically possible with their current networks.¹⁷² Additionally, the AOS providers were required to work with the Carrier Liaison Committee of the Exchange Carrier Standards Association to address the computer hardware and software problems associated with eliminating any other call splashing.¹⁷³ However, the resulting report of a task force established by the committee to address the problem was less comforting. The task force rejected several solutions because they required either high costs to install the necessary equipment or cooperation among competitors.¹⁷⁴ However, the task force did point to some technical and informational solutions that would eliminate most splashing. Primarily, the task force suggested the implementation of open access and consumer education.¹⁷⁵ The task force concluded that as the network becomes more open and understandable, problems of splashing will diminish.

The remaining problem of maintaining local revenues is not susceptible to an easy solution. The commission's first choice may be to protect the local monopoly and the income that operator services provides for the maintenance of universal service.¹⁷⁶ Its second choice may be to promote competition in the AOS market. A little political reality suggests which one of these interests will normally prevail. Local politicians do not get reelected when their decisions increase costs within their control which could be shifted to someone else. In the end, it is a primarily political choice for the state commissions to make. If they choose incorrectly, there will be losses to some part of the customer base.

Once the decision to regulate at some level is made, the practical problem of enforcement becomes more significant. For the system proposed here to work, there must be a significant credible threat that anticompetitive behavior will be costly and will offset the profits generated by that behavior. In the AOS market, enforcement may be problematic. As a recent FCC audit demonstrated,¹⁷⁷ rules without a substantial threat of enforcement may be meaningless to this market. Moreover, past practice suggests that AOS companies are risk takers. In Kentucky, for example, the commission detected one AOS company providing services while an application for a certificate to operate was pending.¹⁷⁸ Likewise, the North Carolina commission determined that thousands of dollars of overcharges were billed by uncertificated AOS companies.¹⁷⁹ The self-serving statements of the AOS companies may not satisfy many regulators that good performance will result.¹⁸⁰

Recognizing the need for enforcement raises two issues. First, one must decide whether enforcement is public or private. In the case of AOS, the public enforcement mechanism is preferable. Individual claims are by definition small—usually the amount of overcharge for an operator assisted phone call—compared to the costs of private litigation. Thus, individuals are not likely to litigate these small claims. Yet, these small amounts could become quite large in the aggregate, as the Tennessee billing study suggests.¹⁸¹ Collecting these interests through public enforcement then makes sense.¹⁸²

Second, one must decide where resources will be spent. Again, one must attempt to balance the benefits and costs of various regulatory approaches. By definition, regulatory resources are limited. Limiting entry and closely regulating those entrants may prove cumbersome and expensive to the regulator. In contrast, providing information and keeping the system open may prove more cost efficient. "[W]hen regulators seek disclosure, they need not fine-tune standards quite so precisely. They themselves need less information from industry, there are fewer enforcement problems, there is less risk of anticompetitive harm, and there is greater probability of surviving judicial review."¹⁸³ Furthermore, to the extent that price and entry regulation does not appear necessary because open access and information can maintain competition, those regulatory resources may be directed toward enforcement.

VII. Conclusion

In summary, AOS is not an appropriate candidate for full-fledged price and entry regulation. The various theories of market failure do not account for high prices or poor service and do not justify regulatory intervention in the AOS market. Instead, competition offers an important and apparently real check on outrageous behavior. Nonetheless, regulators may want to maintain some control over the industry to assure themselves and the public that there is a source of continuing pressure for AOS to "live by the rules." Beyond that, regulation may prove more costly than necessary to meet the goals of just and reasonable prices and practices.

†1991 Frank P. Darr

† Assistant Professor, The Ohio State University. Funding from the Ameritech Fellowship assisted the author's research. Research assistance was provided by J. Bradley Britton, with the firm of Winthrop, Stimson, Putnam and Roberts, New York. The author thanks Arnold Celnicker and Deborah Ballam for their review and discussion of the paper.

1. The distinction between AOS and operator services provided by AT&T and other traditional long distance companies may be less important than initially perceived. The Federal Communications Commission takes the position that the regulation of all interstate operator services is essentially the same. *Telephone Operator Services Protection Act of 1989: Hearings on H.R. 971 Before the Subcomm. on Telecommunications and Finance of the House Comm. on Energy and Commerce*, 101st Cong., 1st Sess. 52 (1989) [hereinafter *Hearings*] (testimony of Gerald Brock). Likewise, the Telephone Operator Services Consumer Act of 1990 does not distinguish between traditional and newer operator service providers. See *infra* text accompanying notes 114-16. Generally, however, traditional operator services are distinguished from AOS providers by the contractual relationship between the provider and the aggregator or end user. For a general description of alternative operator services, see *In re Billing and Collection by Local Exchange Carriers for Uncertificated Operator Service Companies*, 96 Pub. Util. Rep. 4th (PUR) 485, 487 (Ark. Pub. Serv. Comm'n 1988); *In re Alternative Operator Servs.*, 97 Pub. Util. Rep. 4th (PUR) 161, 164-65 (N.C. Util. Comm'n 1988). See *infra* text accompanying notes 26-37.

2. See *infra* text accompanying notes 38-64.

3. *Telecommunications Research and Action Center v. Central Corp. Int'l*, 4 F.C.C. Rcd. 2157 (1989) [hereinafter TRAC]. The FCC eliminated blocking and required AOS company identification near telephones and before calls are connected. See *infra* text accompanying notes 105-12.

4. See *infra* text accompanying notes 136-53.

5. *United States v. American Tel. & Tel. Co.*, 552 F. Supp. 131 (D.D.C. 1982), *aff'd sub nom. Maryland v. United States*, 460 U.S. 1001 (1983) (order approving divestiture); *Rates for Competitive Common Carrier Services and Facilities Authorizations Therefor* 85 F.C.C.2d 1 (1980) (First Report and Order) [hereinafter *Competitive Carrier Rulemaking*] (limited regulation of nondominant carriers). Many states have passed statutes significantly broadening the approaches commissions may take in regulating competitive telephone services. See, e.g., ARIZ. REV. STAT. ANN. § 40-281(E) (1985); COLO. REV. STAT. §§ 40-15-101 to -404 (1990); CONN. GEN. STAT. ANN. §§ 16-247f(b), 16-247i (West Supp. 1990); FLA. STAT. ANN. § 364.337 (West Supp. 1991); GA. CODE ANN. §

46-2-23 (Harrison Supp. 1989); IDAHO CODE §§ 62-601 to -622 (Supp. 1990); ILL. ANN. STAT. ch. 111 2/3, paras. 13-101 to -803 (Smith-Hurd 1988); IND. CODE ANN. §§ 8-1-2.6-1 to -8 (West Supp. 1990); IOWA CODE ANN. § 476.1 (West Supp. 1990); MICH. COMP. LAWS ANN. § 484.103a-f (West Supp. 1990); MINN. STAT. ANN. §§ 237.57-.711 (West Supp. 1991); MISS. CODE ANN. § 77-3-35 (Supp. 1990); MO. ANN. STAT. §§ 392.190-.530 (Vernon Supp. 1991); MONT. CODE ANN. §§ 69-3-801 to -824 (1989); NEV. REV. STAT. ANN. § 704.040 (Michie Supp. 1989); N.M. STAT. ANN. §§ 63-9A-1 to -20 (1989); N.D. CENT. CODE §§ 49-21-01 to -22 (Supp. 1989); OHIO REV. CODE ANN. §§ 4927.01 to .05 (Anderson Supp. 1989); OR. REV. STAT. §§ 757.810-.870 (1989); S.C. CODE ANN. § 58-9-230 (Law Co-op. Supp. 1990); S.D. CODIFIED LAWS ANN. §§ 49-31-1 to -4.3 (Supp. 1990); TEX. REV. CIV. STAT. ANN. art. 1446c (Vernon Supp. 1991); UTAH CODE ANN. §§ 54-8b-1 to -4 (1990 & Supp. 1990); VT. STAT. ANN. tit. 30, §§ 202c-d, 226a, 227a (Supp. 1989); WASH. REV. CODE ANN. §§ 80.36.300-.380 (West Supp. 1991); WIS. STAT. ANN. § 196.195 (West Supp. 1990).

6. National Ass'n of Reg. Util. Comm'rs, Resolution Recommending Guidelines for Agencies Considering Regulating Alternative Operator Services (July 27, 1988); National Ass'n of Reg. Util. Comm'rs, Resolution Regarding Additional Guidelines for Alternative Operator Services. (March 1, 1989).

7. *See, e.g.*, H.R. 971, 101st Cong., 1st Sess. (1989). As passed by the House of Representatives, the bill required an FCC rulemaking concerning AOS that included requirements for (1) the identification of AOS companies to end users; (2) disclosure of rates and methods of billing on request; (3) a ban on blocking; (4) installation or upgrading of equipment to permit open access to competing carriers; and (5) a cap on carrier rates for telephone credit card calls. *Id.* § 4(a). The bill also required that AOS companies file informational tariffs, ordered the FCC to review these tariffs for their reasonableness, and initiated a review of rates, quality, and compliance of AOS companies. *Id.* § 5. For the provisions of the bill as passed, *see infra* notes 113-35 and accompanying text.

8. Notice of Proposed Rule Making, Policies and Rules Concerning Operator Service Providers, F.C.C. Rel. No. 90-231, RM-6767 (July 17, 1990). *See infra* text accompanying notes 110-12.

9. 136 CONG. REC. H8744 (daily ed. Oct. 3, 1990). The act is codified as an amendment to Title II of the Communications Act of 1934, 48 STAT. 1064 (1934), codified at 47 U.S.C. §§ 151-609 (1982). Title II is amended by inserting section 226, and it contains the statutory provisions of the Act. 136 CONG. REC. H8744. Further references to the bill are to its codification.

10. *See infra* text accompanying notes 120-27.

11. *See infra* text accompanying notes 128-35.

12. *See infra* text accompanying notes 65-95.

13. *See infra* text accompanying notes 96-103.

14. Hush-A-Phone Corp. v. United States, 238 F.2d 266 (D.C. Cir. 1956).

15. Use of the Carterfone Device in Message Toll Service, 13 F.C.C.2d 420 (1968), *aff'd on reconsideration*, 14 F.C.C.2d 571 (1968).

16. Interstate and Foreign Message Toll Telephone, First Report and Order, 56 F.C.C.2d 593 (1975), *modified on reconsideration*, 58 F.C.C.2d 716 (1976), Second Report and Order, 58 F.C.C.2d 736 (1976), *aff'd sub nom.* North Carolina Util. Comm'n v. FCC, 552 F.2d 1036 (4th Cir.), *cert. denied*, 434 U.S. 874 (1977).

17. Second Computer Inquiry, Final Decision, 77 F.C.C.2d 384 (1980), *modified on reconsideration*, 84 F.C.C.2d 50 (1980), *further modified on reconsideration*, 88 F.C.C.2d 512 (1981), *aff'd sub nom.* Computer and Communications Indus. Ass'n v. FCC, 693 F.2d 198 (D.C. Cir. 1982), *cert. denied*, 461 U.S. 938 (1983).

18. Allocation of Frequencies in Bands Above 890 Mc., 27 F.C.C. 359 (1959), *modified on reconsideration*, 29 F.C.C. 825 (1960). As a result, a company with offices in two cities could connect their offices with a private phone system using microwave facilities.

19. Microwave Communications Inc., 18 F.C.C.2d 953 (1969).

20. Fowler, Halprin & Schlichting, "Back to the Future": A Model for Telecommunications, 38 FED. COMM. B.J. 145, 155 (1986).

21. Specialized Common Carrier Servs., First Report and Order, 29 F.C.C.2d 870 (1971), *aff'd on reconsideration*, 31 F.C.C.2d 1106 (1971), *aff'd sub nom.* Washington Util. Transp. Comm'n v. FCC, 513 F.2d 1142 (9th Cir. 1975), *cert. denied*, 423 U.S. 836 (1975).
22. *In re* MCI Telecommunications Corp., 57 F.C.C.2d 271 (1975) (Investigation into the Lawfulness of Tariff F.C.C. No. 1 insofar as it Purports to Offer Execunet Service), *rev'd sub nom.* MCI Telecomm. Corp. v. FCC, 561 F.2d 365 (D.C. Cir. 1977).
23. A tariff filing is an approved statement of rates for a service that must be available to all within the class of consumers covered by the filing. 47 U.S.C. § 203(a) (1988); 47 C.F.R. § 61.3(gg) (1989). *See* MCI Telecomm. Corp. v. FCC, 765 F.2d 1186 (D.C. Cir. 1985) (common carrier must file tariffs under 47 U.S.C. § 203).
24. MCI Telecomm. Corp. v. FCC, 580 F.2d 590 (D.C. Cir. 1978), *cert. denied sub nom.* United States Independent Tel. Ass'n v. MCI Telecomm. Corp., 439 U.S. 980 (1978).
25. *In re* Policy and Rules Concerning Rates for Competitive Common Carrier Servs. and Facilities Authorizations Therefor, 84 F.C.C.2d 445 (1981).
26. P. HUBER, THE GEODESIC NETWORK: 1987 REPORT ON COMPETITION IN THE TELEPHONE INDUSTRY at 2.5.
27. *Id.* at 2.6.
28. *In re* Alternative Operator Servs., 101 Pub. Util. Rep. 4th (PUR) 484, 490-91 (Ga. Pub. Serv. Comm'n 1988). *See infra* note 57.
29. Calls dialed 0 or 0 plus the desired number trigger operator assistance.
30. H.R. REP. NO. 213, 101st Cong., 1st Sess. 3 (1989).
31. Burkhart, *Alternative Operator Services: A New Dilemma for Regulators*, PUB. UTIL. FORT., Aug. 18, 1988, at 44.
32. *In re* South Central Bell Tel. Co., 93 Pub. Util. Rep. 4th (PUR) 68, 71 (Tenn. Pub. Serv. Comm'n 1988).
33. Carnevale, *House Seeks Strict Rules for Phone Operator Firms*, Wall St. J., Sept. 26, 1989, at A12, col. 3; Sims, *Complaints Spur FCC Rules on High Cost Calls at Hotels*, N.Y. Times, Feb. 28, 1989, at A1, col. 5, and D14, col. 6.
34. *Hearings*, *supra* note 1, at 213 (statement of Mr. Berg) (70-75 companies); Burkhart, *supra* note 31, at 47 (35 companies); Sims, *supra* note 33, at D14, col. 5 (200 companies).
35. *Hearings*, *supra* note 1, at 134 (testimony of D. Thomas).
36. *In re* Revisions to AT&T Communications Tariff F.C.C. No.1, Hospitality Network Service, 3 F.C.C. Rcd. 975 (1988) (memorandum opinion and order).
37. Competitive Carrier Rulemaking, *supra* note 5, at 21. The FCC defined dominance within a market by "the number and size distribution of competing firms, the nature of barriers to entry, and the availability of reasonably substitutable services." AOS companies do not have the capacity to dominate since the number of competitors is significant and the service can be easily substituted. *See supra* text accompanying notes 33-36. Furthermore, reseller prices for service are constrained by dominant carrier rates if open access is available. In this regard, the rationale to deregulate is identical to that for other resellers. *See* Competitive Common Carrier Services and Facilities Authorizations, 84 F.C.C.2d 445, 494-95 (1981) (Further Notice of Proposed Rulemaking).

A similar argument can be made using "contestable markets" theory. Prices will be constrained if entry is free and exit is costless. Under these circumstances, the market is subject to hit and run entry whenever prices exceed competitive levels. Thus prices are always set at or very near competitive levels. Baumol, *Contestable Markets: An Uprising in the Theory of Industry Structure*, 72 AM. ECON. REV. 1 (1982). No market is perfectly contestable (just as no market is perfectly competitive or monopolistic), but AOS presents an interesting analogy since there are few fixed costs or (except in those states that have enacted bans) barriers to entry.

38. *In re* Alternative Operator Servs., 101 Pub. Util. Rep. 4th (PUR) 484, 490 (Ga. Pub. Serv. Comm'n 1988).
39. *In re* Billing and Collection by Local Exchange Carriers for Uncertificated Alternative Operator Service Companies, 96 Pub. Util. Rep. 4th (PUR) 485, 487 (Ark. Pub. Serv. Comm'n 1988); *In re* Alternative Operator Servs., 97 Pub. Util. Rep. 4th (PUR) 161, 164-65 (N.C. Util. Comm'n 1988).
40. H.R. REP. NO. 213, *supra* note 30, at 3.
41. *Id.* The aggregator may also bill for some part of the call charges in the form of a user surcharge. *Id.*
42. *Id.*; Carnevale, *House Seeks Strict Rules for Phone Operator Firms*, Wall St. J., Sept. 26, 1989, at A12, col. 3.
43. The FCC has received more than 4000 complaints concerning AOS. S. REP. NO. 439, 101st Cong., 2d Sess. 3 (1990). The complaints appeared to peak in 1988 when the FCC received 2000. Sims, *supra* note 33, at D14, col. 4; Burgess, "*Operator Services Told They Must Disclose Fees*", Wash. Post, Feb. 28, 1989, at A1, col. 2. Since the TRAC decision, the FCC has continued to receive 125-150 informal complaints a month. S. REP. NO. 439, *supra*, at 4.
44. *See infra* text accompanying notes 49-53.
45. *See infra* text accompanying notes 54-56.
46. *See infra* text accompanying notes 57-62.
47. *See infra* text accompanying notes 63-64.
48. FCC Public Notice No. 3418, FCC Interstate Operator Services Compliance Audit Findings (June 1, 1990). The auditors checked 971 telephones at 351 locations for compliance with federal requirements as stated in the TRAC decision. *See infra* text accompanying notes 105-109. Oral notification of the AOS provider occurred 87% of the time. Only 20 of the telephones fully complied with the written notification requirements. Also, a substantial amount of blocking continued to exist.
49. *See generally In re* International Telecharge, Inc., 97 Pub. Util. Rep. 4th (PUR) 349, 359 (Mass. Dep't Pub. Util. 1988). For purposes of this paper and the appropriate analysis, one should probably look to the whole fee, since that is the economic signal that determines the end user's behavior under normal circumstances. The fee that the customer sees, however, is broken into a transmission charge, an operator charge, and a subscriber surcharge when permitted and contracted for by the aggregator. *Id.* at 351.
50. *See infra* text accompanying notes 101-103.
51. One reported complaint alleged that the rate charged by the AOS was ten times that of the comparable regulated carrier. Burgess, *FCC Says It Will Probe "Alternate" Phone Firms*, Wash. Post, Apr. 6, 1988, at A20, col. 3. Most reports suggested the rates were two to three times higher. *In re* South Cent. Bell Tel. Co., 93 Pub. Util. Rep. 4th (PUR) 68, 69 (Tenn. Pub. Serv. Comm'n 1988) (two times higher); *Hearings, supra* note 1, at 44 (testimony of S. Hewlett) (two to three times higher); Burgess, *supra* note 43, at A1, col. 2 (three times higher). *But see* Sims, *supra* note 33, at A1, col. 5 (rates four to five times higher than major long distance carriers). Rate concerns continue to constitute the largest portion of complaints filed with the FCC. Testimony before the Subcomm. on Communications of the Senate Comm. of Commerce, Science, and Transp. on Operator Services Providers, 1990 FCC LEXIS 828, *10 (Feb. 7, 1990)(LEXIS, Fedcom library, FCC file).
52. *In re* International Telecharge, Inc., 92 Pub. Util. Rep. 4th (PUR) 211, 212 (Ala. Pub. Serv. Comm'n 1988). The Indiana commission similarly found that the rates were substantially higher on credit card calls, which were the largest percentage of service offered by the AOS company. *In re* American Operator Serv., Inc., 102 Pub. Util. Rep. 4th (PUR) 336, 344 (Ind. Util. Reg. Comm'n 1989).
53. *See infra* text accompanying notes 141-43.
54. *In re* International Telecharge, Inc., 105 Pub. Util. Rep. 4th (PUR) 160, 168 (Ky. Pub. Serv. Comm'n 1989) (condition of

certificate was to provide access to other carriers).

55. The Georgia commission found:

It is not uncommon for traffic aggregators such as hotels, motels, hospitals and private pay phone operators to block access to any carrier other than their prescribed operator services carrier. The vast majority of institutions use a PBX (private branch exchange) to provide telecommunications service to their patrons. Under the traditional dialing arrangement, 9 is used to access the local exchange network and 8 is used to access the interexchange network. Thus, a call dialed 9-0 would be routed to the local exchange operator and a call dialed 8-0 would be routed to the interexchange carrier operator. However, it is not uncommon for institutions to block all 9-0 calls thereby blocking access to the local exchange operator. In addition, many institutions block access to any interexchange carrier other than the prescribed provider by blocking the carrier's access arrangements, be it "00", "10XXX" or "950-XXXX". Some AOS providers have the capability of connecting a customer to the carrier of his or her choice and others do not. Private pay telephones can also be configured to obtain similar blocking results.

In re Alternative Operator Servs., 101 Pub. Util. Rep. 4th (PUR) 484, 490-91 (Ga. Pub. Serv. Comm'n 1988).

56. *See infra* text accompanying notes 144-45.

57. *In re Alternative Operator Servs.*, 101 Pub. Util. Rep. 4th (PUR) 484, 491 (Ga. Pub. Serv. Comm'n 1988).

58. *Id.*

59. *Hearings, supra* note 1, at 51, 53 (testimony of S. Hewlett).

60. The AOS provider contracts with the local exchange company to bill and collect for service by the latter's customers. Failure to pay a bill could result in termination of all phone service to the end user even if the end user disputed the AOS service or charges. *In re South Central Bell Tel. Co.*, 93 Pub. Util. Rep. 4th (PUR) 68, 73 (Tenn. Pub. Serv. Comm'n 1988). The Tennessee commission sought to solve the problem by amending the billing and collection practices of the local exchange companies. Specifically, the commission prohibited billing on behalf of the AOS unless it demonstrated that it had an account with the billed party or limited the amount of charges to the highest intrastate or interstate tariffs for the same service. *Id.* at 74.

61. H.R. REP. NO. 213, *supra* note 30, at 4.

62. C. PHILLIPS, *THE REGULATION OF PUBLIC UTILITIES* 481-84 (2d ed. 1988).

63. *In re Alternative Operator Servs.*, 101 Pub. Util. Rep. 4th (PUR) 484, 492 (Ga. Pub. Serv. Comm'n 1988); *In re International Telecharge, Inc.*, 95 Pub. Util. Rep. 4th (PUR) 421, 423-4 (Ky. Pub. Serv. Comm'n 1988).

64. *In re Alternative Operator Servs.*, 101 Pub. Util. Rep. 4th (PUR) 484, 496 (Ga. Pub. Serv. Comm'n 1988); *In re International Telecharge, Inc.*, 95 Pub. Util. Rep. 4th (PUR) 421, 423-24 (Ky. Pub. Serv. Comm'n 1988).

65. Aranson, *Theories of Economic Regulation: From Clarity to Confusion*, 6 J.L. & POL'Y 247, 249-50 (1990).

66. *Id.* at 250-52.

67. *Id.* at 255-58.

68. *Id.* at 254.

69. The rationale for the FCC approach is contained in the Commission's determination that AOS companies are resellers and therefore nondominant carriers. TRAC, *supra* note 3, at 2158. In *Competitive Carrier Rulemaking, supra* note 5, at 10, the Commission divided the telecommunications world into dominant and nondominant carriers. Dominant carriers can exert market power in such a way as to extract supracompetitive profits and defeat entry by predatory pricing. *Id.* at 20-21. To determine dominance, the Commission suggested that several factors are relevant but placed special emphasis on the existence of bottleneck control of essential facilities. Under this definition of dominance, companies that leased lines from dominant carriers for resale to end

users, generally known as resellers, were not dominant. The Commission justified its conclusion on the lack of entry barriers and the resellers' inability to raise or lower prices from competitive levels *Id.* at 29.

Having found resellers nondominant, the FCC then felt it could lower the degree of price and entry regulation in four areas. First, it eliminated the requirement for cost information to support tariff filings of nondominant carriers on the belief that the cost of filing outweighed the benefits to the customer. Second, the Commission shortened the notice periods for tariff changes to permit quicker response to the market. Third, the Commission revised the grounds for suspending tariffs to prevent the use of the regulatory process to impede competition. Fourth, it substantially revised the provisions for certification of carriers, amended the requirements for expansion of service, and eased the means for abandoning service by providing for a thirty-day notice if other alternatives are available (which by definition there must be). *Id.* at 33-49.

The Massachusetts commission determined that AOS companies were dominant but based its rationale upon the captive nature of the customer. *In re International Telecharge, Inc.*, 97 Pub. Util. Rep. 4th (PUR) 349, 354-55 (Mass. Dep't Pub. Util. 1988). Thus the analysis urged here would apply even though some commissions may describe the service as "dominant."

70. Competitive Carrier Rulemaking, *supra* note 5, at 29 ("Given the low barriers to entry into these operations, resale carriers appear to be more subject to actual and potential competition than any other telecommunications industry."). *But see* P. HUBER, *supra* note 26, at 3.4 ("Resellers that add no independent value exist only at the pleasure of an imperfectly competitive market. Any carrier that depends on reselling AT&T services for much of its business will eventually be squeezed tightly as competition continues to drive AT&T prices toward cost.").

71. *See supra* text accompanying notes 33-37. More needs to be done in the way of determining the extent of coverage available to various geographical areas to determine the real extent of the existing and potential competition. On the other hand, there appear to be few significant barriers to entering the market.

72. S. BREYER, REGULATION AND ITS REFORM 26 (1982). *See infra* notes 75-82 and accompanying text.

73. *Id.*

74. *Id.*

75. Stigler, *The Economics of Information*, 69 J. POL. ECON. 213, 214 (1961).

76. *Id.* at 215.

77. *Id.* at 218.

78. *Id.* at 218-19.

79. S. BREYER, *supra* note 72, at 27.

80. *Id.*

81. *Id.* at 27-28.

82. *Id.* at 28.

83. TRAC, *supra* note 3, at 2158.

84. *Id.*

85. *Id.* at 2159.

86. *See infra* text accompanying notes 105-12.

87. *See, e.g., Hearings, supra* note 1, at 45 (testimony of S. Hewlett).

88. *See infra* text accompanying notes 96-103.

89. *In re* Alternative Operator Servs., 101 Pub. Util. Rep. 4th (PUR) 484, 491 (Ga. Pub. Serv. Comm'n 1988); *see also In re* International Telecharge, Inc., 105 Pub. Util. Rep. 4th (PUR) 160, 166 (Ky. Pub. Serv. Comm'n 1989).

90. *See supra* text accompanying notes 33-36.

91. *See supra* text accompanying notes 65-68.

92. *In re* Alternative Operator Servs., 101 Pub. Util. Rep. 4th (PUR) 484, 493 (Ga. Pub. Serv. Comm'n 1988).

93. *In re* American Operator Servs., Inc., 103 Pub. Util. Rep. 4th (PUR) 124, 130 (Mo. Pub. Serv. Comm'n 1989).

94. *See infra* text accompanying notes 96-103.

95. S. BREYER, *supra* note 72, at 34 ("[O]ne who believes that the primary problem is informational will tend to favor not classical regulation, but governmental efforts to provide more information.").

96. J. BONBRIGHT, A. DANIELSON & D. KAMERSCHEN, *PRINCIPLES OF PUBLIC UTILITY RATES* 29-30 (2d ed. 1988).

97. *See supra* note 43.

98. *Hearings, supra* note 1, at 49 (Statement of G. Brock).

99. *Id.* at 18-19 (Statement of Rep. W. Tauzin). One of the more common complaints was that the customer simply was not familiar with the available options. For example, the Georgia commission noted that customers were not yet conditioned to make the appropriate responses. *In re* Alternative Operator Servs., 101 Pub. Util. Rep. 4th (PUR) 484, 492 (Ga. Pub. Serv. Comm'n 1988). Others have noted a similar transition problem with the deregulation of customer premises equipment. Powers, *Public Interest Implications of Telecommunications Deregulation*, 16 POL'Y STUD. J. 146, 148 (1987). Time heals that sort of problem.

100. *See, e.g., Hearings, supra* note 1, at 12, 14-15 (statement of J. Cooper); *id.* at 90 (testimony of H. Berg); Burgess, *supra* note 51, at A20, col. 3. In Senate hearings, a representative for Sheraton Hotels testified it had terminated all AOS contracts based on the belief that AT&T provided higher quality service. The Sheraton representative went on to state that the incentives offered by the AOS companies were insufficient to outweigh Sheraton's interest in avoiding bad customer relations. *Telephone Operator Consumer Services Improvement Act of 1989: Hearings on S. 1643 and S. 1660 Before the Subcomm. on Communications of the Senate Comm. on Commerce, Science, and Transportation*, 101st Cong., 2d Sess. 251 (1990).

101. Recent experience continues to support the conclusion that aggregators are under substantial pressure. "The industry has experimented with different ways of billing customers," said Brian Kinsella, manager of governmental affairs for the Washington-based American Hotel and Motel Association. "Now the industry has said, 'We want to sell rooms; it's not worth aggravating a customer over a \$2 phone charge.'" Hurdle, *Relief Is At Hand for Business Travelers and Companies Weary of Paying Outrageous Charges for Phone Calls Made From Hotel Rooms*, U.P.I., Sept. 1, 1991, BC cycle, Domestic News (Lexis, Nexis library, UPI file).

. *Hearings, supra* note 1, at 21, 51-2 (testimony of G. Brock).

102. Burgess, *supra* note 43, at A1, col. 3. The same article attributes the price decline to state regulatory action as an alternative to competitive forces.

103. The author observed a print media campaign designed to advise end users to use the five digit AT&T access code to connect with its operators.

104. The Federal Communications Act of 1934 reserves to the states the right to regulate intrastate communications. 47 U.S.C. § 152 (b) (1988). *See Louisiana Pub. Serv. Comm'n v. FCC*, 476 U.S. 355, 370-73 (1986). For a discussion of the curious development of federalism in communications law, see Haring and Levitz, *The Law and Economics of Federalism in Telecommunications*, 41 FED. COMM. L.J. 261 (1989).
105. *See supra* text accompanying notes 83-86.
106. 4 F.C.C. Rcd. 2157 (1989).
107. *Id.* at 2159.
108. *Id.*
109. *Id.*
110. Notice of Proposed Rule Making, Policies and Rules Concerning Operator Service Providers, F.C.C. Rel. No. 90-231, RM-6767, at 2 (July 17, 1990).
111. *Id.* at 3.
112. *Id.* at 4-5.
113. The Senate Report concerning the Act emphasizes the role of informational difficulties in AOS. S. REP. NO. 439, *supra* note 43, at 9. *See supra* note 7 for a description of the more restrictive version passed by the House.
114. 47 U.S.C. § 226(a)(9).
115. *Id.* § 226(a)(7).
116. *Id.* § 226(a)(2).
117. *Id.* § 226(b)(1)(A)-(C).
118. *Id.* § 226(b)(2). These requirements will be suspended three years after enactment. *Id.*
119. *Id.* § 226(c)(1)(A).
120. *Id.* § 226(c)(1)(B)-(C).
121. *Id.* § 226(f). The Act does not specify when existing equipment must be converted; rather, it directs the FCC to initiate a proceeding to determine a reasonable time in which aggregators are to provide open access, providers are to have "800" or "950" access codes, or both. *Id.* § 226(e).
122. *See infra* text accompanying notes 168-71.
123. 47 U.S.C. § 226(b)(1)(F).
124. *Id.* § 226(b)(1)(G).
125. *Id.* § 226(a)(3).
126. *Id.* § 226(b)(1)(H).

127. *Id.* § 226(b)(1)(I).

128. *Id.* § 226(h)(1)(A).

129. *Id.*

130. *Id.*

131. *Id.* § 226(h)(2).

132. *Id.* The requirement to file tariffs sunsets after four years if the FCC determines that regulatory objectives of the Act are being met by the market and suspension will not disrupt the continued achievement of those goals. *Id.* § 226(h)(1)(B).

133. *Id.* § 226(h)(3)(A).

134. *Id.* § 226(h)(4)(A).

135. *Id.* § 226(h)(4)(B).

136. *In re* International Telecharge, Inc., 92 Pub. Util. Rep. 4th (PUR) 211, 213-14 (Ala. Pub. Serv. Comm'n 1988). The Alabama commission subsequently permitted one AOS company to operate in the state on an interim basis. OMOROGBE, THE EMERGENCE OF THE ALTERNATIVE OPERATOR SERVICE INDUSTRY AND ITS IMPLICATIONS FOR REGULATORS 23 (Working Paper presented at the Seventh NARUC Biennial Regulatory Information Conference, Columbus, Ohio, Sept. 5, 1990).

137. *In re* Alternative Operator Servs., 97 Pub. Util. Rep. 4th (PUR) 161, 168 (N.C. Util. Comm'n 1988).

138. *In re* American Operator Servs., Inc., 103 Pub. Util. Rep. 4th (PUR) 124, 131-35 (Mo. Pub. Serv. Comm'n 1989).

139. *In re* South Central Bell Tel. Co., 93 Pub. Util. Rep. 4th (PUR) 68, 72 (Tenn. Pub. Serv. Comm'n 1988).

140. *See, e.g., In re* Alternative Operator Servs., 101 Pub. Util. Rep. 4th (PUR) 484, 495 (Ga. Pub. Serv. Comm'n 1988); *In re* American Operator Servs., Inc., 102 Pub. Util. Rep. 4th (PUR) 336, 345 (Ind. Util. Reg. Comm'n 1989); *In re* International Telecharge, Inc., 105 Pub. Util. Rep. 4th (PUR) 160, 167 (Ky. Pub. Serv. Comm'n 1989); *In re* International Telecharge, Inc., 97 Pub. Util. Rep. 4th (PUR) 349, 356-57 (Mass. Dep't Pub. Util. 1988). The Florida commission attempted to establish a cap by ordering that revenues in excess of those charged by the dominant carrier be held subject to refund pending a hearing to determine if the provision of AOS was in the public interest. An appellate court held that the order was improperly promulgated. Florida Pub. Serv. Comm'n v. Central Corp., 551 So. 2d 568, 569 (Fla. Dist. Ct. App. 1989).

141. The Indiana commission offered the rationale that mirroring rates by the AOS companies would result in "predictability and reasonableness." *In re* American Operator Servs., Inc., 102 Pub. Util. Rep. 4th (PUR) 336, 345 (Ind. Util. Reg. Comm'n 1989). Similarly, based on rate cases with dominant carriers, the rates of Massachusetts traditional operator services were deemed just and reasonable on traditional rate-making principles and could be used as a surrogate by the AOS companies to avoid a full blown rate case. *In re* International Telecharge, Inc., 97 Pub. Util. Rep. 4th (PUR) 349, 356 (Mass. Dep't Pub. Util. 1988). The Massachusetts commission has followed the same approach in certifying several other carriers. *In re* Telesphere Network, Inc., 105 Pub. Util. Rep. 4th (PUR) 405 (Mass. Dep't Pub. Util. 1989); *In re* NYCom, Inc., 101 Pub. Util. Rep. 4th (PUR) 65 (Mass. Dep't Pub. Util. 1988); *In re* ACC Long Distance Corp., 101 Pub. Util. Rep. 4th (PUR) 506 (Mass. Dep't Pub. Util. 1988).

142. *In re* International Telecharge, Inc., 105 Pub. Util. Rep. 4th (PUR) 160, 166-67 (Ky. Pub. Serv. Comm'n 1989).

143. *In re* International Telecharge, Inc., 97 Pub. Util. Rep. 4th (PUR) 349, 356-57 (Mass. Dep't Pub. Util. 1988). The commission noted the expense and administrative burden of a rate case as a justification for the approach. *Id.* at 356.

144. *In re* Alternative Operator Servs., 101 Pub. Util. Rep. 4th (PUR) 484, 497 (Ga. Pub. Serv. Comm'n 1988); *see also In re* American Operator Servs., Inc., 102 Pub. Util. Rep. 4th (PUR) 336, 343-44 (Ind. Util. Reg. Comm'n 1989); *In re* International

Telecharge, Inc., 105 Pub. Util. Rep. 4th (PUR) 160, 168-69 (Ky. Pub. Serv. Comm'n 1989).

145. *In re* Alternative Operator Servs., 101 Pub. Util. Rep. 4th (PUR) 484, 499-500 (Ga. Pub. Serv. Comm'n 1988).

146. *In re* Billing and Collection by Local Exchange Carriers for Uncertificated Alternative Operator Cos., 96 Pub. Util. Rep. 4th (PUR) 485, 491 (Ark. Pub. Serv. Comm'n 1988).

147. *In re* Alternative Operator Servs., 95 Pub. Util. Rep. 4th (PUR) 411, 417-18 (Idaho Pub. Util. Comm'n 1988), *modified on other grounds*, 97 Pub. Util. Rep. 4th (PUR) 170 (Idaho Pub. Util. Comm'n 1988).

148. *Id.* at 419. The commission offered this cryptic comment on the refusal to permit disconnection: "AOS providers have other means to collect from telephone users." *Id.* It did not explain what those choices might be.

149. *In re* Alternative Operator Servs., 101 Pub. Util. Rep. 4th (PUR) 484, 498 (Ga. Pub. Serv. Comm'n 1988).

150. *In re* American Coin-Telephone, Inc., 91 Pub. Util. Rep. 4th (PUR) 103, 105 (N.J. Bd. Pub. Util. 1988).

151. *Id.* at 106.

152. *Id.* at 106-07.

153. *In re* Alternative Operator Servs., 95 Pub. Util. Rep. 4th (PUR) 411, 416 (Idaho Pub. Util. Comm'n 1988), *modified on other grounds*, 97 Pub. Util. Rep. 4th (PUR) 170 (Idaho Pub. Util. Comm'n 1988) (0- routed through local operators); *In re* American Operator Servs., Inc., 102 Pub. Util. Rep. 4th (PUR) 336, 345 (Ind. Util. Reg. Comm'n 1989); *In re* International Telecharge, Inc., 105 Pub. Util. Rep. 4th (PUR) 160, 169 (Ky. Pub. Serv. Comm'n 1989) (0- routed to local exchange operator; 0+ cannot be intercepted or blocked in equal access areas, but they can be intercepted in non-equal access areas).

154. S. BREYER, *supra* note 72, at 34.

155. *See supra* text accompanying notes 69-71.

156. S. BREYER, *supra* note 72, at 164.

157. *In re* American Operator Servs., Inc., 103 Pub. Util. Rep. 4th (PUR) 124, 130 (Mo. Pub. Serv. Comm'n 1989).

158. *Id.*

159. *See infra* text accompanying notes 168-75.

160. *See supra* text accompanying notes 96-103.

161. *In re* Alternative Operator Servs., 95 Pub. Util. Rep. 4th (PUR) 411, 415 (Idaho Pub. Util. Comm'n 1988), *modified on other grounds*, 97 Pub. Util. Rep. 4th (PUR) 170 (Idaho Pub. Util. Comm'n 1988).

162. Rates for Competitive Common Carrier Services and Facilities Authorizations Therefor, 84 F.C.C.2d 445, 454 (1980) (Further Notice of Proposed Rulemaking).

163. *Id.*

164. *See supra* text accompanying notes 102-103.

165. Massachusetts, for example, determined that an AOS provider was a dominant carrier and therefore subject to full rate regulation. However, the commission permitted the carrier to file tariffs that were no higher than those filed by New England Telephone and

AT&T for similar services on the theory that the commission had already approved those rates as reasonable. *In re International Telecharge, Inc.*, 97 Pub. Util. Rep. 4th (PUR) 349, 356 (Mass. Dept. Pub. Util. 1988).

166. Peter Huber gives one of the more artful descriptions of the problem of cost allocation:

Cost separation is a torture of a thousand cuts. A first cut divides costs between a LEC's regulated and unregulated businesses. A second, between interstate and intrastate services, and among the states themselves. Costs are then chopped and diced among dozens of different services-traffic-sensitive and non-traffic-sensitive, switched and special, intrastate and interstate, intraLATA and interLATA....

What emerges from this regulatory Cuisinart is often interesting but always a surprise. Each slicing operation involves a measure of discretion. The discretionary judgments at the [sic] each tier of the dismemberment multiply. After four or five cuts, discretion has been raised to the fourth or fifth order. If there is 20 percent discretion as to just where each cost cut will be made, there is 250 percent discretion as to the size of each small piece that emerges.

P. HUBER, *supra* note 26, at 3.53 to 3.54.

167. Breyer, *Antitrust, Deregulation, and the Newly Liberated Marketplace*, 75 CALIF. L. REV. 1005, 1040-41 (1987).

168. *Hearings, supra* note 1, at 58 (testimony of G. Brock); Report on Billing for Unanswered Calls, *reprinted in Hearings, supra* note 1, at 61-63.

169. Report on Billing for Unanswered Calls, *reprinted in Hearings, supra* note 1, at 61 ("answer supervision enables a carrier to ascertain the precise time between call placement and connection as well as to distinguish between completed and uncompleted calls").

170. *Id.* at 61-62.

171. *Hearings, supra* note 1, at 58 (testimony of G. Brock).

172. TRAC, *supra* note 3, at 2159.

173. *Id.*

174. Task Force Report to the Federal Communications Commission Concerning "Call Splashing," FCC Docket No. CC 90-313 at 25 (June 1, 1989).

175. The task force summarized its conclusion:

The task force recognized that call unblocking, while potentially difficult to fully implement, and the provision of consumer information as ordered by the FCC, coupled with consumer education, would significantly contribute to the reduction of call splashing. In addition, call reorigination at the CPE and the establishment of billing and collection and billing validation agreements will further reduce splashing. However, these solutions may require varying lengths of time to implement and may not totally eliminate splashing due to other factors such as:

1) state regulatory requirements that callers be connected to preferred OSP [operator service provider] without having to redial, and

2) notwithstanding the waiver process, some blocking may continue to occur until technical solutions for prevention of toll fraud are implemented.

Id.

The Senate Report on AOS legislation takes a similar position.

The Committee believes [sic] that the carrier identification and unblocking requirements contained in the bill as reported should

resolve most of the problems with call splashing. As long as an aggregator has properly unblocked the telephone that the caller is using, there should be no need for the OSP to "splash" the call to the caller's desired carrier. The caller may simply hang up and dial the desired carrier's access code number [sic].

S. REP. NO. 439, *supra* note 43, at 15.

176. *See supra* text accompanying notes 63-64.

177. *See supra* note 48.

178. *In re* International Telecharge, Inc., 95 Pub. Util. Rep. 4th (PUR) 421, 425 (Ky. Pub. Serv. Comm'n 1988).

179. *In re* Alternative Operator Servs., 97 Pub. Util. Rep. 4th (PUR) 161, 166-67 (N.C. Util. Comm'n 1988).

180. In response to criticism, several AOS companies have organized a trade group, the Operator Service Providers of America. The association has established general guidelines for pricing and service standards. *Hearings, supra* note 1, at 91-113 (statement of H. Berg).

181. *See supra* text accompanying note 59.

182. R. POSNER, *ECONOMIC ANALYSIS OF THE LAW* 344 (3d ed. 1986) ("if the injury to each victim is too small to make a lawsuit a paying proposition, there is an argument for direct regulation, provided the total injury is substantial in relation to the cost of prevention").

183. Breyer, *supra* note 167, at 580.