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UTILITY CUSTOMER INFORMATION: PRIVACY AND COMPETITIVE IMPLICATIONS

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EXECUTIVE SUMMARY

In the past, privacy issues were mainly concerned with wiretaps. But now privacy issues have matured to include the use of transaction-generated information. Privacy is now tied together with issues associated with the competitiveness of the markets. With today's technologies, telephone, electric, gas, and water utilities can collect sensitive and detailed customer information that might be of commercial interest to the utility itself, its subsidiaries, its competitors, and third parties. Utility customers, on the other hand, have a privacy interest in the information. To examine these issues, it is necessary to develop an analytical framework.

Privacy concerns arise because transaction-generated information inherently has commercial value. Transaction-generated information is information generated by the occurrence of a transaction, but not necessarily by its content. For example, the time, place, identity of parties to a telephone call, as well as the fact that a telephone call occurred would be transaction-generated information. (Inferences can be made without necessarily knowing the content of the telephone call.) The use of transaction-generated information by utilities, their affiliates, and third parties creates customer concerns about the ability to control outflows and inflows of information. Customers may wish to control outflows and inflows of information, including transaction-generated information. Their interest in controlling outflows may be described as a "none-of-your-business aspect" of privacy and their interest in controlling inflows as the "leave-me-alone aspect" of privacy.

Although the constitutional right to privacy is a qualified right against the government, there is a common law right to privacy that applies against an individual or private firm. This reflects the basic "common sense" ground rules of personal interaction. However, new telecommunications and telemetry technologies, such as Caller ID and related services, and the commercial value of the information collected on utility customers creates pressures to change the ground rules of personal interaction.

There are also competitive implications to utility use of customer information, particularly in light of continued utility diversification. The availability of customer information collected by a utility company in its franchised monopoly service area could give it an unfair advantage against potential competitors beyond what is normally understood as the cost efficiencies gained by a single firm producing two related goods. In particular, the availability and use of customer information by a Local Exchange Company (LEC) have a direct effect on the development of independent enhanced service and information service providers.

Thus far, state commissions have dealt mainly with the privacy aspects of information inflows and Caller ID. Indeed, as of this writing, thirty-seven state public utility commissions already have dealt with privacy issues in the context of Caller ID and its associated blocking options, and three commissions have proceedings in progress. Of those thirty-seven state commissions, Caller ID is prohibited in one jurisdiction, Caller ID with no blocking options is allowed in four jurisdictions, and thirty-two states have Caller ID with some form of blocking required.

Caller ID, however, is the mere "tip of the iceberg" of existing, new, and potential utility services with privacy and competitive implications. In the future, privacy and competitive affect issues could become a major focus of state commissions, particularly since a customer's lack of control over information outflows leads to privacy concerns over information inflows.

In considering the competitive and privacy implications of new service offerings, state commissions might wish to consider eight principles developed by the New York state commission. Succinctly stated, these principles are (1) privacy should be recognized explicitly as an issue to be considered in introducing new utility services; (2) the interest in an open telecommunications network should be recognized in evaluating alternative means for protecting privacy; (3) companies should educate their customers on the privacy implications of the services they offer; (4) people should be permitted to choose among various degrees of privacy protection with respect to outflows and inflows of information; (5) a utility offering a new service compromising current privacy expectations should be obliged to offer a means of restoring the lost degree of privacy;

(6) considerations of cost, public policy, economics, and technology bear on the pricing of privacy features, which is best determined case by case; (7) unless a caller explicitly grants informed consent, subscriber-specific information generated by the subscriber's use of the utility service should be used only in connection with that service or for other services requested by the customer; and (8) privacy expectations may change over time.

Although the relationship between privacy and competitive implications may seem conflicting, the means for striking a balance is embedded in determining the future organization of the telecommunications network: centralized or decentralized. The authors advance an idealized model to harmonize and balance privacy and competitive interests. To enhance the competitiveness of the network, a highly decentralized network is desirable. Ideally, local exchange companies could be common carriers, providing a market of enhanced information providers, but not providing the services themselves. Instead, the LEC could provide a useful service by authenticating the identity of those who would use the network. To be successful at providing authentication services, the LEC must scrupulously respect the privacy of its customers by providing the customer the means to block inexpensively. Policies that assure a decentralized network will result in a future telecommunications-computer-information service network that will serve the public interest by appropriately balancing procompetitive markets and individual privacy concerns.

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FOREWORD

Utilities, by the nature of their activities, can collect what could be sensitive and detailed information on their customers. Utility customers have a privacy interest in the information and its possible subsequent use. The recent and ongoing debate about Caller ID has received a good deal of commission attention on privacy grounds. So far, much less attention has been given to the possible (anti)competitive effects of utility-collected customer information if made available to its subsidiaries or third parties.

This study treats a customer's interest in controlling both the inflows of information (sometimes described as the "leave-me-alone" aspect of privacy) and the outflows of information (the "none-of-your-business" variety). It also attempts to alert commissions to the public policy concerns presented by the potential for sale or misuse of data on customer characteristics or behavior to the advantage of one company and the disadvantage of others. A conceptual framework within which to consider all this is presented.

Douglas N. Jones
Director
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PREFACE

Although a joint work, authors of this report can be identified with individual chapters. Chapter 1 was authored by Robert E. Burns, with the assistance of Roopali Mukherjee. Chapters 2 and 3 were authored by Dr. Rohan Samarajiva, with the assistance of Roopali Mukherjee. Chapter 4 and appendices A through G were authored by Roopali Mukherjee, under the supervision of Dr. Rohan Samarajiva. Chapter 5 was written by Robert E. Burns, Esq.

CHAPTER 1

TELEPHONE TRANSACTION-GENERATED INFORMATION: SOME PRIVACY ISSUES AND COMPETITIVE IMPLICATIONS

In Fall 1990, Lotus Development Corporation announced a product that could list names, addresses, shopping habits, and likely income levels for 80 to 120 million United States households. The information was to be available on compact disk and was expected to be most useful to small and mid-sized businesses for use in targeted direct-mail marketing campaigns. Named "Marketplace: Households," the product would contain information about individual households showing ages and incomes by ranges, placing each in one of fifty "psychographic" categories created by Equifax Inc., an Atlanta-based credit reporting company. These categories were created by blending data on individuals with census data and then crossing it with the ZIP+4 postal service listings. This enabled ZIP codes to be carved into areas as small as individual streets. The fifty profiles included categories such as "accumulated wealth," "mobile home families," "cautious young couples," and "inner city singles."[1] By the end of 1990 both Lotus Corporation and Equifax had received more than 30,000 calls and letters from individuals wishing to have their names and personal information deleted from the data base. In late January 1991 the companies abandoned their plans and canceled the product.[2]

In 1987 a Washington D.C. weekly revealed that U.S. Supreme Court nominee Judge Robert Bork preferred to rent Alec Guiness, Alfred Hitchcock, and James Bond

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[1] J. R. Wilke, "Lotus Product Spurs Fears About Privacy," *Wall Street Journal* (November 13, 1990): B1; "Disturbing Actions By Lotus," *Telecom-Digest* (electronic newsmagazine) 10, Issue 908, Message 1 of 4 (December 30, 1990).

[2] L. M. Fisher, "New Database Ended By Lotus and Equifax," *New York Times* (January 24, 1991): C3; M. W. Miller, "Lotus Likely to Abandon Consumer-Data Project," *Wall Street Journal* (January 23, 1991): B1.

movies from his local video store.[3] Publication of that information spurred a reaction in Congress to prohibit the disclosure of video rental records without knowledge and consent, and it triggered enactment of the Video Privacy Protection Act of 1988. Often referred to as the "Bork bill," the statute prohibits video stores from disclosing the names of movies its customers rent.[4]

In December 1990 Blockbuster Entertainment Corporation was preparing a massive data base of the movies each of its 30 million customers rent. Blockbuster planned to sell information from the data base to direct mailers for marketing campaigns. Lists of "mystery movie renters" could be sold to mystery book clubs, "kids movie renters" to toy stores, "classics renters" to senior-citizen marketers, and so on. Blockbuster argued the 1988 statute did not affect its data base because only *video categories* and not specific titles were to be monitored.[5] A *Wall Street Journal* story created such a stir among customers that a week later Blockbuster announced that information about its customers' video rentals would not be sold and that such data was being collected for internal purposes alone.[6]

These stories illustrate the imaginative variety of uses to which information about individuals is collected and used in the course of their transactions with businesses. They suggest the value this information poses to firms in marketing, planning, and development projections and the reaction of many consumers to these activities. According to T. E. McManus, this information is properly called transaction-generated

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[3] M. W. Miller, "Coming Soon To Your Local Video Store: Big Brother," *Wall Street Journal* (December 26, 1991): 9.

[4] Pub. L 100-616, 102 Stat. 3195 (1988).

[5] Miller, "Coming Soon."

[6] M. W. Miller, "Blockbuster Contradicts Official, Saying It Won't Sell Rental Data," *Wall Street Journal* (January 2, 1991): B6.

information (TGI).[7] That is, transactions among businesses, government, and individuals usually generate some sort of a record. These records could "convey pictures of personal consumption habits, finances, whereabouts, political and recreational preferences and other potentially sensitive information."[8] TGI is produced in the course of a transaction. The primary purpose of the transaction is generally not the production of information, but information is nonetheless produced as a consequence of any transaction.

There appears to be an escalating demand by businesses for detailed consumer information capable of offering increasingly accurate portraits of potential customers. Demand for such detail is motivated in part by the phenomenon of consumer "information overload" which current advertisers are battling. More effective ways are seen as necessary to grab an audience's attention and "reach" consumers overloaded with commercial and other messages. One possible solution is the idea of "individualized mass marketing." This represents a shift away from the older persuasive selling techniques to "fact-based" selling.[9] Sufficiently detailed information on the buying habits and personal preferences of individuals could enable firms to create unique messages for each consumer. This need to accurately identify buyers combined with the technological capability of coherently "massaging" and manipulating massive quantities of data about millions of people has spurred a massive reworking of the methods marketers use to reach and influence potential customers.

While many instances of TGI use are reported outside the context of utilities, this report focuses on TGI in the unique context of United States utilities, their networks,

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[7] T. E. McManus, *Telephone Transaction-Generated Information: Rights and Restrictions* (Cambridge, MA: Program on Information Resources Policy, Harvard University, 1990), 1.

[8] J. B. Rule, "Data Wars: Privacy Protection in Federal Policy," *New Directions in Telecommunications Policy,* P. R. Newberg, ed. (Durham, NC: Duke University Press, 1989), 19.

[9] M. Mayer, "Scanning the Future," *Forbes* (October 15, 1990): 114, quoting J. Costello, President of Nielsen Company's marketing information services unit in the United States.

and associated institutions. Because of the ease with which telephone transactions can generate information, most of the report consists of examples which relate to telephone utilities. However, other utility sectors also produce transaction-generated information that might be of value to third parties. For example, the information generated by a "Smart House" (a residence with technologically advanced control features) can be useful to appliance salespersons and telemarketers.

Telephone transaction-generated information, according to McManus, is generated by telephone usage and transactions related to telephone service.[10] Katz notes TTGI is "the fact itself that the communication was made. . .who uses which service, when and with whom."[11] The local exchange telephone company's monopoly characteristics, the "essential" nature of its service, its continuous relationship with its customers, and the functional need (for billing and collection) to monitor customers' transactions with and through the network produce unique implications for privacy and competition in the use of TTGI.

For instance, a utility's monopoly status ensures that all users within a service area are customers of a single local exchange company (LEC). Therefore local telephone usage records enable demand to be predicted by a complete census rather than through sampling and statistical tools. If businesses that make use of projections from utility usage patterns gain access to utility data they ". . .won't have to guess. They'll know."[12] Customer information collected by utilities can be valuable to businesses only if they can logically make projections about demand from the utility's customer records. While it makes very little sense for a florist to buy records of people's telephone use patterns, a magazine subscription seller looking for potential subscribers could make excellent use of records of customers' audiotex use. To a business selling subscriptions to "TV Guide" or

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[10] McManus, *Telephone Transaction-Generated Information,"* 6, 43.

[11] J. E. Katz, "US Telecommunications Privacy Policy: SocioPolitical Responses to Technological Advances," *Telecommunications Policy* (December 1988): 353.

[12] Mayer, "Scanning the Future," 115.

some other entertainment weekly, an individual who makes repeated calls to a service providing daily TV specials would be a particularly attractive direct-mail target.

As mentioned, privacy issues may also concern customers of electric, gas, and water utilities. These utilities, too, can collect sensitive and detailed customer information that might be of commercial or other interest to third parties. For example, it is possible for an electric utility monitoring the load of a residential customer through a demand-side management program to establish a usage pattern for that customer. That pattern could be used to discover the type and age of appliances used in the household. This information would be of interest to those selling new, more energy efficient appliances. Some would consider such a use of this type of information as socially desirable. However, the information could also be used to establish when a home is occupied, useful information for telemarketers and others. In the case of industrial customers, the type of equipment used by electric or gas-intensive industries might be determined. Such information might be useful to competitors. Electric and gas utilities today, for their own reasons, typically make information about the usage patterns of their industrial customers proprietary. If the information had enough value, a utility with a monopoly franchise service area conceivably might find it tempting to sell the information.

The competitive implications of utility use of customer information takes on a greater importance in the light of continued utility diversification. Telephone utilities have diversified widely and can use customer information to give their affiliates an advantage over other competitors. One example might be the telephone utility with a cellular communications affiliate.[13] An LEC can identify a small business customer which suddenly doubles or triples its telephone usage in terms of local call volume and which has recently requested additional voice and data lines. This information may imply a significant increase in the firm's business, indicating it may need cellular telephony to manage its increasing business. With access to customer information

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[13] The FCC permits each cellular service area to be served by one LEC affiliate and one independent cellular provider.

collected by the parent utility, a cellular affiliate could target prospective customers long before its competitors. Furthermore, there would be little incentive for the LEC to provide equal access to competing cellular providers. The availability of customer information collected by the parent company in the course of its franchised monopoly service transaction could give an unfair advantage to the affiliated cellular firm beyond what is normally understood as an economy of scope, that is, the cost efficiencies gained by a single firm producing two related goods.

Further, the potential competitive implications of utility use of customer information were recognized early on by Judge Greene, who explicitly asked about the anticompetitive effect that utility use of such information would have on independent enhanced and information service providers should the applicable MFJ (modified final judgment) restrictions against diversification be lifted. Telephone utilities are seeking to diversify into enhanced information services where they can provide computer-based information through telephony. Existing enhanced service competitors point out that not only does the telephone company have an unfair advantage due to its wealth of customer information, but that as a competitor the telephone company will be in a position to raise the cost of doing business for its competitors, either directly by raising its price or indirectly by compromising quality of service. A more subtle, but nonetheless pervasive example would be a utility's use of customer information to provide synergy in some other unrelated businesses, such as credit cards, real estate, computers, travel, and banking, because their wealth of customer information provides them with a marketing advantage.

Informational privacy, thus, has been a matter of significant public concern since the 1960s. In the 1960s and 1970s, privacy concerns were driven by new applications of computer technology, particularly the use and abuse of personal records in computer-readable form. Now, telecommunication applications are giving rise to a second wave of concern over customer information privacy. New telecommunication technologies, exemplified by Signalling System-7 (SS7) switches and personal communication networks as well as smart houses and automatic meter reading, dramatically increase the ability of

utility network operators to systematically gather, utilize, and then to sell to third parties information about users.

The bottleneck characteristics of telecommunications and other utility networks have given rise to competitive issues over access to customer information by firms providing telecommunication and other utility related goods and services. Policymakers and regulators are faced not only with an unfamiliar subject matter (customer information and privacy), but also with apparently contradictory objectives (privacy versus competition and efficiency). The availability and use of customer information by the LEC has a direct effect on the development of independent enhanced information service providers that in turn could affect the degree to which we will have freedom of choice as consumers.

Under the traditional utility culture, privacy would not be an issue. Utility executives have traditionally acted in the public interest and protected the privacy of their customers. There is, however, a sea change. The utility culture is changing from one based on the public interest to one based on marketing--a phenomenon that can be traced to the trend of more competitive forces being introduced in each of the public utility sectors.

State public service commissions already have dealt with privacy issues in the context of utilities providing Caller ID and associated blocking options. However, privacy and competitiveness issues are much broader than Caller ID. As will be shown in Chapters 2 and 3, these issues can arise in a wide variety of contexts. Indeed, it might be said that Caller ID is merely the "tip of the iceberg" of existing, new, and potential utility services that have privacy and competitiveness implications. Within the larger framework of privacy and competitive questions implicit in the disclosure, sale, and transfer of transactional customer information collected by utilities, this report attempts to lay out some issues and develop conceptual frameworks within which to consider these issues, to show what the state public service commissions have done to date with these issues, and to identify some public policy implications that state public service commissions might wish to consider when addressing these issues.

CHAPTER 2

CONCEPTUAL FRAMEWORK FOR ANALYZING COMPETITIVE IMPLICATIONS

Introduction

This chapter develops a conceptual framework for the analysis of competitive implications of utility uses of customer information. Here, the analysis is explicitly theoretical, giving weight to clarifying concepts and relationships between concepts rather than the accurate description of the phenomenon under investigation. For example, this chapter situates the public utility firm within a conglomerate wherein each constituent firm provides a single product or service. That is, the normal multiproduct firm is depicted as a conglomerate of single-product firms, with one of the constituent firms being a public utility. This idealized structure is helpful in developing the conceptual framework and eliminates an entire layer of complexity associated with the specialized function of holding companies. The simplification does not reduce the analytical value of the framework.

Following the statement of operational definitions of, and assumptions regarding, customer information and competition, the chapter develops a conceptual framework for analyzing the competitive implications of customer information, beginning from the surveillance imperatives of a generic firm.[1] Here, key competitive issues, including the passing of information from the utility to competitive subsidiaries, such as Yellow Pages publishers, are delineated.

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[1] The term "surveillance" as used here carries no negative connotation. The term is understood in the sense proposed by Harold D. Lasswell to describe one of three functions of all communication processes, that of disclosing threats and opportunities. See, Harold D. Lasswell, "The Structure and Function of Communication in Society," *The Communication of Ideas*, L. Bryson, ed. (New York: Institute for Religious and Social Studies, 1948), 51. "To surveil" is used as a term of art to indicate the verb form of surveillance as used here.

Customer Information

Every transaction, even if the express purpose is not communication of information, generates information if recorded.[2] It may be useful to think of this transaction-generated information (TGI) as information given-off by the transaction or as a by-product of the primary transaction. When an individual ceases to commute to work and starts a small business in the basement, energy consumption in that household will go up. The householder uses more energy to keep the house at a comfortable temperature and to power various pieces of equipment. She does not intend to communicate the existence of the small business, its activity level, or any other information about her changed circumstances to the energy utility. Yet, the changed energy usage pattern has the potential to be interpreted to yield such information. At a minimum, the utility can infer that someone in the household is staying home more. With the kind of detailed monitoring that accompanies certain demand-side management schemes, incentives to gather detailed information on customer behavior, and possibly cross-matching with information from other sources, the energy utility can generate much more detailed information.

TGI has assumed greater importance today than in the past as the complexity of society has increased. For our purposes, the key stages are the rise of industrial society and the application of computer technology to all forms of transactions. In industrial society, people began to interact with large and complex organizations. Much that was known about individuals was reduced to files, and information began to be gathered about various transactions in permanent forms rather than being stored in individual

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[2] Thomas E. McManus, *Telephone Transaction Generated Information: Rights and Restrictions* (Cambridge, MA: Harvard University Program on Information Resources Policy, 1990), 1, 43.

memories.[3] The old paper-based systems could only handle a limited amount of information, resulting in the collection of only the most obviously important information. With the application of computer technology to these tasks, large-scale information handling became easier and cost-effective. It was now possible to collect all sorts of information, including what appears to be insignificant on the face. When aggregated or analyzed, all sorts of previously insignificant information can yield extraordinary insights. Here is an off-beat, yet insightful, illustration:

> For a quick read on the state of world affairs, one can look at pizza deliveries to the Pentagon, the White House, and the Central Intelligence Agency. "The news media doesn't always know when something big is going to happen because they're in bed, but our deliverers are out there at 2:00 in the morning," said Frank Meeks, owner of the 43 Domino's pizza outlets in the Washington area. Mr. Meeks said that late-night deliveries to the Pentagon had increased steadily, from 3 on January 7 to 101 Tuesday night [January 15, 1991, the night before the beginning of the air assault on Iraq], and that 55 pizzas had been delivered to the White House from 10:00 P.M. Tuesday to 2:00 A.M. today [January 16, 1991]. Mr. Meeks said the demand for pizzas had coincided with the build-up in tensions as the United Nations deadline had approached for Iraqi troops to withdraw from Kuwait. He said he had traced the trend through the invasions of Panama and Grenada, the fall of President Marcos in the Philippines, and previous Persian Gulf crises. In every case, pizza orders to the three Government buildings soared he said. Mr. Meeks said the record for late-night deliveries to the C.I.A.--21 pizzas--was set August 1, the night before Iraq invaded Kuwait. But deliveries after 10 P.M. have dropped since January 9, when they reached 15.[4]

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[3] C. Dandeker, *Surveillance, Power and Modernity: Bureaucracy and Discipline From 1700 to the Present Day* (Cambridge, U.K.: Polity Press, 1990); A. Giddens, *The Nation-State and Violence: A Contemporary Critique of Historical Materialism, Volume 2* (Cambridge, U.K.: Polity Press, 1985).

[4] "New Crisis Indicators: Cheese and Pepperoni," *New York Times* (January 17, 1991): A16.

The pizza delivery operator has TGI. Based on the casual, nonsystematic collection of information generated as a by-product of the pizza transactions, he is making inferences about the advent of international crises. If the telecommunication utility, a third party, the Defense Department, or the pizza delivery firm had a device to systematically record the patterns of telephonic pizza delivery orders and analyze them in relation to certain profiles or norms, the inferences and the conclusions may be stronger. The patterns of telephonic pizza delivery orders, including the identity of the customers, the times, and frequencies constitute telecommunication TGI, a subset of utility transaction-generated information. A third party would have to explicitly make the inference that pizza orders after normal office hours from specific government agencies indicate officials busily working on international crises.

Following McManus, we define utility TGI broadly to include:

1. Information provided at the time of establishing a business relationship with the utility (for example, name, billing address, credit references, employment information),
2. Information generated by transactions with the utility (for example, energy usage patterns, billing information, credit arrangements),
3. Information generated by transactions with third parties over the utility's facilities (for example, the fact that a telephone conversation at a specific time and of a specific duration occurred between a person using A's telephone and a person using B's telephone--whether or not the conversation was actually between A and B--may be inferred but not conclusively proved from the telecommunication TGI).

It is possible to distinguish between access information (that is, name, address, telephone number) and other forms of TGI. Access information enables a person or an organization to be contacted in the future. A person or an organization may have a special interest in regulating the use of access information as a basic element of regulating information inflows (to be discussed below under privacy). Therefore, the term utility TGI will include all three categories listed above. Customer information is synonymous with utility TGI. In keeping with the understanding that TGI is a by-

product of a transaction, the actual content of a telephone conversation would not be included in the definition.

A clear definition of utility customer information or utility TGI with the imprimatur of a court or public utility commission decision does not exist. The closest to such a legally established definition is found in the Federal Communications Commission's (FCC) inquiries on Open Network Architecture (ONA).[5] These inquiries define the concept of Customer Proprietary Network Information (CPNI) and is of particular interest because of the underlying agreement that the information under consideration is proprietary to customers and that customers have "rights" over this information. The FCC defines CPNI as "all information about customers' network services and customers' use of these services that a Bell Operating Company (BOC) possesses by virtue of its provision of network services."[6] Referring specifically to the submissions made by the various parties, the 1988 order specifically includes billing information for each network service used by a customer, usage data, and information on calling patterns within the ambit of CPNI.[7] The FCC specifically excludes credit information from the definition of CPNI. Unpublished and unlisted telephone numbers are excluded from the scope of CPNI and placed in a special category with restricted access.[8]

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[5] Filing and Review of Open Network Architecture Plans: Memorandum Opinion and Order, 6 FCC Record 7646, 7670-72, Released December 19, 1991. Computer II Remand Proceedings: Bell Operating Company Safeguards and Tier 1 Local Exchange Company Safeguards: Report and Order, 6 FCC Records, 7571, 7605-7614, 7629. Released December 20, 1991. *Open Network Architecture Plans of Bell Operating Companies (Amended Plans): Memorandum Opinion and Order*, 5 FCC Record, 3103, Released May 8, 1990. *Filing and Review of Open Network Architecture Plans: Memorandum Opinion and Order*, 4 FCC Record, 1, 209-301, Released December 22, 1988.

[6] Ibid., 4 FCC Record, 215.

[7] Ibid., 215-16.

[8] Ibid., 216.

Table 2-1 shows the constituent elements of CPNI as proposed by the stakeholders in the ONA inquiries. The table depicts the wide variety of information that can be included under the heading of utility TGI (here limited only to telecommunication TGI), and in turn gives an understanding of the difficulties of arriving at a consensus definition. Although the FCC does not resolve differences between the parties conclusively, the general wording suggests that the FCC favors a broad, rather than a narrow definition except in the case of credit information. However, the order does not resolve a number of issues. For example, BellSouth includes in its proposed definition only information received from customers in the course of providing common carrier services. In addition, BellSouth proposes that CPNI should only include information unavailable from any source other than the Regional Bell Operating Company and the customer. Narrowly construed, this clause seems to exclude the customer's name, address and telephone number. It would also exclude calling patterns to specific numbers in an environment that includes Automatic Number Identification (ANI) and Caller ID.

Energy and water utility TGI would include elements that parallel categories to those found in the CPNI definitions such as usage patterns, types of conduits and services, and billing information. An energy utility in addition may have information on a customer's appliances and energy consumption. This information may have been obtained directly from the customer in the context of a demand-side management program or through remote meter reading devices capable of monitoring minute-by-minute consumption differences at the household level.[9]

Competition

Competition is assumed to be good, in the spirit of the Sherman antitrust law. The extension of market power is seen as undesirable. The mandates of the

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[9] John Douglas, "Reaching Out With Two-Way Communications," *EPRI Journal* (September 1990): 4-13.

TABLE 2-1

CONSTITUENT ELEMENTS OF CPNI AS PROPOSED BY SELECTED PARTIES TO THE FCC's ONA INQUIRY

Constituent Elements of CPNI	NYNEX	BellSouth	Pactel	Ameritech	US West	SWBT	Bell Atlantic	ADCU*
Access and usage charges								x
Access arrangements and costs								x
Account number (except if published)								x
Basic services used								x
Billing address								x
Billing information			x	x	x	x	x	
Billing name								x
Billing summaries								x
Calling patterns	x		x					x
Capacity of services utilized							x	
Class of service				x		x		x
Credit information	#			#	#		#	x
Current charges								x
Customer's billing records	x	x						
How much customers use service	x	x						
Local measured service								x
Location(s) of services customer subscribes to	x	x						
Long-distance records								x
Network services taken								x
Number of lines			x	x		x		x
Quantity of services customer subscribed to	x	x						
Repair information					x			
Service address								x
Service name								x
Service orders					x			
Station message detail recording information					x			
Technical characteristics of service						x		
Telephone number								x
Telephone number (except if unpublished)								x
Traffic information					x			x
Type(s) of services customer subscribes to	x	x						
Types of access lines						x		
Usage data	x		x					x

Sources: Compiled from Filing and Review of Open Network Architecture Plans: Memorandum Opinion and Order, 6 FCC Record 7646, 7670-72, Released December 19, 1991. Computer II Remand Proceedings: Bell Operating Company Safeguards and Tier 1 Local Exchange Company Safeguards: Report and Order, 6 FCC Records, 7571, 7605-7614, 7629. Released December 20, 1991. Open Network Architecture Plans of Bell Operating Companies (Amended Plans): Memorandum Opinion and Order, 5 FCC Record, 3103, Released May 8, 1990. Filing and Review of Open Network Architecture Plans: Memorandum Opinion and Order, 4 FCC Record, 1, 209-301, Released December 22, 1988.

* ADCU: Association of Data Communication Users, California Bankers Clearing House, Committee of Corporate Telecommunications Users, Mastercard International Incorporated, New York Clearing House Association, VISA USA, Inc.

x = inclusion proposed by intervener

= exclusion proposed by intervener

commissions are assumed to include a commitment to create and maintain "level playing fields" for firms in utility-related markets. The policing of the line between competitive and monopoly activities of utilities is seen as an essential element of the commissions' mandate to serve the public interest, and particularly to ensure that residential and small business customers are treated fairly in terms of price, accessibility of services, and quality of services.

The Surveillance Imperative

Current developments in the collection and use of customer information by public utilities are best understood by examining how firms and individuals collect and use information about their environments. This is done by examining the incentives a firm has in relation to such information, particularly customer information.

Firms gather information about their environments in three ways. They may engage in specific information-gathering activities such as conducting interviews and surveys. They may purchase information about their environment from specialized information providers. Or they may gather information generated in the course of routine transactions (that is, the information is a by-product of the routine conduct of business). While all three methods are important, this report pays particular attention to the last--collection of TGI.

All modern, complex organizations, including utility and nonutility firms, continually surveil their environments.[10] Based on the information gathered from this surveillance the firm seeks to control or adapt to its environment. Surveillance takes four forms with a firm in a real-world competitive market. The firm seeks information about its sources of inputs and the purchasers of its output. While a firm in a perfectly competitive market would not seek to control either of these relationships, and would therefore not seek information about its suppliers or buyers, in real-world imperfect

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[10] C. Perrow, *Complex Organizations: A Critical Essay* (Glenview, IL: Scott, Foresman & Co., 1972); J. D. Thompson, *Organizations in Action* (New York: McGraw-Hill, 1967).

markets there are possibilities of controlling upstream and downstream markets and, therefore, incentives to surveil. In addition, the firm engages in two other forms of surveillance: surveillance of government agencies with power to affect the firm's activities and surveillance of competitors. In the real world, government agencies structure markets, define and enforce property rights, give or deny subsidies, impose standards and regulations of various kinds, and so on. Surveillance of government agencies is driven by the twin needs to control government actions and to respond properly to them. Surveillance of competitors is a staple of business literature.[11] In all these forms information may be gathered directly or as a by-product of routine transactions with the relevant external actors.

If surveillance is a precondition of controlling agents external to the firm, it follows that shielding the firm's own information from external surveillance is a precondition to preventing control by external agents. Here, the information to be shielded includes both information generated in the course of the firm's functioning and the information gathered by its surveillance activities. That is, a firm will seek to shield its customer information from its competitors, its competitor intelligence from its suppliers, and so on. This strategic conception of surveillance is associated with the concepts of misinformation and disinformation, the former being unintentionally erroneous and the latter being intentionally erroneous information. A firm has incentive to disseminate certain kinds of disinformation about itself and remain silent on other types of misinformation, meaning a surveilling firm must take care to distinguish between reliable and erroneous information. Problems of misinformation and disinformation are endemic to direct surveillance, but are less important with TGI. In the latter case, the information-gatherer merely extracts information embodied in the transaction. There is a greater probability of accuracy since both parties have a stake in effectively concluding the transaction. Furthermore, the party extracting the information controls the

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[11] Michael E. Porter, *Competitive Strategy: Techniques for Analyzing Industries and Competitors* (New York: Free Press, 1980).

information gathering process, minimizing the possibility of the introduction of disinformation.

The four forms of surveillance are connected. It may be more effective for a firm to gain access to a competitor's customer information through competitive intelligence than to expend the resources to gather information about customers directly, or to gather competitive intelligence by accessing government records on its competitors than to directly generate the information. This is especially so because direct surveillance is difficult to conceal. It's good to have information about an external agent, but it's better to have that information unbeknownst to the agent.

Surveillance is costly, but information once gathered can be replicated at minimal cost and sold to multiple buyers. Information can be sold without denying use to the original gatherer.[12] This characteristic of information is conducive to resale of information gathered through surveillance. The resale can be done either by the firm (in which case it is a by-product and not the main line of business) or by a specialized surveillance firm. Actually, the tendency to resell is limited by the nature of the information. Information that gives competitive advantage is valuable only to the extent that it is not available to competitors. Thus, most resales of information are made to firms that are not directly competitive. A firm will sell information gathered in its market to a firm in a different market; that is, a new-car dealer will sell information about its customers to an insurance company or to a credit card company, but not to a competing dealer. The purchaser buys the information assuming a correlation exists between the two purchasing behaviors, for example, that persons who buy new cars are more likely to buy certain forms of insurance.

The discussion so far has assumed single-product firms. In reality, most firms are multiproduct firms. For purposes of analysis, Figure 2-1 shows the multiproduct firm as a conglomerate of single-product firms. Each of them supplies different markets. The

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[12] Kenneth J. Arrow, "Economic Welfare and the Allocation of Resources for Invention," in *Economics of Information and Knowledge: Selected Readings*, Donald M. Lamberton, ed. (Harmondsworth, U.K.: Penguin Books, 1971), 141-59.

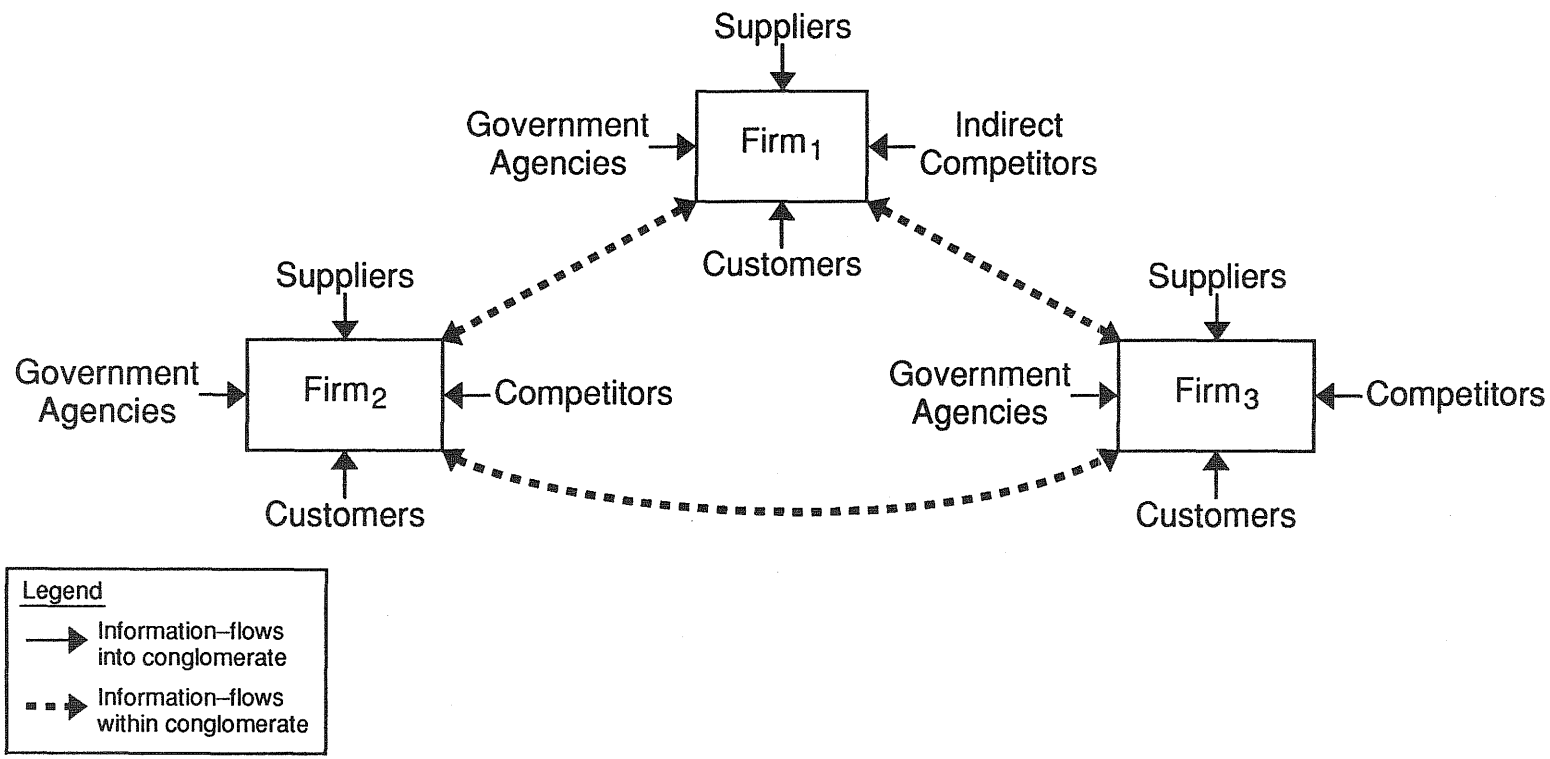

Fig. 2-1. Information flows within a conglomerate of single-product firms.

normal incentives to make multiple uses of TGI gathered by each firm will operate in the case of the multiproduct conglomerate. Being part of a collective economic entity, the relationship between the constituent firms is one of complementariness not competition. Therefore, the normal constraints against the sharing, resale, and reuse of TGI will not apply within the conglomerate. It is possible that at least a part of the "economies of scope" associated with multiproduct firms derive from the sharing of TGI.

Customer Surveillance

Managing of demand has always been a central imperative of firms in market economies. For the best part of this century the prevalent methods of demand management were advertising and marketing campaigns.[13] These included sample surveys of present and potential customers, focus groups, and other techniques intended to find out what was going on in the heads of present and potential customers.

The period since the 1970s has seen increasing market segmentation and the increased application of computer technologies to retail and wholesale marketing and distribution processes. As products and services have become more differentiated and the mass media used to advertise them have become increasingly fragmented, incentives have been created to improve the quality of customer information in terms of predictability of future buying behavior and accuracy of market segmentation. In other words, the marketers needed to predict more accurately what finely defined (almost to the level of individual households) groups in society would buy.[14] One of the best predictors of future buying behavior is past buying behavior.[15]

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[13] James R. Beniger, *The Control Revolution: Technological and Economic Origins of the Information Society* (Cambridge, MA: Harvard University Press, 1986).

[14] David Shepard Associates, Inc., *The New Direct Marketing: How to Implement a Profit-Driven Database Marketing Strategy* (Homewood, IL: Dow Jones-Irwin, 1990).

[15] Ibid., 19-20.

Data on past buying behavior, or purchasing TGI, had always been available to marketers but the sheer quantity precluded easy use. The increased use of checks, charge cards, and similar forms of payment that associated unique identifiers (social security numbers, credit card numbers, telephone numbers) and access information (names, addresses, telephone numbers) with specific purchases and the availability of the relatively cheap information processing and storage power of the computer created conditions ripe to capture and process data on past buying behavior.[16] Direct marketers, particularly direct vendors of services, and financial service companies such as American Express pioneered the mining of transaction-generated information for marketing purposes.[17] A transaction need not be successfully completed to generate TGI. The sale of mailing lists of people who have applied for, but have been turned down for credit, illustrates this point.[18]

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[16] Henry Unger, "Keeping Tabs on Consumers: Equifax Making the Information Business Pay Off," *Atlanta Constitution* (January 27, 1990): G1+; James B. Rule, "Data Wars: Privacy Protection in Federal Policy," in *New Directions in Telecommunications Policy*, P. R. Newberg, ed. (Durham & London: Duke University Press, 1989), 19; Meredith W. Mendes, "Privacy and Computer-Based Information Systems," in *Issues in New Information Technology*, B. M. Compaine, ed. (Norwood, NJ: Ablex, 1988), 193-264; "Now Merchants Can Learn More About Charge Customers," *Business Week* (March 19, 1984): 47.

[17] John P. Newport, Jr., "American Express: Service That Sells," *Fortune*, 120 no. 12 (November 20, 1989): 82; Richard Layne, "Banc One's $100 Million Software for Retail Banking Slated for Test," *American Banker* (February 12, 1991): 1; Alan Redding, "Banks Use PC-Based Systems to Tap CIF (Customer Information Files), Boost Sales, and Develop Relationships," *Magazine of Bank Administration*, 65 (November 1989): 60; Richard Karpinski, "Interconnects Mine Customer Base," *Telephony* (November 5, 1990): 9+; Calvin Sims, "Drive for Holiday Calls Abroad," *New York Times* (June 2, 1991): C1; M. L. Carnavale and J. A. Lopez, "Making a Phone Call Might Be Telling the World About You," *Wall Street Journal* (November 28, 1989): 1; Anne Field and Catherine Harris, "The Information Business: Despite a Slow Start, Many See a Bonanza in Selling Electronic Data," *Business Week* (August 25, 1986): 82-90; J. Harnett, "Transactional Marketing," *Marketing Communications* (March 1984): 36-41.

[18] "New List Bank," *Direct Marketing* (April 1991): 56.

The new marketing is intended to "isolate relatively homogeneous market segments; and score and rank individuals in terms of their probability of behaving in a variety of predictable ways (responding, buying, returning, paying, staying or leaving and so on)."[19] Extrapolating from past behavior to future behavior in relation to the same product or service is a relatively simple task. Extrapolating from past behavior regarding one product or service to a related but new product or service or to a different product or service that is not directly related poses a bigger challenge. However, given the need to expand markets, the expense of gathering TGI, and the incentives to resell/reuse, much of the utilization of customer TGI occurs across, rather than within, markets. The corollary is that firms have an incentive to purchase customer information in processed form (for example, lists, profiles, geodemographic cluster tapes) from other firms.

This report is about customer information or TGI. Customer information includes the information given to establish an account, change a mailing address, and so on, as well as information gleaned by the firm from the nature, frequency, volume, and so on of the customer's transactions. Information gathered directly from customers in the form of marketing surveys is excluded from this definition as is customer information purchased or obtained by the firm from other sources such as the U.S. Census Bureau, the U.S. Postal Service (USPS), and list providers such as R. H. Donnelley. When the USPS sells a list of recent address changes, it is selling a value-added compilation of TGI as an information product. The list buyer does not obtain it as a by-product of a transaction. The information is the purchase. The fact that the USPS compiled the list from the transaction of a customer arranging for the redirection of mail makes the information TGI in relation to the USPS, but not in relation to a purchaser of the list from the USPS. Motor vehicle registrations, birth registrations, and so on are also important sources of "raw material" for firms providing market information. In these cases, too, the original information is provided in the context of a transaction (for example, registering a motor vehicle), but the compiled list does not fall within the definition of TGI. Census data are different because they are collected directly and not

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[19] Shepard Associates, *The New Direct Marketing*, 6.

as TGI. But the purchase of compiled census information or its value-added forms falls into the same category as the purchase of a list from R. H. Donnelley.

The natural incentive that firms have to collect customer information has been accentuated by problems of marketplace "clutter" and the dramatically higher capabilities afforded by new information and communication technologies to collect, store, and process vast amounts of transaction-generated information. While the individual pieces of TGI may appear mundane if taken in isolation, their aggregation and combination with information from other sources can yield vital information useful for predicting customer behavior. The following section discusses the special importance of transaction-generated information collected and processed by utilities.

Utility Customer Surveillance

Five key characteristics distinguish utility customer surveillance from the generic surveillance by firms discussed above:

1. Utilities are franchised monopolies serving almost the entire population in the franchise area. This makes their customer information unique because it is, for practical purposes, comprehensive. Customers have no choice but to deal with the utility.

2. Utilities supply essential services to households and businesses,[20] which reinforces the inability of the customers to sever their relationships with the utilities because of their monopoly status. Detailed information on usage of water, energy, and communication facilities by individuals and businesses may yield more clues to the core patterns of their behaviors than other forms of transaction-generated information.

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[20] David C. Sweet and Kathryn Wertheim Hexter, *Public Utilities and the Poor: Rights and Responsibilities* (New York: Praeger, 1987).

3. Utilities control bottleneck facilities that customers must use to obtain services from suppliers other than the utility. The utility's facilities are essential for suppliers wishing to reach potential customers of network-based services as well.[21]

4. Utilities have continuous, ongoing, and long-term relationships with their customers. The relationship is in most cases undergirded by a physical connection (that is, a telephone wire or a gas conduit) that is under the control of the utility. The "flow" characteristics of the services provided increase the possibilities of surveillance and enhance the richness of the data gathered. Many nonutility firms strive to establish the continuous relationships with customers that utilities have always had.[22]

5. Customers are billed at regular intervals for accumulations of relatively low-value transactions. The regular "monitoring" also enhances the quality of information about the customer, particularly in areas such as credit behavior.

Utilities attach a greater importance to the surveillance of government agencies because regulation has a qualitatively greater effect on utilities than on competitive firms. But with government, surveillance has to be direct since little TGI is generated by business-government interactions. While there are no direct competitors, a utility will still surveil the activities of indirect and potential competitors (that is, surveillance of gas companies by electric utilities). Customer surveillance may not be as important for broad consumption management purposes, but still may be done to ensure that delivery and billing mechanisms on customer premises are not corrupted, that customers do not switch to indirect competitors, that future demand is predicted, and so on.

To be sure, "pure" public utilities are becoming rare. A pure public utility is a firm that would engage in only one line of business as a franchised or "natural"

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[21] J. H. Flynn, "Discussion: Legal Approach to Market Dominance: Assessing Market Power in Antitrust Cases," in *Telecommunications Deregulation: Market Power and Cost Allocation Issues*, J. R. Allison and D. L. Thomas, eds. (New York: Quorum, 1990), 36-41.

[22] Shepard Associates, *The New Direct Marketing*, 6; L. Sloane, "Stores Battle Credit Cards With Theirs," *New York Times* (May 25, 1991): 16; Lewis Mandell, *The Credit Card Industry: A History* (Boston: Twayne Publishers, 1990).

monopoly. In fact, however, public utilities are increasingly multiproduct firms where one or more lines of business fall within the above definition. The same firm, directly or through affiliates, engages in both monopoly and competitive lines of business.[23] For purposes of clarity, we will assume in Figure 2-2 that the utility firm provides a single monopoly service (that is, acts as a classic public utility) and that competitive products and services are provided by separate single-product affiliates.

In this type of conglomerate, incentives to collect and use customer information or utility TGI exist to a much greater extent than in the case of a "pure" public utility. Each competitive subsidiary will have an incentive to collect and use customer information just like the "normal" competitive firm depicted in Figure 2-1. In addition, the utility firm with access to a unique and comprehensive set of utility TGI will now have an incentive to collect and process that information for use by its affiliates, over and above whatever uses it may make internally. Utility affiliates may be classified as utility-related and utility-unrelated businesses because of significant differences in the process of extrapolating from patterns of past utility behavior by customers. That is, it would be easier to extrapolate from a customer's electricity usage patterns the likelihood of that customer buying a heat pump than the likelihood of the customer renting a car or going on vacation. Accordingly, Figure 2-2 can be modified as shown in Figure 2-3.

If a utility has an incentive to transfer utility TGI to subsidiaries, the corollary is that it would also have an incentive to prevent competitors of its affiliates from gaining access to such information. The transfer of utility TGI to affiliates by public utilities is governed by the normal incentives and constraints discussed above, but certain additional factors come into play because of the unique characteristics of utility customer surveillance.

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[23] David Chessler, Bryan K. Clark, and Li-Kung Ferng, *Unregulated Enterprises of the Bell Regional Holding Companies* (Columbus, OH: The National Regulatory Research Institute, 1986); Robert E. Burns, Peter A. Nagler, Kaye Pfister, and J. Stephen Henderson, *Regulating Electric Utilities with Subsidiaries* (Columbus, OH: The National Regulatory Research Institute, 1986); The District of Columbia Public Service Commission, *For Whom Do the Bells Toll? The Case of Separate Subsidiaries*, White Paper (Washington, D.C.: District of Columbia Public Service Commission, 1990).

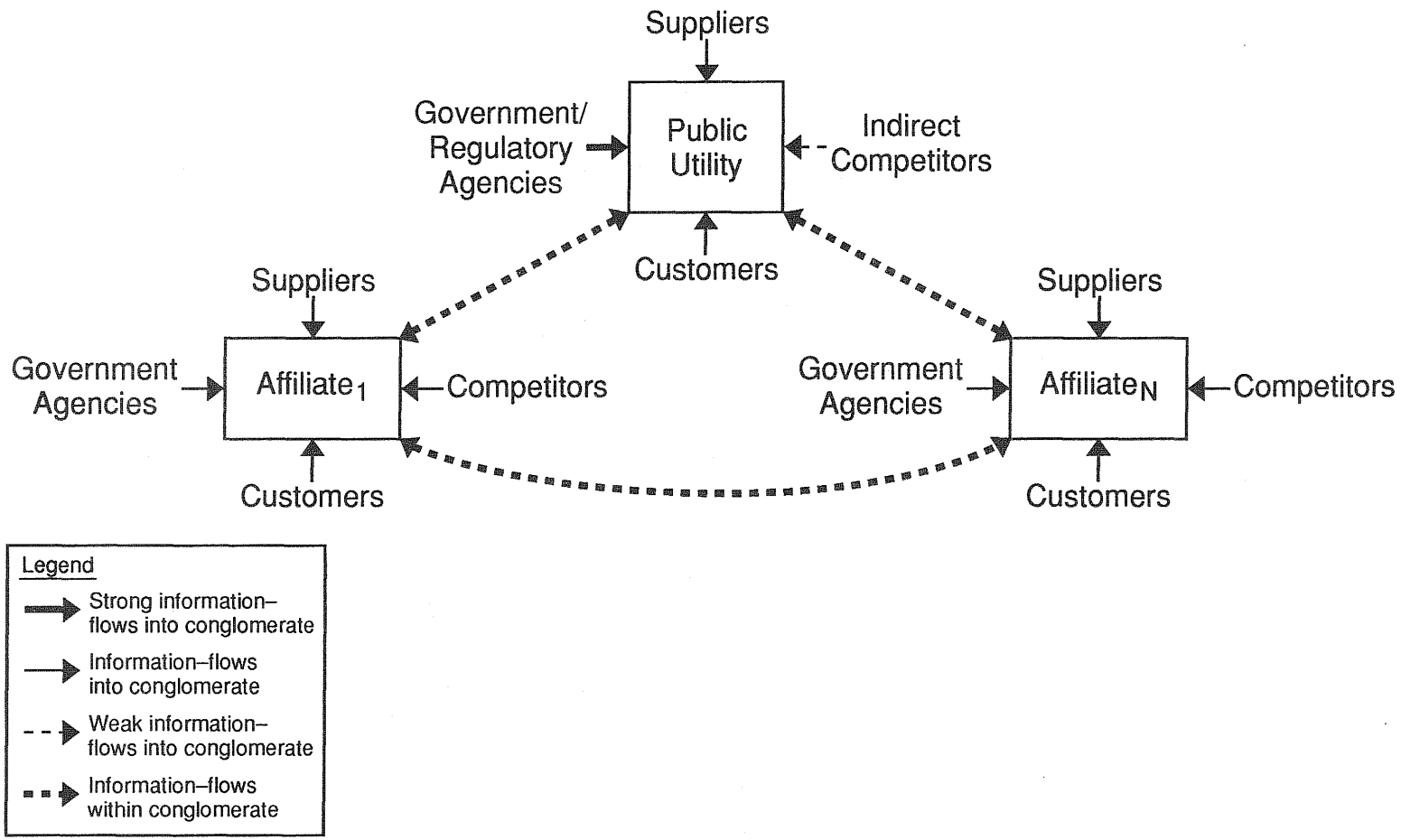

Fig. 2-2. Information flows within a conglomerate containing a public utility.

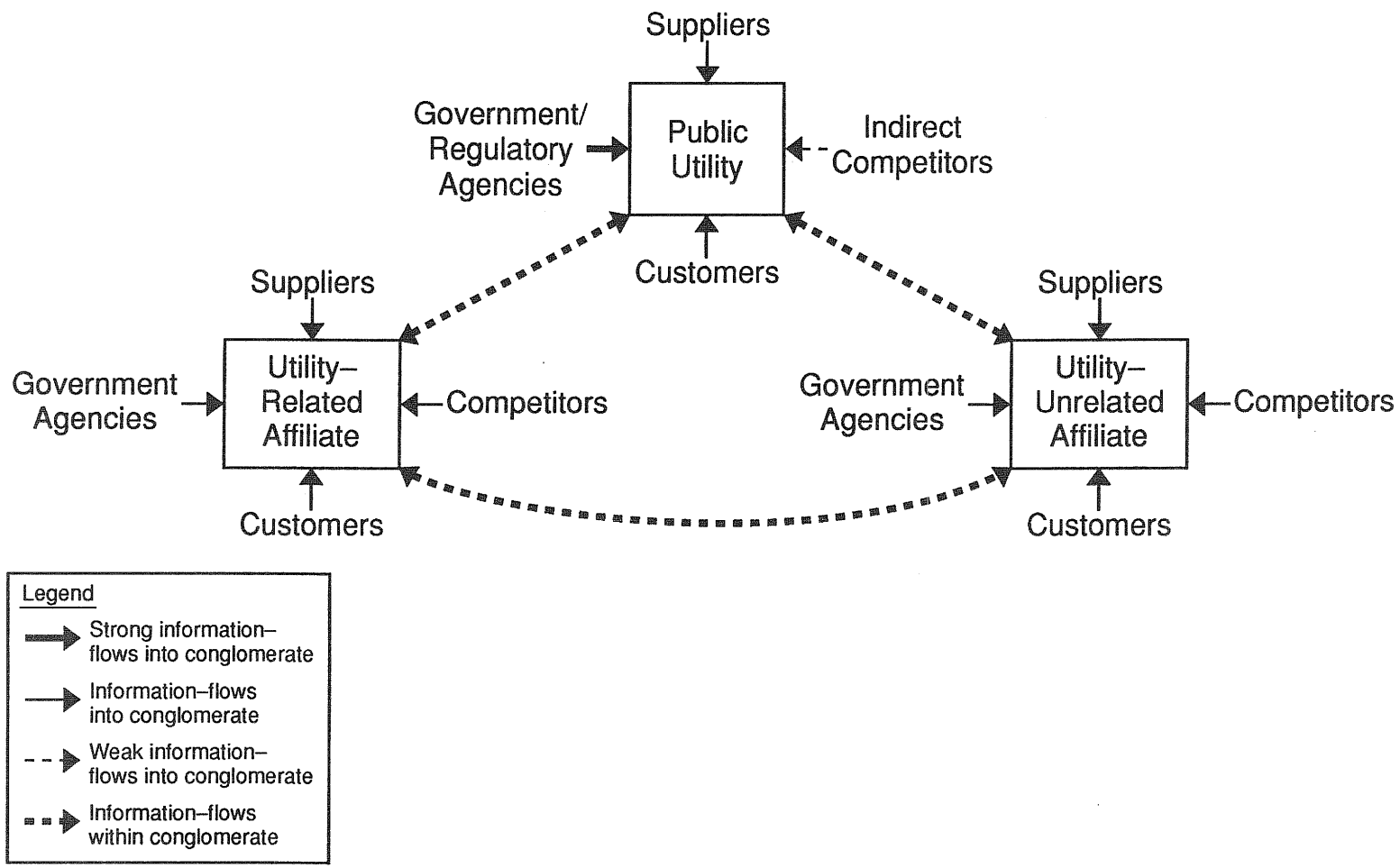

Fig. 2-3. Information flows between a public utility, a utility-related affiliate, and a utility-unrelated affiliate.

The "flow" characteristics of the services (for example, natural gas flowing through pipes instead of being compressed into cylinders and periodically delivered) supplied by the public utilities and their essential nature are inherently more suited for surveillance, not only of the specific service provided by the utility, but of many other aspects of the customer's life. For example, drug investigators can examine energy usage patterns to pinpoint suspect locations, the assumption being that unusually high electricity usage is indicative of hydroponic cultivation of marijuana or the cooking of crack cocaine.[24] Nonconsumption or low consumption of energy may indicate that customers are away from their residence. With demand-side management (DSM) the possibilities are even greater, depending of course on the particular methods of tracking usage.[25] Here, it may be possible to identify the age, type, and performance of appliances as well as the everyday life rhythms of customers in terms of when they wash, when they cook, how warm they keep their house for sleep (and thereby their sleeping apparel) and so on.[26] Smart House® technologies open up further possibilities for intensive TGI gathering. The interactive nature of telephonic communication yields a great deal of valuable utility TGI. As more and more transactions occur over the telephone,[27] the indispensability of the telephone and the value of telecommunication transaction-generated information will increase.

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[24] State v. Chryst, 793 P. 2d 538 (Alaska App. 1990).

[25] Mary Wayne, "Understanding the Consumer," *EPRI Journal* (October 1986): 5-11; David Boutacoff, "A New Look at Commercial Customers," *EPRI Journal* (December 1990): 12-21; Donald L. Schlenger, "Current Technologies in Automatic Meter Reading," *Water World* (May/June 1991): 14.

[26] Douglas, "Reaching Out With Two-Way Communications," 4-13.

[27] Rohan Samarajiva and Roopali Mukherjee, "Regulation of 976 Services and Dial-A-Porn: Implications for the Intelligent Network," *Telecommunications Policy* (April 1991): 151-52; Lena Williams, "Consumers vs. Callers: The Lines Are Busier," *New York Times* (June 20, 1991): B1+; "Utility 'One-Stop' Provided by Telco," *Enhanced Services Outlook* (December 1990): 12.

In the past, billing methods for utility services were rather rudimentary, partly because of the lack of incentive to collect TGI and partly because the cost-of-service/ cost-of-billing ratio was rather low. The latter point is illustrated by billing for water. Since water costs so little, there are no "natural" incentives to bill by time of day, or even usage. It is much more economical to send one bill for a flat rate once or twice a year. In the case of telephone service, the general pattern until recently was to have a flat rate for cheap local calls, and detailed itemized billing for more costly long-distance calls. Recent developments have changed both the incentives for collecting TGI and the cost structures of billing. The growing importance of competitive services has created incentives for information collection, and the declining costs of information processing and storage have raised the cost-of-service/cost-of-billing ratio. Energy and water conservation campaigns have created incentives to monitor usage, to design and monitor conservation campaigns such as demand-side management, and to identify and punish profligate users.[28]

The geographic monopoly status of utilities makes their TGI unique and valuable. The TGI generated by a supermarket chain, however large, is still not comprehensive. It would still be possible for a smaller competitor to apply statistical techniques to its smaller customer sample and draw conclusions at the aggregate level that are comparable to those drawn by the larger firm. The monopoly status of a public utility would preclude similar actions by, say, a retailer of telecommunication customer-premises equipment, which would not have access even to a small sample of basic telephone users to collect data comparable to that generated by the local exchange carrier. Further, the comprehensive coverage of a public utility would be absolutely unrivalled in terms of developing marketing profiles at the individual or household level.

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[28] "Governor's Water Use Exceeds Expectations," *Los Angeles Times* (March 20, 1991): A14:2.

Summary

This chapter developed a framework for analyzing competitive implications of the collection, use, and sale of customer information by public utility firms. The framework is based on the incentives to engage in surveillance of suppliers, customers, government, and competitors on the part of a generic firm. Here, information is conceptualized as a strategic resource, emphasizing the role that access to or restriction of information, disinformation, and misinformation plays in gaining or losing competitive advantage. The general analysis of firms as information gatherers, users, and providers was then modified for a pure public utility firm located within a conglomerate that included utility-related and utility-unrelated affiliates. The developed framework enables researchers and policymakers to identify the incentives and constraints of the stakeholders at the firm level. In terms of research, the framework opens up the question of the nature of economies of scope. How much of what has traditionally been described as economies of scope are in actual fact information subsidies flowing from units of the multiproduct firm serving markets characterized by economic and information monopolies to units serving competitive markets? In terms of policy, the framework, enables policymakers to clarify the interests involved in the CPNI debate, among others.

This chapter also situated customer surveillance by utilities and the potential for the further processing and sale of customer information by utilities within the context of general developments in marketing. As products and services have become more differentiated, the media outlets used to advertise them have become more fragmented, and mass advertising itself has lost its effectiveness due to "clutter," demand has arisen for effective new marketing techniques. The response has been a trend toward market segmentation, leading to "mass customizing." According to one author, the "ultimate logic of ever-finer differentiation of the market [from mass to segmented to niche] is markets of one; that is meeting the tailored needs of individual customers and doing so

on a mass basis."[29] Market differentiation requires ever more detailed information about customers. Rapidly decreasing costs of collecting, storing, and processing information have enabled the utilization of hitherto ignored sources of information on customer behavior, such as utility TGI.

[29] Stanley M. David, *Future Perfect* (New York: Addison-Wesley, 1987), 175, cited in McManus, *Telephone Transaction-Generated Information*, 1.

CHAPTER 3

CONCEPTUAL FRAMEWORK FOR ANALYZING PRIVACY IMPLICATIONS

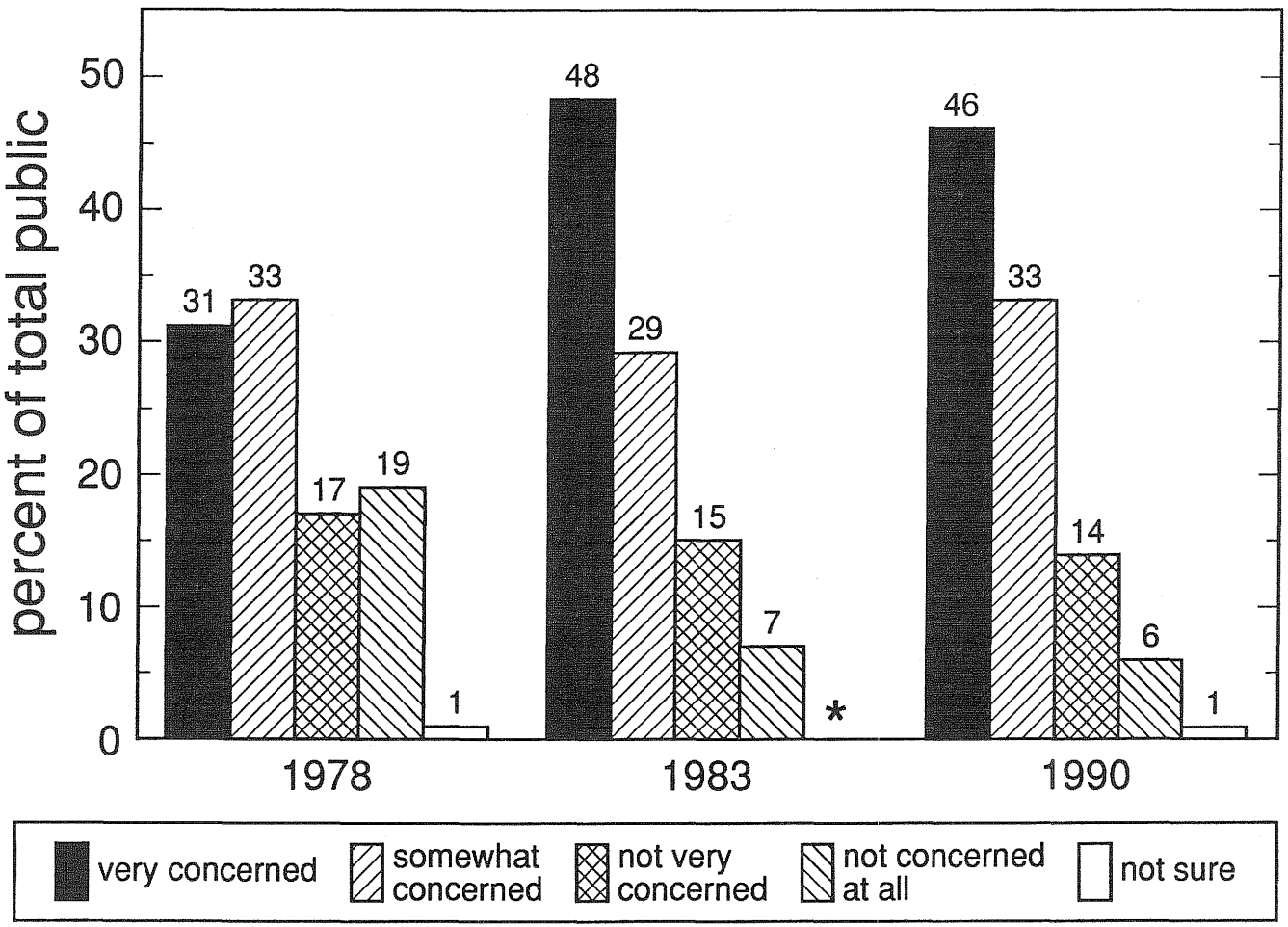
Introduction

This chapter develops a conceptual framework for the analysis of privacy implications of the collection, utilization, and sale of customer information by public utilities and relates it to the analysis developed in Chapter 2. Here too, the analysis emphasizes the clarification of concepts and relationships between concepts. The chapter begins with the operational definition of, and assumptions regarding, privacy. Privacy implications are examined in terms of the outflow of information from the customer to the utility and the inflow of information to the customer through facilities controlled by the utility. High-surveillance and low-surveillance paradigms for controlling incoming information are described and evaluated. The interrelationship between the outflows of information and inflows is discussed using the recent controversy regarding Caller ID, which constitutes but a small part of the overall phenomenon of utility collection, use, and sale of customer information as an exemplar.

The previous chapter examined the incentive structures of utility firms in relation to customer information. This chapter examines how the information practices of utility firms affect the privacy interests of customers. Customers are here limited to natural persons, or the residential customers of utilities. After all, the privacy concept is not commonly associated with legal persons. Business customers do have interests in controlling their utility transaction-generated information (TGI). These interests, though bearing some similarities to privacy interests, are usually couched in the language of competitive advantage.

Privacy

Privacy, though a new concept in the field of public utility regulation, occupies an increasingly high profile in the public mind. Figure 3-1 shows the persistence of public



*In 1983 the "not sure" responses were less than 0.5%.
SOURCE: Louis Harris & Associates and Alan F. Westin, The Equifax Report on Consumers in the Information Age (Atlanta, GA: Equifax, 1990).

Fig. 3-1. Public concern about privacy.

concern about privacy over the 1978-1990 period. Figure 3-1 shows the responses to three Louis Harris-Alan Westin surveys asked the question, "How concerned are you about threats to your personal privacy in America today?" (very concerned, somewhat concerned, not very concerned, not concerned at all). The percentage of the population "very concerned" about privacy rose from 31 percent in 1978 and stabilized around 47 percent in 1984 and 1990. If the "very concerned' and "somewhat concerned" categories are combined, the progression is from 64 percent in 1978, to 77 percent in 1983, to 79 percent in 1990. In all cases, a very high percentage of the population expresses concern about privacy.

The Equifax Report, coauthored by privacy scholar Alan Westin, identified technologically enhanced consumer information services as the important new privacy concern to surface in 1989-1990. The use of information given for one purpose (that is, purchase of a product or service, donation to a charity), technologically manipulated and used for a different purpose without the individual's consent was given as an illustration.[1] The subject matter of this report falls foursquare within this new area of public concern identified by Westin.

Privacy, in its broadest sense, encompasses all aspects of personal autonomy. For example, the recognition of a right for a woman to have an abortion in Griswold v. Connecticut and Roe v. Wade was anchored in a right of privacy/autonomy a woman has over her body.[2] Understandably, this has made privacy in the broad sense an extremely controversial concept. It is customary to define it either by referring to the famous Warren and Brandeis law review article or the Fourth Amendment to the U.S. Constitution.[3] But the contested nature of the basic concept, the interaction of multiple state constitutions with the federal constitution, and advances in the analysis of privacy,

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[1] Louis Harris & Associates and Alan F. Westin, *The Equifax Report on Consumers in the Information Age* (Atlanta, GA: Equifax, 1990), xix-xx.

[2] Roe v. Wade, 410 U.S. 113 (1973); Griswold v. Connecticut, 381 US 479 (1965).

[3] For example, as was done by Robert E. Smith, *Compilation of State and Federal Privacy Laws* (Washington, D.C.: Privacy Journal, 1988): v.

particularly informational privacy, over the past two decades limit the value of a formal juridical definition. Privacy is here defined as an individual's ability to control his or her inflow and outflow of information. Privacy is conceptualized as a relational concept (that is, control over the release or receipt of information in a relationship), not as a state of existence (that is, absolute seclusion or secrecy).

This definition is anchored in the social science literature on the grounds of interpersonal interactions in public spaces. Sociologist Erving Goffman defined public spaces as "any regions of a community freely accessible to members of that community."[4] He studied the ground rules of interactions in these spaces. Ground rules were seen as but one component of social organization and capable of regulating dealings between people sharing virtually no common organizational affiliations.[5] His classic example was people walking busy streets, signalling directional changes and yielding rights of way to total strangers.

There is much in common between Goffman's public spaces and interactions in the public switched telecommunication network and computer networks of today, so-called electronic space. These networks offer the possibility of initiating dyadic or group communication links with millions of individuals, and of having one or more of these millions initiate a return communication. Contacts with total strangers are initiated infrequently in electronic as well as in physical space. The predominant pattern is that of individuals navigating through public space obeying its ground rules to establish contact with a known person or persons, at which point the dyad or larger group effects a complete or partial withdrawal from the public space into a private space. In physical and electronic spaces alike, the boundaries of these private spaces are defined by negotiation primarily between the communicating parties. Violating these boundaries and using coercion in the negotiating process constitute privacy invasions.

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[4] E. Goffman, *Behavior in Public Places: Notes on the Social Organization of Gatherings* (New York: The Free Press, 1963), 9.

[5] E. Goffman, *Relations in Public: Microstudies of the Public Order* (New York: Basic Books, 1971), x-xi.

Goffman's research on interactions in public spaces led him to conclude that:

> . . .in Western society, as probably in all others, there is the 'right and duty of partial display.' Two or more individuals present together have the right and duty to make some information generally available concerning their relationship and the right and duty to leave unsignalled other information about their relationship.[6]

This ground rule regarding informational privacy can be extended to electronic space:

> Parties must have the ability to release and withhold personal information in electronic interactions as in face-to-face interactions. The corollary is that parties must be free to terminate interactions when desired personal information is withheld.[7]

The principle is compatible with the definition of privacy found in Alan Westin's influential book:[8]

> Privacy is the claim of individuals, groups, or institutions to determine for themselves when, how, and to what extent information about them is communicated to others. Viewed in terms of the relation of the individual to social participation, privacy is the voluntary and temporary withdrawal of a person from the general society through physical or psychological means, either in a state of solitude or small group intimacy or, when among larger groups, in a condition of anonymity or reserve.

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[6] Ibid., 198.

[7] Rohan Samarajiva, "Privacy and Competitive Implications of New Uses of Customer Information," in *NCF 1991 Proceedings* (Chicago: National Engineering Consortium, 1991), 85.

[8] Alan F. Westin, *Privacy and Freedom* (New York, Atheneum, 1970), 7.

The corpus of privacy law and practice that has been built up over the years provides a foundation for defining privacy as an individual's "right" to control the inflow and outflow of information. (The term "foundation" is used because the law is not fully settled.)

Courts have long recognized common law rights that are essentially identical to the right of privacy. However these were not recognized as "privacy" until publication of the 1890 law review article by Warren and Brandeis.[9] The article reviewed a number of cases in which relief had been afforded on the basis of defamation, invasion of some property right, or breach of confidence or an implied contract, and concluded that they were in reality based upon a broader principle which was entitled to separate recognition.[10] This was the right to privacy which Cooley had earlier referred to as "the right to be let alone."[11] Violation of the common law right of privacy has traditionally given rise to a tort action. The right of privacy may be invaded in four different ways: (1) unreasonable intrusion upon the seclusion of another; (2) appropriation of the other's name or likeness; (3) unreasonable publicity given to the other's private life; or (4) publicity that unreasonably places the other in a false light before the public.[12]

By the 1950s the Supreme Court began to speak of a "constitutional" right to privacy which protected individuals against improper acts of government officers. Then in 1965 the Supreme Court held that the guarantees of the Bill of Rights created "zones

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[9] Samuel D. Warren and Louis D. Brandeis, "The Right to Privacy," *Harvard Law Review* (December 15, 1890): 213, note 1.

[10] W. Prosser, *Torts*, 4th ed. (St. Paul, MN: West, 1971), 803.

[11] T. M. Cooley, *A Treatise on the Law of Torts Or the Wrongs Which Are Independent of Contract*, 2nd ed. (Chicago: Callaghan & Co., 1880), 29.

[12] Prosser, *Torts*, 802-18.

of privacy."[13] Two years later, the Court created a standard called "the reasonable expectation of privacy" to guide subsequent decisions on the issue.[14] The Roe v Wade ruling in 1973 recognized a woman's right to choose to have an abortion on grounds of personal privacy.[15] While the Constitution protects privacy from governmental intrusion, the protection of a person's right to be let alone by other people and nongovernmental institutions has largely been left to federal and state legislatures.[16] Privacy protection laws currently cover several aspects of life[17] including credit information,[18] financial information,[19] harassing or obscene calls,[20] wiretapping,[21]

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[13] Griswold v. Connecticut, 381 U.S. 479 (1965); the First Amendment protects the right of associational privacy and allows a certain degree of personal autonomy in decisions. The Fourth Amendment affirms the right of people to be secure in their homes, houses, papers, and effects against unreasonable searches and seizures. The Fifth Amendment protects against self-incrimination. The Ninth Amendment reserves to the people all guarantees not explicitly stated by the Bill of Rights among these implicit guarantees is privacy. From Novak et al., *Constitutional Law* (St. Paul, MN: West, 1986), 684-85, 710-21, 940-42, 1022-25; Evan Hendricks et al., *Your Right to Privacy: A Basic Guide to Legal Rights In An Information Society* (Carbondale, IL: Southern Illinois University, 1990).

[14] Katz v. United States, 389 U.S. 347 (1967); criteria for determining constitutionally protected "zones of privacy" were set forth; whether the expectation of privacy in the area to be searched outweighs the government's interest in searching that area, factoring the degree of intrusion involved. From Hendricks, *Your Right to Privacy*, xv.

[15] Roe v. Wade, 410 U.S. 113 (1973).

[16] Katz v. United States; George Trubow, *Watching the Watchers: The Coordination of Federal Privacy Policy* (Washington, D.C.: Benton Foundation Project on Communications and Information Policy Options, 1989), 7.

[17] Jerry Berman and Janlori Goldman, *A Federal Right of Information Privacy: The Need for Reform* (Washington, D.C.: Benton Foundation Project on Communications and Information Policy Options, 1989); Privacy Protection Commission, *Personal Privacy in an Information Society* (Washington, D.C.: U.S. GPO, 1977); Office of Technology Assessment, *Federal Government Information Technology: Electronic Record Systems and Individual Privacy* (Washington, D.C.: U.S. GPO, 1986).

[18] *The Fair Credit Reporting Act of 1970*, 15 USCA § 1681 et seq.

[19] *The Right to Financial Privacy Act of 1978*, 12 USCA § 3401 et seq.

restricting the collection and use of personal information by federal agencies,[22] school records,[23] cable television[24] and video rental records.[25] Although privacy protection has come a long way since Warren and Brandeis' impassioned plea of 1890, the exact nature of the legal right to privacy remains subject to considerable ambiguity at the international, federal, and state levels.

International law on the subject at the present time is made up of guidelines and has not developed to where enforceable rights can be identified.[26] The ambiguity at the federal level is exemplified by questioning nominees to the Supreme Court about their position on whether a constitutional right of privacy exists. There is no consistency in the treatment of privacy in state constitutions and legislation,[27] a point of particular relevance. Thus, the term "right" will remain within quotation marks to signal it often is not quite a defined legal right in the full sense. However, there exists enough support for a claim that the "right" to control the inflow and outflow of personal information is a social entitlement, approaching a right in the legal sense.

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[20] *The Communications Act of 1934*, 47 USC § 223a.

[21] *The Omnibus Crime Control and Safe Streets Act of 1968*, 18 USC § 2510; *The Electronic Communications Privacy Act of 1986*, Pub. L. 99-508, October 21, 1986, 100 Stat. 1848.

[22] *The Privacy Act of 1974*, 4 USCA § 552a.

[23] *The Family Educational Rights and Privacy Act of 1974*, 20 USCA § 1232g.

[24] *The Cable Communications Policy Act of 1984*, Pub. L. 98-549, 98 Stat. 2779.

[25] *The Video Privacy Protection Act of 1988*, Pub. L. 100-616, 102 Stat. 3195.

[26] J. Bing, "The Council of Europe Convention and the OECD Guidelines on Data Protection," *Michigan Yearbook of International Legal Studies* (New York: Clark Boardman Co., 1984), 271-303; Organization of Economic Cooperation and Development, *Guidelines on the Protection of Privacy and Transborder Data Flows of Personal Data* (Paris: Organization of Economic Cooperation and Development, 1981), 41.

[27] Smith, *Compilation of State and Federal Privacy Laws*.

Control of Personal Information

Social theory (and the popular literature on the "information society") posits a strong relation between information and control.[28] In the sense used here, control encompasses the range of meanings from the most determinate form of absolute control to the weakest and most probabilistic form. For example, television advertising can be said to control demand, or direct mail campaigns can be said to control issue voting, even though only a small fraction of the intended audience may be influenced in either case.[29]

The previous chapter analyzed the surveillance imperative of the firm in terms of its need to control its environment. It surveils its external environment (suppliers, customers, competitors, and government) for control. The firm seeks to restrict access to information about itself in order to prevent others from controlling it. In a similar manner, customers surveil their external environments as best they can and seek information about external agents including firms selling them goods and services. They also seek to restrict access to certain types of internal information to reduce the ability of others (including firms that supply them with goods and services) to control them. In the same way that firms do not seek to keep secret all forms of information (and indeed seek to actively disseminate certain forms of information and disinformation), individuals do not have a blanket aversion to the release of information. What they strive for is control over the outflow of information. This corresponds to the outflow aspect of privacy. Control of incoming information is the other aspect of privacy.

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[28] Beniger, *The Control Revolution*; Anthony Giddens, *A Contemporary Critique of Historical Materialism* (Cambridge, U.K.: Polity, 1985); Geoffrey J. Mulgan, *Communication and Control: Networks and the New Economies of Communication* (New York: Guilford, 1991); James Rule et al., *The Politics of Privacy: Planning for Personal Data Systems as Powerful Technologies* (New York: Elsevier North Holland, 1980), 27; Wilson P. Dizard, *The Coming Information Age: An Overview of Technology, Economics and Politics*, 3rd ed. (New York: Longman, 1989).

[29] Beniger, *The Control Revolution.*

The information implications of transactions between customers and public utilities may be examined under the two headings of information outflows from the customers and inflows to the customers through utility facilities. In the case of energy utilities almost all the information implications fall under the heading of outflows at the present time. The information inflows from facilities under the control of the utilities are limited at the present time to billing statements, billing inserts, and limited forms of inflows associated with demand-side management trials such as time-specific energy price information[30] and telemetric signals shutting off hot-water heaters sporadically.[31] Most, if not all, privacy issues pertaining to energy utilities are connected to outflows of customer information.

In the case of telecommunication utilities, similar types of information fall under the heading of outflows. Customer information generated by telecommunication utilities includes names, addresses, credit information, numbers of lines, load factors on lines, nature and age of customer premises equipment, usage of interexchange carriers (IXC) or information service providers (ISP) services, calling patterns, and so on. Nevertheless, the fact that the service provided by the telecommunication utility is a communication capability leads to concern over inflows as well. Concerns over telemarketing and obscene and harassing calls fall under this heading. Caller ID service (which involves the involuntary transmission of the number of the calling party to the called party) has

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[30] One example is the TranstexT AEM system, an interactive demand-side energy management system that allows residential customers to control central heating and cooling systems and electric water heaters and appliances in response to changing price signals that reflect the utility's varying costs of producing and providing electricity. The American Electric Power Company which serves Central Ohio is among the utilities which have planned TranstexT AEM pilot programs for improving customer service. See Leslie Lamarre, "Building the Intelligent Home," *EPRI Journal* (June 1991): 5-15; Fereidoon P. Sioshansi, Paul Baran, and Spencer T. Carlisle, "Bypassing the Local Telephone Company: The Case of the Electric Utility," *Telecommunication Policy* (February 1990): 71-77.

[31] Betsy Brown, "Real Cost of Solar-Heated Water," *New York Times* (August 23, 1981): 13:1.

highlighted the interconnected nature of inflows and outflows. As the calling number is transmitted along with every call, the customer *as calling party* loses control over an important element of his or her outgoing information. The greater computer-processability of a telephone number (as opposed to other forms of personal identification information such as name) makes it more likely that it will be entered into telemarketing or other data bases and that more calls will flow to the customer. What is transmitted is not the number alone, but a cluster of telecommunication TGI. The time of day, the gaps between calls, and so on can, with other contextual information, yield rich information about the calling party. For example, if the called number belongs to a used car dealership, the car dealer may reasonably infer that the calling party is in the market for a used car.

Control over Information Outflows from Customers to Utilities

This subsection focuses on information flowing from customers to pure public utilities, and not to their affiliates. As in Chapter 2, the conceptual framework assumes a public utility firm within a conglomerate wherein each constituent firm provides a single product or service. That is, the normal multiproduct firm is depicted as a conglomerate of single-product firms, with one of the constituent firms being a public utility. Even if the actually existing utility provides competitive services, the analysis will treat the transfer of customer information from the monopoly service to a competitive service, or vice versa, as equivalent to information transfers between affiliates within a conglomerate. The unique features of information outflows to utilities were outlines in Chapter 2. In brief, the lack of alternatives to obtaining services from a utility distinguishes the customer's relationship with the utility from those with other firms. In addition, the utility's franchise and accompanying regulation impose special responsibilities on the utility. The utility must operate in the public interest, as defined

by the regulator, unlike a competitive firm that is mandated only to satisfy its shareholders.[32]

Figure 3-2 depicts the flow of customer information captured in the facilities of all public utilities--energy, telecommunications, and water.

Concerns over outflows vary depending on the recipient of the information:

1. The utility is the recipient. The information is used to manage the utility's primary business of providing energy or communication facilities narrowly defined. This is a utility use of customer information. According to the "right" that individuals have to control information outflows, the need for customers to know what information is being taken and for what purpose should be considered in the public policy process, and a presumption of customer consent must be established. In the event the service cannot be provided without the information and the customer refuses to release it, procedures will have to be in place to break the impasse. It is unlikely that utility use will be problematic. It appears reasonable to assume that customers give implicit consent to the use of their information collected *by the utility* in the course of *utility transactions* for the provision of *utility services*. The definition of utility services is of central importance. The existing multiproduct utility firms may wish to define utility use as any use any part of the firm wishes to make of the customer information generated in the course of utility transactions. This is not unproblematic. If the customer provided the information in obtaining basic voice telephone service, utility use means the use of that information for the provision of basic voice telephony only, not use for the marketing of credit cards, call waiting, and so on. These are not primary utility uses, but secondary uses, and are discussed below.

2. The utility's subsidiaries engaged in the provision of utility-related competitive products and services are the recipients. This is a secondary use of information in that the customer did not initiate a transaction involving goods and services provided by these

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[32] Martin G. Glaeser, *Public Utilities in American Capitalism* (New York: MacMillan, 1957); Charles F. Phillips, Jr., *The Regulation of Public Utilities: Theory and Practice* (Arlington, VA: Public Utilities Reports, Inc., 1988).

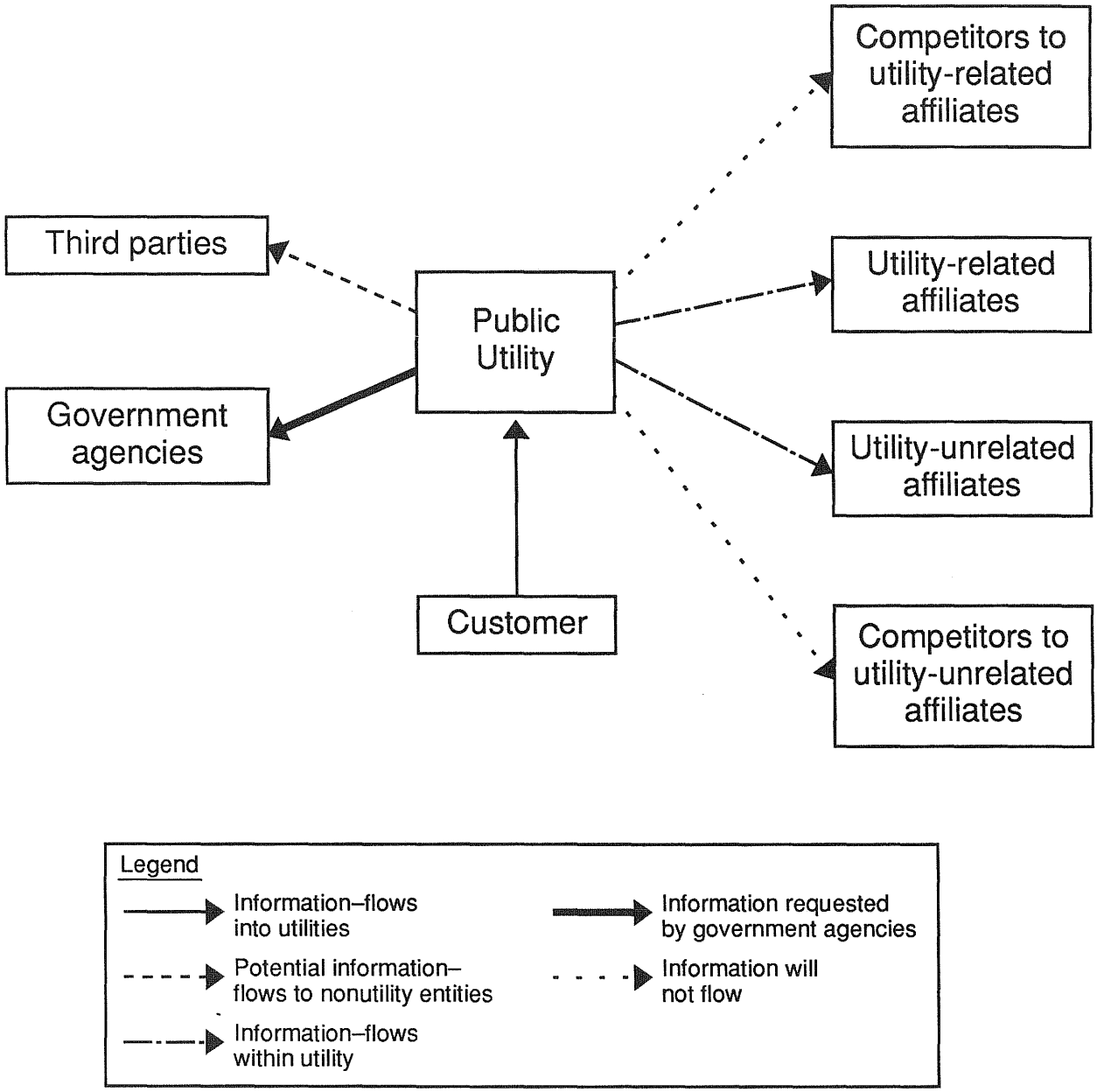

Fig. 3-2. Potential flows of customer information captured by public utilities.

subsidiaries. The "right" to control outflows is supplemented by the general principle that information collected for one purpose should not be used for another without permission.[33] Affirmative consent of the customer would be required. Of course, it would be necessary to inform the customer that the information was being or might be transferred in order to obtain the consent. Questions of compensating the customer for the use of the information will arise. The distinction between utility uses and uses by utility-related competitive subsidiaries (that is, management and enhancement of monopoly services versus the marketing of related competitive services and products) will be continually challenged by utility companies and competitors in the related businesses, but from the opposite directions. The utilities will have an incentive to collect more information than needed strictly for utility uses and to funnel processed customer information to utility-related subsidiaries. Competitors of utility subsidiaries will have an incentive to hinder all transfers of information from parent to subsidiary and challenge all types of information collection practices by the utility as a basic competitive strategy. However, competitors may allow or even encourage information gathering by utilities if they are allowed the same access as the subsidiary.

3. The utility's subsidiaries engaged in the provision of utility-unrelated competitive products and services are the recipients. Here, the transfer of information is clearly a secondary use. The issues in item 2 above apply, although the line between utility uses and nonutility uses will be clearer in this case.

4. Third parties other than the utility, its subsidiaries, or their competitors are the recipients of TGI and access information prepared by utilities. This is a residual category made up of firms in markets where the utility and its subsidiaries have no presence and nonprofit organizations. Selling lists of names, addresses, and/or telephone numbers of customers who use little or no electricity in the summer to home security system vendors or operators of time-share vacation properties would be examples. In addition to the concerns in item 2 above, further concerns may exist about controlling

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[33] Bing, "The Council of Europe Convention," 271-303; Organization of Economic Cooperation and Development, *Guidelines on the Protection of Privacy*.

further dissemination. Present practice regarding mailing/telephone lists limits the renter of the list to a specified number of uses unless there is a response of some sort, in which case the respondent's address becomes the property of the renter.[34] The renter may also extend ownership to rented addresses by adding value through the merging of information from other sources. In both cases, the customer has no relationship with the new holder of this information and will find it difficult--if not impossible--to maintain control.

5. The recipient is the IXC or ISP. Customer information is routinely passed to IXCs and ISPs for billing purposes. Here, the customer has engaged in a transaction with the recipient. There are concerns about passing on this information, exemplified by a Washington Utilities and Transportation Commission ruling prohibiting the passing of unlisted numbers to ISPs.[35]

6. The recipient is an 800 services subscriber. Customer information is routinely passed in real time to 800 services subscribers through Automatic Number Identification (ANI) services.[36] This was an IXC tariff approved by the FCC without controversy in 1988.[37] Only a limited number of business users are involved at present; but this is changing rapidly with rapid growth in 800 numbers, particularly personal 800 numbers.

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[34] Eleanor Novak, Nikhil Sinha, and Oscar Gandy, "The Value of Your Name," *Media, Culture, and Society* 12 (1990): 525-43.

[35] "NARUC Survey: States Just Beginning to Grapple with ONA Issues," *Enhanced Services Outlook* (January 1990): 9; Paul Shultz, *Caller ID, ANI, and Privacy: A Review of the Major Issues Affecting Number Identification Technologies* Report Series No. 4 (New York: Telecommunication Reports, 1990), 9, quoting Linda Linn, Carrier and Public Services Management, BellSouth Services, "Position Paper on Nonpublished (Private) Listings Services and the Privacy Issue," January 19, 1989.

[36] Information Industry Liaison Committee, *Position Paper on the Issue of Calling Party Identification Privacy/Anonymity* (IILC Issue No. 024-NTWC, February 22, 1990); Calvin Sims, "How To Tell Who Rings Your Phone," *New York Times* (March 1, 1989): 1.

[37] AT&T's 800 INformation FOrwarding-2 (INFO-2) Service Order, 3 FCC Record 4407 (June 30, 1988).

7. Customer information is routinely passed to whoever is being called. This is no-block Caller ID service, which is quite similar to ANI in function. The service is being marketed to a broad audience including residential and small business customers.

8. The government is the recipient. Concerns differ depending on the nature of the government agency receiving the information. Customary practice as well as statutory and administrative law appear to have ratified the release of customer information to 911 emergency services.[38] Law enforcement agencies need court orders to gain access to customer information[39] but there is a belief that informal access is granted by utilities.[40] Provision of customer information to other parts of government falls between the two extremes, being treated as similar to purchases by private sector firms in some cases[41] and mandated in others.

Figure 3-3 shows only those flows specific to telecommunications utilities. Note the difference in the flows to IXCs and ISPs, wherein the customer information is supposed to flow directly to the IXC/ISP without being open to the utility, unlike the cases where information is intended to go only to the utility with the next stage of transmission at the discretion of the utility.

Figure 3-4 provides a more detailed view of information outflows from a customer to a telecommunications utility. It provides a detailed exposition of the directory information services subset of the utility-related subsidiaries and depicts information passed on to 800 service customers and Caller ID subscribers through the utility's facilities.

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[38] California Public Utilities Code § 2893(a)(2).

[39] *Privacy Act of 1974*, 5 USC § 552a.

[40] State v. Chryst, 793 P. 2d. 538; State v. Butterworth, 737 P. 2d 1297 (Wash. App. 1987); H. Dewar, "Leak Investigator Backs Down on Phone Subpoenas," *Washington Post* (March 18, 1992): A4; S. Kettman, "NPR Ace Survives U.S. 'Harassment:' Nina Totenberg Broke Anita Hill Story," *San Francisco Chronicle* (June 7, 1992): 62.

[41] Priscilla M. Reagan, "Privacy, Government Information, and Technology," *Public Administration Review* 46 no. 6 (November/December 1986).

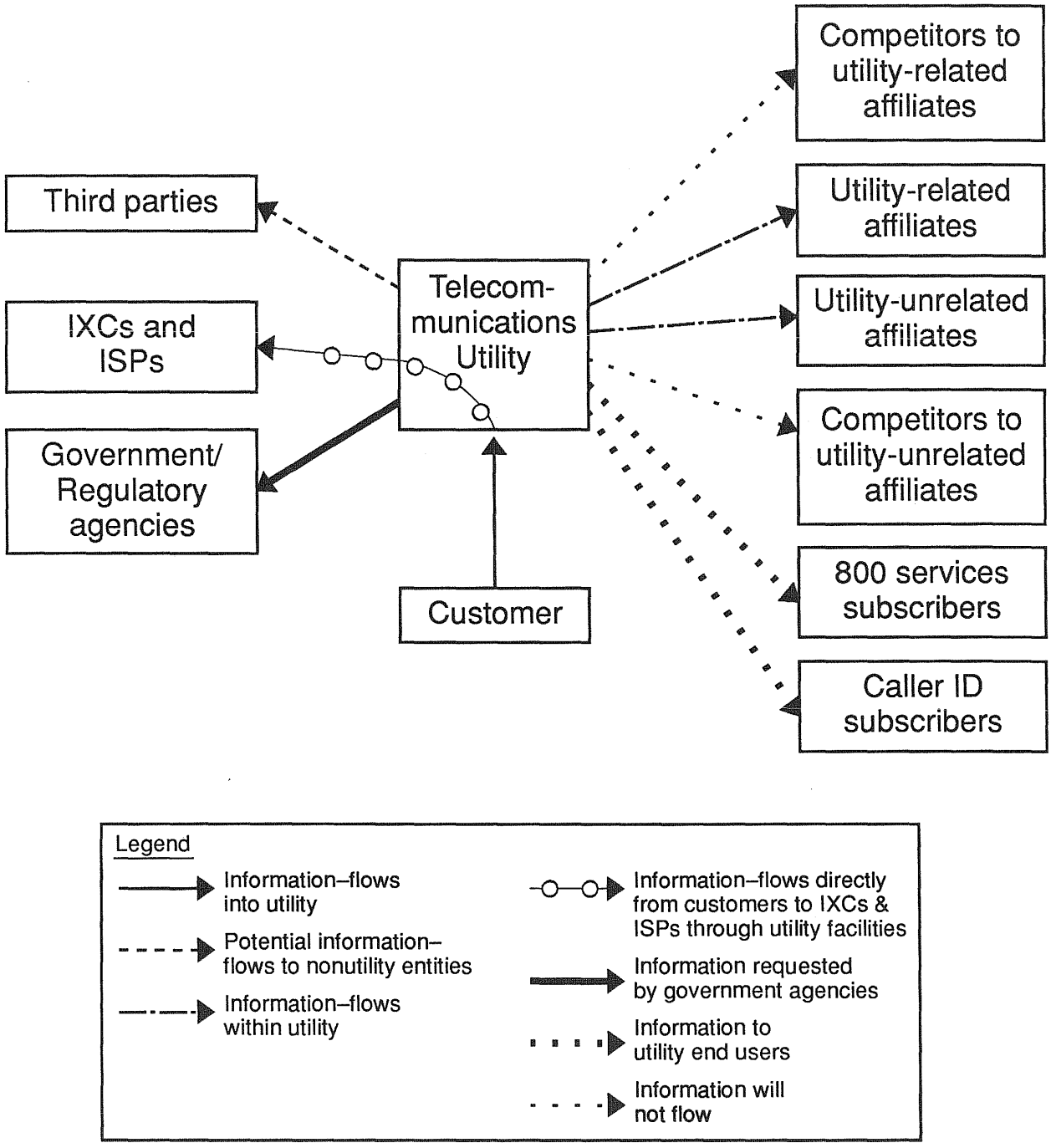

Fig. 3-3. Potential flows of customer information captured by telecommunication utilities.

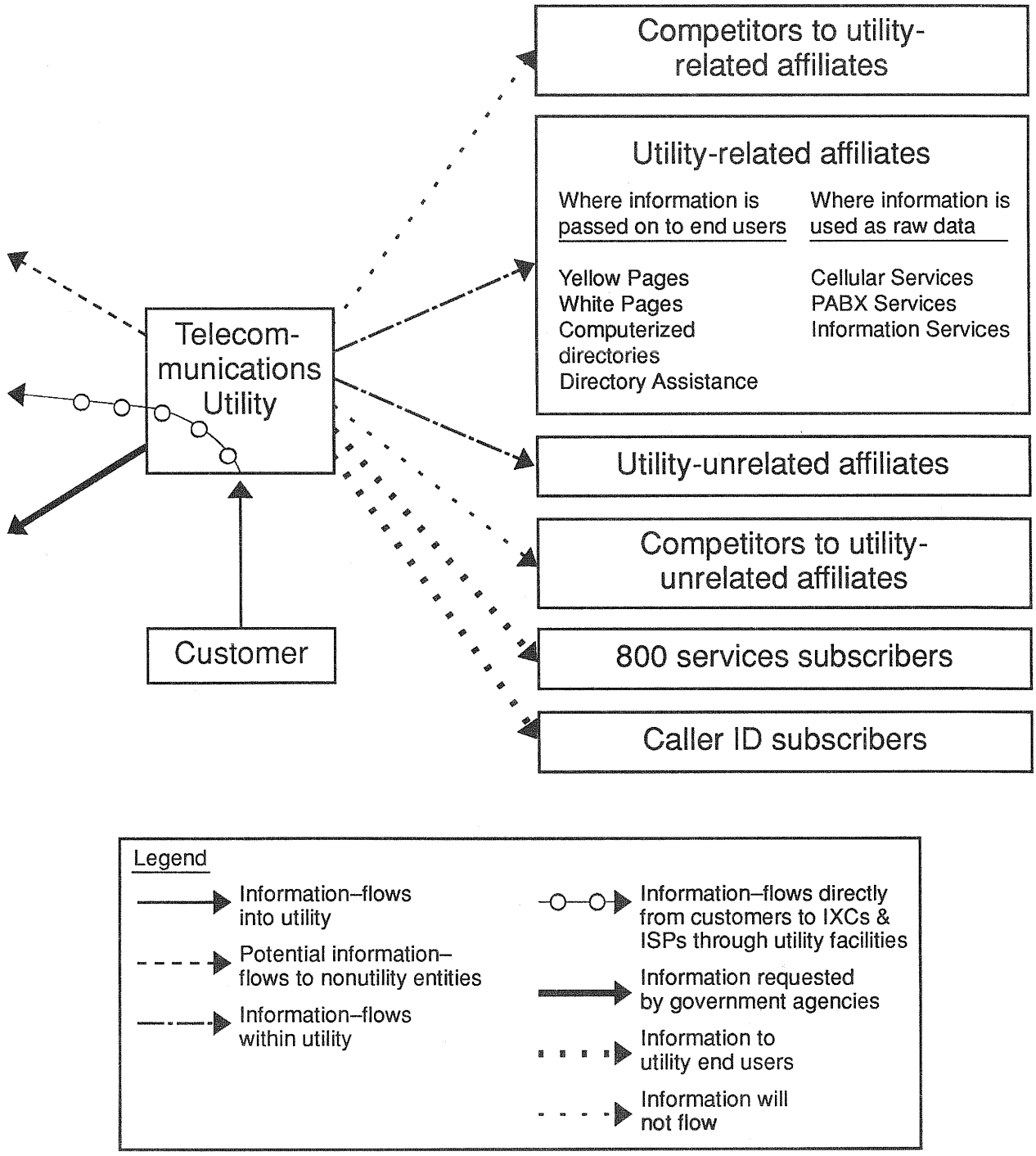

Fig. 3-4. Detail of flows of customer information to utility-related affiliates.

The directory services subsidiaries of telecommunication utilities which constitute a subset of the utility-related subsidiaries require separate discussion because of their unique features.[42] Whereas other subsidiaries use customer information to sell other products and services such as PBXs and heat pumps, directory-services subsidiaries add value to the utility TGI transferred from the parent utility and sell it. In other words, they act as conduits for the sale of certain forms of utility TGI to end users. In the case of White Pages publishers, little value is added. In the basic White Pages print directory, customer names, addresses, and telephone numbers are organized alphabetically. That is, the mode of access is similar to that of a library author catalog. Highlighting names and keeping unpublished numbers, some addresses, and so on out of the directory is about all the additional processing that is done.[43] Audio directory assistance services are complementary to print services, though they can be considered substitutes in some ways, especially if they are priced inexpensively. Here too, the mode of access is limited to names. Computer-searchable directory services offer more modes of access and ability to download large sets of directory entries rapidly and easily. There is more value added in Yellow Pages directories (which can come in print, audio, and computer-searchable forms too) since the basic customer information from the utility is supplemented by other information accessible through subjects or key words. Reverse directories and other specialized directories may also be provided by this subset of utility-related subsidiaries. The value-added customer information sold by the directory subsidiaries and their competitors is available to all user categories identified in Figure 3-2. Customer concerns over the control of personal information extend to this access-information subset of customer information.

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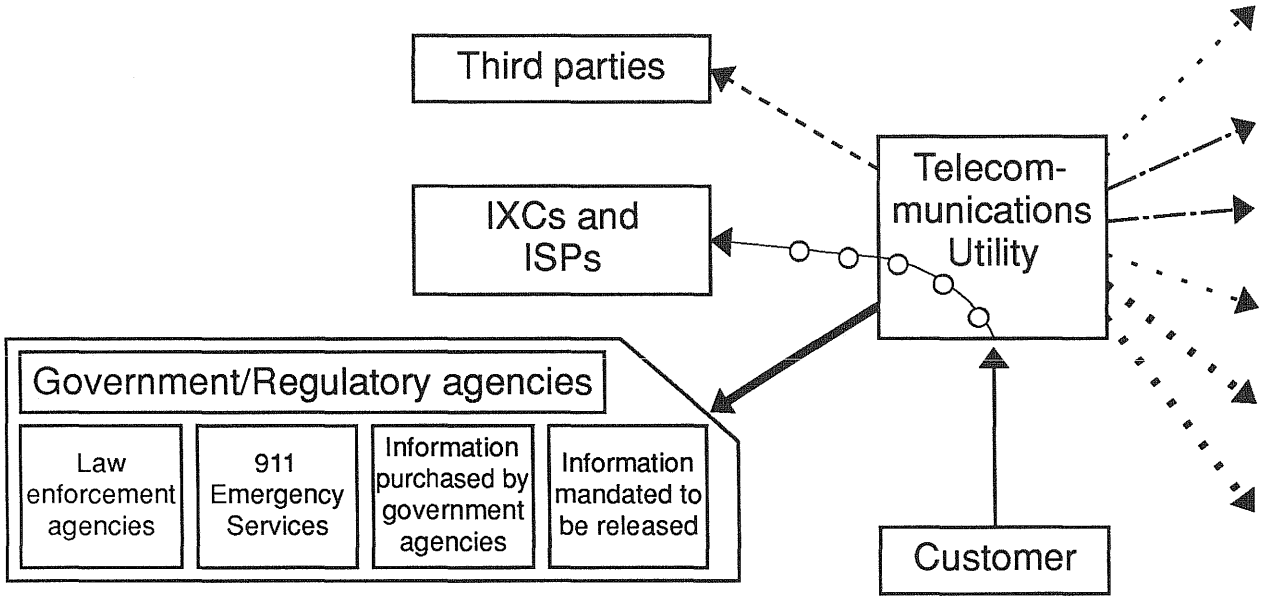
[42] E. D. White and M. F. Sheehan, "Monopoly, the Holding Company, and Asset Stripping: The Case of Yellow Pages," *Journal of Economic Issues*, 26 no. 1 (March 1992): 159-82.

[43] The Court's decision in Feist Publications v. Rural Telephone Service Co. (Docket No. 89-1909, 59 U.S.L.W. 3243, October 1, 1990) underlined the lack of added value in WP directories.

Figure 3-5 provides a more detailed view of government as the recipient of customer information from the utility, and depicts the different subsectors in detail.

Control over Information Flowing in to Customers through Utilities

Information flowing in to customers through utility facilities pose privacy concerns different from those discussed above which had to do with information flowing in the other direction. This subsection deals with telecommunication utilities, because the privacy issues pertaining to information flowing to customers from energy utilities are negligible at the present time. The two-way communication capabilities of the telecommunication network necessarily involves information from various parties flowing to the customer through facilities controlled by the telecommunication utility. Telemarketing calls that disturb the customer's dinner, junk fax messages that tie up his/her fax machine and use up the paper, and harassing calls that keep the customer awake at night are common examples. Privacy concerns pertaining to information inflows vary depending on the source of the information. The incoming information will be judged as acceptable or not, on the basis of content or transactional characteristics. Content is the customer's perception of the message conveyed. This may range from extremely positive to extremely negative. The transactional characteristics of a telephone call (or a fax message, or any other information conveyed via the telecommunication network) include the timing, frequency, and length of the call. Since it is not possible to judge the content of a call without first listening to it, individuals tend to use proxy indicators to make content judgments. For example, it may be possible to infer content characteristics from the identity of the caller (for example, a chimney sweep company). Purely transactional data such as the telephone number of the instrument from whence the call originates can be used, through a sequence of inferential steps, to reach early conclusions regarding content characteristics (number → caller's identity → content of call). Or, it may be possible to infer content characteristics from another transactional characteristic such as the time of the incoming call. Judgments of content and transactional characteristics can only be made from the perspective of the customer;



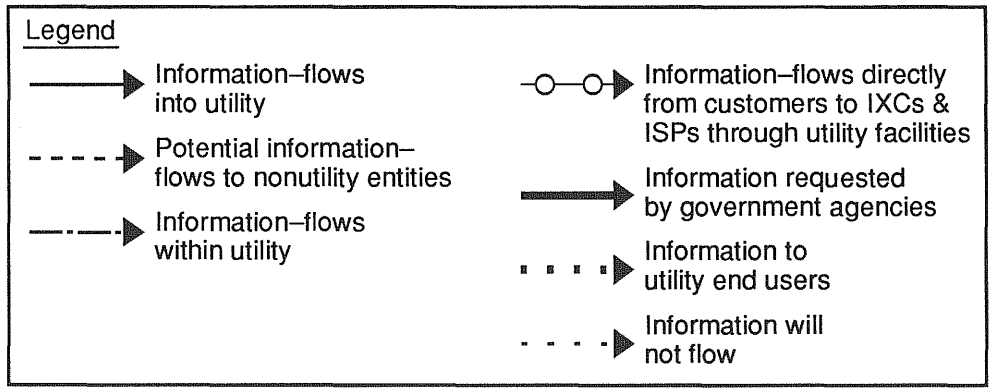


Fig. 3-5. Detail of flows of customer information in response to requests from government agencies.

these characteristics vary from customer to customer, and indeed from situation to situation even with regard to the same customer.

The discussion of information flowing in to the customer through utility facilities extends beyond the strict definition of telecommunication TGI, to informational content of messages. This is necessary because content and transactional characteristics constitute the two principal dimensions of incoming information and are interrelated as shown above. Customers routinely make judgments of content based on inferences from transactional characteristics.

An individual's incoming telephone calls may be situated in the matrix in Figure 3-6. Depending on the called party's perceptions of what is "desirable" through "neutral" to "obnoxious," the calls may be located in the matrix. Figure 3-7 shows that calls from "friends and family" and "work associates" will generally tend to cluster in quadrant A but may spill over into quadrants B, C, and D based on desirable content characteristics overriding undesirable transactional characteristics and vice versa. The actual distribution of these calls can be found only by a sample survey using qualitative as well as quantitative methods, similar to the study of Ohio telephone users conducted by Dervin and Associates.[44]

Calls from "unknown but legitimate individuals" and "firms--legitimate" are likely to cluster in quadrants A and B (Figure 3-8). It must be emphasized that the calls are classified on the basis of called-party perceptions and not on the basis of some "objective" criteria. Therefore, spillovers into the "bad" quadrants cannot be ruled out even with "good" calls. Calls from "unknown individuals with no legitimate interests" and "firms with no legitimate interests" will tend to cluster in quadrants B, C, and D (Figure 3-9).

Customers will have the greatest desire to control incoming calls belonging to quadrants B, C, and D. Identifying what is in those quadrants requires surveillance of all

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[44] Brenda Dervin and Peter Shields, "Users: The Missing Link in Technology Research," presented at the 18th Congress of the International Association for Mass Communication Research, Communication Technology Section Meeting, Lake Bled, Yugoslavia, August 1990.

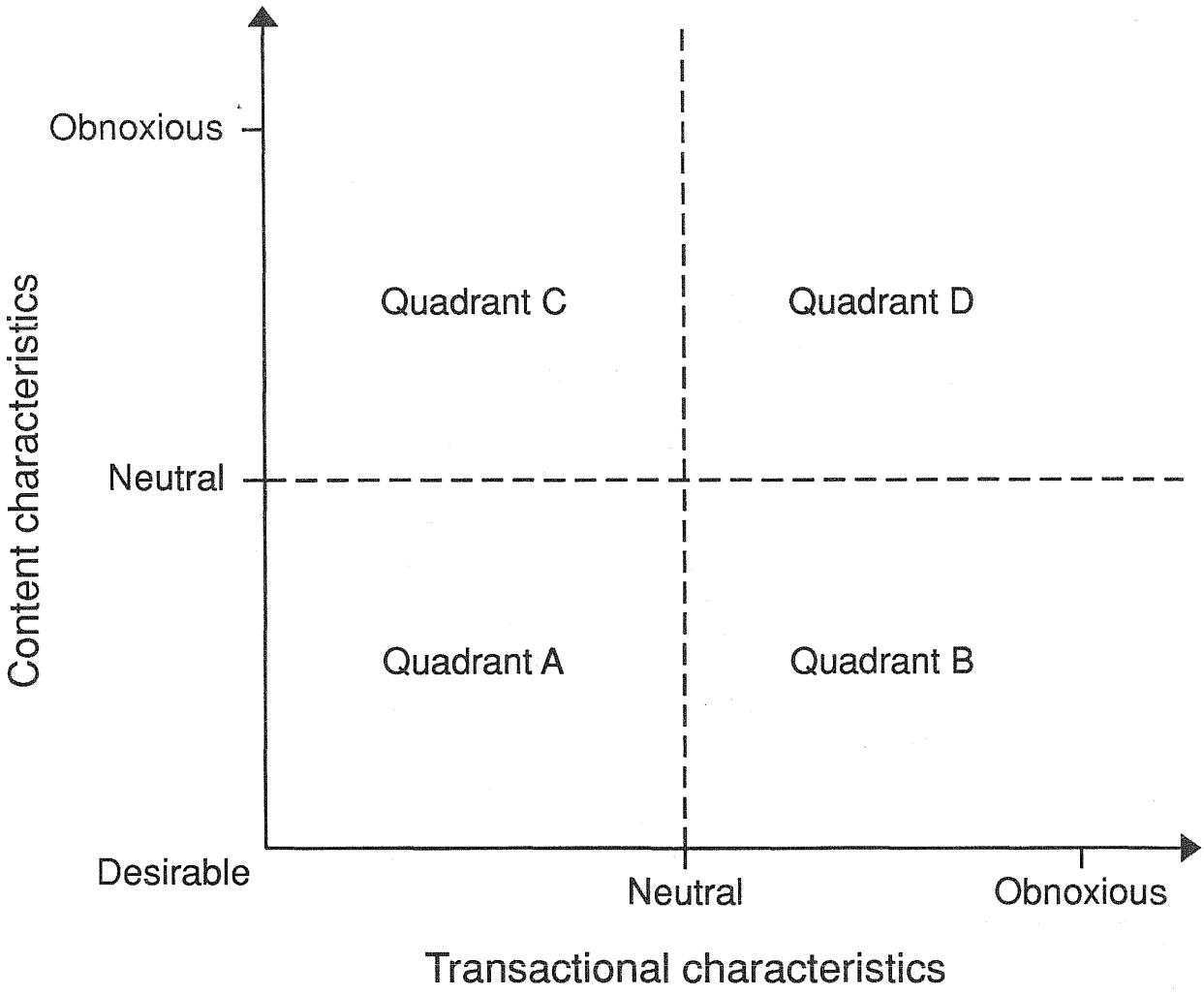

Fig. 3-6. Matrix of incoming telephone call characteristics.

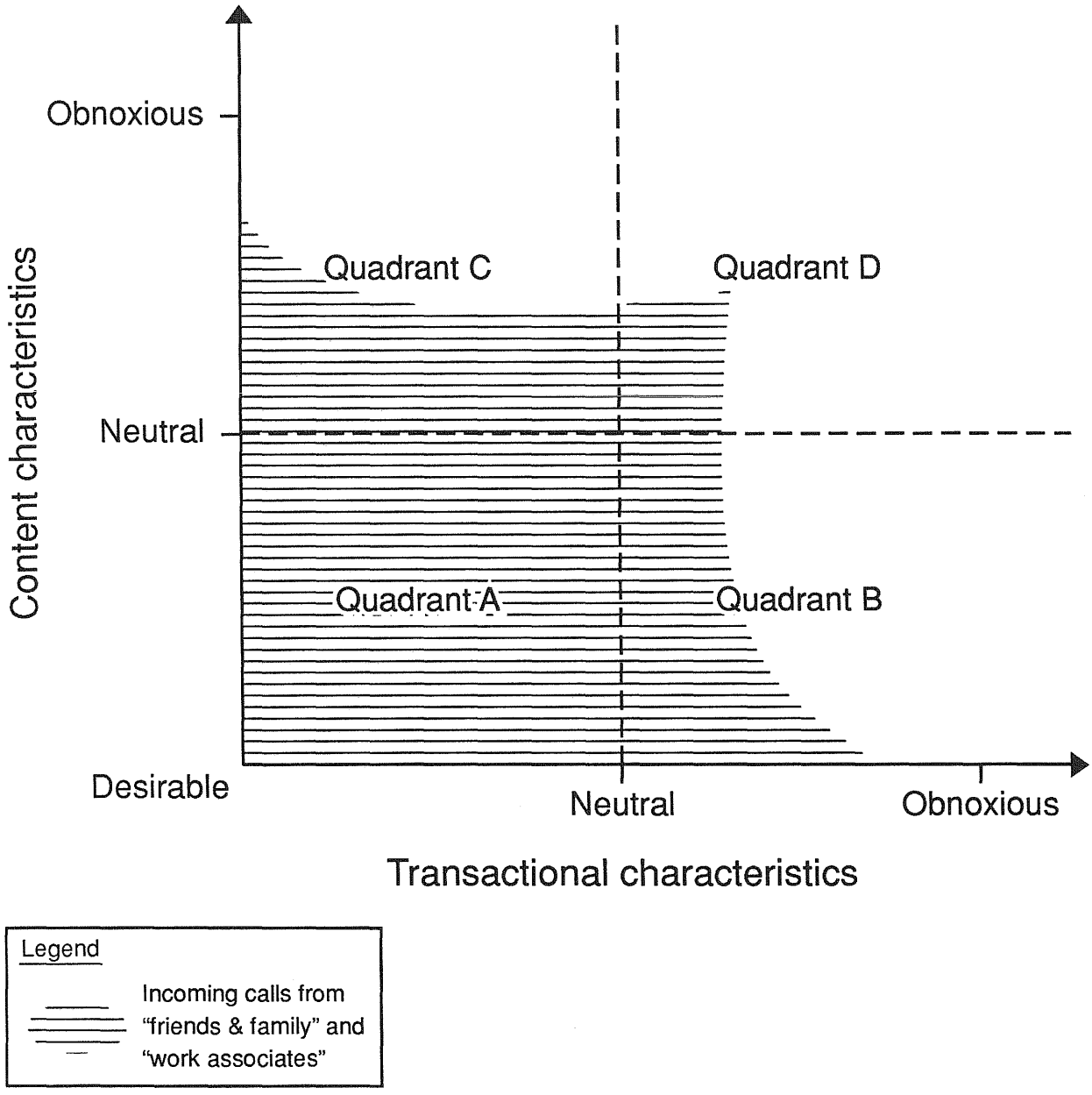

Fig. 3-7. **Likely locations of calls from "friends and family" and "work associates."**

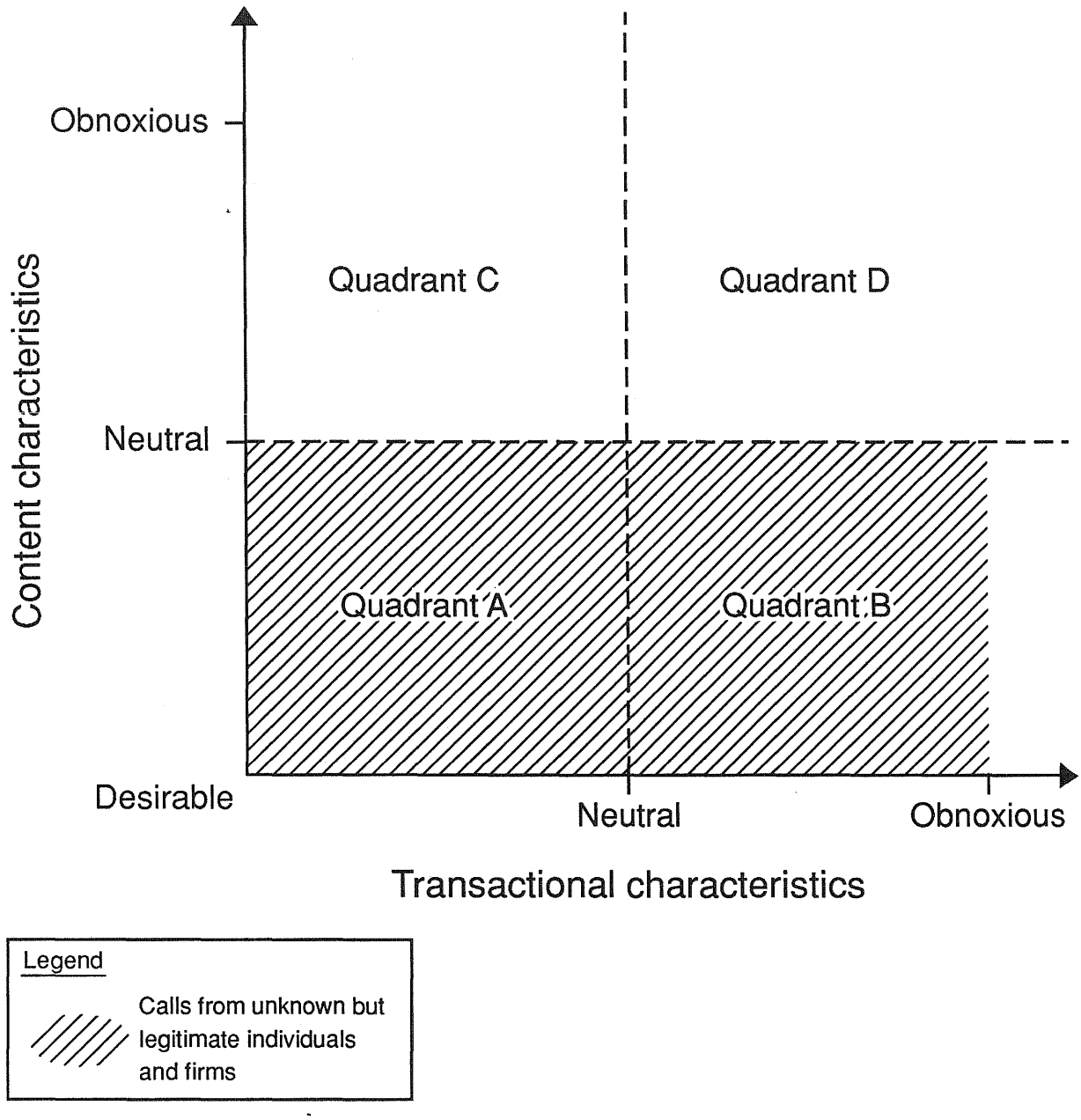

Fig. 3-8. **Likely locations of calls from unknown but legitimate individuals and firms.**

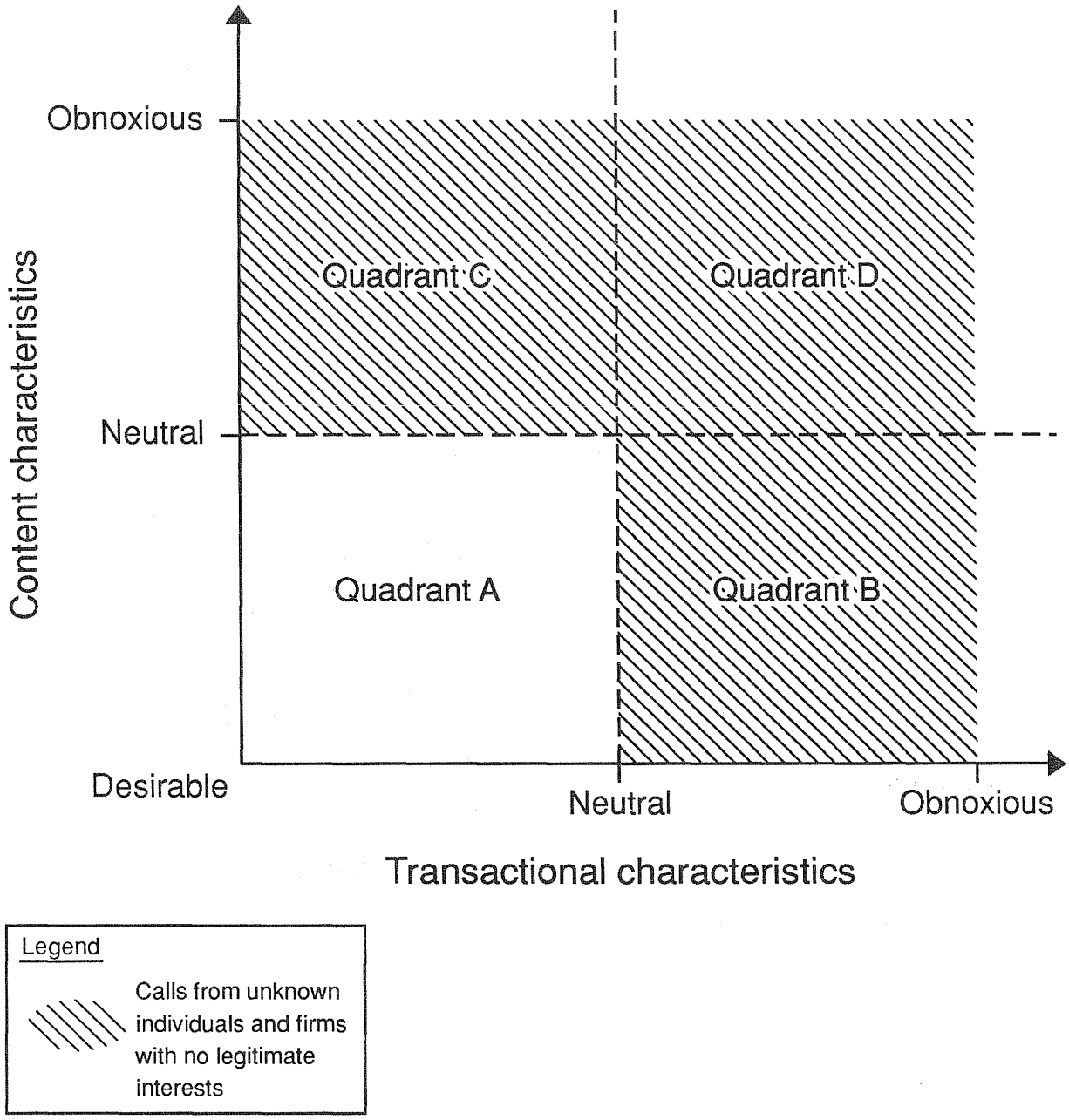

Fig. 3-9. **Likely locations of calls from unknown individuals and firms with no legitimate interests.**

incoming calls, including those that fall into quadrant A. Information on content of calls and transactional characteristics is required for classification. It is not possible to truly surveil an incoming call without listening to its entirety, which defeats the purpose in most cases since there is nothing that can be done to control the call once it is over. However, it is possible to use proxy indicators of content. If the calling party is identified as a gossip, based on previous experience, it is possible to infer that the content of the call will be gossip. But this inference may be wrong. The gossip may be phoning to report that the called party's lost cat has been found by him.

Called parties use many proxy indicators to classify incoming calls on the basis of content. The most common proxy indicator of content is the identity of the calling party. Almost all telephone conversations begin with mutual identification. One party's refusal to identify himself or herself may lead either to the termination of the call or a similar hostile action based on the inference that refusal to identify indicates obnoxious content or transactional characteristics. The issue of identification has been the focus of much debate in the context of the Caller ID controversy. Many commentators erroneously assume that a called party is necessarily identified and that only the calling party has the choice of voluntarily identifying himself or herself, or of being untruthful. In fact, most telephones are not uniquely associated with a single individual. Called parties in most households and offices have to identify themselves. Identity of the calling party is not the only proxy indicator nor is it used only by itself. The indicators used by called parties are as diverse as the situations and relations they find themselves in. The time of the call may indicate content in one situation, while the number of rings or some combination of factors may indicate content in other situations. The point of relevance to the present study is that most, if not all, of these proxy indicators of content of incoming information are transactional (for example, who made the call, at what time, how long was the ringing).

Classifying incoming calls on the basis of transaction characteristics is relatively easier than classifying on the basis of content. However, the overall classification will still be fuzzy, because called parties classify by applying content and transactional characteristics together. A transactionally obnoxious call may still be welcomed if the

informational content is extremely valuable, or an informationally undesirable call may still not be acutely resented if it had the most desired transactional characteristics. If the line between transactionally appropriate and inappropriate calls was unambiguously clear people simply would switch off their telephones at the inappropriate times such as dinner time and sleep time.

The principal sources of information flowing into a customer through the facilities of a telecommunication utility may be depicted as in Figure 3-10.

1. Information comes from within the circle of family and friends. Persons "referred to" the recipient by a member of the circle of family and friends are included in the penumbra of this category. A friend of a friend who has moved into town and calls for help or to convey a message using a phone number given by the friend is an example. It is possible that abusive, harassing, or unwanted calls may come from family and friends but these are primarily problems of relationships and not of the medium of communication or information transmission. As long as the identity of the calling party is known (even if the call itself is abusive), the inflow of information can be treated under this heading. If by some means the calling party disguises his or her identity and makes abusive calls there is no preexisting relationship from the perspective of the recipient. In such a case the information inflow must be considered under category 4 below. It is possible that solutions may be devised to make the transmission medium neutral or perhaps even helpful in controlling the inflow from family and friends. The recipient may wish to control the content characteristics of the telephone calls or their transactional characteristics (for example, the timing and frequency of the calls, their length, or both).

2. Information comes from persons associated with the recipient's work setting. Calls from a superior at the work place, patients calling a doctor, and customers calling a self-employed person are examples. Again, part of the interest in controlling incoming information may be derived from the nature of the relations of the parties rather than the telephonic medium. A dislike of dinnertime interruptions by a call from the boss is an example. As above, the medium may be structured to be neutral or helpful to the recipient in controlling inflow of information from persons associated with work. As in

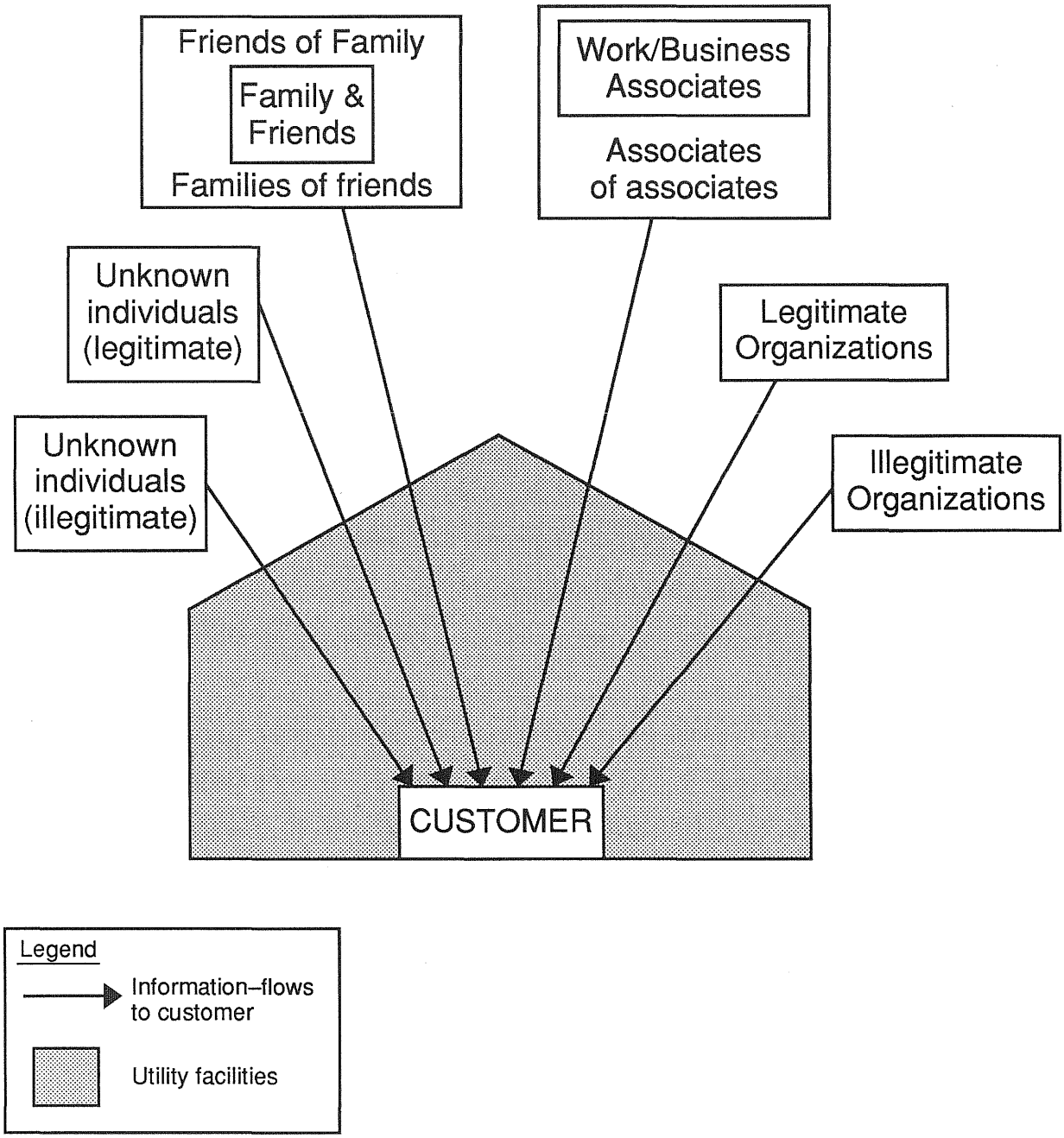

Fig. 3-10. Types of information flowing in through utility facilities.

the above case, concerns may pertain to the information content, the transactional aspects, or both.

3. Information comes from previously unknown persons who have a legitimate need to communicate with the recipient. It is difficult to define clearly what a legitimate need is, and what is not. A person phoning to return the recipient's wallet using the telephone number found inside is an example of a legitimate need. The need to control these inflows is inextricably connected to the need to control calls from parties having no legitimate interests, as discussed below.

4. Information comes from previously unknown persons who have no legitimate needs to communicate with the recipient. These calls can range from calls innocently dialled to wrong numbers, to randomly dialled harassing or obscene calls, to threatening or obscene calls made specifically to the recipient. The need to control intensifies along this continuum. Calling parties who unintentionally dial wrong numbers have no need for anonymity although obscene or harassing callers do because they are engaging in illegal acts.

5. Information comes from firms and organizations with legitimate interests in communicating with the recipient. A doctor's office phoning to confirm an appointment or a department store phoning to arrange a delivery are examples. Generally, the recipient would have provided the calling party with his or her telephone number.

6. Information comes from firms and organizations having no legitimate need to communicate with the recipient. As in the case of defining legitimate needs to communicate on the part of individuals, defining legitimate needs on the part of organizations is difficult. The local Fraternal Order of Police may claim a legitimate need to telephone all households in the area to sell dance tickets, but some residents may feel such calls are intrusive and threatening and may wish to control them. It is tempting to categorize all telemarketing calls under this heading, but the fact that some people do respond to some telemarketing appeals suggests that not all telemarketing calls are unwanted.

The categories of family and friends and work associates are quite similar in terms of the privacy concerns raised. They are depicted separately only because future

developments such as teleworking (working at home) may lead to new privacy concerns arising in the case of work associates. The other four categories are closely related to each other. The called party's perception of what is legitimate and what is not defines the lines between the individual and organization pairs. Given the fact that all calls are characterized on the basis of called-party perceptions rather than some objective criterion, separation between individual and organization arguably is superfluous. Keeping the categories separate is preferable because called parties appear to distinguish between telemarketing-type calls (thought to originate from organizations), and obscene and harassing calls (thought to originate from individuals).

Two Paradigms for Controlling Incoming Information

Called parties seek to control information flowing in from all these sources. The intensity of the desire to control the flow will vary depending on the individual, as well as the source of the incoming information and its characteristics. Called parties will generally desire to control incoming information in the following ways:

1. Allow the inflow of information that is desired both in terms of content and transactional characteristics.

2. Allow the inflow of information that is highly valued in terms of content despite poor transactional characteristics.

3. Tolerate inflows of information marginally desirable in terms of content, and possibly information with poor content characteristics, but with excellent transactional characteristics. An example is an individual who may not mind a call from a telephone survey firm if made on a lazy Saturday afternoon, but will become enraged if the same call were to be made at dinner time on a weekday.

4. Change the transactional characteristics of transactionally inappropriate information that is not undesirable in terms of content. An example is the use of an answering machine to take routine calls during a particularly busy period. By listening to the calls at a different time, the called party changes their transactional characteristics.

5. Reject calls that are obnoxious in terms of content and transactional aspects, or both, permanently or for the moment. A called party may consider a call from the in-laws to be truly obnoxious but that will rarely lead to a desire to prevent all calls from them forever. In contrast, an obscene call from an unknown person will generally lead the called party to want to prevent all future calls from the offending individual.

Public opinion surveys indicate that there is serious concern about information flowing in to customers through utility facilities.[45] The high level of state regulatory activity pertaining to telemarketing, junk faxes, and so on, documented in Chapter 4, is also evidence that control of incoming information has become a serious problem. Solutions to the current loss of control over information coming in over the telecommunication network may be developed within two broad frameworks. The first may be described as in information-intensive or high-surveillance paradigm. The second framework may be described as a low surveillance paradigm.

The high-surveillance paradigm is based on gathering information about incoming messages/interactions, classifying them into desired, neutral, obnoxious, or even finer categories, and dealing with the different categories differently. Given the difficulty of obtaining information about the content characteristics of incoming calls, the customer would have to be provided with qualitatively greater access to information on transactional characteristics of incoming calls. Caller ID service, with its promise of delivering the calling party's number and/or subscriber name prior to the phone being picked up, falls within this paradigm.

The low-surveillance paradigm does not require classification of all incoming calls, and therefore does not require content or transactional information on all calls. In this paradigm decisions on incoming calls are taken by treating special calls specially--flagging particularly desirable calls by the use of special ringing tones, and so on, and preventing the recurrence of repeated obnoxious and undesired calls. The solutions offered by

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[45] J. E. Katz, "Public Concerns Over Privacy: The Phone is the Focus," *Telecommunications Policy*, 15 no. 2 (April 1991): 166-68.

services such as distinctive ringing, call trace, and call screen generally fall within this paradigm.

The difference between the two paradigms may be clarified by drawing an analogy with how individuals control their privacy or even their interactions with people (for example, collisions with passers-by, avoiding muggers) in physical space. A person walking down a street may notice an individual approaching from the opposite direction with whom she does not wish to interact at that time. The reason may be as trivial as not having the time to stop and talk, or it may be as serous as fear of being mugged or assaulted by the approaching individual. This is so common a situation that few stop to think about it or analyze the information processes that precede the preventive actions taken. What happens is a fast decisionmaking process based on imperfect information. Based on a first impression of the approaching person, the individual will cross the street, take a turn into a side street, or turn back. In cases where fear of mugging exists, a person may avoid certain areas during certain periods or altogether. Where the person is in the area and the threat of being mugged looms large, the individual will call for help or assistance through the phone or otherwise. In none of these cases does the individual engage in a comprehensive surveilling and classifying process. The first step in such a process would be to identify the undesired interactions. In order to identify undesired interactions, it would be necessary to increase the amount of information collected on all interactions prior to occurrence. This would require a dramatic increase both in surveillance and information processing capabilities. For example, it may be necessary to have some form of reliable identifier (or authenticating device) implanted in every individual since mere appearance is an ambiguous identifier. Is it really "x" who is coming down the road, or is it someone who looks like "x?"

The low-surveillance paradigm is still the prevalent one in physical space, but the high-surveillance paradigm is becoming increasingly popular. It is found in existing systems used by large organizations such as the U.S. Customs Service, law enforcement

agencies of all sorts, and some corporations to determine the form of their interactions with citizens.[46]

The high-surveillance paradigm appears more efficient and trustworthy, but it has three major weaknesses. First, it requires large amounts of information to be collected and processed, increasing the costs and vulnerability of the system. Second, despite the appearance of objective and thorough data gathering, the high-surveillance paradigm is intrinsically unreliable because it rests on inferences about future behavior made from data of past behavior. In many cases, additional, probabilistic inferences are required. For example, a Caller ID subscriber must infer that the calling party is the person in whose name the account with the telephone company is held (or at least a member of that person's household). Third, the large-scale collection of data necessitated by the high-surveillance paradigm infringes on the privacy interests of a larger population than that which may be engaged in unlawful or undesirable behaviors. It is overbroad in its effects upon the legitimate rights and interests of citizens.

Caller ID

Caller ID helps illustrate the difficulties of protecting the "rights" of customers to control both inflows and outflows of information. It is a high-surveillance solution to the problem of assisting customers to control inflows of information. Caller ID promises to provide called parties with more telecommunication TGI so they may classify incoming calls more efficiently and thereby control them better. The point may be illustrated by assuming that the primary purpose of Caller ID is to prevent or punish obscene/harassing calls. These calls will tend to cluster at the top of the matrix as shown in Figure 3-11.

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[46] N. Reichman, "Managing Crime Risks: Toward an Insurance Based Model of Social Control," *Research in Law, Deviance, and Social Control*, 8 (1986); O. H. Gancy, "The Surveillance Society: Information Technology and Bureaucratic Control," *Journal of Communication*, 39 no. 3 (Summer 1989): 61-76.

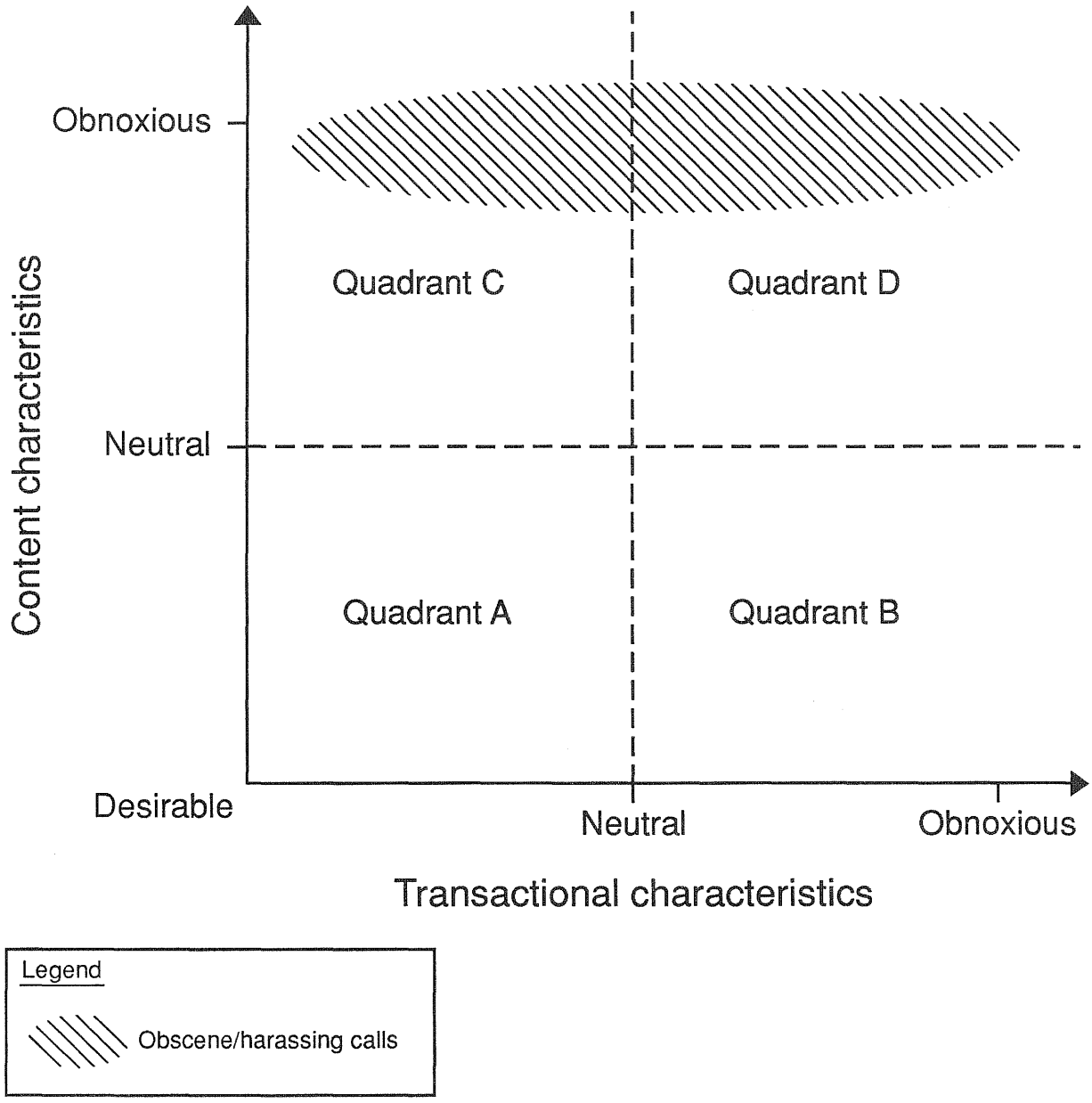

Fig. 3-11. Likely location of obscene/harassing calls.

The primary reason for considering obscene calls obnoxious is content. On the transactional axis, these calls may range from the desired to the obnoxious. Since one does not want to listen to all, or even a part, of unwanted messages, one or more proxy indicators are needed for classification. Identifying the calling party is the most common proxy indicator useful for classification (enabling avoidance) and also for initiating a complaint for legal sanction.[47] One cannot rely on voluntary and truthful disclosure of calling-party identity since the calling party has an incentive to lie or withhold identification information. Having the telephone utility identify the calling party would therefore be useful.

Caller ID provides information on the billing number associated with the telephone from which the call is being made.[48] An inference must be made that the person responsible for paying the charges associated with that particular billing number is the person making the call. Assume that the called party refuses to take calls from that number again, or that he or she initiates a complaint with the utility or the police. In the former instance, the offending caller (who may or may not be the person responsible for the charges on that billing number) may make calls from other telephones. In the latter instance, the utility or the police will have to set up a trap-and-trace device to obtain acceptable evidence that offensive calls were made and to separately establish the link between the calls and a specific individual.

This particular high-surveillance solution to the problem of controlling incoming information has many shortcomings. It requires surveillance of all calling parties, necessarily reducing the ability of all customers to control their information outflows. In addition, the high-surveillance solution requires a large amount of information processing. Merely obtaining the calling party's number is not enough. To be truly effective, the solution requires attaching reverse telephone directories, screening

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[47] Making such calls is an offense under the *Communications Act of 1934*, 47 USC § 223a.

[48] Caller ID can also be programmed by the telephone company to reveal the name of the subscriber of the calling party phone.

algorithms, and so on. Whatever attachments are added, the procedure will still be too cumbersome for the nonproblematic, desired calls (Quandrant A) to come through with no delay or hindrance. These calls will necessitate additional bypass mechanisms such as distinctive ringing. There is a logic to this process from the perspective of the telephone companies in the sense that their "solution" to the problem of regulating incoming calls creates additional problems in turn "solved" by the purchase of additional telephone services. But this may be counter-productive from the consumers' perspective.

Individuals do not manage their interactions in physical space using similar information-intensive, high-surveillance methods. Even if individuals or corporations wished to adopt such methods, the general public policy stance has been hostile to the necessary mandatory release of individual identification information and universal availability of personal information. The repeated rejection of a national identity card[49] is evidence that explicitly stated high-surveillance solutions find no favor in the public policy arena when it comes to familiar face-to-face interactions.

This does not preclude all technological solutions to the problem of regulating incoming information over the telecommunications network. Technological solutions that are both less damaging to the "rights" of calling parties to control information outflows and are parsimonious in terms of information processing requirements are available in rudimentary form now. The Call Reject feature (programming the switch not to connect any more calls from a specific telephone number) and the Call Trace feature (storing the number and time of the offending telephone call in a form acceptable as evidence in the utility's switch) of the CLASS (Custom Local Area Signalling Services) package have the potential (if properly configured and accompanied by proper procedures) to help called parties deal with obscene/harassing calls, without stripping called parties of their "rights" to control information outflows.

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[49] J. W. Eaton, *Card-Carrying Americans: Privacy, Security, and the National ID Card Debate* (Totowa, NJ: Rowman & Littlefield, 1986); K. C. Laudon, *Dossier Society: Value Choices in the Design of National Information Systems* (New York: Columbia University Press, 1986).

Summary

This chapter formulated a definition of privacy melding the insights of research on interpersonal communication and privacy law that recognized the need to control incoming as well as outgoing information on the part of natural persons. A taxonomy of information outflows based on the recipient of the information was developed. This taxonomy will enable both researchers and policymakers to distinguish between different types of information flows, and thereby, between different issues. For example, the flow of telecommunication TGI via a telecommunication utility's facilities to IXCs and ESPs with which customers have contractual relations needs to be treated differently than the resale of telecommunication TGI by the utility to its affiliates and third-parties.

A taxonomy of inflows of information to customers through the facilities of telecommunication utilities was also developed on the basis of customer perceptions of content and transactional characteristics. In terms of research, this offers rich potential in terms of a systematic investigation of electronically-mediated communication processes. In policy terms, the taxonomy is likely to be of use to policymakers and regulators grappling with the complex issues posed by services ranging from telemarketing to Caller ID.

This chapter also identifies two paradigms for controlling incoming information. The first, the high-surveillance paradigm is exemplified by the proposed use of Caller ID to control obscene or harassing calls. The second, the low-surveillance paradigm, is modelled on how people control physical interactions in public places and is exemplified by telecommunication services such as Distinctive Ringing and Call Trace. It is suggested that the low-surveillance paradigm is worthy of consideration by policymakers because solutions under the high-surveillance paradigm are likely to be costly, vulnerable, of unknown reliability, and overly-broad in their effects upon the privacy interests of customers.

CHAPTER 4

STATUS OF ACTIVITIES ON UTILITY USE OF CUSTOMER INFORMATION

Introduction

This chapter details initiatives by state regulatory commissions on the subject of customer information generated by transactions between consumers and telephone, gas, electric, and water utilities in various contexts. The chapter reports on legislative initiatives and judicial precedent in particular states but focuses primarily on regulatory initiatives. Documentation on legislative initiatives and judicial decisions is provided in Appendices A through D. Here proposed bills, existing statutes, and state court decisions are included. The discussions that follow are not intended to comprehensively cover all state-level initiatives on utility use of customer information. Rather this chapter gives an overview of the different contexts in which state commissions have encountered and addressed the issues and provides a sense of how state commissions have come down on the often conflicting interests.

A survey was sent to the fifty-one state regulatory commissions (including the District of Columbia) early in the project. The questionnaire uncovered trends on how state commissions were framing the issues. It asked questions to offer a bird's-eye view of the existing regulatory climate for privacy protection in the individual states and of related initiatives taken by state regulatory agencies in support of competition. Finally the survey attempted to map the various proposals and investigations that state commissions have launched to better understand, and in some situations to balance, the privacy and competition issues that surround utility use of customer information. We received twenty-three partially completed survey responses. Eighteen commissions responded without returning the survey--with letters or policy documents relevant to the issues. No responses were received from ten states. The bulk of the responses indicated that the issues had not been addressed by state commissions. Additional data was collected by the systematic perusal of specialized newsletters such as the *NARUC Bulletin*, *Telecommunication Reports*, *NRRI Quarterly Bulletin*, and the *State Telephone*

Regulation Reports, as well as coverage in business newspapers and publications. The primary source of data for this chapter was the Lexis/Nexis data base service. The major customer information issues which state agencies have encountered are outlined in Figure 4-1. Note that every box in the figure identifies other figures which magnify each issue identified. For example, the box in Figure 4-1 under the title of "Directory Information Issues" identifies Figure 4-2. This means that detailed data on issues of access to directory lists addressed by regulatory commissions can be found in Figure 4-2. An appendix and tables are identified in the figure which further expand upon the information provided. This format is followed through this chapter--figures set out issues identified in Figures 4-1, and tables provide details in summary form.

Figure 4-1 addresses the issues in the conceptual frame developed in the previous chapter. First it addresses those questions pertinent to information outflows, such as access to directory information (listed, unlisted, and unpublished), and information collected for billing purposes by utilities. It includes a residual category for situations in which commissions have encountered the problem of balancing the privacy of and competitive demand for customer information that cannot be included under directory or billing information. Next, issues concerning access to information provided to subscribers of Automatic Number Identification (ANI) services are identified. Finally, the chapter identifies issues concerning the specific category of Customer Proprietary Network Information (CPNI) encountered within the context of the Open Network Architecture debates.

Under information inflows to customers, the chapter considers the problem of telemarketing and other types of intrusions which rely on Automatic Dialing and Announcing Devices (ADADs) and the issue of Caller ID services. Since many regulatory agencies (and telephone providers) have preferred that Caller ID be viewed as alleviating the problem of obnoxious inflows to customers, this chapter identifies Caller ID under information inflows, although the issues properly could be seen as involving aspects of outflows too.

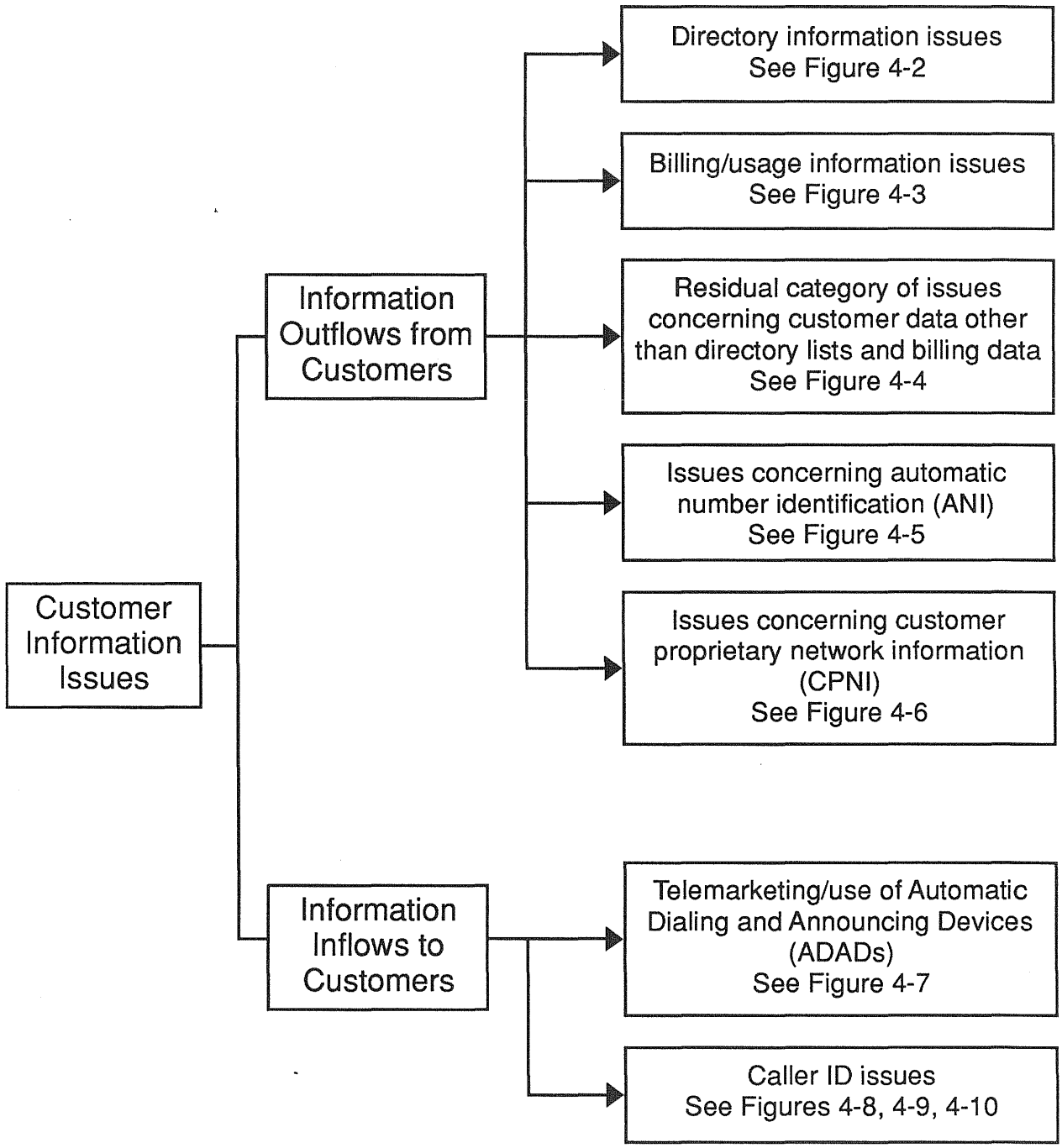

Fig. 4-1. Chapter format used to discuss customer information issues encountered by state regulatory agencies.

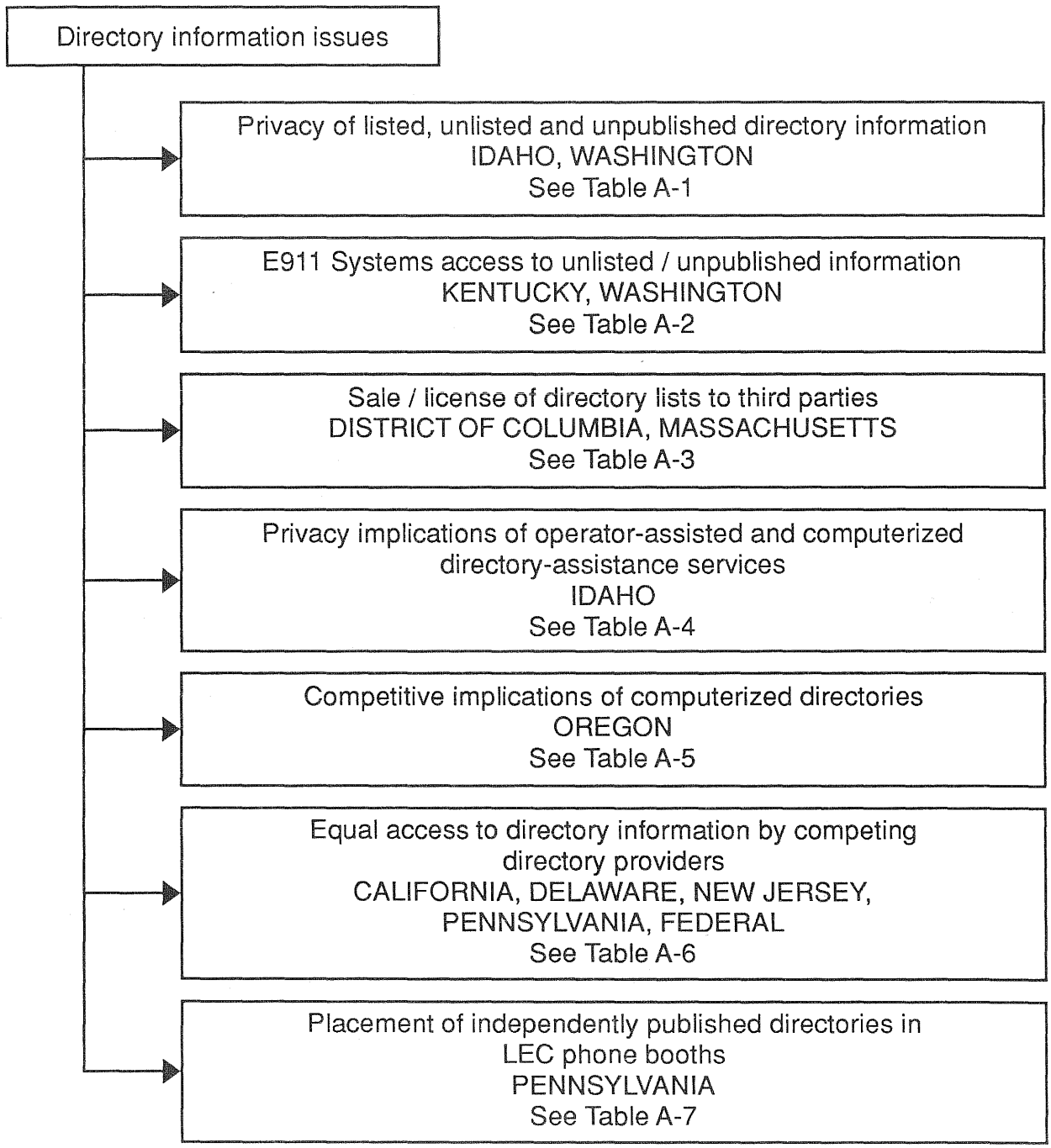

Fig. 4-2. Issues concerning directory information (see also, Appendix A, August 1992).

Information Outflows from Customers

Directory Information Issues

Concerns over the competitive and privacy implications of information outflows from customers collected by utilities to compile telephone directories have arisen often in regulatory fora. Included under this category is customer data available in printed phone books--"White Pages" and "Yellow Pages," audio directories, and electronic directories--available on compact disk and on-line, specialized directories such as cross directories and reverse directories, and information provided by directory assistance services. Such information is conceptually closer to access information (subscriber's name, address, and telephone number) than customer information in the transaction-generated information (TGI) sense.

By removing information service line-of-business restrictions, issues concerning local exchange company (LEC) provision of electronic directory services are moot; however, regulatory treatment of these questions (prior to lifting any restrictions) helped raise significant issues for the purposes of this report. When Judge Harold Greene waived restrictions allowing, for example, Ameritech to offer reverse directory services, revenues were required to be used to support local rates. Judge Greene rejected the claim that the customer name and address service was "just like directory assistance" since its function was not to enable the completion of a call but to sell customer information.[1] This highlights the important distinction between services where customer information passes from the utility to end users (as in the case of Yellow and White Pages directories, directory assistance services, and various computer directory services) and services where customer information passes from the utility to other entities for use as raw data for other purposes. Some argue that information used in telephone directories is never intended to be private and that no economic advantage can be gained by utility affiliates gaining access to a utility's directory lists because they are

[1] US v. Western Electric, 1989-1, Trade Case (CCH) 68,433 (D.D.C. 1989).

equally accessible to affiliates and independents. They contend that neither competitive implications nor privacy issues concerning directory information merit regulatory attention. However this may be, directory services substantially weaken customers' control over access to their information. Once published in a phone book, customer access information is public information. Once electronically available, the costs of massaging and compiling are low.

Figure 4-2 sets out the subcategories of directory information disputes. Under each issue identified, a reference to a table found in Appendix A is given. For example, the first subcategory in Figure 4-2 reports on regulatory activity in Idaho and Washington concerning the privacy of listed, unlisted, and unpublished directory information. Table A-1 identified in this box, provides greater detail on the individual commission actions.

Issues Concerning Billing and Usage Information

In 1989 AT&T filed suit in Dallas federal district court alleging that Intellicall Inc. (manufacturer of pay phones for private ownership) illegally obtained billing information owned by AT&T. Although the suit was dropped in a few weeks, interesting property rights questions emerged as a result of AT&T's request that Intellicall be ordered to stop unauthorized use of the billing information.[2] Questions regarding the ownership of customer information are embedded. Do IXCs own billing information generated by a customer's use of long-distance service? Can LECs that bill for IXCs have access to IXCs' billing tapes? These are some of the issues concerning competitive access to billing information that are detailed in Figure 4-3 and the tables which follow.

Billing information is generated by customers using the network and services available on the network and maintained by a utility to bill customers. Generally, an LEC bills and collects for interexchange carriers (IXCs), enhanced service providers (ESPs), and information service providers (ISPs) which serve its customer area. Information generated by customers using services provided by an IXC is collected and

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[2] "AT&T files Intellicall Suit," *New York Times* (September 11, 1989), 31.

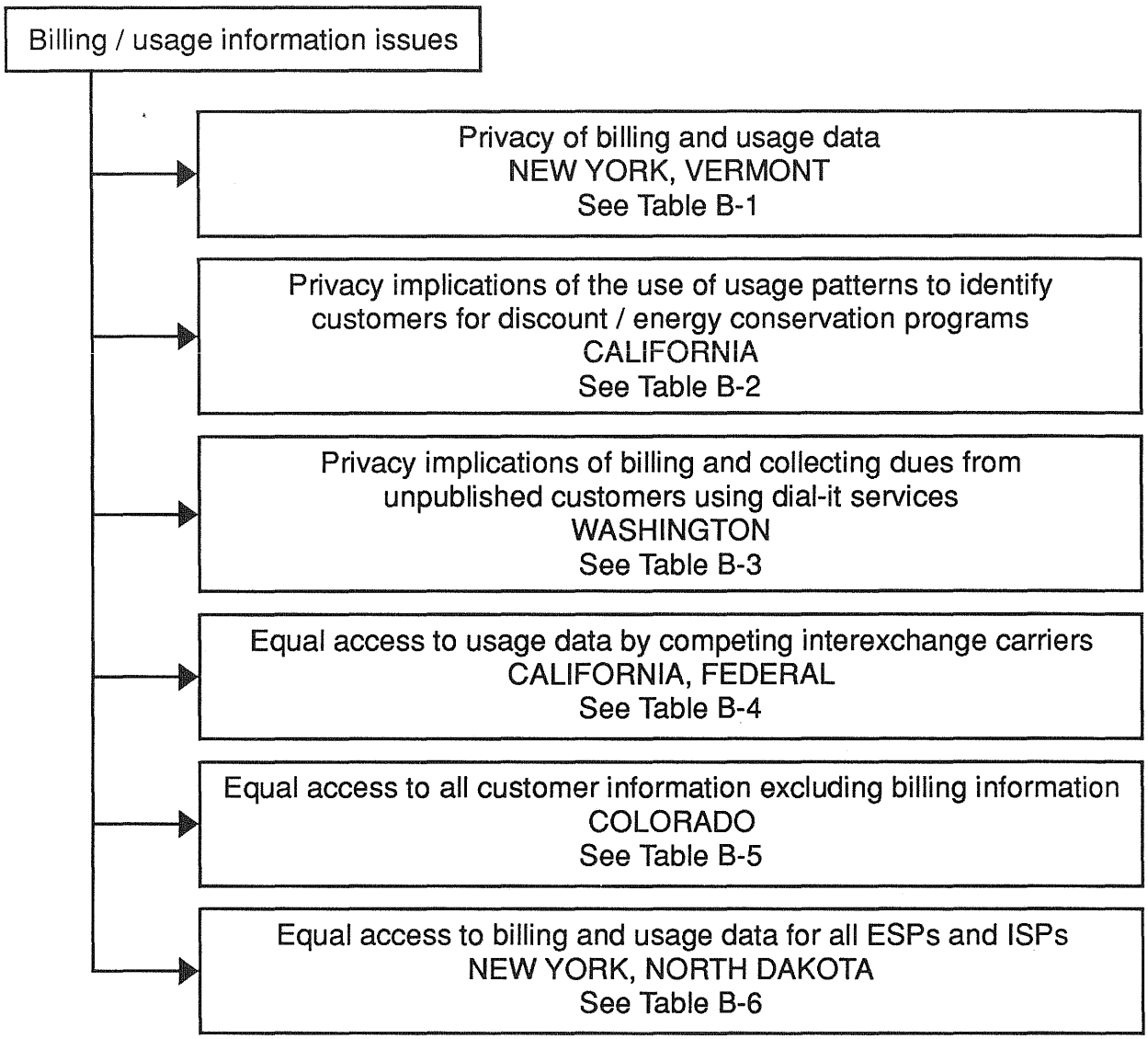

Fig. 4-3. Issues concerning billing and usage information (see also, Appendix B, August 1992).

maintained by the local exchange company but to which the IXC has exclusive access. This creates the problem of having a utility collect and access IXC billing data, without the assurance that this information will be used only for billing and collection. The example of AT&T's suit against Intellicall illustrates the rigor with which billing data are protected.

While this secrecy serves the privacy interests of customers in that data collected for billing purposes are not likely to be used by third parties, the motivation for this protectiveness is not grounded in concern over customer privacy but rather in maintaining whatever advantage can be leveraged. As discussed previously, while a firm would have an incentive to shield this information from competitors, it also has an incentive to find the highest bidder for that information in another market.

Usage and billing information often are used synonymously. In some cases, however, usage information is treated as being distinct from billing data to indicate that part of customer data collected by utilities to assess demand, increase efficiency, and enable discount or conservation programs. In the latter sense, usage data primarily are useful in aggregated form and therefore have fewer privacy implications.

Issues Concerning Customer Information Other Than Directory and Billing Data

Utilities collect customer information for many purposes other than to publish in directories and to bill and collect for services. Some providers maintain records on each customer's credit and personal financial history. Others compile demographic specifics. Regulatory actions concerned with these types of data are included within this residual category of issues as shown in Figure 4-4. The section covers treatment of credit information, and various data grouped together under such categories as customer lists or records, personal information obtained by a public utility within the normal course of business, subscriber records, customer information or data, subscriber-specific information generated by the subscriber's use of a telecommunication service, proprietary business data, and so on. State commissions have used different definitions for these categories, therefore each category is treated as a unique combination of data.

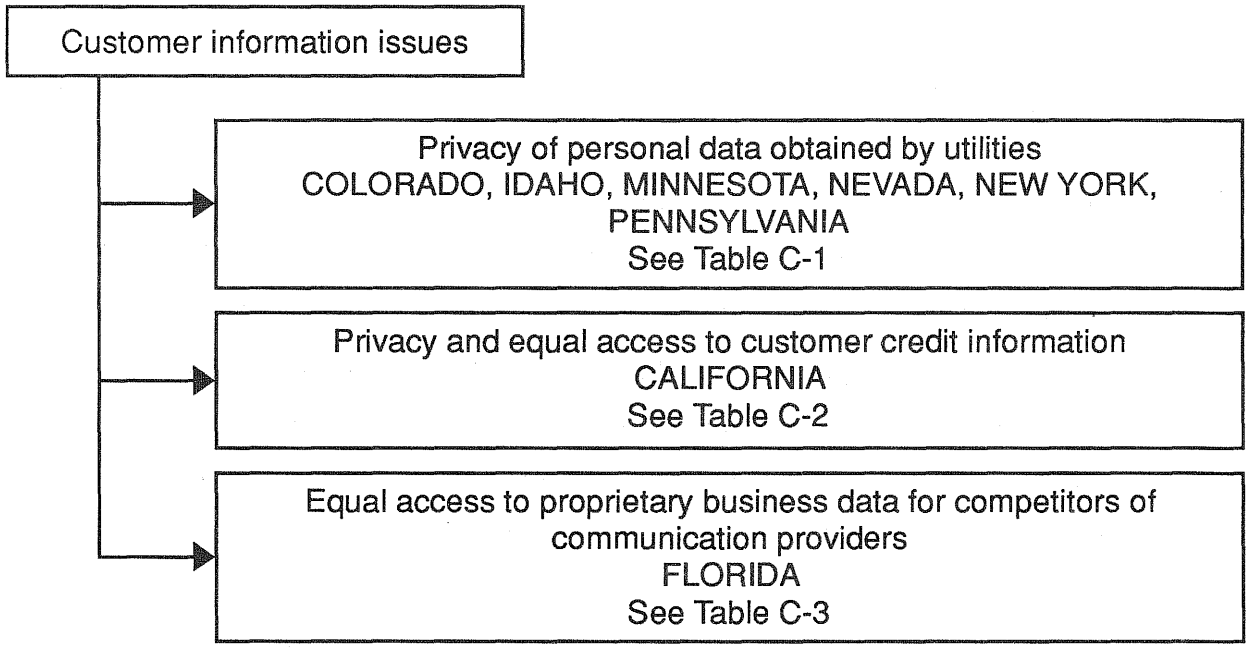

Fig. 4-4. **Issues concerning customer information not covered by foregoing categories (see also, Appendix C, August 1992).**

Automatic Number Identification (ANI) Issues

Although ANI appears on the surface to be a type of interstate Caller ID service, the FCC in its Caller ID Notice of Proposed Rulemaking, distinguishes between Caller Identification services and Automatic Number Identification services.
The FCC provides that ANI precedes the call by arriving at the called station before the first ring or simultaneous with the first ring. ANI provides the billing rather than the calling location number. In most applications the billing and calling party numbers are the same number. However, in some instances, especially in the business setting, many calling numbers can be associated with a single billing number. Further, ANI is provided directly by the IXC only on calls that do not use a terminating LEC. This is possible because a dedicated line is established between IXCs and the called party. Finally, Caller ID and ANI are distinguishable in that identification of ANI is not blockable by the calling party under current technology.[3] The two are distinct functionally as well--ANI has been traditionally used by LECs and IXCs for call set-up, call management, and to identify telephone numbers for billing purposes, whereas Caller ID is intended for use by residential consumers to identify callers' numbers before receiving calls from them.

ANI is also available through IXCs in conjunction with 800 and 900 service. Businesses that subscribe to interstate ANI use the service for such applications as dealer location, to associate an incoming call with the dealer closest to the caller's location, alarm signalling to link an incoming call with the caller's address, data security, as a secondary means to restrict access to electronic information to calls from particular numbers only, call redirection/routing capability, and to transfer calls to employees handling particular geographic locations. This application is used in customer service or

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[3] Notice of Proposed Rulemaking in the matter of Rules and Policies Regarding Calling Number Identification Service, adopted September 26, 1991, released October 23, 1991, 3, 15, note 42.

order taking applications to match an incoming number instantly with billing information about that customer, such as account balances or prior purchases or transactions.[4]

Another service which uses ANI is the sophisticated Enhanced 911 (E911) emergency system. The new E911 service is different from basic 911 service in three ways: it provides Selective Routing, which routes the 911 call to the correct Public Safety Answering Point (PSAP) regardless of PSAP serving boundary and central office boundary mismatches; it uses Automatic Number Identification (ANI) which produces the caller's telephone number on a console at the PSAP; and it provides Automatic Location Identification (ALI) which provides the street address associated with the ANI of the party calling 911. When 911 is dialed, the information generated by these features is displayed at an emergency services dispatch center. E911 service is provided to cities, counties, and municipalities using a telephone network with a centralized data base which stores the dispatch information. The 911 data base is updated by LEC service orders and Master Street Address Guide information from the County. This stored information allows for the automation of the events leading to the dispatch of appropriate emergency services. E911 automation minimizes human error, provides precise location information, fosters better response times, minimizes wasted effort on false alarms, delivers emergency services more efficiently, and potentially saves human lives.[5]

Privacy concerns regarding the routine identification of callers by those who have ANI have been superseded by the need for access to emergency systems and law enforcement agencies. Thus, even those regulators most protective of customers' privacy have made exceptions for health and safety emergencies. Calling numbers are identifiable to emergency agencies irrespective of available blocking options. Recall

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[4] Ibid., 3.

[5] In re: Proposed Agency Action to require unbundling of E911 terminal equipment and allow for the competitive provision of E911 equipment by other than the serving LEC, Docket No. 900297-TL; Order No. 22996, 1990 Fla. PUC LEXIS 607; 90-5 FPSC 362, May 29, 1990.

from the discussion of directory information issues (Table A-2) that regulators have been concerned with whether unlisted and unpublished data should be accessed by emergency agencies in the same manner as listed names.

Some argue that ANI is being used in ways never intended.[6] Information accessed through ANI service is becoming increasingly available to noncarrier subscribers of IXC services (800 and 900 service subscribers and information service providers). The effect of ANI misuse upon the calling party is the same as in the case of Caller ID identification of a number associated with the calling number. Unrestricted identification of the calling number could develop into unrestrained dissemination of this information to third parties beyond businesses originally called. The extent of ANI misuse can be discerned from the self-regulatory policies adopted by the Yellow Pages Publishers Association representing 140 member companies that produce more than 90 percent of the Yellow Pages directories and 99 percent of the revenues generated by Yellow Pages advertising to prohibit secondary dissemination--the sale or other commercial distribution of calling party information. This is information defined as the telephone number, name and/or address of a caller to a talking Yellow Pages provider collected with the help of ANI. These "first-ever" rules to be adopted require "affirmative consent" which applies to secondary use as well--the use of calling party information by a direct marketing company affiliated with a talking Yellow Pages provider. This consent may be collected in any reasonable manner.[7] The issue is confounded further with respect to calls to 800 service subscribers which in effect are "collect calls" because the called party pays for the call. Any privacy interest associated with identification of the calling number therefore is weighed against the costs borne by 800 service subscribers.

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[6] Quoting Pacific Bell comments, FCC's NOPR in the matter of Rules and Policies Regarding Calling Number Identification Service, adopted September 26, 1991, released October 23, 1991, 16.

[7] *Telecommunications Reports* (June 11, 1990): 16.

ANI technologies are tariffed by the FCC--LECs offer the service to IXCs and other subscribers through Feature Group D access service and Feature Group B over D access service as part of the Open Network Architecture tariffs. IXCs offer them through the INFO-2 tariffs. For this reason most state-level regulators treat ANI issues as falling outside their jurisdictional purview. Those state regulators who have addressed ANI have done so because they perceive critical overlaps between ANI and Caller ID issues.[8] A small number of commissions, however, have dealt with concerns over ANI services specifically. These are identified in Figure 4-5 and its associated tables. (The tables do not list those actions where questions concerning ANI have arisen purely in passing within Caller ID inquiries.)

Issues Concerning Customer Proprietary Network Information (CPNI)

While few state commissions have CPNI rules, a majority of those that do have based them on the CPNI rules promulgated by the FCC as a part of its ONA regulations. A number of states have encountered and addressed similar issues concerning "cross-subsidization" and structural separation between affiliate firms. Although the FCC's recent decision preempts state CPNI disclosure rules that require prior authorization where such authorization is not required under FCC rules, there are state commissions that have recognized the significance of CPNI in the context of issues concerning competitive access to and privacy of customer information maintained by utilities.

The competitive issue has been encountered most often by state commissions in the context of separating local exchange service providers from enhanced service providers affiliated with the monopoly telephone companies. In several proceedings, however, state commissions ignore these aspects and focus instead primarily on the cross-subsidy and cost accounting issues that more traditionally fits within rate regulation.

The outflow issues at the heart of this report are most clearly exemplified in the CPNI debates both at the federal level and at the few state commissions where CPNI

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[8] New York, Florida, and Washington are examples.

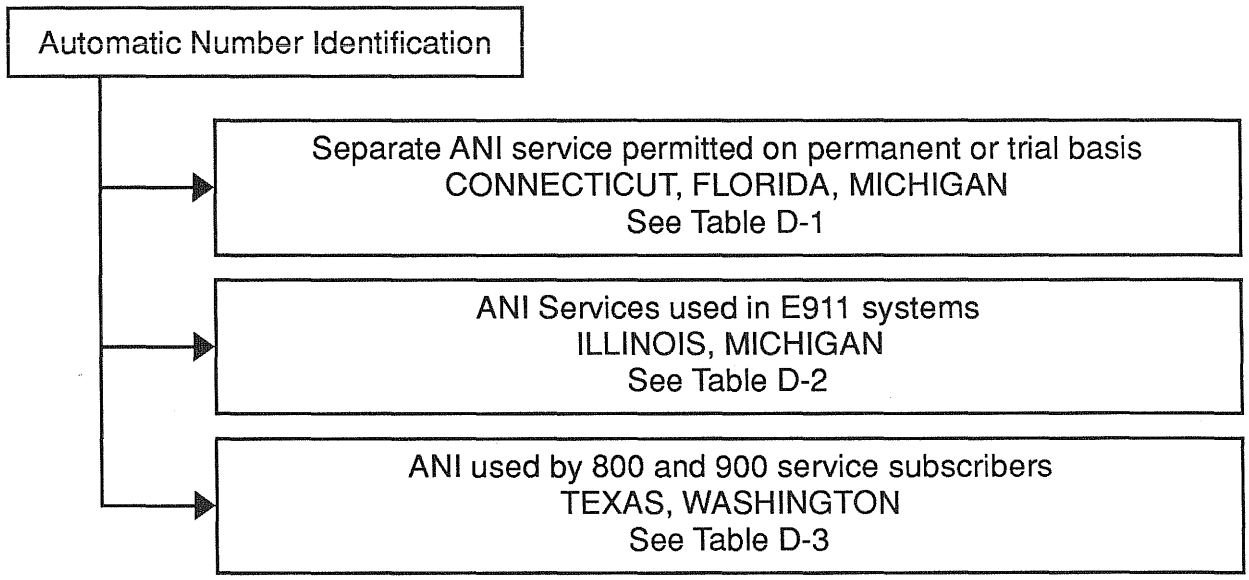

Fig. 4-5. **Issues concerning customer information provided with Automatic Number Identification (ANI) systems (see also, Appendix D, August 1992).**

has been investigated.[9] CPNI is distinguishable from telecommunication TGI only in that CPNI has been specifically defined by regulators in the course of the Open Network Architecture (ONA) inquiries. Table 2-1 in a previous chapter shows the various configurations of the constituent elements of CPNI proposed by utilities in these debates. The table demonstrates that consensus over what constitutes CPNI has not come easily.

The FCC's CPNI rules are intended to balance considerations of efficiency, competitive equity, and privacy. They provide that in the absence of a request for nondisclosure by the customer (residential or single-line business) utilities are permitted to release customer's CPNI to their enhanced service personnel. By default the FCC rules permit utilities to disclose CPNI freely within their organization. Further, when a customer requests disclosure of his/her CPNI to a designated ESP (affiliated or otherwise), utilities must make such information available to unaffiliated ESPs on the same terms and conditions as they do to their ESP affiliates. This means that in the absence of a request from a customer, utilities must not release customer's CPNI to unaffiliated ESPs, no matter what terms and conditions the unaffiliated ESP agrees to. The lack of symmetry is obvious. The default condition is for utilities to release customers' CPNI to their own affiliates and not to release it to competitors, giving their affiliates a "leg up" on their competition. Finally, regardless of a customer's consent, aggregated CPNI can be made available by a utility to its own enhanced services personnel.

In essence, the FCC rules permit a utility to pass CPNI to its affiliates when a customer does not make a formal authorization on the fate of his/her CPNI. This allows utilities to track the calling patterns of their customers and pass that information over to their affiliated ISPs for pinpoint sales pitches, without the knowledge or authority of customers; in contrast, unaffiliated, competing ISPs and ESPs must secure affirmative customer consent in writing prior to release of the same information from the LEC. The

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[9] "CPNI: FCC's Newest Acronym a Four-letter Word to ESPs," *Enhanced Services Outlook* (June 1988): 4-5.

FCC defends the rules (which enable LECs through their provision of public utility services to grant affiliates preferential access to CPNI) on the claim that "[a]ccess to CPNI permits effective integrated marketing of enhanced services and permits the efficient use of carrier resources to provide enhanced services to a broad spectrum of customers."[10] The FCC defended its rules further by stating that its rules do not authorize the practice of "unhooking," that is, targeting enhanced services sales pitches at customers who contact the BOC to order network services to use with a competitor's enhanced service. The FCC finds the practice constitutes an abuse of the BOC's positions as providers of basic services and will investigate claims that any BOC is engaging in such a practice.[11]

However, not only do federal CPNI rules favor the arguments presented by the utilities, but the FCC apparently has not sought to balance considerations of efficiency, competitive equity, and privacy. The focus of the proceedings has been exclusively on the problems of efficiency and competitive equity. The privacy of customer proprietary information largely has not been addressed in the drive towards maximizing the value of customer information. Proceedings which refocus regulatory attention toward better balancing economic efficiency and privacy concerns are unusual but some states have attempted them as is shown in Figure 4-6 and detailed in Table E-1.

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[10] "Report and Order," In the matter of Computer III Remand Proceedings: Bell Operating Company Safeguards and Tier 1 Local Exchange Company Safeguards, CC Docket No. 90-623, 6 FCC Record, p. 7636, adopted November 21, 1991, released December 20, 1991.

[11] "Report and Order," In the matter of Computer III Remand Proceedings: Bell Operating Company Safeguards and Tier 1 Local Exchange Company Safeguards, CC Docket No. 90-623, 6 FCC Record, 7613-4, adopted November 21, 1991, released December 20, 1991.

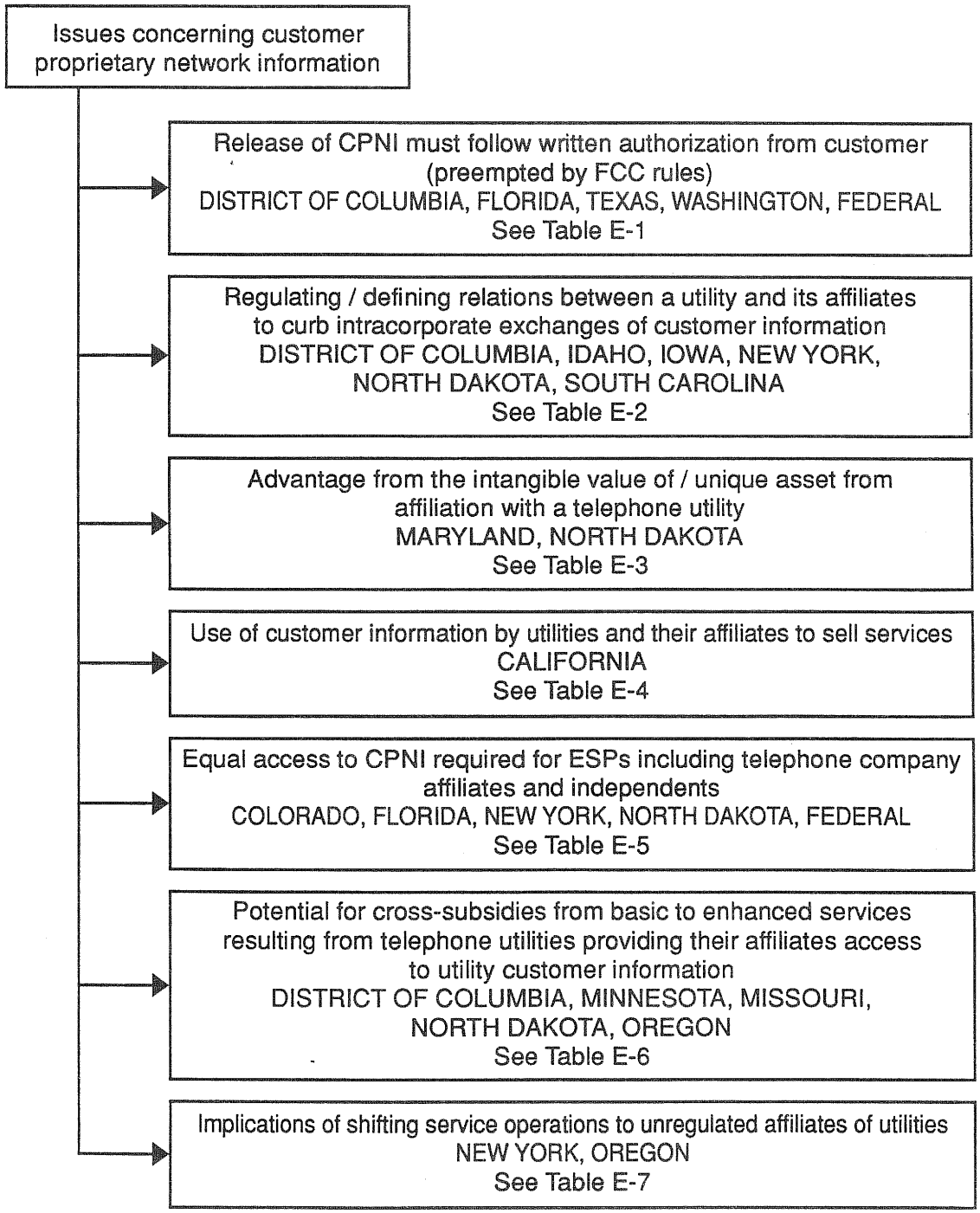

Fig. 4-6. Issues concerning Customer Proprietary Network Information (CPNI) (see also, Appendix E, August 1992).

Information Inflows to Customers

Telemarketing Issues

The first of the issues within the "inflows to customers" section concerns intrusions into people's homes and offices by callers attempting to sell goods and services. Previous chapters have emphasized the evolution in marketing and sales techniques which enable "individualized mass marketing." These techniques rely heavily on detailed information on individual persons or family units. In addition, the new selling techniques rely upon modes of reaching potential buyers, more intrusive than before--from supper time telemarketing to random-number accessing Automatic Dialing and Announcing Devices (ADADs).

Concerns over telemarketing and the use of ADADs tend to focus on privacy issues, especially concerns over intrusions into home life. Telemarketing efforts are not designed to be obnoxious or to annoy recipients. Yet, telemarketing is among the hardest hit by restrictive legislation at both state and federal levels. One reason for the huge number of complaints against telemarketers received by lawmakers is the time and length of sales calls. In response most legislative proposals have strict time-of-day restrictions during which telemarketing calls may be made. Issues concerning telemarketing and the considerable regulatory and legislative attention they have received, therefore, provide an excellent case for the significance of transactional criteria in an individual's attempts at controlling inflows.

The intrusive capacity of new telemarketing techniques is dwarfed by that of ADADs. These devices typically dial numbers randomly generated by a computer. ADADs thus are incapable of differentiating between listed and unlisted/unpublished numbers. As a result, most bills and regulations attempting to restrict the use of ADADs require that unlisted and unpublished numbers be excluded. Further, the sales message announced is generally prerecorded and recipients have no way to disable the recording or complain about the intrusion. The problem that most announcements cannot be disconnected by the called party is exacerbated by the fact that many run for

as long as two minutes. In response most legislative proposals have required the presence of a human operator for any sales call recipient who wishes to register a complaint or ask to be included on "don't-call-me" lists. Further, all ADADs must be reconfigured to allow disconnection at any point during the announcement.

Efforts to restrict telemarketing through legislation and regulation have been accompanied by attempts at self-regulation by businesses which rely on telemarketing. The Direct Marketing Association began its own plan in 1985 which gave consumers the choice of being included on a list of persons not wishing to receive unsolicited sales calls. The plan requires that these lists be distributed to telemarketing businesses. About 315,000 people nationwide had signed up by March 1990. The main criticism of the scheme is that many telephone sales companies are local and do not participate in industry-sponsored programs.[12] Another industry association, the Chicago Association of Direct Marketing, passed a resolution requiring written permission from both parties to a phone call before the records of the call could be used for marketing purposes. The resolution followed a proposal from AT&T to segment its most frequent 800-number callers and target them with various service directories. The "AT&T Gift and Specialty Directory" was scheduled to roll off the presses in the Fall of 1991 and had marketers worried that their customers would learn of competing products through the new AT&T service. The direct marketers did not clarify whether the policy would apply to companies that planned to sell information collected from consumers who call 800 and 900 numbers.[13]

Concerns over telemarketers intruding into people's private space and time and accessing utility lists to call persons can be extended to issues of competitive access to telemarketers' lists. Although the competitive implications of access to utility lists for

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[12] Barry Meier, "Intruder On the Phone: Ending a Sales Talk Before It Begins," *New York Times* (March 3, 1990): Sec. A, 48:1.

[13] M. Miller, "Lobbying Campaign, AT&T Directories Raise Fears About Use of Phone Records," *Wall Street Journal* (December 13, 1991): B1:1; *CPSR Alert* (electronic newsletter) (October 25, 1991): 2.

telemarketing have not been pressing questions for state or federal regulators, one could foresee situations where this question would become important. If access to a utility's lists by telemarketers is not regulated at the point where it becomes available to a third party, these data may cease to be recognizable as customer information generated by the use of utility facilities. It may be in the hands of numerous unregulatable third parties. This suggests that unless regulations restrict the disclosure of utility customer information at the source (when it is in the hands of the utility), it becomes virtually impossible to control once it has become available to even a single third party.

Figure 4-7 and the associated tables in Appendix F attempt to show the range of problems associated with telemarketing and the use of ADADs recognized by lawmakers and the various solutions proposed. Note that most of the entries provide information on legislative initiatives. Legislative solutions are included because regulatory commission action on telemarketing and the use of ADADs lags far behind legislative initiatives at both the federal and state levels. Most state legislatures have established procedures and conditions under which telemarketing is permitted whereas regulatory commissions in only a few states have promulgated regulations on the issue. Restricting this report to regulatory initiatives alone would provide a highly impoverished view of ongoing activity in this area.

Caller Identification Issues

While privacy issues have appeared on state regulatory agenda for quite some time and in a variety of contexts, concerns over the intrusive capabilities of telecommunications services appear to have mushroomed over the past four years in the Caller Identification context. In fact, more commissions have deliberated over consumer privacy concerns in the Caller ID context than in any other. As a result, this section focuses on providing the most current information on Caller ID proceedings in every jurisdiction rather than to provide the range of contexts in which these questions have

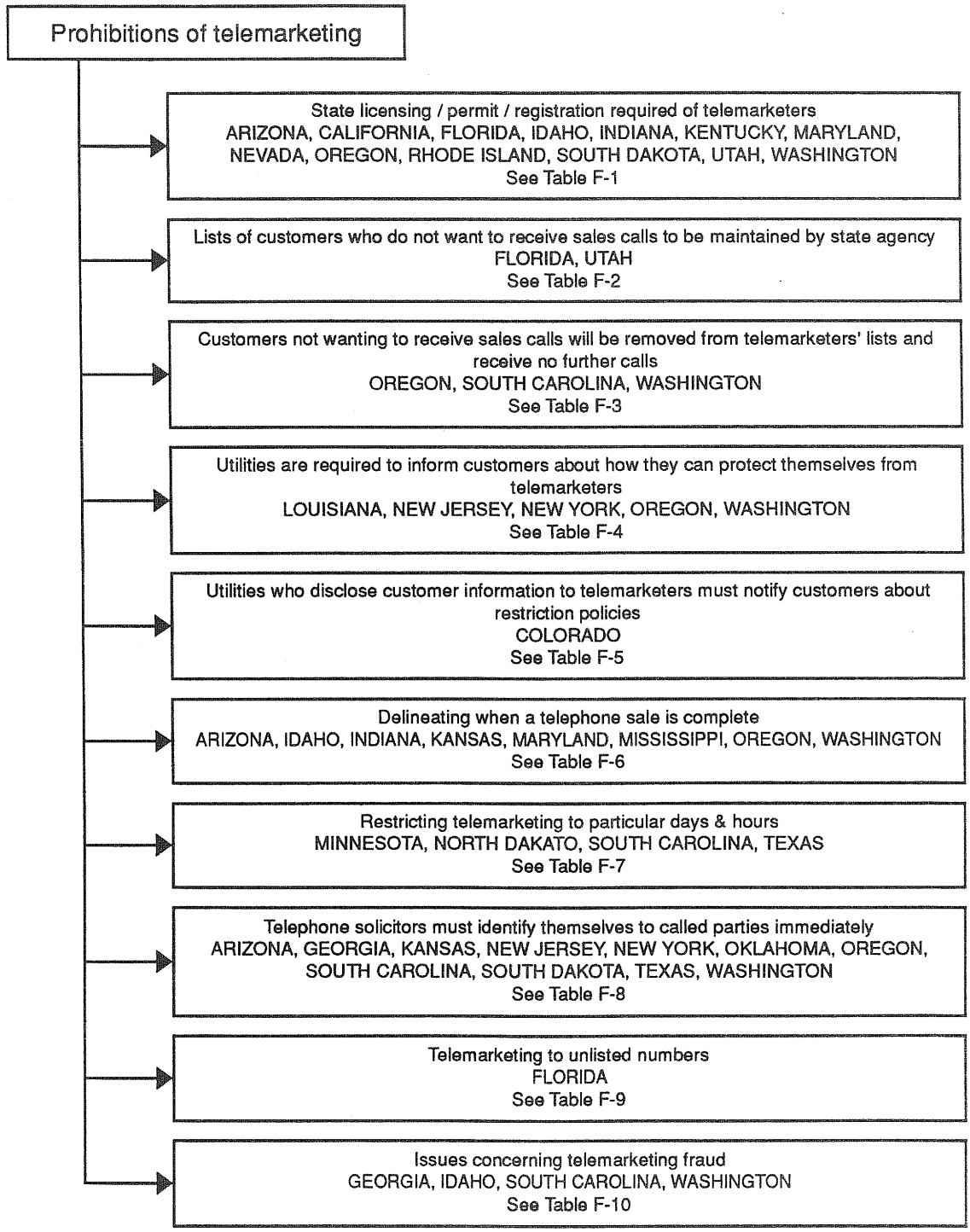

Fig. 4-7. Issues concerning telemarketing and the use of Automatic Dialing and Announcing Devices (ADADs)--Continued on next page.

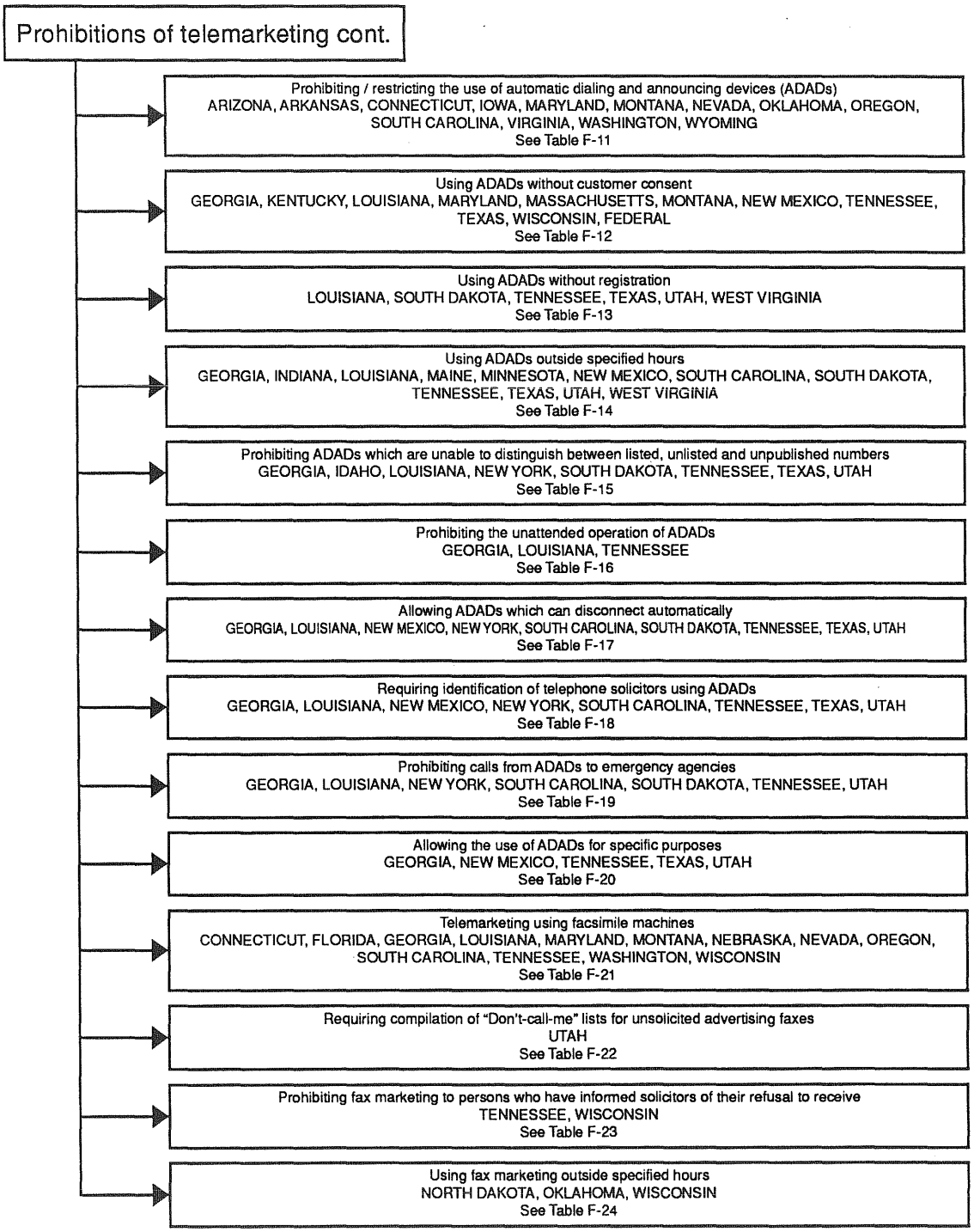

Fig. 4-7. Issues concerning telemarketing and the use of ADADs-- Continued (see also, Appendix F, August 1992).

arisen. As of July 1992, forty of fifty-one state regulators (fifty states and Washington, D.C.) had addressed the Caller ID question.

Caller identification use on the new Signalling System-7 (SS7) switch technology enables a host of other services, such as those proposed by local exchange companies for a number of Custom Local Area Signalling Services (CLASS). Most commonly proposed among these are Call Return (redials the last incoming number), Call Screen (rejects calls from specified numbers), Call Trace (allows a subscriber to notify the central office that a record is to be made for the last call received), Continuous Redial (redials a busy station continuously until a connection is made), and Selective Call Forward (allows only specified incoming calls to be forwarded to another station). In some jurisdictions particular configurations of CLASS packages are presented as easing the effects of the more intrusive Caller ID service. For instance, the Public Utilities Commission of Ohio has insisted upon contemporaneous offering of Caller ID, Call Trace, and Call Screen. These services differ significantly--for instance, Call Trace does not give the called party access to the calling party's telephone number as Caller ID does. Therefore, the Commission argues that together these services would give customers an alternative to Caller ID for assistance in discouraging obnoxious calls.[14] Most CLASS services are seen as reducing the loss of control over personal information endemic to Caller Identification services. However, CLASS packages have been configured in a multitude of ways and data on regulatory treatment of each package is extremely difficult to compile. Therefore, while services proposed in CLASS packages may provide alternatives to Caller ID, especially in jurisdictions where blocking issues are deadlocked, this report deals with regulatory treatment of these services only marginally.

In thirty-seven jurisdictions, commissions have concluded proceedings concerning Caller ID service. In three states, market trials have either been concluded or are in progress on Caller ID. Eleven states have begun no action on Caller ID. Figure 4-8

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[14] PUCO Order, Case No. 90-467-TP-ATA and Case No. 90-471-TP-ATA, March 26, 1992.

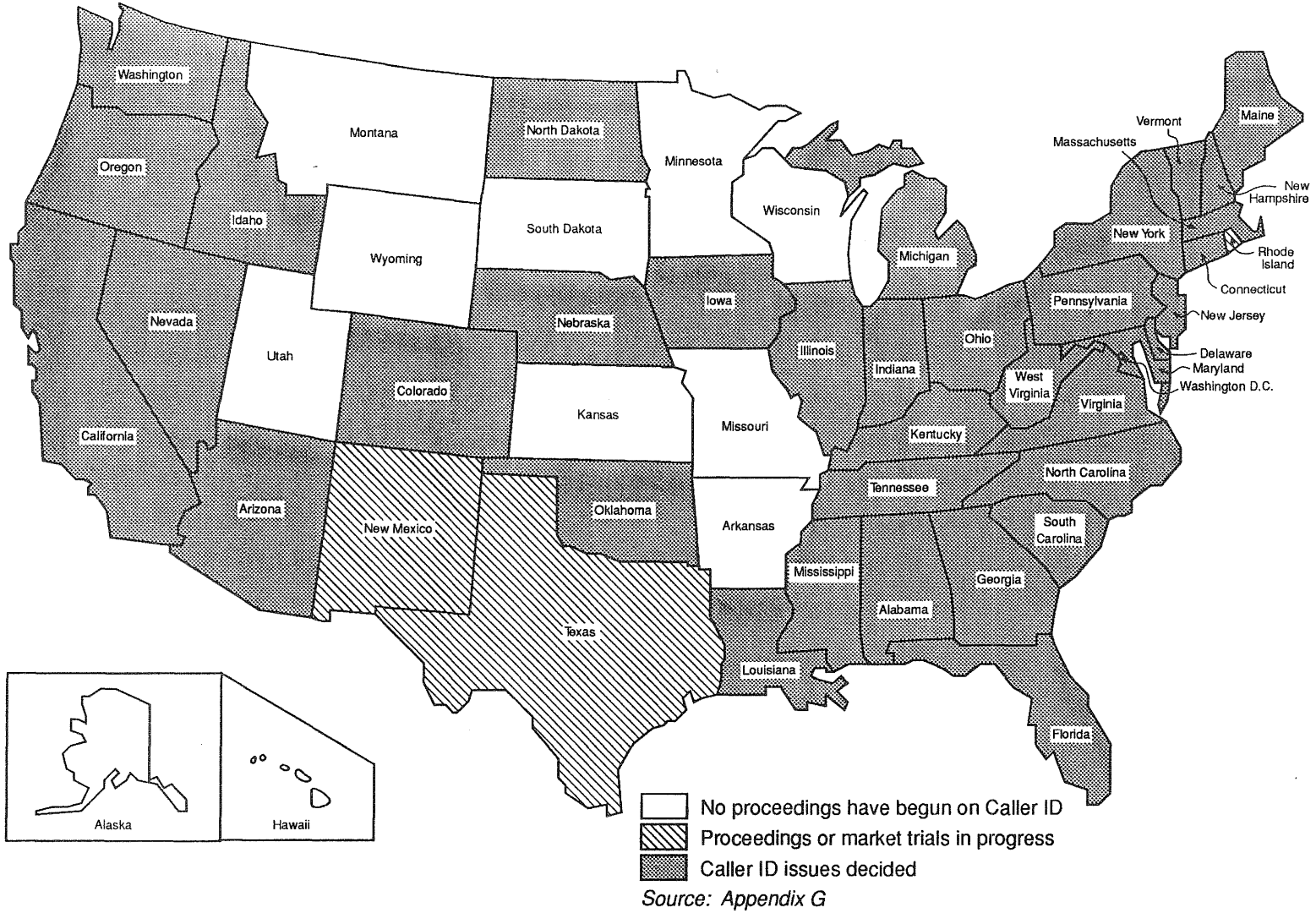

Fig. 4-8. Status of state regulatory action on Caller ID, August 1992.

provides a nationwide report on the status of Caller ID. States are divided into (1) those that have completed and decided the Caller ID questions, (2) those that have begun but not completed proceedings or states where telephone providers have filed tariffs or have launched limited-time trials of the service, and (3) those that have not begun any proceedings on Caller ID. The map provides a clear picture of the large number of states which have encountered and decided privacy concerns at issue in the Caller ID case.

At the federal level there have been several legislative efforts to amend existing statutes to protect telephone consumers' privacy jeopardized by Caller ID service. The Telephone Privacy Act of 1991 (S. 652 proposed by Senator Kohl, D-WI) would amend the Electronic Communications Privacy Act of 1986 (ECPA) to legalize Caller ID and enable a caller to block receipt of any individually identifying information about the originator without charge. Emergency services including E911 communications within a closed system and automatic number identification- (ANI) type services which cannot technically be blocked as yet are exempt from the blocking requirement. The bill was modified by Senator Patrick Leahy (D-VT) distinguishing between Caller ID and ANI and specifying per-call blocking.[15]

Comparable action advancing in the House is the "nuisance call" measure (H.R. 1304 proposed by Representative Edward J. Markey, D-MA). As proposed, this bill requires free per-call blocking for customers calling those with Caller ID and restricts use of information collected with ANI (includes telephone number and billing information) to billing and collection purposes, completion of the customer's call or transaction, or for services directly related to the customer's call. It prohibits sale or reuse of data collected with ANI without consent.[16] However, the House Telecommunications Subcommittee approved a modified version proposed by Representative Matthew J. Rinaldo (R-NJ) during June 1991 which adds a section of

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[15] *Telecommunications Reports* (June 24, 1991): 5.

[16] *Telecommunications Reports* (March 11, 1991): 11.

findings on privacy rights, Caller ID, ANI, collection of personal information, and the necessity of federal regulation of Caller ID.[17] Rinaldo's version includes a special clause for unlisted numbers.[18]

Regulatory proceedings on Caller ID began at the federal level late in 1991. The FCC opened a rulemaking proceeding (Docket 91-281) to establish national rules on blocking and other matters relating to Caller ID and ANI.[19] The central focus was on setting a uniform policy on interstate transport of Caller ID information in the face of divergent state policies on blocking. Intrastate Caller ID will be treated as a separate but related issue in the rulemaking. The FCC tentatively concluded that per-call blocking best balances the privacy interests of the calling and called parties. In discarding the per-line blocking option the FCC said that such blocking would diminish the value of the service. Although the FCC held that it would not propose preemption of intrastate Caller ID offerings, it did not rule out preemption especially if, upon analysis, "the Commission concludes that interstate and intrastate rules could not coexist harmoniously, both legally and technologically."[20] Part of the suspicion on the FCC's part arises from the varied approaches regulators have espoused to decide Caller ID issues. While most states have stayed with the basic frame of caller versus called party rights, regulators exhibit a spirit of experimentation with respect to their solutions which span a wide range of number delivery blocking techniques. These allow customers to stop their telephone numbers from being transmitted to recipients of their calls, the simplest of which requires activation by a two-digit code (like, *67) to prevent transmission of the number. This is understood as per-call blocking where the default

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[17] *Telecommunications Reports* (June 24, 1991): 6.

[18] *Telecommunications Reports* (April 29, 1991): 4-5.

[19] In the matter of Rules and Policies Regarding Calling Number Identification Service, CC Docket 91-281, Notice of Proposed Rulemaking, Released October 23, 1991.

[20] FCC NOPR, 19.

situation is that callers' numbers are transmitted unless the code is dialed. Generally, this option has been provided free to the customer.

Another mode is per-line blocking. Here transmission of the number is disabled to all calls made from a number. While this option could use an activating code as in per-call, per-line blocking generally has been provided as the default option. This means that customers would need to use a code to deactivate blocking. In all circumstances where the code is not used, the calling party's number would be blocked. Where per-line blocking has been required, most often per-call is provided as well.

Some states have required companies to provide the per-line blocking option only to subscribers who are classified "at-risk." These include crisis intervention centers, battered women's shelters, human services shelters, and so on. The risks faced by employees and those who seek shelter at the centers necessitate precautions against their numbers being divulged when calls are made to abusive homes. Others with special needs are, for instance, AIDS, suicide, and substance abuse hotlines, which perform confidential services and fear that individuals may be discouraged from calling due to the potential of the Caller ID device to reveal their identity.

The most restrictive of blocking policies may be prohibition of service altogether. This is the situation in Pennsylvania. After a two-year lawsuit, the state Supreme Court decided that Bell of Pennsylvania's proposed Caller ID service violated state wiretap laws and was therefore illegal. Pennsylvania, however, is alone in its decision to prohibit the service.[21] A majority of states have decided the issues by devising blocking arrangements instead. In thirty-two jurisdictions, telephone customers are able to block their numbers from being transmitted in particular ways. Both per-call and per-line are required free of cost to all customers in fourteen states.

Excluding the outright prohibition of the service, the per-call and per-line blocking option has the strongest privacy protection intent. It is noteworthy that among those commissions which have already decided the Caller ID blocking question, only four

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[21] Pennsylvania PUC v. Bell Tel. Co. of Pa., 1992 Pa. LEXIS 242, 130 PUR4th 280 (1991).

have decided upon unblocked Caller ID while thirty-two have decided to have some form of blocking. It is especially interesting that in two states where no regulatory proceedings have begun but where telephone companies are proposing market trials of the service, all trials will include provision of some blocking option. For example, both the New England Telephone and Telegraph Company in Rhode Island, and US West in New Mexico are proposing free per-call blocking in their filings.

The Texas Commission found that the Caller ID device is a "trap and trace" device and thus illegal under Texas law, suggesting that legislative changes may be necessary before the service could be introduced. If approved, a unique blocking option would be required--per-line blocking for all subscribers. Calls to emergency services will be exempted from this requirement. As discussed earlier, blocking can be configured so that all telephone customers are required to activate the blocking mechanism prior to making a call. The default situation is unblocked Caller ID and some affirmative act is required on the part of users to activate the blocking option. Most proposals for per-call and per-line blocking fall within this category. A second configuration allows Caller ID to remain blocked until a telephone user takes some action to unblock the transmittal of his/her number to the recipient of the call. In this situation, Caller ID is blocked by default. The solution devised by regulators in Massachusetts falls within this category. Default per-line blocking is required with per-call unblocking option.

In Indiana, Maine, and North Dakota, a decision concerning Caller ID has come from state legislatures, not regulatory commissions. Particularly interesting is the case in Indiana where legislative action overruled a regulatory decision. In December 1991 the Utilities Regulatory Commission rejected Indiana Bell's proposal for unblocked Caller ID and suggested it would require per-call blocking for all customers (free for an initial period and cost-based thereafter). In February 1992, the state legislature passed Senate Enrolled Act 222 explicitly prohibiting Caller ID blocking options beyond per-call blocking for "at-risk" agencies whose eligibility is to be defined by the telephone company.

The following figure offers a nationwide view of various blocking arrangements that state commissions have chosen and those which are being proposed in various states.

Because the figure ignores the status of proceedings, it does not provide a concise nationwide picture of blocking options chosen and proposed in the fifty-one state jurisdictions. Blocking options identified in Figure 4-9 reflect all of the following: final decisions by commissions, options chosen for market trials being conducted or planned, as well as tariff filings by telephone companies in states where policy proceedings have not begun. This allows for comparisons between the most and least popular blocking options and indicates at a glance the extent of regulatory activity on the privacy implications of Caller ID service. Figure 4-10 provides a schematic overview of current state regulatory activities with regard to Caller ID in the United States.

Summary

This chapter has concerned itself with the range of initiatives that state utility commissions have taken, in first acknowledging conflicts that have arisen between privacy and competitive interests over customer information collected by utilities, and second, in devising solutions to these conflicts. The chapter has provided information on specific initiatives by commissions and actions which focused on privacy concerns of customers and business interests in assuring equal access to customer information.

The chapter divided customer information issues into those that involve inflows to and outflows from customers. Commissions have treated concerns over outflows and those over inflows as markedly different. Whereas outflows of information from customers either to utilities or to third parties have been treated as involving equitable access questions, inflows have been seen as concerning the privacy interests of customers. Generally, regulators have tended to treat inflows as intrusions into people's homes and therefore as necessarily involving questions of privacy. These intrusions are more readily perceptible and have required vigorous protection. In contrast, outflows of customer information tend to be systemic and therefore relatively transparent to customers and regulators alike. The chapter further suggests that concerns over inflows have generated significantly more voluminous regulation and legislation than outflow issues.

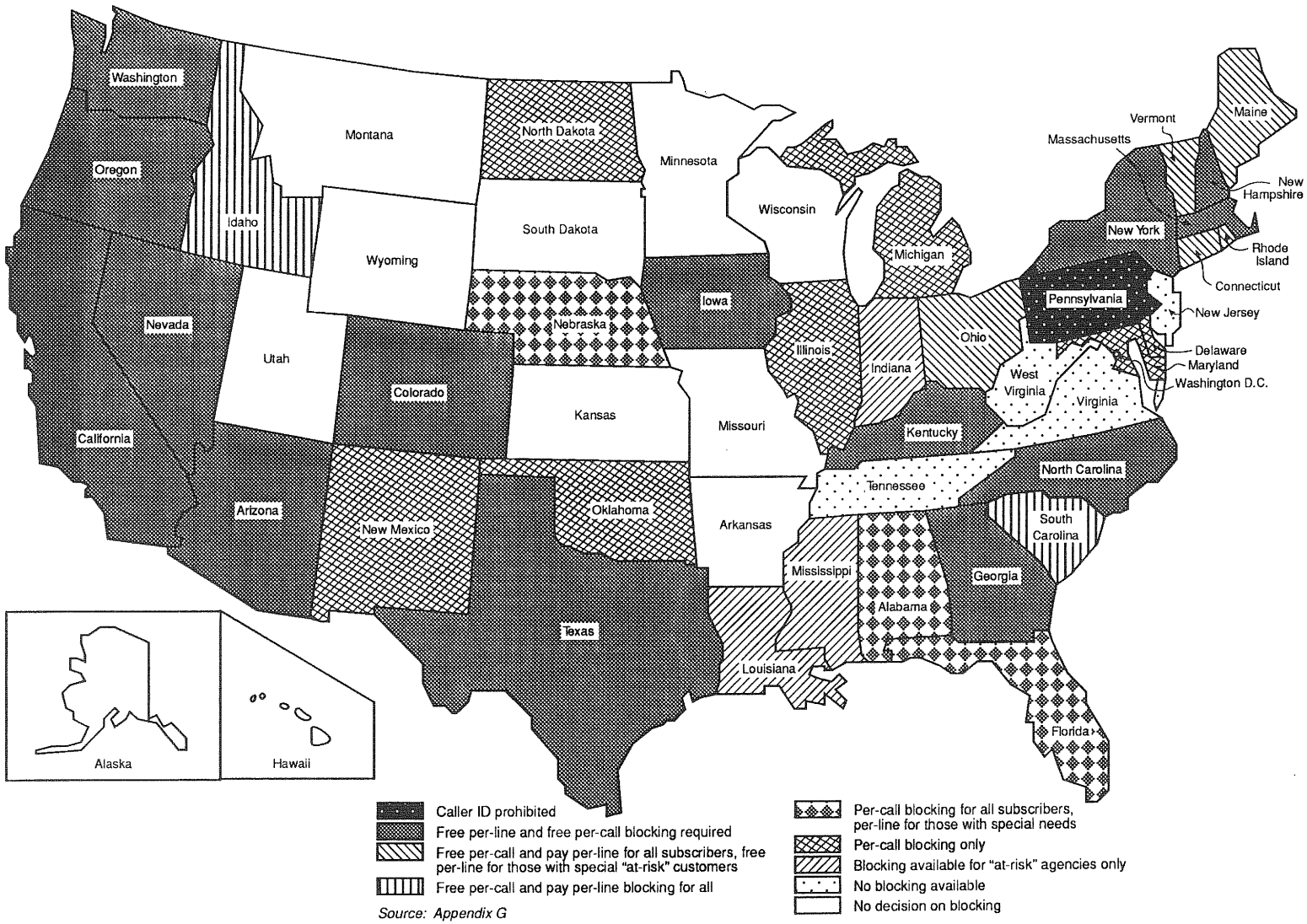

Fig. 4-9. State positions on Caller ID blocking, August 1992.

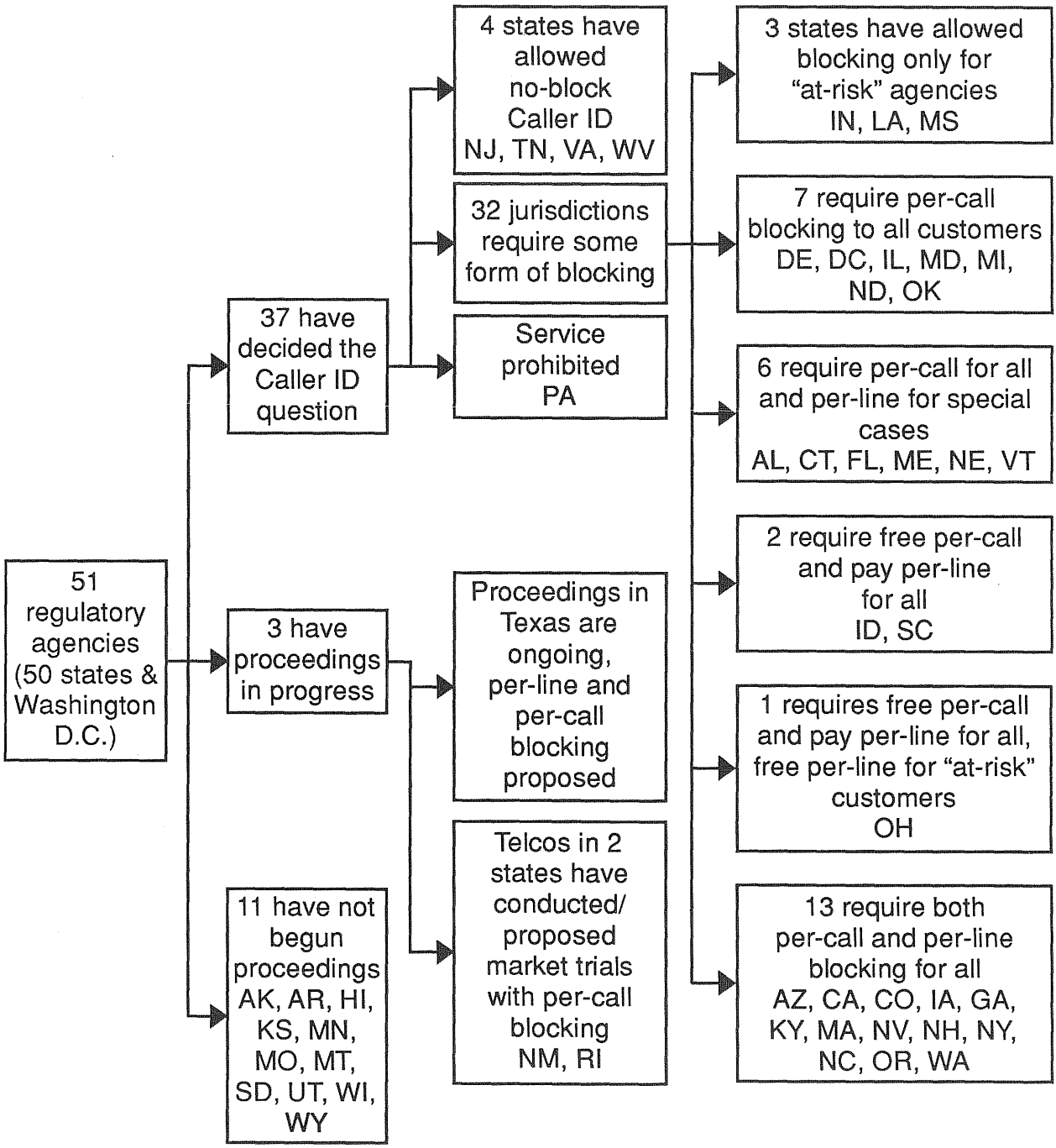

Fig. 4-10. Overview of current state regulatory activity on Caller ID service (Source: Appendix G, August 1992).

The notion of privacy embraced in discussing information inflows is quite distinct from that understood in the TGI sense. Whereas privacy issues categorized within outflows more directly involve the unauthorized disclosure of TGI, inflows exemplify Alan Westin's notion of "reserve."[22] Existing policies on privacy issues stem from questions which have appeared on regulatory agendas since the turn of the century. These have focused on concerns over wiretaps and other "listening-in" or "peeping-Tom" cases common to which is the problem of intrusions upon private spaces, sanctuaries, and reserves. It is not surprising that regulators have more readily recognized privacy questions concerning intrusions into the home over similar concerns associated with disclosure of information generated by businesses in their dealings with individuals, a conception much closer to TGI. This may further explain the disparity in the regulatory treatment of inflows in comparison with that of outflows. It may also explain the paralleling of inflows questions with privacy concerns and of outflows questions with competitive issues.

However, where concerns over outflows have attracted regulatory attention, the focus has tended to lie on the lucrative potential of trade in customer data or of leveraging advantage against competitors through access to these data. Even in this respect, only a few commissions have identified a potential for "intangible advantage" from access to customer data bases. So far, the majority of utility commissions see neither the potential for economic advantage from access to information outflows nor the existence of pressing privacy issues concerning outflows. Rather, outflows of information tended to be considered basic to the functioning of networks--disclosure of this information is both routine and essential for the system to function adequately.

Commissions which acknowledge that concerns over information outflows merit regulatory attention have concentrated on ensuring equitable access to customer information by interested parties. The Customer Proprietary Network Information (CPNI) discussion at the Federal Communications Commission is typical of commissions' treatment of information outflows from customers. Regulators have tended to give

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[22] Alan F. Westin, *Privacy and Freedom* (New York: Atheneum, 1970).

primacy to preventing cross-subsidies from monopoly utilities to their competitive affiliates through access to customers data bases. Privacy interests in these information flows are viewed as less significant in the face of concerns over equitable access to this information in the interest of "developing competition in the industry" or "to enable the full utilization of the network." Customer information made available to utility affiliates typically has been required to be made accessible on equal terms to unaffiliated firms competing with utility affiliates. This allows disclosure of utility data to any firm which can prove that it competes with a utility affiliate. From the perspective of customers with privacy interests in these data, these decisions permit unpoliceable disclosure to unregulated firms which reduces a customer's control over his/her information. These decisions perpetuate treatment of privacy interests and competitive concerns as oppositional. Where competitive access to customer information has been afforded, it has been typically at the cost of privacy concerns and vice versa. Little effort has been made to reconcile these interests in a complementary fashion.

The issues concerning utility use of customer information may fall outside the traditional purview of utility regulation. Customer information issues are therefore among others defining the frontier of utility regulation--challenging regulators to perceive privacy implications in outflows of information from customers in the TGI sense, and further to reconcile and balance privacy and competitive interests in the use of this information.

Finally, states that have addressed questions of privacy and competitive access to customer information to some degree have focused on the practices of telecommunication utilities. In contrast issues of use of customer information by gas, electric, and water utilities have attracted little attention from regulators. Yet while almost no attention has been paid to the potentially significant privacy implications of automatic and remote meter reading, demand-side management and customer-specific conservation programs, some commissions have made efforts with regard to customer account/usage information collected by electric and gas utilities (California, Minnesota, and Vermont). Others have proceedings on customer information generated by service from electric utilities (Nevada and South Carolina) and still others are investigating customer data collection practices

of gas, electric, and water companies and the potential for improper cross-subsidization of unregulated appliance sales operations by regulated energy/water provision operations (Minnesota). However, these are the exceptions.

CHAPTER 5

STATE POLICY CONSIDERATIONS

In Chapters 2 and 3, the authors developed a conceptual framework for considering privacy and competitive implications of utility customer information. In Chapter 4, the authors reviewed state actions taken on these issues. This chapter examines different state policy considerations for dealing with the implications of utility customer information. Some conclusions are offered about the need for considering and balancing privacy and competitiveness implications, particularly in the context of proposing new telecommunications services.

Privacy Implications

The existence and scope of a constitutional right to privacy is a controversial and contested concept. To the extent an uncontroverted constitutional right to privacy exists, it is a qualified right that confers "*as against the government*, the right to be let alone--the most comprehensive of rights and the right most valued by civilized men. To protect that right, every *unjustifiable* intrusion by the Government upon the privacy of the individual, whatever the means employed, must be deemed a violation of the Fourth Amendment."[1]

The constitutional right to privacy is limited; it does not apply to private firms or individuals. Also, it is a qualified right that protects individuals only against unjustifiable intrusions by the government. Thus, intrusions, such as a census or tax audit, are not violations of the constitutional right to privacy because they are justifiable.

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[1] Justice Brandeis in his dissenting opinion in Olmstead v. United States, 277 U.S. 438, 478-479 (1928). Justice Brandeis' dissenting opinion became constitutional law in Katz v. United States, 389 U.S. 347 (1967).

Although the right to privacy is a qualified constitutional right against the government, it is by no means a trivial one. Indeed, in 1947 the United States Supreme Court emphasized that "the rights to privacy. . .are to be regarded as the very essence of constitutional liberty; and the guarantee of them is as important and as imperative as are the guarantees of the fundamental rights of the individual citizen."[2]

It is clear, however, that there is also a common law "right to privacy" that applies against individuals and private firms. This right simply reflects basic ground rules of interpersonal interactions. Recall that social science research on the interactions between individuals in public places led sociologist Erving Goffman to state that "in Western society, as probably in all others, there is the 'right and duty of partial display' [of information]."[3] His observations tend to reenforce Westin's basic rule regarding an individual's right to control the flow of information that became the basis of much of the subsequent literature on privacy.[4] Commissioner Joseph Rhodes of the Pennsylvania Public Utility Commission calls the ability to control information outflows the "none-of-your-business" aspect of privacy. The ability to protect oneself from unwarranted intrusions or inflows of information he terms privacy's "leave-me-alone" aspect.[5] This corresponds with the concepts of information inflows and outflows developed in Chapter 2.

In their seminal law review article on the right to privacy, Warren and Brandeis state that the common law tort of invasion of privacy has four aspects: appropriation, publicity, intrusion, and false light.[6] The first three of these concern us here.[7]

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[2] Harris v. United States, 331 U.S. 145 (1947).

[3] Erving Goffman, *Relations in Public: Microstudies of the Public Order* (New York: Basic Books, 1971), 198.

[4] A. F. Westin, *Privacy and Freedom* (New York: Atheneum, 1970).

[5] Joseph Rhodes, "Privacy and Communications: Problems of Technology, Solutions of Choice," presented at the 103rd Annual NARUC Convention and Regulatory Symposium, San Antonio, Texas, November 16, 1991, 8.

[6] Samuel D. Warren and Louis D. Brandeis, "The Right to Privacy," 4 *Harvard Law Review* 193 (1890).

[7] False light sounds in defamation and slander and is not relevant to this discussion.

Early appropriation cases dealt with an advertiser's use of someone's name or photograph without his or her consent. The appropriation doctrine can be extended to recognize a property right to control the outward flow of information about one's self. While an individual can give up this right to privacy for something of value, such as the publicity value of one's photograph or name, it is not automatically surrendered without the consumers' consent. Whenever practicable, this consent should be explicitly given. However, explicit consent is not always practicable. For example, magazines have been allowed to sell their subscriber lists without getting the consent of subscribers on the basis that the costs of obtaining consent is high relative to the list's value.[8] The sophisticated capabilities of new network technologies such as Signalling System-7 (SS7) and Custom Local Area Signalling Services (CLASS) appear to have brought down considerably the costs of obtaining customer consent. At least at the technical level, it is now becoming possible to allow customers to give or not give consent to the use of their transaction-generated information. However, for consent to be given, the consumer must be given a choice. There is no implicit consent for the release of a phone number by a customer merely using the network.

An advertiser that uses someone's photograph without consent also violates the individual's right to privacy. However, if a photograph or name is not used for publicity purposes but as part of a "newsworthy" story, then there is no infringement to the right to privacy.[9]

Unreasonable or unwarranted intrusions also violate one's right to privacy and can lead to a civil suit. In short, individuals are permitted to build a wall of privacy around themselves. Of course, an individual's expectation of privacy is at its highest in his or her household. Any intrusion there is considered unreasonable if it involves eavesdropping, photographic surveillance of the interior of a home, ransacking private records, or similar

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[8] See Shibley v. Time, Inc., 45 Ohio App. 2169, 341 N.E.2d 337 (1975), as discussed in Richard Posner, *The Economics of Justice* (Cambridge, MA: Harvard Press, 1981), 256.

[9] Assuming, of course, the newsworthy story does not present the individual in a "false light."

intrusive methods that violate an individual's expectations of privacy.[10] An intrusion is unwarranted if it is intrusive without the consent, explicit or implied, of the consumer.

These three aspects of the common law right to privacy--misappropriation, unreasonable publicity, and unreasonable intrusion--can be recategorized into the "none-of-your-business" and the "leave-me-alone" aspects of privacy. Misappropriation and unreasonable publicity concern the ability to control information outflows about oneself, that is, the "none-of-your-business" aspect of privacy. The unreasonable intrusion aspect of privacy concerns controlling inflows of information, that is, the right to be left alone.

Nevertheless, even the common law right to privacy is not unqualified. Business firms have a common law right to collect information about the market. In particular, businesses are allowed to collect transaction-generated information about their own customers.[11] Public policy encourages businesses attempting to engage in providing service for established customers. Knowing one's customers better is clearly necessary for a business to anticipate and better serve consumer wants and needs. Further, so long as its surveillance is not unreasonable or unwarranted, a business can gather general information about market conditions, including the anticipated wants and demands of consumers. In short, firms are free to engage in marketing. Indeed, many firms hire other firms to collect information about potential customers and the marketability of real or potential products, thus creating a marketing information industry. Generally, the existence and use of a marketing information industry is thought to have procompetitive effects on the market. Further, so long as direct product marketing is unobtrusive and noninvasive, there are few privacy concerns raised. However, there has been a recent qualitative change in the ability of firms to collect information. As such, it is not easy to extrapolate what is considered acceptable under present technology and marketing practices.

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[10] See Roach v. Harper, 143 W.Va. 869, 105 S.E.2d 546 (1958); Dietemann v. Time, Inc., 449 F.2d 245 (9th Cir.), as discussed in Posner, *Economics of Justice*, 266.

[11] See Shibley v. Time Inc., 45 Ohio App. 2169, 341 N.E.2d 337 (1975).

Controlling Inflows of Information: Leave-Me-Alone Privacy

While direct mail solicitations of customers is at worst an unobtrusive, relatively noninvasive nuisance for many American households, the incessant ring of the telephone by solicitors may represent an unwelcome, obtrusive, intrusive, and invasive interruption of the privacy of the family household. While a few individuals might value solicitations from telemarketers, many are annoyed by these intrusions.

Oregon has legislated a solution, making it a violation of the state's unlawful trade practices law to make a telephone solicitation call to a residential party identified in the telephone directory as someone not wishing to receive commercial solicitation calls.[12] As shown in Tables F-2 and F-3, Florida and Oregon have somewhat similar approaches permitting customers to notify telemarketers of their "don't call me" preference using codes or symbols in telephone directories. As shown in Table F-2, Florida and Utah also provide for registration and lists of customers who do not want to receive sales calls, with the list maintained by a public agency. In Florida, telemarketing is prohibited to unlisted numbers, making acquisition of an unlisted number the equivalent of a symbol stating that the customer does not want to receive calls from telemarketers. These approaches have the advantage of making customers' privacy preferences known before an objectionable telephone call is placed, without burdening businesses that use telemarketing. The major disadvantage to this approach is that it prohibits all telemarketers, even those that might be inoffensive to the individual listed as not desiring calls.

Other states use other approaches. Several states discourage telemarketers by requiring state licenses, permits, or registration. As shown in Table F-1, theses states include Arizona, California, Florida, Idaho, Indiana, Kentucky, Maryland, Nevada, Oregon, Rhode Island, South Dakota, Utah, and Washington. Virginia has also called for the National Conference on Uniform State Laws to create model state legislation on

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[12] See Myron B. Katz, "Privacy and Communications: Problems of Technology, Solutions of Choice," *NRRI Quarterly Bulletin* (March 1992), 25-31.

telemarketing fraud. New York utilities are required to inform customers in their white pages directories about how they can protect themselves from telemarketers. In the State of Washington, telemarketers are required to identify themselves and to remove customers not wanting to receive sales calls from their lists. In Colorado, as shown in Table F-5, utilities that make customer information available to telemarketers must notify customers of the availability of options to restrict the use of their name, address, and telephone number by third parties.

A related area of concern is the use by telemarketers of automatic dialing and announcing devices (ADADs), which are held in nearly universal contempt. As shown in Table F-11, several states have taken the lead by restricting or forbidding their use, including Arizona, Arkansas, Connecticut, Iowa, Maryland, Montana, Nevada, Oklahoma, Oregon, South Carolina, Virginia, Washington, and Wyoming. In addition, the New Hampshire and Georgia legislatures have sent resolutions to Congress and the FCC proposing regulation of interstate use of ADADs. As shown in Table F-12, Georgia, Kentucky, Louisiana, Maryland, Massachusetts, Montana, New Mexico, Tennessee, Texas, and Wisconsin prohibit the use of ADADs without customer consent. Since the use of ADADs normally involves automatic dialing to an exchange, requiring customer consent effectively prohibits their use. Table F-13 shows that Louisiana, South Dakota, Tennessee, Texas, Utah, and West Virginia prohibit the use of ADADs without registration with the state utility commission, or, in the case of Utah, the State Division of Consumer Protection.

Other states have more narrowly defined restrictions on the use of ADADs. Georgia, Indiana, Louisiana, Maine, Minnesota, New Mexico, South Carolina, South Dakota, Tennessee, Texas, Utah, and West Virginia prohibit using ADADs outside specified hours. Table F-15 shows that Georgia, Idaho, Louisiana, New York, South Dakota, Tennessee, Texas, and Utah prohibits the use of ADADs to unlisted or unpublished numbers.

Another area of concern is the annoying and costly use of facsimile machines by telemarketers. As shown in Table F-21 many states have prohibited their use for unsolicited advertisements, including Connecticut, Florida, Georgia, Louisiana, Maryland,

Montana, Nebraska, Nevada, Oregon, South Carolina, Tennessee, Washington, and Wisconsin. As shown in Table F-22, Utah requires a state-compiled "don't-call-me" list for unsolicited advertising, and as shown in Table F-24, North Dakota, Oklahoma, and Wisconsin prohibit the use of fax marketing outside of specified hours.

Controlling Outflows of Information: None-of-Your-Business Privacy

A more insidious invasion of privacy may concern an individual's control over his or her information outflows, that is, the none-of-your-business aspect of privacy. Violations of none-of-your-business privacy leads to more violations of leave-me-alone privacy by telemarketers and others.[13] Although Caller ID is dealt with earlier in the report as an information inflow problem, it is discussed here as an information outflow problem because the invasion of privacy for an individual from Caller ID occurs as a result of information outflows.

Caller ID and Other CLASS Services

The controversy over Caller ID and the other CLASS services may merely be the first in a series of contests over the reconfiguration of the public switched telecommunications network by local exchange companies. The telephone companies have attempted to portray the new services as tools to enhance the ability of customers to protect their leave-me-alone aspect of privacy. While this may be true for some CLASS services such as Call Trace and Caller ID, detailed information emerging from evidentiary hearings suggests the issues are far more complex. Every customer is a calling as well as a called party. Losing control of personal information including access information (that is, information that would enable others to contact the individual as a calling party) results in a reduced ability to control incoming information. In other

[13] Rhodes, "Privacy and Communications," 10.

words, losing control over the none-of-your-business aspect of privacy can lead to a loss of control over the leave-me-alone aspect of privacy too.

Caller ID, which requires purchase or rental of a display device by the customer, is the most problematic in terms of the none-of-your-business aspect of privacy because it provides transaction-generated information, sometimes in computer-readable form. Devices for hooking up Caller ID display devices to personal computers to develop lists and data bases are already on the market.[14]

Even the other CLASS services are problematic, however. Evidentiary hearings have revealed that certain configurations of Call Return (or Automatic Callback) and Call Reject (or Call Screen) services enable the called party to capture the telephone number of the calling party and violate its leave-me-alone privacy through the telephone or by other means.

For example, "Level Two" Automatic Callback includes an announcement from the switch stating the number, date, and time of the last valid incoming call. This information would enable the called party to make calls to the original calling party, or to obtain the calling party's address from a reverse directory, send mail or even go to that party's residence.

Various number display blocking solutions to the problems posed by Caller ID and other CLASS services have been debated and adopted by state public service commissions. Indeed, the focus of the policy debate has shifted from "blocking versus no blocking" to "what form of blocking."

The lowest form of blocking favored by the telephone companies is per-call blocking. Here, the customer has to act affirmatively to block release of its number to the called party. In the per-line blocking solution adopted most recently by Massachusetts and Indiana (among others), the customer must affirmatively act to request per-line blocking from the telephone company. Once the blocking is in place, all outgoing calls go to their destination with the calling number blocked. Per-line blocking

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[14] H. Kirchhoff, "Status of Caller ID Service and Privacy," Telecom Publishing Group White Paper (1991), 4.

may be offered with a per-call unblocking capability. Here, the customer can unblock the number on a call-by-call basis. Within a proper legal framework, this will enable users of customer information to obtain the consent of customers to use that information in a low-cost and efficient manner. The third solution is default blocking with per-call unblocking. Here, the customer need not affirmatively act to preserve the existing level of privacy. Making a call without any additional steps will result in the number not being delivered to the called party. Should the calling party want to release the number, per-call unblocking can be used. Examples are situations where security screens are in place as in remote banking or remote computer usage, or where a customer desires expedited handling of a service inquiry.

Caller ID and related services continue to raise some fundamental issues for regulators. Are privacy and convenience included in the concept of quality of basic telephone service? If yes, how does Caller ID, a discretionary service, affect the quality of basic service? Subscribers to Caller ID may benefit as called parties but not as calling parties and yet be happy with the tradeoff. Customers who decide not to subscribe to Caller ID receive no benefits but suffer damage to their existing level of privacy as calling parties and are compelled to inconvenience themselves to retain that level of privacy even with per-call or per-line blocking.

The first group of customers, the great majority, will not subscribe to Call Display. They will pay what they paid prior to Call Display (not including any allocation of SS7 and CLASS software costs), but will enjoy lower privacy benefits as calling parties. In no-block Caller ID, they will lose control over their numbers and associated information in all instances, except when they call from pay phones or through the operator. In the latter instances they will incur additional monetary and convenience costs to maintain present levels of privacy. Their benefits as called parties will not be affected.

The second group of customers will subscribe to basic Caller ID only, without the additional measures discussed below, and may enjoy some privacy benefits as called parties. But their privacy as calling parties will be reduced. They will presumably be happier because they have determined that the called-party benefits are greater than the financial costs to them of Caller ID. But they will pay the telephone company more

money than they used to pay. The third group of customers will subscribe to Caller ID and to other services and hardware (for example, "unpublished-in-directories" numbers, outgoing-only lines, reverse directory services, Multi-Ring service) to remedy the problems caused by Caller ID. This last group may come out ahead on called-party and calling-party privacy (especially because everyone else's telecommunication privacy has deteriorated on one or both criteria), but they will pay significantly more. The telephone company wins by selling Caller ID services, and by selling other services to alleviate the problems caused by Caller ID. The individual customer's net gain or loss depends on which of the four classes above best describes him or her.

Questioning the wisdom of allowing the wholesale revision of the ground rules of telephonic interactions by accepting telephone company proposals for Caller ID should not be seen as a rejection of the entire CLASS package or a denial that real problems exist with respect to obscene and harassing calls. Remedies for these problems can be developed that are not too harsh in their effects on privacy. The decision of the New Jersey Board of Regulatory Commissioners to offer Call Trace on a universal basis with a per-use fee of $1.00 is an example of such a remedy. Addressing the leave-me-alone and none-of-your-business aspects of privacy requires attention to be paid to the problem of obscene and harassing calls as well, as discussed in Chapter two.

Other Contexts

As mentioned, state public utility commissions have been faced with privacy issues in a variety of contexts other than Caller ID. As suggested in Chapter two, commissions tend not to provide high levels of privacy to directory information, the logic being that privacy expectations for access information contained in directories are low. Of course, privacy expectations are much higher for unlisted and unpublished telephone numbers. Table A-1 shows the Idaho Commission requires LECs to notify customers of the conditions of release of unpublished numbers. The Washington Commission requires that unpublished directory information be disclosed only with the customer's consent and

after executing a contract limiting the information use to billing and collection purposes for information or enhanced service providers or third-party telephone companies.

Several states have privacy policies concerning the sale of directory lists to third parties, shown in Table A-3. Most policies again are aimed at protecting customers with unlisted or unpublished numbers. Two states have different approaches. The Massachusetts Commission has issued specific customer awareness guidelines concerning the offering of Customer Listing Service by New England Telephone (NET), requiring NET to notify customers of its exclusionary policy which gives customers the option of asking to be removed from lists which would be sold to third parties. As a result, NET discontinued selling its directory lists because many customers requested to have their names removed from the lists.

The Idaho Commission has considered the privacy implications of operator-assisted and computerized directory-assistance services offered by GTE-Northwest that provides (1) the phone number, address, and zip code of a list subscriber whose name is given, or (2) the name, address, and zip code of customers whose telephone number is given. Unlisted and unpublished telephone information is not provided through the service. Listed customers can ask that their name and number not be given out.

Privacy rights over outflows of customer information can become constitutional rights when the outflow is to governmental agencies. In particular, Appendix A reflects increased concern with customer data released to law enforcement agencies. For example, a California statute states a subpoena for personal records maintained by the telephone company is not valid unless it includes a consent to the release by the affected consumer. The California Supreme Court has held that a telephone subscriber with an unlisted number has a legitimate state constitutional expectation of privacy in telephone records showing her name and address. This privacy would be violated by disclosing the information to law enforcement officials. The California courts have even held that obtaining the address of a telephone subscriber from the telephone company without a warrant is an unreasonable search under state law. However, the California courts held that telephone company records of numbers dialed from a criminal suspect's home telephone are obtainable without a warrant. Federal law denies protection of records

obtained by means of a pen register, a trace and trap device. The Idaho Commission has adopted rules on the disclosure of phone company records to law enforcement agencies and on release of conversations automatically recorded by government agencies.

As shown in Table A-2, even though a customer information outflow to a governmental agency is involved, states understandably have made exceptions for the release of unlisted customer information to emergency agencies when E911 is called.

Another area of privacy deals with release of utility billing and usage information. As shown in Appendix B, several states have dealt with this issue, forbidding the release of billing or usage information on individual customers. In some states, however, an exception is made for third parties that require the information for billing telecommunications services to callers. For example, the New York Commission has a rule that designates unlisted billing names and addresses as confidential and cannot be resold except to third parties who require the information for billing telecommunications services to callers. This rule is necessary for information and enhanced service providers and third-party telephone companies, since New York's policy also provides that basic local service will not be cut off if local service charges are not paid. The Washington Commission requires that privacy concerns for nonpublished information be protected and that such information may be disclosed only with the informed consent of the customer after executing a contract between the utility and the third-party telephone company or the information or enhanced service provider that limits the use of the information to billing and collection purposes. The California Commission requires a telephone company to submit a plan for itemized billing for its business customers and to inform them of benefits of various plans based on their actual toll usage.

Table B-1 shows that the Vermont Commission has considered the privacy implications of releasing customer billing and usage information in the context of a residential customer's electricity consumption. The Board found all such customer information should be treated as confidential because that information is no one's business but the customer's. The Board clearly based its logic on the none-of-your-business aspect of privacy. It did recognize, however, that the right to privacy is not absolute and that a balancing test can be applied. The right to privacy yields when the

public at large would substantially benefit from energy conserved as a result of customer electricity usage information released to a third party. The Vermont Commission also used a balancing test to rule that an electric utility cannot release tenants' delinquent billing information to landlords without the consent of the tenant, but that a notice of impending disconnection to landlords would satisfy the balancing test because severe weather makes rental property vulnerable to damage if utilities are disconnected. The California Commission has instituted a rulemaking to establish procedures governing release of customer information to third-party demand-side management providers to develop generic and customer specific conservation opportunities.

As shown in Appendix C and Tables C-1 through C-3, several states have developed policies on the privacy of other personal data obtained by utilities. California's statutes prohibit telephone utilities from making particular data about their residential customers available to third parties without the customer's expressed written consent. The law applies to personal calling patterns, but excludes billing information to the person called. Utility customer credit or personal financial information can be disclosed on Commission order to determine the credit-worthiness of new utility subscribers. Indeed, the state's LECs share a consumer credit information system and its electric and gas companies have started a pilot program to share such information to identify potential credit risks. The theory is that utility customers who do not pay their bills have no legally protected expectation of privacy with respect to the release of their credit data to other utilities. Thus, privacy concerns are balanced against the general public goal of reducing future increases in revenue requirements caused by customers who fail to pay their bills. A recent statute passed in California also allows utilities to release customer service information from a public utility's data base about individuals liable for child or spousal support. Here too, the California legislature has determined that privacy issues are outweighed by other societal concerns. Other aggregate customer information can be disclosed only if individual identities and characteristics have been removed.

The Colorado Commission has regulations concerning the collection and disclosure of personal information. Utilities can only collect information useful to billing

for services, including information on credit-worthiness. A public utility cannot disclose personal information to any third party, unless authorized by the customer. Personal information does not include a person's name, address, listed telephone number, or Standard Industrial Code (SIC) information used for directory publishing.

The New York Commission has adopted eight privacy principles or rules that provide a framework for protecting the rights of consumers when new telephone services are offered on the network. One principle states that unless a caller grants informed consent, subscriber-specific information generated by the use of a telecommunications service should be used only in connection with rendering or billing for that service or other goods or services requested by the customer.

The Pennsylvania Commission has proposed minimum standards of confidentiality to protect customer communications, information, and records. The proposed regulations prohibit disclosure of customer information without the customer's consent, except to the extent necessary to provide service, to protect the legal rights and property of the telephone company, to protect the company or user from fraudulent or abusive use of the telephone service, or to the extent provided for by law.

However, in Alaska, the courts have held that there is no expectation of privacy for electric utility customers for personal data about their names, addresses, and locations where they receive utility services. The court held that a person's name and address alone do not constitute information about which a person can have a reasonable expectation of privacy that society should be willing to recognize.

A few states have addressed the privacy issues associated with Automatic Number Identification (ANI) associated with 800 and 900 number services. The Connecticut Commission approved a six-month experiment for Connecticut Light and Power Company allowing it to use ANI for customer account information. Customers were allowed to opt out. The Department allowed the trial to occur to determine whether customers would benefit from or be troubled by ANI. The Washington Commission staff requested a broader legislative inquiry into privacy issues raised by ANI.

Two state commissions have taken steps to educate the consumer about ANI. The Texas Commission proposed a generic rule that requires all LECs to notify

consumers that dialing an 800 number may release the consumer's number to the called party. And, Richard Kessel, then Executive Director of the New York Consumer Protection Board, has suggested that announcements about the potential disclosure of personal information on 800 and 900 calls either before such calls are answered or in billing inserts.

A final area of concern is the release of Customer Proprietary Network Information (CPNI) without written authorization from the customer. As shown in Table E-1, at least four jurisdictions, the District of Columbia, Florida, Texas, and Washington had proposed or taken some action to require prior written authorization before release of CPNI. However, as noted below, a recent FCC decision appears to preempt the states on the release of this information.

Competitive Implications

The competitive and anticompetitive implications of utility use of customer information are intimately tied to federal and state policies on utility diversification. The primary area of concern, noted earlier, is enhanced services. Because the use of computer technologies combined with transaction-generated information (TGI) makes possible the collection, storage, and manipulation of customer information never before possible, utility use of customer information has direct implications on the competitiveness of enhanced service providers and other services that can be provided through the telecommunications/computer network. Utility use of customer information also has more indirect (but real) competitive implications for any existing or future product or service that can be affected by more perfect market information. As noted above, the availability of a nearly complete census of the population (those served by the franchised monopoly) makes the information it collects invaluable for enhanced services. It also can provide the utility with more market information for the sale of other goods and services. While more complete market information is normally thought of as being procompetitive, it may constitute unfair competition if the information is made available through monopoly conditions and is not made available to potential rivals.

As a part of the final modified judgment implementing the AT&T divestiture, Bell Operating Companies (BOCs) and Regional Bell Operating Companies (RBOCs) were prohibited from entering the enhanced information service market.[15] This prohibition stemmed from a recognition that the owner of essential facilities (that is, facilities that cannot feasibly be duplicated but which are critical to competitors) can deny entry into a market directly by refusing to deal. The same effect can be achieved more subtly by increasing the cost of potential competitors by virtue of their potential rivals' information services on local network access. This power to exclude or control competition indicates market power sufficient for monopolization or attempted monopolization to occur. This analysis is consistent with existing and previously announced Justice Department policies on monopolization.[16]

In a recent action, however, the RBOCs and several other parties, including the Department of Justice, persuaded the District of Columbia Court of Appeals to require a reluctant Judge Harold Greene to remove these restrictions unless he concludes from the evidence that the RBOCs' entry into the enhanced information services market would be *certain* to lessen competition.[17] The Court of Appeals also required the District Court

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[15] United States v. Western Electric Co., 569 F. Supp. 1057 (D.D.C. 1983), aff'd, California v. United States, 464 U.S. 1013 (1983).

[16] William Baxter, "Conditions Creating Antitrust Concern with Vertical Integration by Regulated Industries--'For Whom the Bell Doctrine Tolls,'" 52 *Antitrust Law J.* 243 (1983), as noted in Robert E. Burns, "Antitrust Doctrines: A Touchstone for Regulators of Public Utilities," *Proceedings of the Fourth NARUC Biennial Regulatory Information Conference*, Raymond Lawton, ed. (Columbus, OH: The National Regulatory Research Institute, 1984), 1281-92.

[17] Judge Greene issued a stay of his own decision. However, on October 7, 1991, the District of Columbia Circuit Court of Appeals granted the Motion of the RBOCs and dissolved the district court's stay of its own decision removing the information services restriction. MCI's Petition to the Supreme Court to reimpose the stay was denied by the full Court on October 30, 1991.

to give deference to the evidence presented by the Justice Department.[18] The Justice Department's evidence concludes that no substantial possibility exists for RBOCs to use their monopoly power in the local exchange to impede competition in information services markets. This is because the RBOCs are bound by nondiscrimination provisions of the consent decree and because state public service commissions or the FCC would detect any widespread discrimination **after** it occurs.

However, for the FCC, the state public service commissions, or for both to prevent discrimination (by raising rivals' costs) or to prevent cross-subsidization (by transferring something of value, that is, TGI, from the utility to its diversified enterprise without full compensation) **before** it took place would require structural safeguards. Otherwise, abuses could not be prevented before they occurred; we may have merely created a scenario where the RBOCs would be driven by profit motives to "remonopolize," ultimately making necessary other actions, such as a second antitrust case and divestiture.

In light of the decision allowing RBOCs to enter the enhanced service market, the FCC has recently acted to require BOCs to obtain prior authorization from business customers with more than twenty lines before BOC personnel marketing enhanced information services can access their customer proprietary network information. The idea is that BOCs would be allowed to serve large business customers with enhanced services while protecting large business customers' potentially competitively sensitive CPNI from competitors. In the meantime, the FCC will allow BOCs to offer in the mass consumer market enhanced services through the integrated (bundled or tied) sales of basic and enhanced services. In addition, the FCC ruled that enhanced services are to be treated as nonregulated activities for federal accounting purposes and that it will

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[18] United States v. Western Electric Co., 900 F.2d 283 (D.C. Cir.), cert. denied sub nom. MCI Communications Corp. v. United States, 111 S. Ct. 283 (1990). Requiring a District Court to defer to the "expertise" of the Justice Department turns the legislative history of the Tunney Act on its head. The Tunney Act was enacted to hold in check the Justice Department to keep it from cutting private politically motivated deals in the form of consent decrees that would effectively end an antitrust action and reward the antitrust violator.

require nonstructural (accounting) safeguards to prevent discrimination and cross-subsidization of enhanced services by basic services whenever there are jurisdictionally-mixed enhanced services. Thus, any state requirements that there be structural separation of personnel or facilities for enhanced services, or requirements that there be a separate affiliate with separate books is preempted when it comes to the jurisdictionally-mixed enhanced services. Only state structural separation requirements affecting purely intrastate enhanced services are not preempted.[19]

Unless state public service commissions and the FCC can effectively regulate the RBOCs by policing for discriminatory actions against potential rivals, for discounted rates to customers of potential rivals, and for uncompensated affiliated transactions between the BOCs, RBOCs, and their nonstructurally separated enhanced information service enterprise, RBOCS can be expected to enter, attempt to monopolize, and gradually dominate the enhanced information services market. In light of these recent actions by the federal courts and the FCC, state public service commissions may want to organize regionally to identify and deal with discriminatory actions of RBOCs. Without structural separations, the job will be difficult.

In addition, state public service commissions might consider lobbying Congress to enact legislation guaranteeing that BOCs and RBOCs will act as common carriers providing access to all enhanced service providers. Interconnection is the key and it will not be freely granted by an incumbent to a potential rival. Possible solutions are (1) to exclude BOCs and RBOCs from the enhanced information service market, or (2) to require structural separation and divestiture of enhanced information service providers set up by the BOCs and RBOCs.

State public utility commissions have considered the competitive implications of certain services involving utility use of customer information. For example, issues related

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[19] "In Computer III Remand Action, FCC Strengthens Cost Accounting Safeguards Applying to 'Tier 1' Telcos, Promises Review of Nonstructural Safeguards in Three Years; States Will Be Preempted on More Narrow Basis; CPNI Prior Authorization Rules Are Changed," *Telecommunications Reports* (November 25, 1991): 3-6. An appeal of the FCC action is likely.

to equal access to directory information by competing directory providers have been considered by California, Delaware, Florida, Iowa, Maryland, New Jersey, New York, North Carolina, and Pennsylvania. Because the information was access information found in a directory (which is typically considered to be a utility-related service) most of the decisions favored the utility or its subsidiary. A few states have considered the case of competitive access to billing and usage data. The Colorado Commission, for example, proposed Open Network Architecture rules for telephone companies. The Commission proposed that any nonbilling, customer-specific information not needed to provide the service that is made available to one enhanced service provider be available to all enhanced service providers on equal terms and conditions. The New York Commission has determined that CPNI not otherwise publicly available, such as through directory listing, will not be made available unless the customer consents, because of the potential for anticompetitive nature of selective release. The North Dakota Commission has a docket on equal access to customer information. Florida has a statute protecting against access by competitors of communication providers to proprietary business data. The District of Columbia Commission has required that to prevent cross-subsidization and discrimination, the telephone company must provide enhanced services through a separate subsidiary. The Commission points out that nonstructural separations will be ineffective because it fails to recognize the real value of nonbook transfers of valuable customer information between regulated and unregulated activities.

More is at stake here than antitrust and competitive markets. Policies implemented now will help shape the telecommunications-computer-information services network in the future. At a conference of the Aspen Institute's Program on Communications and Society, divergent stakeholders came together to assess the effect of communications and information revolutions on democratic institutions and values. Conference participants listed the basic goals of the nation's communications system, including a diversity of voices, diversification of ownership, universal access, and ensured privacy. The conference also listed First Amendment goals and values. The first goal listed was a free marketplace of ideas, which subsumed the communication system's goals

of creating a diversity of voices and providing diversification of media ownership.[20] Care should be taken to keep these goals in mind when addressing the competitive implications of telecommunications policies. Whenever possible, public policy should be set to allow a diversity of enhanced and information service providers. Allowing telephone companies or their affiliates to compete as enhanced or information service providers creates an opportunity for an unfair trade advantage if there is less than a total corporate separation (because of the value of TGI collected by the utility on an ongoing basis); it also creates an opportunity for price or quality of service discrimination against enhanced and information service providers in competition with the utility or its affiliate.

State public service commissions and the Federal Communications Commission may want to take a more proactive approach, including federal-state conferences and joint boards that use collaborative processes such as joint problem-solving workshops,[21] to assure that their policies result in a future telecommunications-computer-information services network that will serve the public interest, widely defined to include both procompetitive market and individual privacy concerns.

Some Summary Conclusions About Balancing Privacy and Competitiveness Concerns

Special problems related to privacy and anticompetitive effects arise where there is utility use of customer information. The issues are in many respects similar to those that come about when any private firm collects information about its customers.

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[20] David Bollier, *Electronic Media Regulation and the First Amendment: A Perspective for the Future* (Washington, D.C.: The Aspen Institute, 1991).

[21] For a description of the more proactive approaches that might be used by the state public service commissions and the FCC, see Robert E. Burns, *Administrative Procedures for Proactive Regulation* (Columbus, OH: The National Regulatory Research Institute, 1988). A forthcoming NRRI report on regional regulation will discuss how these procedures might be used in a multistate and state-federal context.

However, there are certain characteristics of a public utility that increase privacy concerns.

First, a utility is in the unique situation of having been granted a franchise area in which it is a monopoly. Its services come close to total saturation (for telephone and electric utilities, this means well over 90 percent penetration). This provides the utility with a near-total population of consumers from which it can obtain information, making a utility's TGI valuable indeed, not only for utility products and services, but for other products and services as well. Thus, information is of interest to competing firms providing utility products and services and to utility affiliates providing nonutility products and services, their competitors, and firms that do not compete with the utility or its affiliates. The information is also of great interest to marketing firms.

While a public utility is not the government but a private firm, an argument can be made that utilities must be held to a higher standard than that contained in the common law of privacy. After all, public utilities are subject to a comprehensive scheme of economic regulation by the government and are franchised monopolies permitted to exist within their franchised service areas because of the regulatory bargain. State governments entered into these regulatory bargains with utilities because utilities are essential facilities that would be inefficient to duplicate. This is particularly true for the telephone local loop, the electric transmission system, and the local distribution systems of gas and electric utilities--sectors that traditionally are natural monopolies. The regulatory bargain imbues utilities as businesses operating in the public interest. This special interest and relationship allow for more pervasive government regulation. As such, it may be that an individual's right to privacy in cases involving a utility should meet more than minimal common law privacy standards.

A utility is expected to collect and use customer information in the public interest, as it is narrowly defined. It is in the public interest, of course, for a utility to use customer information as it plans internally for new or existing utility services. It is also in the public interest to package or market those utility services so that customers can increase their own consumers' surplus.

However, it is not in the public interest (narrowly defined) to allow a utility to use customer information for other nonutility-related purposes without the explicit consent of the customer. This includes providing information to marketing or third-party firms, or passing the information to a utility affiliate that does not provide utility services. In such cases, the utility is taking advantage of its government-granted franchise to collect information that the customer has no choice but to yield because there is no alternative source of utility service. Duplicating the utility's essential facilities is impractical, and moving to another service territory would most likely be inefficient, expensive, and not solve the problem. Thus, the government's involvement in granting a franchised service area for an essential service inherently raises privacy concerns about utility use of customer information for other than justifiable utility planning or utility service marketing purposes to something approaching a constitutional level.[22]

Utility use of customer information for other than justifiable purposes (that is in the public interest narrowly defined) would tend to violate the misappropriation and publicity aspects of the common law of privacy. Although a utility would have collected its TGI in the normal course of serving its customers, using the information for purposes other than the reason it was collected constitutes a conversion without the ratepayers' consent; it violates the "none-of-your-business" aspect of privacy. Information should be used by utilities for the purposes for which it was justifiably collected--utility purposes.

Further utility service offerings beyond Caller ID and the other CLASS services can be anticipated, involving utility collection and use of customer information. These new service offerings will be TGI-rich and take advantage of the "flow" nature of utility networks. While these services certainly will be proposed by telephone companies, they may also be proposed by other utility sectors, for example services involving demand-side management for the electric sector. Each service is likely to have its own privacy and competitiveness implications. State public utility commissions can face these new service offerings in two ways. They can deal with each service on an ad hoc, case-by-case basis,

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[22] A similar argument was made in Justice Douglas' dissenting opinion in Public Utility Commission v. Pollack, 343 U.S. 451 (1952).

or they can develop a set of generic principles on privacy and competitiveness specific enough to give the commission guidance when these new service offerings arise, but flexible enough to let the state commission devise solutions that properly balance both privacy and competitiveness concerns.

As mentioned, at least one state public service commission, the New York Public Service Commission, undertook such a generic docket and produced guidelines or principles for use in considering the competitive and privacy implications of new service offerings. It formulated and adopted eight privacy and competitiveness issues. Succinctly stated, these principles are (1) privacy should be recognized explicitly as an issue to be considered in introducing new telecommunications services; (2) the interest in an open network should be recognized in evaluating alternative means for protecting privacy; (3) companies should educate their customers as to the implications for privacy of the services they offer; (4) people should be permitted to choose among various degrees of privacy protection, with respect to both the outflow of information about themselves and the receipt of incoming intrusions (inflow information); (5) a telephone company offering a new service that compromises current privacy expectations would be obliged to offer a means of restoring the lost degree of privacy, unless it showed good cause for not doing so; (6) considerations of cost, public policy, economics, and technology all bear on the pricing of privacy features, which must be determined case by case; (7) unless a caller grants informed consent, subscriber-specific information generated by the subscriber's use of a telecommunications service should be used only in connection with rendering or billing for that service or for other goods or services requested by the subscriber, and it may not be made otherwise available except as required by law; and (8) privacy expectations may change over time, requiring in some instances changes in telecommunications services; at the same time, changes in telecommunications services, technology, and markets may lead to changes in customers' privacy expectations.[23]

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[23] "N.Y. PSC Requires Both Caller ID Blocking Options, Adopts Eight Privacy Principles," *Telecommunications Reports* (March 18, 1991): 11.

The privacy and competitiveness principles of the New York Public Service Commission represent a good starting point for a discussion of what other state public service commissions might want to consider as guiding principles. The first principle that privacy should be recognized explicitly as an issue to be considered in introducing new telecommunications services is valid not just for telephone utilities. State commissions might also consider whether the introduction of new services by electric, gas, and water utilities has privacy implications because the new services provide the utility with the opportunity to collect and use or disseminate customer information that can be useful for purposes beyond billing or the provision of the service.

The second principle recognizes that privacy can be protected in more or less restrictive ways. For example, per-line blocking without some means of unblocking does not encourage the use of an open network. Also, mechanisms for protecting the privacy of a subscriber might be introduced so that information and enhanced service providers that are not affiliated with the telephone company can gain access to the customer and compete. To encourage the development of an open network, commissions might consider requiring that utilities be functionally and perhaps physically separated from subsidiaries and affiliates that are not providing utility or utility-related services. What's more, it can be argued there ought to be a strictly enforced policy that the telephone utility act as a common carrier without engaging in price or service discrimination for information or enhanced service providers. Likewise, utility affiliates providing other totally unrelated services, such as banking, real estate, or other similar activities, would be separated from the utility.[24] Competitors of the utility's affiliate should have access to customer information in the utility's possession on the same terms as the utility affiliate. For example, if the state commission forbids the transfer of privacy-sensitive

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[24] The Public Utilities Holding Company Act of 1935 would, in most cases, forbid electric and gas utility holding companies from having affiliates that are not related to providing utility services. However, the Act does allow diversification by registered holding companies into areas that are vertically integrated, such as utility engineering, fuel procurement, or mining. For more on this topic, see Robert E. Burns et al., *Regulating Electric Utilities with Subsidiaries*; and a forthcoming NRRI report on telephone regional holding companies.

information from the utility to its affiliate, then the information should not also be available to the competitor. If it appears that state regulation cannot be effective in preventing anticompetitive discrimination against competitors of the utility affiliate, then the state commissions, or the FCC in the case of the RBOCs, might consider divestiture of the affiliates. In the event divestiture is not pursued by the FCC when warranted, an antitrust action might be brought, using the Baxter theory mentioned above.

The third principle is that companies should educate their customers about the privacy implications of the services they offer. Customers will encounter new challenges to their privacy and need information programs on the privacy implications of services such as Caller ID that affect the "none-of-your-business" aspect of privacy. While customers are directly and immediately affected by information inflows, they are often unaware of the insidious nature of information outflows in the form of utility TGI. To the extent that customers are aware of the privacy implications of these information outflows, they need to be educated about their options that block the information outflow or allow the information outflow, as desired by the customer. State commissions might charge the utilities with performing the function of educating the public about the privacy implications and options for new services. In some cases, utilities have and probably will again advocate new services that have potential adverse privacy impacts without providing any explicit means for the customer to protect his or her privacy. If a utility fails to provide unbiased, objective information to customers, the state commission might need to undertake the educational role itself, perhaps with the assistance of the state attorney general's office or other agencies involved in consumer protection. The commission might also send a strong signal that dissemination of such disinformation by a utility violates its duty to act in the public interest.

The fourth principle says that, to the extent possible, the principle of consumer sovereignty should be applied to privacy decisions. Each consumer should be allowed a range of privacy choices for information inflows and outflows. For example, in the case of information inflows, such as harassing and obscene phone calls, customers should be offered Caller ID and Call Trace as well as the option of being listed as not welcoming telemarketers. Listing the customer as not welcoming telemarketers in most cases would

discourage telemarketers from invading a customer's privacy. Call Trace does not prevent the obscene or harassing phone call from occurring, but can act as a general and a specific deterrent in most cases by identifying the caller's phone number immediately.[25]

An example of allowing various degrees of privacy protection when it comes to controlling information outflows concerns the availability of blocking options. If per-call blocking were offered, then on a phonecall-by-phonecall basis, a customer can decide whether to block the outflow of TGI to the called party. Per-line blocking could appeal to those individuals and institutions that place a high value on privacy. In addition to customers who simply select this degree of privacy, certain physicians, undercover police officers, social workers, shelters for battered women, and other similarly situated individuals and organizations could be expected to select per-line blocking. Neither should the use of blocking necessarily undercut the value of a service such as Caller ID. As has been pointed out by Janlori Goldman,[26] transmission of a blocked call conveys its own TGI. It is valuable information to know that a calling party has blocked the call.

The fifth principle is that a telephone company offering a new service that compromises current privacy expectation would be obliged to offer a means of restoring the lost degree of privacy, unless it showed good cause for not doing so. As noted earlier, new service offerings that affect privacy might also be offered by electric, gas, and water utilities, particularly in conjunction with demand side management programs, "smart houses", automatic meter reading, and real time pricing. State commissions might wish to consider extending this principle to all utilities. The principle basically means

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[25] Call Trace might be less effective against callers from public telephones.

[26] Janlori Goldman, Privacy and Technology Project, American Civil Liberties Union, discussant at the "Privacy Issues and the Improvement of the Public Network: Are Conflicts Inevitable?" Session of the Twenty-Third Annual Conference of the Institute of Public Utilities, December 10, 1991, Williamsburg, Virginia.

that if a new service would compromise current privacy expectation some form of blocking the TGI transmitted by the service should be made available and offered as a means of restoring the privacy. It is not "good cause" to contend that the reason for not offering blocking service is that blocking would undercut the value of the new service offering. In such a situation, the principal value of the service is related to a misappropriation of the consumer's "none-of-your-business" privacy. Good cause would occur when blocking was not technically feasible and when the public interest and good from the new service offering outweigh privacy interest lost.

The sixth principle is that considerations of cost, public policy, economics, and technology all bear on the pricing of privacy features, which must be determined case by case. If a new service is offered and a blocking service is made available to restore the degree of privacy lost by the new service, then the greater public interest is served so long as some means for blocking the TGI is simple to implement and inexpensive or free. A utility that offers a new service that compromises the customers' privacy expectations should be required to make some means of blocking information outflows at most a nominal cost to the ratepayer. However, customers who select a higher degree of privacy than the typical customer should be asked to bear the costs of the blocking. The cost of high degrees of privacy has always been borne by those who demand it. As technology changes over time, the costs of all forms of blocking may be reduced.

The seventh principle is that unless a caller grants informed consent, subscriber-specific information generated by the subscriber's TGI should only be used in connection with rendering the utility service, billing for that service, or for other goods or services requested by the customer. Customer-specific information should not be available for purposes other than rendering the utility service or billing for that service, without the customer's informed consent. But, rendering the utility service should be read broadly enough to allow the utility to plan and invest to meet its obligation to provide service at the lowest cost. It should also be read to allow the use of customer information for designing and offering utility services packaged for the individual customer, for example, offering a Call-Canada discount package to a phone subscriber who qualifies for the service. However, customer-specific information should not be made available to

nonutility-related affiliates or third parties without the customer's consent. To do so would be a misappropriation of the customer's privacy interest. However, a state commission might allow the utility to compensate the customer for giving his consent to the transfer of such information either to third parties or to utility affiliates. If the information is made available to a utility affiliate engaged in nonutility-related activities, then it should also be made available to the affiliate's competitors on the same terms and conditions.

The eighth and final principle reminds us that changes in services, technology, and markets may lead to changes in customer's privacy expectations. The point of this principle is simple. The right to privacy is tied to reasonable expectations of privacy. It is a nontrivial right that is not absolute. The right to privacy is consistently being affected by people's reasonable expectations of privacy, which in turn is affected by available utility services, and dynamic forces such as changing technologies and changing markets. With regard to new and developing telecommunications and other utility services, it is important that a balancing occur so that to the maximum extent feasible, an individual's right to privacy is guaranteed as is an individual's right to access the market and to choose among competitors. It is important not to foreclose the new utility services. Rather, state public service commissions must balance the privacy and competitiveness implications of new services so that competitors can arise in nonutility-related services, and so that ratepayers have an affordable option to block undesired information outflows.

State commissions might also consider that the "balance" or relation between privacy and competitive issues is embedded in the question of what will be the essential nature of the network--centralized or highly decentralized. If a highly decentralized network is desirable, the state commissions might petition the FCC to pursue policies that encourage the LECs to provide a market for enhanced information service providers, but provide no such services themselves. The policy would be congruent with common carriage principles and would be the most procompetitive of all policy options. The LECs could also provide authentication services. To successfully implement this

service, the LECs must scrupulously respect the privacy of its customers and not compete with firms providing services over the network and using its authentication services.[27]

Balancing privacy and competitive implications of new services involve issues that are of a quasilegislative nature. Because the services are provided by utilities, privacy and competitiveness issues will usually arise at the state public utility commissions first, rather than at the legislature. Because of the quasilegislative nature of these issues, state commissions might find an adjudicatory administrative process cumbersome for balancing these issues. State commissioners may choose to consider the use of joint problem-solving workshops, negotiated rulemaking and other similar administrative processes that make use of consensus building to balance the interests of the parties.[28]

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[27] For a more thorough discussion, see Rohan Samarajiva and Roopali Mukherjee, "Telecommunication Transaction-Generated Information and Privacy: A Conceptual Framework and Policy Scenarios," presentation to the Sixth Annual Educational Conference of CAMPUT, Banff, Alberta, May 13, 1992.

[28] For a description of these and other available procedures, see Robert E. Burns, *Administrative Procedures for Proactive Regulation* (Columbus, OH: The National Regulatory Research Institute, 1988).

APPENDIX A

STATE COMMISSION ACTIONS ON DIRECTORY INFORMATION ISSUES

TABLE A-1

PRIVACY OF LISTED, UNLISTED, AND UNPUBLISHED DIRECTORY INFORMATION

States	Description of Actions
Idaho	Commission requires LECs to notify customers of the conditions of release of unpublished numbers. (Case No. U-1500-173, Order No. 22576 issued June 1989.)
Washington	The Pacific Northwest Bell Telephone Company (PNB), an affiliate of US West Communications, requested that changes be made in nonpublished service in the wake of the decision in State v. Butterworth (infra above) and in response to changes in the telecommunications industry. PNB argued that there is a significant problem of uncollectibles caused by nonrelease of information regarding unpublished accounts to Information Service Providers (ISPs) (example, the problem of uncollectibles from nonpublished subscribers who use 976 information delivery service). The Washington Utilities and Transportation Commission (WUTC) decided that PNB's arguments were not supported and in the interest of privacy concerns, nonpublished information should only be disclosed with the informed consent of the nonpublished customer and after the execution of a contract (between PNB and the ISP, enhanced service provider (ESP) or telephone company--third party) which limits the use of such information to billing and collection purposes. (WUTC v. Pacific Northwest Bell Telephone Company, Docket No. U-88-2149-T, Decision dated March 22, 1989. 102 PUR4th 396.)

Source: Authors' research.

TABLE A-2

E911 SYSTEMS ACCESS TO UNLISTED INFORMATION

Kentucky	Conditions under which customer data base access or information should be provided by LECs to Kentucky communities who wish to obtain 911 services. When the Commission detariffed 911 CPE and mandated unbundled 911 data base access, South Central Bell announced it would make only 'listed' customers' information available. This meant that communities would not be able to provide 911 service to all their residents. The Commission reconsidered and ordered that unpublished and unlisted customers would have to be notified and specific waiver procedures would have to be established and followed allowing unpublished and unlisted subscribers and all new subscribers to agree in writing before their numbers are given to local governments for E911 service. (In the matter of the sale and detariffing of embedded CPE, Administrative Case No. 269, Phase IV, Order dated December 14, 1989.)
Washington	WUTC granted a petition from US West for a declaratory order to stop Pierce County (one of its customers) from using the company's emergency 911 data base to gain information about a telephone subscriber or number, when no emergency call was made. US West's tariff allows public safety agency access to information about nonpublished numbers. The tariff does not allow reverse line inquiry access (R-ALI) in the absence of an emergency call imminently placed from the subject number. The purpose of the tariff is to assure that the privacy rights of the company's nonpublished customers are maintained. A call to 911 may be seen as a waiver by the calling party of the privacy rights which are associated with nonpublication. The public safety agencies may then respond appropriately to the call for assistance. While state law permits access to some protected communication in certain emergency situations (Chapter 9.73 RCW), the courts have ruled that subscribing to the company's nonpublished service establishes a privacy interest in the information. (State v. Butterworth, 48 Wn.App. 152, 737 P.2d 1297 (Div. 1, 1987).) Pierce County uses the R-ALI service for uses ranging from possible emergencies (telephone company operators reporting possible need for assistance) to circumstances having no apparent emergent need for the access (inquiries initiated by persons who would ordinarily be expected to know a subject's address or other relevant information, such as a close relative or an alarm company providing service to the premises).

TABLE A-2--Continued

Washington--Continued	Information about nonpublished numbers is included in the company's data base. R-ALI access obtains this information regardless of the subscriber's election to pay for nonpublished service. The data base does not screen or block the R-ALI inquiries when nonpublished information is involved, nor does it identify whether the number is nonpublished. WUTC granted US West's petition and declared that the company's tariff did not allow R-ALI in the absence of an emergency call imminently placed from the subject number. (Petition of US West Communications for Declaratory Order, Docket No. UT-910785, 1991 Wash. UTC LEXIS 100; 127 PUR4th 541, October 17, 1991.)

Source: Authors' research.

TABLE A-3

SALE OR LICENSE OF DIRECTORY LISTS TO THIRD PARTIES

States	Description of Actions
District of Columbia	During March 1987 Chesapeake & Potomac Telephone Company of Maryland (C&P) announced its intentions to license the use of published names, addresses and telephone numbers to selected customers. The Office of Peoples' Counsel (OPC) asked for a Notice of Proposed Rulemaking (NOPR) with opportunity for public notice and comment. In addition to the 'opt-out' option that C&P proposed for customers whose names were to be licensed, the OPC asked for an 'opt-in' choice. The D.C. Commission (PSC) dismissed the complaint on the grounds that list services were not utility services and therefore outside its jurisdiction. The PSC stated that it would act if list services were interfering with provision of regulated services or if C&P was improperly discriminating. (In regard to the complaint of the Office of the People's Counsel concerning the sale of customer addresses and telephone numbers by the C&P Telephone Company, Case No. TT87-9, Order No. 8942, DCPSC, February 18, 1988.)
Massachusetts	The Massachusetts Department of Public Utilities (DPU) issued specific customer awareness guidelines on May 2, 1989 regarding New England Telephone and Telegraph's (NET) offering of Customer Listing Service. NET was required to notify customers (in the White Pages directory and through an annual reminder) of its exclusionary policy which gave customers the option of asking for their names to be removed from lists which would be sold to third parties--"companies whose products and services may have been of interest to them." NET was also required to provide the DPU with an annual update on the number of complaints it received regarding the marketing of customer lists. NET began selling its directory lists in February 1990 and sold a total of 105 lists. On September 28, 1990 NET announced that it had discontinued the sale of customer lists because "many customers" had indicated that they wished to have their names removed from these lists. (Letter from DPU to NET detailing customer awareness procedures required in the provision of Customer Listing Service, dated May 2, 1989. Letter from NET to the DPU informing about NET's withdrawal from selling customer lists in Massachusetts, dated November 20, 1990. "Calling all customers: Information about your telephone service," Quarterly bill insert from NET, Vol IV, No.3, November 1990.)

Source: Authors' research.

TABLE A-4

PRIVACY IMPLICATIONS OF OPERATOR-ASSISTED AND COMPUTERIZED DIRECTORY-ASSISTANCE SERVICES

State	Description of Actions
Idaho	Commission approved (in February 1988) two experimental services from GTE-Northwest. The first allowed directory assistance operators to give the phone numbers of up to three businesses listed in the Yellow Pages (YP) of any Idaho phone book. Second, a Customer Name and Address (CNA) service which provided a calling party with the phone number, address and zip code of a listed subscriber whose name is given. CNA also gives the name, address and zip code of customers whose telephone numbers are given. CNA is offered as 'regular'--two listings provided, or 'bulk' where fifteen are disclosed. Unlisted and unpublished telephone information is not provided through these services. In addition listed customers could request that their name or numbers not be given out. To qualify, businesses must obtain a voucher number, then only will name, address and zip code listing be made available. As of June 1989 CNA was made a permanent service offering of GTE-Northwest in Idaho. (Telephone interview with L. Anderson, Idaho Commission, May 29, 1991.)

Source: Authors' research.

TABLE A-5

COMPETITIVE IMPLICATIONS OF COMPUTERIZED (CROSS, REVERSE) DIRECTORIES

States	Description of Actions
Oregon	US West announced that one of its (unregulated) subsidiaries would offer reverse telephone directories and another would sell consumer and business lists and that it would stop reporting revenues from these services. The Commission ordered US West to continue publishing and providing the directories and consumer and business lists because it interpreted the company's move as an attempt "to divert revenues from regulated services to unregulated operations, while leaving substantial costs to be borne by basic service customers." (*Telecommunications Reports*, October 15, 1990, 13. *NARUC Bulletin* No. 42-1990, October 15, 1990, 16-17.)

Source: Authors' research.

TABLE A-6

EQUAL ACCESS TO DIRECTORY INFORMATION BY COMPETING DIRECTORY PROVIDERS

States	Description of Actions
California	Commission denied Donnelley's complaint that Pacific Bell provides more complete, more frequently updated, and more readily useable subscriber information to Pacific Bell Directory (PBD), a wholly owned subsidiary of the defendant, than it provides to Donnelley and that this conduct is unfair, discriminatory and in violation of Pacific Bell's tariffs. Donnelley sought an order requiring Pacific Bell to provide PBD only that subscriber information which is available to independent customers under the terms of its tariffs and to cease to apply the Bell Company exception to nondisclosure of confidential customer credit information to PBD. Donnelly also sought determination that the confidential credit information, barred from release by the Credit Tariff, was only residential subscriber information and did not include business subscriber information. The Commission encouraged Donnelley's vigorous participation in its (List OII) proceeding to review policies in light of the alleged competitive changes in the nature of the directory listings market. "While we do not prejudge the outcome of that review, we believe it possible that our policies could be changed as a result." (The Reuben H. Donnelley Corp. and Dun & Bradstreet Information Resources, a division of Dun & Bradstreet, Inc. v. Pacific Bell (U1001C), Decision No. 9101016, Case No. 88-06-031 (Filed June 21, 1988), 39 CPUC2d 209, January 15, 1991.)
California	Commission proceeding considering on a generic utility-wide basis, whether to alter the present practices to which defendant has been properly adhering and to allow LECs to alter tariffs to satisfy demands of Donnelley and other information users and publishers. Two proceedings on the issue of access to directory listing information involving Pacific Bell (application to offer a new business subscriber information service to make available to all who request, at market prices, all information which Pacific Bell provides to Pacific Bell directories, (*Telecommunication Reports*, February 5, 1990, 17-18) and GTE-California (issue of appropriate compensation from GTE-California to Pacific Bell for use of joint directory assistance data base, (*Telecommunication Reports*, February 5, 1990, 17-18) have been consolidated into this new generic investigation. (Investigation on the Commission's own motion into the matter of competitive access to customer list information, Investigation No. I.90-01-033, Order instituting investigation dated January 24, 1990--currently inactive.)
Delaware	Upon motions by Diamond State Telephone Company, Donnelley's first complaint against Diamond State for equal access to subscriber listings

TABLE A-6--Continued

States	Description of Actions
Delaware--Continued	for directory publishing was dismissed by the Commission. (PSC Complaint Docket No. 293-88.) Donnelley's second attempt to compel access to Diamond State Telephone's customer information was dismissed for failure to state a claim upon which relief could be granted. Donnelley argued that a public utility may not use its control over public utility property or its access to utility customer information to its competitive advantage in an unregulated business. Utilities participating in an unregulated industry must afford competitors equal access to assets, information, etc. under their control by reason of their public utility status or refrain from using those assets, information, etc. in their unregulated endeavors. The Commission asserted that its jurisdiction was restricted to unfair discrimination in the provision of utility service. It was not authorized to require that Diamond offer all the business resources it employs in the production and distribution of its YP directory (not an essential utility service) to the public as a public utility service. However, if Diamond chose to do so voluntarily, then the Commission would be required to ensure that all parties have access in a nondiscriminatory manner. (Donnelley Directory v. Diamond State Tel. Company, Opinion and Order No. 3124, PSC Complaint Docket No. 296-89, January 16, 1990, 110 PUR4th 549 (1990).) Subscriber listing information is not a public utility service, therefore the Commission lacks jurisdiction over the subject matter and, consequently, cannot grant Donnelley relief. Further even if the Commission had jurisdiction in this case, it should decline to exercise such jurisdiction because the public interest does not require that it regulate the licensing of subscriber listing information. (In the matter of Donnelley Directory v. Diamond State Telephone Company, PSC Complaint Docket No. 297-89, March 19, 1990.)
New Jersey	New Jersey Board of Public Utilities (BPU) denied a complaint concerning access to directory information. Donnelley's request for access to New Jersey Bell's expanded customer information, billing services and telephone booths was denied on the grounds that there were antitrust issues and the BPU lacks the power to consider them under state law. (In the matter of the Board's Inquiry into Yellow Pages advertising: Donnelley Directory v. New Jersey Bell Telephone Company, BPU Docket No TC87080798, Order of dismissal dated December 15, 1988.)

TABLE A-6--Continued

States	Description of Actions
Pennsylvania	Donnelley Directory buys Remote Call Forwarding service from Bell of Pennsylvania. Remote Call Forwarding (RCF) provides the ability to measure the volume of calls made to a particular telephone number which appears only in the Donnelley Directory. This enables Donnelley to quantify and notify advertisers about the number of inquiries made to that advertiser's business as a direct result of its advertisement placed in the Donnelley Directory. It enables Donnelley to demonstrate the effectiveness of advertising in the Donnelley Directory. RCF service does not include the provision of this ability although RCF customers can use the service for this purpose. Bell of Pennsylvania failed to provide service to Donnelley on three separate occasions. Donnelley argued that usage billing detail is an integral part of RCF service and failure to provide the details resulted in inadequate service. The Commission denied Donnelley's arguments on the grounds that Donnelley did not contract with the telephone company to receive usage data for any purpose other than to substantiate the usage billing rendered. Although Donnelley wanted the usage data for a secondary purpose, and Bell may have been aware of that secondary purpose, it was not included in the contract between the two companies and therefore when it was not delivered for that purpose no breach occurred. Donnelley requested among other things, that the Commission investigate what Bell of Pennsylvania's Yellow Pages actually received during the period of the billing lapses on RCF accounts that it may have had serviced by the central offices. The Commission concluded that Bell's YP activity did not receive alternative traffic data for any failure to record the customary usage data. (Donnelley Directory, a Division of the Reuben H. Donnelley Corporation v. The Bell Telephone Company of Pennsylvania, 105 PUR4th, 173 (1989).)
Federal	Generally, federal regulators have been faced with issues of competitive access when concerns over directory information have come to their attention. When AT&T's tariff transmittal No. 1941 which proposed electronic directory assistance (EDA) allowing customers with personal computers direct access to LEC data bases without going through directory operators, the Times Journal (provider of directory assistance and reverse directory assistance via printed directories) petitioned the FCC to disapprove of this proposal on grounds that AT&T and the LECs have formed a 'group boycott' to give AT&T exclusive license to EDA access. Further, a complaint was brought to the Antitrust Division by Teleconnect*USA Directory Company, a unit of Telecom*USA Inc. The publishing company requested an inquiry against US West for discriminating in favor of its own subsidiary in the provision of billing and collection services and for discriminating among ISPs in the pricing of subscriber listings. (*Telecommunications Reports*, February 5, 1990, 48.)

Source: Authors' research.

TABLE A-7

PLACEMENT OF INDEPENDENTLY PUBLISHED DIRECTORIES IN LEC PHONE BOOTHS

States	Description of Actions
Pennsylvania	An independent directory provider, Donnelley, competing with Bell of Pennsylvania requested PA Commission to permit placement of its classified directories in Bell's telephone booths. It requested that either Bell's directories be removed from the booths or that Donnelley's directories be placed in the booths with Bell's. (*NARUC Bulletin* No. 17-1987, 23-24.)

Source: Authors' research.

APPENDIX B

STATE COMMISSION ACTIONS ON BILLING AND USAGE INFORMATION ISSUES

TABLE B-1

PRIVACY OF BILLING AND USAGE INFORMATION

States	Description of Actions
New York	The New York Commission has adopted new generic billing and collection rules that sharply limit telephone companies' (telcos') rights to resell billing names and addresses. As of July 1, 1992, the new rules designate billing names and addresses as confidential information that cannot be resold "except to third parties who require the information for billing telecommunications services to callers." If the billing address and service address are the same and are published in the telcos' directories, then the directory listing can be resold for any legal purpose. But if the service and billing names and addresses are different or the customer is unlisted, the information can be used only in conjunction with rendering bills for service, unless the customer gives explicit written consent for other uses. This rule applies to use by telephone companies and their affiliates as well as resale of the information to third parties. By July 1, 1992, telephone companies are required to develop procedures for handling this confidential billing name and address information and devise agreements that will bind third parties to the telcos' procedures for handling confidential information. Telephone companies must devise procedures for requesting a customer's written consent to release the confidential information. (Case No. 90-C-1148, Billing and Collection Services, Issued January 9, 1992. Case No. 90-C-0165, Proceeding on the Commission's motion to review proposed restrictions on the use of interactive network services and billing name and address service.)
Vermont	The Public Service Board set forth a test for determining whether or not customer account information may be released to third parties. "A utility should treat all information it maintains on its customers as confidential. Although disclosure of a residential customer's electric consumption is not likely to be prejudicial in ordinary circumstances, that information is generally no one's business but the customer's, and its privacy ought to be respected. But this consideration is not an absolute. Where a valid public purpose may be served by the release of such information, disclosure ought to be authorized--under appropriate restrictions--at least in the absence of a showing that specific harm would result." Applying the balancing test, the Board decided that the public at large would substantially benefit (for instance, energy conservation) from the release of information regarding customers' electric consumption to a third party. (Petition of Farmers Home Administration for an order to show cause why Central Vermont Public Service Corporation should not be directed to disclose information regarding electric usage for apartments at Green Mountain Apartments in Docket 4697, Order of October 15, 1982 at 2-3.)

TABLE B-1--Continued

States	Description of Actions
Vermont	The Board ruled that an electric utility cannot release tenants' delinquent account information to landlords without the consent of the tenant/ customer, finding that tariff changes failed to adequately consider the personal privacy of tenants. But the Commission stopped short of finding that constitutional rights were violated. The Board distinguished the present case from its decision in Docket 4697 (discussed above) because tenants in the earlier case were given notice of the release and opportunity to comment on it and none objected to it. The Board also recognized that the severe weather conditions in VT made rental property vulnerable to damage if utilities were disconnected. Thus a tariff filing which provided notice of impending disconnection *only* to landlords would satisfy the balancing test requirements. (Tariff filing of Village of Stowe Electric Department requesting a revision to its rules and regulations, Docket No. 4989, heard February 11, 1991, order entered July 17, 1991, VtPSB.)

Source: Authors' research.

TABLE B-2

PRIVACY IMPLICATIONS OF THE USE OF
USAGE PATTERNS TO IDENTIFY CUSTOMERS FOR
DISCOUNT/ENERGY CONSERVATION PROGRAMS

California	The California Commission ordered Pacific Bell to submit (before April 1987) a plan for itemized billing for business customers. In addition, Pacific Bell was required to submit quarterly reports to determine whether it is necessary to inform Call Bonus residential customers about benefits from various Call Bonus plans based on their actual toll usage patterns. (*NARUC Bulletin*, No. 8-1987, 21.)

Source: Authors' research.

TABLE B-3

PRIVACY IMPLICATIONS OF BILLING AND COLLECTING DUES FROM UNPUBLISHED CUSTOMERS WHO USE DIAL-IT SERVICES

Washington	The Pacific Northwest Bell Telephone Company (PNB--US West affiliate) requested that changes be made in nonpublished service in the wake of the Washington decision in State v. Butterworth and in response to changes in the telecommunications industry. PNB argued that there is a significant problem of uncollectibles caused by nonrelease of information regarding unpublished accounts to ISPs (example, the problem of uncollectibles from nonpublished subscribers who use 976 information delivery service). WUTC decided that PNB's arguments were not supported and in the interest of privacy concerns, nonpublished information should only be disclosed with the informed consent of the nonpublished customer and after the execution of a contract (between PNB and the ISP, ESP or telephone company--third party) which limits the use of such information to billing and collection purposes. (WUTC v. Pacific Northwest Bell Telephone Company, Docket No. U-88-2149-T, Decision dated March 22, 1989. 102 PUR4th 396.)

Source: Authors' research.

TABLE B-4

EQUAL ACCESS TO USAGE DATA BY COMPETING INTEREXCHANGE CARRIERS

California	Commission heard arguments from MCI Inc. who claimed that AT&T-California (AT&TC) enjoyed significant advantages not directly related to equal access at end offices. For example, MCI cited AT&T's access to historical customer usage data not available to other competitive carriers, which gives AT&TC significant advantages both in marketing and in ordering of access lines. AT&TC argued that MCI's request for certain usage information from LECs is extraneous to this proceeding. (Order Instituting Investigation on the Regulatory Framework for InterLATA Telecommunications Market, Decision No. 8707017, Investigation No. 85-11-013, Filed November 13, 1985, 24 CPUC2d 541, Interim Opinion dated July 8, 1987.)
Federal	During June 1987 regulators at the federal level adopted equal access policies (Docket 85-348) requiring Bell Operating Companies (BOCs) to provide their IXC customers with, among other things, historical and projected numbers of business and residence telephone lines and average usage per line. The Commission clarified (responding to a request from NYNEX) that the policies were aimed at assisting IXC marketing and planning efforts and thus to enable more efficient use of the public switched network. (Action by the Commission June 3, 1987 by Memorandum Opinion and Order, FCC docket 87-203. Reported in *NARUC Bulletin* No. 29-1987, July 20, 1987, 5-6.)

Source: Authors' research.

TABLE B-5

EQUAL ACCESS TO ALL CUSTOMER INFORMATION
EXCLUDING BILLING INFORMATION

Colorado	The Commission proposes open network architecture (ONA) rules for telephone companies, which included provisions related to customer proprietary network information (CPNI). Any CPNI that is made available to one ESP by the utility should be made available to all ESPs on equal terms and conditions. However, disclosure of customer-specific CPNI used for billing and provisioning purposes by an ESP shall not be subject to this restriction. (Colorado ONA rules, State Register, March 4, 1991. *Telecommunications Reports*, February 25, 1991, 3-4.)

Source: Authors' research.

TABLE B-6

EQUAL ACCESS TO BILLING AND USAGE DATA
FOR ALL ESPs AND ISPs

New York	Recognizing the value of information about a customer's telephone services to any entity selling telecommunications-related services, the New York Commission held that to make that information available to various parties on an unequal basis is inherently anticompetitive. Therefore the Commission required regulated carriers to restrict access to their customer information to the extent that it is not otherwise publicly available (such as through directory listings) unless the customer authorizes its release. The Commission determined that network information at a minimum should include billing name, address, telephone number, and account number, service name, address and telephone number, number of lines purchased, class and type of service, usage data, traffic information and calling patterns, access arrangements and costs, billing information and network topology (system interconnections). (Review of telecommunications industry interconnection arrangements, ONA and Comparatively Efficient Interconnection (CEI), Case 88-C-004, Opinion 89-28, September 11, 1989. *Enhanced Service Outlook*, October 1989, 3. *NRRI Quarterly Bulletin* No. 10:5, 529-30.)
New York	The New York Commission held proceedings on telephone company provision of billing and collection services to third parties and decided to detariff billing and collection services. Among the issues raised by parties were obligations of telephone companies to bill and collect, potential for discrimination between third parties and the effect of deregulation upon customer charges or privacy. (Case No. 89-C-191, Billing and Collection Services, Opinion No. 90-33, Issued December 28, 1990. Order denying petition for rehearing, Issued May 16, 1991.)
North Dakota	Following a 1989 amendment to the telecommunications law (which removes telecommunications companies from rate-of-return (ROR) regulation by the Commission unless a company elects to remain under rate-of-return regulation), the North Dakota Commission assigned separate dockets dealing with cross-subsidies, royalties and monitoring. Among the issues examined in the docket on subsidies was the question of competition. Within this, the Commission was

TABLE B-6--Continued

North Dakota--Continued	concerned with, among other issues, whether the development of competitive markets could be furthered by requiring that LECs provide competitors with information about customers' use of the telephone network so that the competitors may design their services to suit customer needs. However this proceeding remained focused on equal access issues and did not discuss privacy issues. (Case No. PU-2320-90-183, Notice of hearing issued March 19, 1991.)

Source: Authors' research.

APPENDIX C

STATE COMMISSION ACTIONS ON ISSUES CONCERNING RESIDUAL CATEGORY OF CUSTOMER INFORMATION NOT COVERED BY FOREGOING CATEGORIES

TABLE C-1

PRIVACY OF PERSONAL DATA OBTAINED BY UTILITIES

State	Description of Actions
Colorado	The Commission issues regulations concerning the collection and disclosure of personal information obtained by a public utility or telecommunications service provider within the normal course of business. The utility is restricted to collecting only that information which is useful to bill and collect for services including information on credit-worthiness. Customers have the right to review and amend information maintained by the utility about them. A public utility may not disclose personal information to any third party--a person who is neither the customer, public utility, nor public utility affiliate--unless authorization for disclosure has been obtained by the third party from the customer. Personal information is such personally identifiable information obtained through the exchange of information between a person and a public utility from which judgments can be made about that subscriber's character, habits, avocations, finances, occupation, general reputation, credit, health or other personal characteristics. Not included here are a person's name, address, listed telephone number, and Standard Industrial Code (SIC) information used for directory publishing. (Commission rules concerning collection and disclosure of personal information, adopted January 7, 1991, effective March 3, 1991.)
Idaho	Commission rules concerning the privacy of telephone subscriber records and disclosure of records to third parties by telephone utilities have been adopted pending legislative review by the Commission. New rules governing Idaho telco's relations with their customers go into effect September 1, 1990. These rules cover a wide range of topics including deposit, termination requirements, billing and complaint procedures, and notice and quality of service requirements. (Case No. 31.D-89-1, Gen Order No. 181.)
Minnesota	The Commission found that the Company's proposals for changes to its data collection practices were acceptable with some modification--(1) a new training program emphasizing customer privacy and confidentiality of customer records to be attended by all new employees and all current employees working in customer contact positions, (2) performance

TABLE C-1--Continued

State	Description of Actions
Minnesota--Continued	evaluations for personnel working in customer contact positions would include a review of the appropriateness of notations on customers' records (earlier there had been some trouble concerning racial designations used for notations on individual customer records), (3) the company will perform random audit of notations on customer accounts twice each year, (4) the company would work towards limiting internal access to customer account information to employees with customer contact responsibilities. Additionally, the Commission recommended that the company be required to disclose to customers from whom it seeks information, which items they can decline to supply and still receive service. (In the Matter of an Investigation into Northern States Power Company's Customer Data Collection Practices; In the Matter of an Investigation into the Customer Data Collection Practices of Minnesota Utilities, including telephone companies, Docket No. E-002/M-89-818; Docket No. U-999/CI-89-943, 1990 Minn. PUC LEXIS 148, Opinion dated October 8, 1990.)
Minnesota	The Commission held that public utilities have special needs for customer information. For example, utility field personnel must enter customers' homes to read meters, to disconnect services in emergencies, to disconnect service for nonpayment, etc. This creates a need to record any information that helps to ensure the safety of field personnel. Further utilities must cooperate with agencies administering Fuel Assistance or Telephone Assistance programs. This obligates utilities to record such information as the receipt of payments from the sources which discloses the income levels of participating customers. Utilities also have unique advantages in obtaining information from customers. Since they provide essential services they have unusual leverage when requesting customer information. Since they service households as well as individuals, they often receive information on individual customers from third parties--landlords, present and past, former roommates, ex-spouses, etc. These facts raise privacy concerns which are not present in ordinary business transactions. They create situations where the privacy rights of customers conflict with the information needs of utilities. They create

TABLE C-1--Continued

State	Description of Actions
Minnesota--Continued	significant potential for compromising the reliability and relevance of recorded information. The Commission appointed a study group to determine whether or not a rulemaking proceeding should be opened. The study group would determine (1) whether current utility practices should change, (2) what, if any, access and disclosure restrictions should be imposed on customer account information, (3) what, if any, validation requirement should apply to information recorded in customers' records, (4) what information may utilities require as a condition of providing service, (5) what information should utilities be prohibited from requesting or recording. (In the Matter of an Investigation into the Customer Data Collection Practices of Minnesota Utilities, including telephone companies, Docket No. U-999/CI-89-943, Order initiating investigation and establishing study group, data and effective November 8, 1989; 1989 Minn. PUC LEXIS 208.)
Nevada	Commission proposed broader controls on phone companies' use of customer information. Alternate telephone regulations (incentive regulation plan) approved in July 1990 contain strict guidelines on information content handled by LECs. The Commission proposed to extend regulations to all telephone companies, not only those who choose to operate under the alternate regulation plan. Local telephone companies cannot own or control the content of information travelling through its transmission lines unless the Commission determines through public hearings that such control will not impede competition. The regulation would have the effect of controlling telephone company use of customer and competitor information, monitoring potential subsidization of competitive services, placing strict controls on a telco's offering of information services, and requiring a telephone company to demonstrate that safeguards exist to ensure that their operations will not impede competition. (*Telecommunications Week*, 8 No. 27, July 9, 1990, 6; *NARUC Bulletin* No. 52-1990, December 24, 1990, 8-9; *Telecommunications Reports*, March 18, 1991, 14.)

TABLE C-1--Continued

State	Description of Actions
New York	Proceeding on motion of the Commission to review issues concerning privacy in telecommunications, Case No. 90-C-0075, Notice requesting comment on proposed privacy principles, issued November 16, 1990. Opinion dated January 31, 1990. Statement of policy on privacy in telecommunication issued and effective March 22, 1991. (122 PUR4th 10 (1991).) The New York Commission adopted a set of eight privacy principles that provide a framework for protecting the privacy rights of consumers when new telephone services are offered on the network. Most relevant here is Rule 7, which states that unless a caller grants informed consent, subscriber-specific information generated by the subscriber's use of a telecommunications service should only be used in connection with rendering or billing for that service or for other goods or services requested by that subscriber. It may not otherwise be made available except as required by law. Regulated companies will be required to adopt technical measures, operating procedures, and tariff provisions to limit the likelihood that information would be used for unauthorized purposes, either by themselves or by their subscribers. Customers should be permitted to require compensation for the use of information about themselves, but in providing such compensation, consideration should be given to whether similar requirements had been imposed on nonregulated companies.
Pennsylvania	The Pennsylvania Commission adopted an order on March 6, 1991 to promulgate proposed regulations for minimum standards of confidentiality to ensure that all telephone companies and their employees understand what is expected in terms of protecting the confidentiality of customer communications, information and records. The regulations prohibit disclosure of customer information to persons outside the telephone company or to subsidiaries or affiliates of the telephone company except to the extent necessary to provide service, to protect the legal rights/property of the telephone company, to protect the telephone company or a user from fraudulent or abusive use of the service, following a valid subpoena or court order, to the extent disclosure is requested or consented to by the customer or his/her authorized representative, or to the extent that disclosure is required or permitted by law or regulation, and to government entities if the customer has consented to disclosure. Comments to the proposal were due early July 1991. 52 Pa. Code Chapter 63, Section 131-136. (1991). (Published in *Pennsylvania Bulletin* 21 no. 20, May 18, 1991, 2369-73.)

Source: Authors' research.

TABLE C-2

PRIVACY AND EQUAL ACCESS TO CUSTOMER CREDIT INFORMATION

California	Commission permitted local telephone companies to share consumer credit information. Gas and electric companies have a pilot program to share such information with each other, but not with telecommunications utilities. (Decision of the Commission D. 90-12-121 dated March 8, 1991.) See Appendix C.
California	The California Commission directed the seven largest local exchange utilities to participate in a two to three year trial of sharing information on customers who are known credit risks because they fail to pay the closing bill owed to the telephone utility which previously served them. A computerized CCCS will be established, with final details to be worked out by the telephone utilities ordered to participate, but under the specific guidelines and safeguards ordered today to protect customers' privacy. The goal is to increase the amount of billing or revenue collected by the utilities, and thereby reduce the revenue requirement which must be generated from nondelinquent customers to subsidize or make up for those customers who moved failing to pay their bills. Telephone customers who do not pay their bills for telephone service have no legally protected expectation of privacy with respect to the release of their credit data to other telephone utilities. However all telephone customers have an expectation of privacy with respect to their unpublished telephone number, even if they have not fully paid previous serving telephone utilities. Telephone utilities' tariffs have traditionally provided for the release of customer credit-worthiness data to other telephone utilities. But LECs presently do not solicit or exchange credit information on customers who moved without paying their final bills. (Application of the General Telephone Company of California, a corporation, for authority to increase certain intrastate rates and charges for telephone service, and Related Matter, Decision No. 8503017, Application No. 83-07-02 (Filed July 1, 1983), OII No. 83-08-02 (Filed August 3, 1983) 17 CPUC2d 190, March 6, 1985, as Amended August 6, 1986.)

Source: Authors' research.

TABLE C-3

EQUAL ACCESS TO PROPRIETARY BUSINESS DATA FOR COMPETITORS OF COMMUNICATION PROVIDERS

Florida	Commission granted MCI Telecom Corporation's request for Specific Confidential Treatment of the names and addresses of its 900/976 customers. Public disclosure of these names and addresses would provide competitors with valuable market data which could be used to MCI's detriment. Thus not only does the relevant statute require confidentiality of MCI's competitively sensitive material, but given the competitive nature of the 900 market, Commission's failure to do so would interfere with the benefits that vigorous competition provide to consumers. (In regard to Petition of the Attorney General and the Public Counsel to adopt rules governing 900 services, Docket No. 910060-TP; Order No. 24402 dated April 22, 1991. 1991 Florida Commission LEXIS 462; 91-4 FPSC 297.)
Florida	Commission denied Sprint Gateways' request for a Permanent Protection Order but granted its petition for confidential status for the names and addresses of Sprint gateways' 900 information providers. The information was described as commercially valuable proprietary information, the disclosure of which would allow the company's competitors to gain an unfair advantage. (In regard to Petition of the Attorney General and the Public Counsel to adopt rules governing 900 services, Docket No. 910060-TP; Order No. 24404 dated April 22, 1991.)
Florida	Commission granted AT&T Communications of the Southern States, Inc.'s request for Specific Confidential Treatment of the names and addresses of its 900 information providers. Public disclosure of these names and addresses would provide competitors with detailed market information concerning AT&T's activities in the 900 market. Access to this valuable market data could be used to the competitive disadvantage of AT&T. Thus not only does the relevant statute require confidentiality of AT&T's competitively sensitive material, but given the competitive nature of the 900 market, Commission's failure to do so would interfere with the benefits that vigorous competition provide to consumers. (In regard to Petition of the Attorney General and the Public Counsel to adopt rules governing 900 services, Docket No. 910060-TP; Order No. 24349 dated April 11, 1991. 1991 Florida Commission LEXIS 413; 91-4 FPSC 141.)

Source: Authors' research.

APPENDIX D

AUTOMATIC NUMBER IDENTIFICATION ISSUES

TABLE D-1

SEPARATE ANI SERVICE PERMITTED ON PERMANENT OR TRIAL BASIS

Connecticut	The Connecticut Commission approved Connecticut Light & Power and Southern New England Telephone (SNET) to test an ANI-based system for speeding up customer service for those calling in. For six months (August 1, 1990 through February 1, 1991) account information linked with the incoming telephone number would automatically appear on the screen of the representative answering the call. Since customers did not always call from their own phones, representatives would verify information with caller. The Commission required that the companies notify their customers through bill inserts and that customers be allowed to opt not to participate (default participation). Customer questions and complaints were to be reported to the Commission at the end of the test period. The Consumer Counsel opposed the trial on privacy grounds and argued that it should be limited to those who returned postcards agreeing to participate (default nonparticipation). The companies claimed that better service and lower costs could materialize from the use of ANI in handling customer service calls. The Commission allowed the trial because it was intended to determine whether benefits would accrue or if customers would be troubled by the ANI system. (*NARUC Bulletin* No. 28-1990, July 9, 1990, 19.)
Florida	By Order No. 24386, issued on April 18, 1991, Storefinder, Inc., a subsidiary of Domino's Pizza, Inc. was granted authority for limited experimental usage of LEC access and automatic number identification (ANI) services by Southern Bell Telephone and United Telephone. (In regard to the Application of Storefinder, Inc. for a Certificate of Public Convenience and Necessity Authorizing Operation as an Interexchange Telephone Company in Florida, Docket No. 900823-T1; Order No. 24386, april 18, 1991, "Opinion: Order Denying IXC Certificate and Approving Experimental Offering," 1991 Fla. PUC LEXIS 447; 91-4 FPSC 243.)
Florida	The Florida PUC approved Southern Bell's proposed tariffs offering ANI and other associated features. ANI will deliver the calling station's billing number to the called party (the ANI subscriber). Subscription to Uniform Access Number (UAN) will provide a uniform LATA-wide seven digit number for use by subscribers who desire to have a single number available over a broad region that appears to be local to customers.

TABLE D-1--Continued

Florida--Continued	Custom Service Area (CSA) allowing subscribers to limit their market coverage by blocking calls from specified central offices is also permitted. Finally, Call Detail Information will provide a detailed monthly record of terminating traffic to the UAN subscriber. (In re: Proposed Tariff Filing to Provide Trunk Side Access, Uniform Access. Number, Automatic Number Identification, Custom Service Area, and Call Detail Information as Open Network Architecture Offerings by Southern Bell Telephone, Docket No. 910838-TL; Order No. 25096, 1991 Fla. PUC LEXIS 1567; 91-9 FPSC 386, September 24, 1991.)
Michigan	The Public Service Commission approved the application of Michigan Bell to offer a new service, Utility Reporting and Inquiry Service (URIS)--an optional service that will enable regulated utilities to facilitate the handling of customer calls in times of public emergency. URIS consists of two distinct services: transport with Automatic Number Identification (ANI), which may be provided to the regulated utility by an interexchange carrier, and a service address data base that, when used with ANI, will identify the regulated utility customer's service address. The service address data base will include nonpublished and nonlisted numbers. This information will be provided to the utility only for the purpose of facilitating responses to customers' calls, especially in times of emergency. The numbers will not be used or disclosed by the utility for any other purpose. (In the matter of the application of Michigan Bell Telephone for authority to revise its Tariff M.P.S.C. No.2 to provide a new service offering, Utility Reporting and Inquiry Service, Case No. U-10022, 1991 Mich. PSC LEXIS 327, December 5, 1991.)

Source: Authors' research.

TABLE D-2

ANI SERVICES USED IN E911 SYSTEMS

Illinois	Regulators in Illinois authorized E911 systems in several areas which employ Automatic Number Identification, Automatic Location Identification and Selective Routing and Forced Disconnect. These features will allow dispatch personnel to immediately identify the caller's telephone number and address in the event that the caller is unable to communicate information to dispatch telephone personnel. (Village of LaGrange Park, Illinois: Petition for approval of a 911 Emergency Telephone Number System, 1991 Ill. PUC LEXIS 174, May 28, 1992.) Similar systems have been approved for the City of Naperville, the Counties of DuPage and Will; and the Villages of River Forest and Niles.
Michigan	The Commission allowed Michigan Bell to revise its tariff to allow residential names to be furnished to a 911 system in the same manner as business names. (In the matter of the application of Michigan Bell Telephone Company for authority to revise its tariff MPSC No. 2 as it pertains to Universal Emergency Number Service (911) to allow residential names to be displayed on the Public Safety Answering Point Console, Case No. U-9646, Mich PSC, August 9, 1990.)

Source: Authors' research.

TABLE D-3

ANI USED BY 800 AND 900 SERVICE SUBSCRIBERS

Texas	Commissioner Greytok described the Texas Commission's proposed generic telecommunications rule, which requires the Commission to identify and address any relevant privacy interests in any new service before the service is approved. The rule also explicitly addresses Automatic Number Identification and CPNI issues, requiring all LECs to (1) notify consumers that dialing an 800 number may release the consumer's number to a dialed party, and that the LEC holds personal information and (2) solicit and receive permission before selling personal information. (Commissioner M. Greytok's remarks at the 103rd Annual NARUC Convention and Regulatory Symposium, Panel on Privacy and Communications: Problems of Technology, Solutions of Choice, San Antonio, Texas, November 11-14, 1991. *NARUC Bulletin* No. 49-1991, December 9, 1991, 11-12.)
Washington	The Commission requested a broader legislative inquiry into privacy issues raised in the ANI inquiry that also pertain to financial institutions and other industries. ("Telephone Privacy and Automatic Number Identification (ANI)," Staff report and recommendations dated October 15, 1990. Docket No. 89-3194-SI.)
Washington	Commission staff initiated an inquiry (Docket No. 88-2649-SI, Spring 1989) into the provision of Open Network Architecture services which would include services which would display, record and/or store calling telephone numbers. In addition, interexchange carriers began offering interstate services tariffed by the FCC which allowed 800 customers to receive the telephone numbers of all callers. In the fall of 1989, staff recommended that limited exceptions to the unpublished tariff should be allowed and requested that the Commission initiate an inquiry into telephone privacy and ANI. In the wake of FCC's November 1991 order to reimpose Computer III, the WUTC has put a proposal for an intrastate ONA structure on temporary hold. The FCC's decision to preempt state rules on release of CPNI affects the proposed state rule that would give customers the right to restrict access to their CPNI. (*State Telephone Regulation Report*, December 26, 1991, 12.)

Source: Authors' research.

APPENDIX E

ISSUES CONCERNING CUSTOMER PROPRIETARY NETWORK INFORMATION (CPNI)

TABLE E-1

RELEASE OF CPNI MUST FOLLOW WRITTEN AUTHORIZATION FROM CUSTOMER (CURRENTLY PREEMPTED)

District of Columbia	The Commission proposed that C&P require prior authorization by its customers before it releases CPNI to ESPs. (Order issued August 16, 1991; *Telecommunications Reports*, August 26, 1991, 1-3.)
Florida	The PUC denied Southern Bell's request for clarification of its decision concerning CPNI. The Commission held that, with respect to ISP access to CPNI, all ISPs, including an LEC's affiliated ISP, should be required to obtain written authorization from a customer before they can access that customer's CPNI. (In re: Investigation into the statewide offering of access to the local network for the purpose of providing information services, Docket No. 880423-TP, Order No. 23183, Order No. 23183-A, 1990 Fla. PUC LEXIS 819; 90-7 FPSC 39; 90-7 FPSC 232; 114, PUR4th 228, July 13, 1990, as Amended July 19, 1990.)
Texas	The Texas Commission has proposed privacy rules which cover Caller ID, ANI, and CPNI. Regarding CPNI, the rules restrict the release of customer-specific billing and service information to any third party--except for the release of name, address and telephone number for publication in telephone directories--without prior written authorization from the customer involved. (Texas Register, April 1991. Project No. 9547, new substantive rule 23.57. *Telecommunications Reports*, April 15, 1991, 20.)
Washington	In the wake of FCC's November 1991 order to reimpose Computer III, the WUTC has put a proposal for an intrastate ONA structure on temporary hold. The FCC's decision to preempt state rules on release of CPNI affects the proposed state rule that would give customers the right to restrict access to their CPNI. (Docket No. 88-2649-SI. *State Telephone Regulation Report*, December 26, 1991, 12.)
Federal	The federal policy requires that Bell Operating Companies (BOCs) get prior authorization from business customers with more than twenty lines before BOC personnel marketing enhanced services can access the CPNI of such customers. Customers who have more than twenty lines distributed among multiple locations, each of which has fewer than twenty lines, must be treated as subject to the prior authorization rule if it is practically feasible to identify them as having more than twenty lines in total. Where a BOC treats several locations as belonging to the same customer for other purposes, it must do so for CPNI as well. BOCs are required to implement

TABLE E-1--Continued

Federal--Continued	the FCC's prior authorization rule in a nondiscriminatory manner. The twenty-line cutoff is an attempt to balance the equities, to look at where CPNI would be most competitively sensitive--the large business market. In the mass consumer market, that is, for other than large businesses, the FCC reasoned that it is desirable to let the BOCs exploit their marketing advantage, which may result in services being more widely available and customers being better served. (*Telecommunications Reports*, January 6, 1992, 6-8. *Telecommunications Reports*, November 25, 1991, 3-4.) For all other customers, preexisting rules still apply. These establish four basic requirements for the use of CPNI by utilities--(1) utilities must limit the access of their enhanced service personnel to a customer's CPNI if that customer so requests, (2) on customer request, the utilities must release a customer's CPNI to any ESP designated by the customer, and the BOC must make this information available on the same terms and conditions that they make CPNI available to their own enhanced service operations, and (3) if the utilities make nonproprietary, aggregate CPNI available to their own enhanced services personnel, they must make such information available on the same terms and conditions to unaffiliated ESPs. (Order, In the matter of Filing and Review of Open Network Architecture Plans, CC Docket No. 88-2, Phase II, Adopted, 4 FCC Record (1989), 209-301.)

Source: Authors' research.

TABLE E-2

REGULATING/DEFINING RELATIONS BETWEEN
A UTILITY AND ITS AFFILIATES TO CURB
INTRACORPORATE EXCHANGES OF CUSTOMER INFORMATION

District of Columbia	Structural separation for C&P's enhanced services, D.C. Commission tentatively decided August 1991 that requiring C&P to provide enhanced services through separate subsidiaries is necessary to prevent cross-subsidization and discrimination. The Commission proposed to institute a rulemaking proceeding on this requirement. In addition, the Commission will propose that C&P require prior authorization by its customers before it releases CPNI to ESPs. (Order issued August 16, 1991; *Telecommunications Reports*, August 26, 1991, 1-3.)
District of Columbia	The Commission published a White Paper concerning separate subsidiaries arguing for structural separation of Regional Bell Operating Companies' (RBOCs) new competitive and existing monopoly activities. Among other issues, the White Paper criticized methods used in the FCC's fully distributed costs which ignore nonbook transfers of valuable information and resources between regulated and unregulated activities. The Commission defined these nonbook transactions to include (but not be limited to) exchanges of information, reassignment of personnel, access to the financial resources of the regulated utility, access to the trademarks, reputation, organizational and physical ubiquity, goodwill and other tangible and intangible resources of the regulated utility and its corporate parent. Nothing in the FCC's cost allocation rules can require any financial transfer of "payment" by the unregulated side of the LEC's business for information it receives from the utility. "By limiting its attention to the allocation of costs that can be reflected on the LEC's books, the FCC may be missing the far more significant source of integration economies. . .the on-book economies of scope that the LECs so far have identified. . .pale in comparison with the magnitude of potential exchange of resources and information that is not capable of being measured or monitored by any nonstructural device that the FCC has created thus far. ("For Whom Do the Bells Toll? The Case for Separate Subsidiaries," District of Columbia Public Service Commission White Paper, June 1990, ES-3, 42-47.)

TABLE E-2--Continued

Idaho	The 49th Legislature passed the Telecommunications Act of 1988, which provided that at the election of certain telephone companies and as a matter or law for others, the Commission's rate regulation and oversight of many aspects of telephone business would be substantially reduced or eliminated. Yet the Commission retains broad authority over customer relations of all telephone companies operating in Idaho. The law separates services into essential and nonessential offerings and sets down specific rules which protect customers against losing essential service. (*NARUC Bulletin* No. 36-1990, September 3, 1990, 5.)
Iowa	Iowa State Utilities Board (SUB) investigated the relations between utilities, holding companies and affiliates. The investigation covered relations between regulated utilities, holding companies and nonregulated utilities. Also examined provision of nonregulated services such as appliance sales and maintenance by regulated utilities. A similar investigation had begun in 1987 which looked at whether nonutility services were being subsidized. By March 1, 1989 utilities were required to file information including organizational structure, policies and procedures etc. also information on services. (*NARUC Bulletin* No. 1-1989, 12.)
New York	NYNEX filed its restructuring plan with New York Commission ALJ Furlong to eliminate most business dealings between its regulated operating companies and unregulated NYNEX affiliates. The plan was in response to the Commission's invitation to the telephone company to file its own proposal for restructuring, given that affiliate problems were endemic to NYNEX's corporate structure. Under a 'zero transaction rule' the operating companies and NYNEX would not sell or otherwise transfer goods or services except at regulated tariffed rates. Permitted affiliate transactions, subject to regulatory oversight include sale of administrative services for up to $200,000 by telephone companies to affiliates and dealings between operating companies and NYNEX Information Resources Company (NYNEX IRC), which publishes White and Yellow Pages directories. The plan makes it possible to "draw a bright line between the regulated and unregulated sides" (J. Malachowski, Chair, Rhode Island Commission). The unusual plan has drawn much attention from other states. (*State Telephone Regulation Report*, July 25, 1991, 1+.)

TABLE E-2--Continued

North Dakota	The 1989 legislature amended state telecommunications law to remove telecommunications companies from rate-of-return (ROR) regulation by the Commission unless a company elects to remain under ROR regulation. For those who do not choose to remain under ROR regulation, the new law separates telecommunications services into essential services and nonessential services. The law imposes no upper price limits on nonessential services. The price of essential services may be changed according to the essential telecommunications price factor. (Notice of Hearing for S. 2320--Subsidy investigation, Case No. PU-2320-90-183, March 19, 1991.)
South Carolina	The South Carolina Commission has an ongoing project to evaluate the extent of unregulated investments by the state's electric utilities and to establish an approach for protecting ratepayers from any potential harm. Does not mention privacy issues in synopsis. Notes that Commission intends to develop formal guidelines and procedures to insure that ratepayers are not harmed by any unregulated diversification activities; customer information issues may come up here. (*NRRI Quarterly Bulletin* No. 11:3, 302.)

Source: Authors' research.

TABLE E-3

ADVANTAGE FROM THE INTANGIBLE VALUE OF/
UNIQUE ASSETS FROM AFFILIATION WITH A TELEPHONE UTILITY

Maryland	In requiring that the cost allocation manual be used for the purpose of separating the investment, expenses and revenues associated with competitive and other-than-competitive (OTC) services, rules were proposed by C&P, AT&T and Commission staff. Included were rules concerning nonnetwork activities and requiring allocation of revenues and reasonable costs to OTC where C&P uses a unique asset or facility of the network to gain a competitive advantage in a nonnetwork activity (may include customer information or contract, entrenched patronage maintained from a previous regulatory regime, use of logos and goodwill, or the ability to disconnect local phone service). While the Commission does not agree that it has been established that C&P used a unique asset to gain a competitive advantage, it does accept that C&P may indeed have a competitive advantage in providing some of these services. (In the matter of the cost and revenue allocation manual of the Chesapeake and Potomac Telephone Company of Maryland, Case No. 8333, Order No. 69285, July 19, 1991, Filed.)
North Dakota	The question of advantage from the intangible value of a service (could include customer information collected in the provision of a service) was addressed directly in a royalties docket. The Commission asked whether "give advantage to" in N.D.C.C. Section 49-21-02.2 included increased revenues from nonessential and deregulated services that would not occur without the advertising or marketing gains associated with name recognition of the company. Commission consultant Dr. L. Dobesh suggested that "it was doubtful that any advantage would inure to one telecommunications service from the intangible value of another service. Further, Dobesh testified that any intangible value which might accrue to a company should be retained by the company's owners, who produce the value, and not to the company's customers." Commission staff concurred with Dobesh arguing that existing statutory prohibitions would ensure against cross-subsidies from intangibles if any existed. (Case No. PU-2320-90-737, Findings of fact, conclusions of law and order, May 21, 1991.) (Supplemented by telephone interview with Illona Jeffcoat-Sacco, Commission Advisor on Case No. PU-2320-90-183, February 25, 1992.)

Source: Authors' research.

TABLE E-4

USE OF CUSTOMER INFORMATION BY UTILITIES AND THEIR AFFILIATES TO MARKET SERVICES

California	Commission grants interim authority to provide BSEs/CNSs through Pacific Bell's information services group until Commission resolves issues raised such as use of customer information to market BSEs/CNSs, Caller ID and other generic ONA matters. These issues may be resolved in Phase II of A.89-12-010 or other proceedings. (In the matter of the expedited application of Pacific Bell for approval of a state-wide offering of certain Basic Service Elements (BSEs) and Complementary Network Services (CNSs), Decision No. 9012126 dated December 27, 1990, Application No. 90-08-069 filed August 31, 1990. 1990 California Commission LEXIS 1413.)

Source: Authors' research.

TABLE E-5

EQUAL ACCESS TO CPNI REQUIRED FOR ALL ESPs
INCLUDING TELEPHONE COMPANY AFFILIATES
AND INDEPENDENTS

Colorado	The Colorado Commission's policy regarding ONA rules for telephone companies states that any CPNI made available to one ESP by the utility should be made available to all ESPs on equal terms and conditions. Customer-specific CPNI to which a customer has restricted access, under the Commission rules, shall not be disclosed or used for the purpose of joint marketing or enhanced services unless specifically authorized, in writing or orally, by the customer. Such specific authorization by a customer to an LEC to market its enhanced service shall be considered authorization to disclose customer's name, address and telephone number to other ESPs providing compatible alternatives to that enhanced service. Disclosure of customer-specific CPNI used for billing and provisioning purposes by an ESP shall not be subject to this restriction. All aggregate CPNI--CPNI with all customer identifying information removed--made available to the ESP affiliated to the LEC must also be made available to other ESPs under equal terms. (Colorado ONA rules, State Register, March 4, 1991. *Telecommunications Reports*, February 25, 1991, 3-4.)
Florida	The PUC denied Southern Bell's request for clarification of its decision concerning CPNI. The Commission held that, with respect to ISP access to CPNI, all ISPs, including an LEC's affiliated ISP, should be required to obtain written authorization from a customer before they can access that customer's CPNI. With respect to aggregate CPNI, an LEC affiliated ISP should obtain access to such information under the same terms and conditions as other non-LEC ISPs. Personnel of an LEC affiliated ISP should not be allowed to access CPNI possessed by the LEC, unless authorized in the manner described above. The PUC clarified that the intent of the CPNI requirement is to prevent the LEC from using customers' CPNI information as a marketing tool to benefit its own ISP operations regardless of whether the LEC's ISP is integrated or structurally separate. The Commission determined that such a concession would give the LEC's ISP affiliate an unfair competitive advantage. Thus, it concluded that an LEC which is allowed to provide

TABLE E-5--Continued

Florida--Continued	information services on an integrated basis should have the same requirements imposed on it as are imposed on its competitors. The Commission objected to excluding customer name, address, telephone number, and customer premises communication equipment from CPNI. While such information may not be directly related to network uses, it should be a part of the CPNI definition; if it is not, the LEC ISP will have easy access to names and addresses of potential customers. In this event, the information would be useful in initiating contact with potential ISP customers. The LEC ISP competitors would not have this benefit and therefore could be at a competitive disadvantage. The Commission disagreed with the FCC with respect to the status of credit information and claimed that an LEC affiliated ISP would have access to this information only as a result of its integrated structure, not because of any management efficiency or expertise of the LEC ISP. This is not a privilege that the LEC ISP's competitors would have. Contrary to the FCC's opinion, the Commission believes that if the LEC-affiliated ISP is allowed access to credit history information, it will receive an unfair competitive advantage. (In re: Investigation into the statewide offering of access to the local network for the purpose of providing information services, Docket No. 880423-TP, Order No. 23183; Order No. 23183-A, 1990 Fla. PUC LEXIS 819; 90-7 FPSC 39; 90-7 FPSC 232; 114, PUR4th 228, July 13, 1990, as Amended July 19, 1990.)
New York	Review of telecommunications industry interconnection arrangements, ONA and CEI, Case 88-C-004, Opinion 89-28, September 11, 1989. Recognizing the value of information about a customer's telephone services to any entity selling telecommunications-related services, the Commission held that to make that information available to various parties on an unequal basis is inherently anticompetitive. Therefore the Commission required regulated carriers to restrict access to their CPNI (to the extent that it is not otherwise publicly available, such as through directory listings) unless the customer authorizes its release. Determines that network information at a minimum should include billing name, address, telephone number, and account number, service name, address and telephone number, number of lines purchased, class and type of service, usage data, traffic information and calling patterns, access arrangements and costs, billing information and network topology (system interconnections). (*Enhanced Service Outlook*, October 1989, 3. *NRRI Quarterly Bulletin* No. 10:5, 529-30.)

TABLE E-5--Continued

North Dakota	Following the 1989 amendment to the telecommunications law, the Commission assigned a new docket to that portion of S. 2320 which deals with cross-subsidies, royalties and monitoring. Within the docket on subsidies, the Commission was concerned with, among other issues, whether the development of competitive markets could be furthered by requiring that the LECs provide competitors with information about customers' use of the telephone network so that the competitors may design their services to suit customer needs. However, this proceeding remained focused on equal access issues and did not discuss the privacy issues. (Case No. PU-2320-90-183, Notice of hearing issued March 19, 1991, Comments due by June 24, 1991 and reply comments by July 8, 1991.)
Federal	Most recent federal policy requires that utilities get prior authorization from business customers. The federal policy requires that BOCs get prior authorization from business customers with more than twenty lines before BOC personnel marketing enhanced services can access the CPNI of such customers. Customers who have more than twenty lines distributed among multiple locations, each of which has fewer than twenty lines, must be treated as subject to the prior authorization rule if it is practically feasible to identify them as having more than twenty lines in total. Where a BOC treats several locations as belonging to the same customer for other purposes, it must do so for CPNI as well. BOCs are required to implement the FCC's prior authorization rule in a non-discriminatory manner. The twenty-line cutoff is an attempt to balance the equities, to look at where the CPNI would be the most

TABLE E-5--Continued

Federal--Continued	competitively sensitive--the large business market. In the mass consumer market, letting the BOCs take advantage of efficiencies may result in service being more widely available and customers being better served. (Memorandum Opinion and Order," In the matter of Filing and Review of Open Network Architecture Plans, CC Docket No. 88-2 Phase I, Adopted November 21, 1991, adopted December 19, 1991, p. 7670.) These establish four basic requirements for the use of CPNI by utilities--(1) utilities must limit the access of their enhanced service personnel to a customer's CPNI if that customer so requests, (2) on customer request, the utilities must release a customer's CPNI to any ESP designated by the customer, and the BOC must make this information available on the same terms and conditions that it makes CPNI available to their own enhanced service operations, and (3) if the utilities make nonproprietary, aggregate CPNI available to their own enhanced services personnel, they must make such information available on the same terms and conditions to unaffiliated ESPs. (Order, In the matter of Filing and Review of Open Network Architecture Plans, CC Docket No. 88-2, Phase II, Adopted, 4 FCC Record (1989), 209-301.) Further credit information cannot be included in CPNI. Utilities are prohibited from giving customers' unpublished and unlisted telephone numbers to their enhanced services personnel. Utilities are required to use a password/ID system to restrict CPNI access by the affiliated ESP, unless a BOC implemented an alternative scheme for restricting access on demonstration that the password/ID system was not feasible in particular end offices or for particular data bases. Finally, utilities were required to delete or otherwise restrict access to the forwarded-to numbers (Complementary Network Services in call-forwarding services) by BOC enhanced service personnel. (4 FCC Record (1989), 209-301.)

Source: Authors' research.

TABLE E-6

POTENTIAL FOR CROSS-SUBSIDIES FROM BASIC TO ENHANCED SERVICES RESULTING FROM TELEPHONE UTILITIES PROVIDING THEIR AFFILIATES ACCESS TO UTILITY CUSTOMER INFORMATION

District of Columbia	Structural separation for C&P's enhanced services, D.C. Commission tentatively decided August 1991 that requiring C&P to provide enhanced services through separate subsidiaries is necessary to prevent cross-subsidization and discrimination. The Commission proposed to institute a rulemaking proceeding on this requirement. (Order issued August 16, 1991; *Telecommunications Reports*, August 26, 1991, 1-3.)
Minnesota	The Commission held that while it could not conclude that improper cross-subsidization of unregulated activity by regulated operations was occurring, the potential for such cross-subsidization existed. Therefore, gas and electric utilities in Minnesota which offered unregulated sales and service of any kind were required to develop and submit customer brochures clarifying their regulated and unregulated services. Further, utilities were required to file cost separation methodologies and actual 1990 cost separation data for their nonutility appliance sales and service businesses. (Findings and Conclusions, dated August 2, 1991. Order Requiring Further Filings by Utilities, dated August 28,1991. In the matter of an investigation into the competitive impact of appliance sales and service practices of Minnesota gas and electric utilities; Docket No. G,E-999/CI-90-1008, Order requiring further filings in investigation dated May 6, 1991.)
Missouri	In a proceeding concerning the request of an LEC affiliate for a certificate of public convenience and necessity to provide interexchange service in the interLATA market, the Commission focused on the question of subsidies between local exchange and long-distance operations and the potential of unfair advantage that an LEC affiliate may have over its interexchange competitors. The Commission found that the long-distance affiliate had not shown that adequate safeguards existed to ensure that its operations would not be subsidized by the LEC. Specifically, the evidence shows that an absence of safeguards to prevent the affiliate's access to sensitive and proprietary information (which is not available to other interexchange carriers) constitutes a threat to the development of full and fair competition in the interLATA market. The Commission found that the

TABLE E-6--Continued

Missouri Continued	application was not in the public interest and therefore should be denied. (In the matter of the application of United Telephone Long Distance Company of the Midwest for a certificate of public convenience and necessity to provide intrastate interLATA telecommunications services in Missouri. Case No. TA-87-91, 29 Mo. P.S.C. (N.S.) 87-185, July 28, 1987.)
North Dakota	Following the 1989 amendment to the telecommunications law, the Commission assigned a new docket to that portion of S. 2320 which deals with cross-subsidies, royalties and monitoring. Within the docket on subsidies, the Commission is concerned with, among other issues, whether the development of competitive markets can be furthered by requiring that the LECs provide competitors with information about customers' use of the telephone network so that competitors may design their services to suit customer needs. However, this proceeding remained focused on equal access issues and did not discuss the privacy issues. (Case No. PU-2320-90-183, Notice of hearing issued March 19, 1991, Comments due by June 24, 1991 and reply comments by July 8, 1991.)
Oregon	US West announced that one of its (unregulated) subsidiaries would offer reverse telephone directories and another would sell consumer and business lists and it stopped reporting revenues from these services. The Commission ordered US West to continue publishing and providing the directories and consumer and business lists because it interpreted the company's move as an attempt "to divert revenues from regulated services to unregulated operations, while leaving substantial costs to be borne by basic service customers." (*Telecommunications Reports*, October 15, 1990, 13. *NARUC Bulletin* No. 42-1990, October 15, 1990, 16-17.)

Source: Authors' research.

TABLE E-7

IMPLICATIONS OF SHIFTING INFORMATION SERVICES OPERATIONS TO UNREGULATED AFFILIATES OF UTILITIES

New York	A proceeding is instituted to investigate affiliated interest contracts executed between NYT and NYNEX subsidiaries. At the time of this proceeding, NYT had executed four such contracts. This initial investigation focused on the first of these agreements--the contract between NYNEX IRC and NYT whereby the directory operations formerly conducted by NYT are to be conducted by NYNEX IRC. Pursuant to this agreement, NYNEX IRC was to produce, publish, and distribute telephone directories (that is, Yellow and White Pages) for all exchange areas served by NYT. During the five year term of the contract (January 1, 1984 to December 31, 1988), NYNEX IRC receives the right to solicit NYT's subscribers for Yellow Pages advertising. The contract also specifies that billing and collection services are to be performed for NYNEX IRC by NYT, with directory service charges being listed separately on subscriber's bills. The Commission was not convinced that the transfer of NYT's directory operations to NYNEX IRC was justified and thus required the company to submit testimony. (Proceeding on motion of the Commission to investigate affiliated interest contracts between New York Telephone Company and NYNEX subsidiaries, Case 28860, June 26, 1984.)
New York	Commission disapproved the directory publishing agreement (DPA) between NYT and NYNEX IRC on the grounds that NYT failed to take adequate precautions in the DPA to protect the value of its exclusive ownership of the directory listing. Further, the DPA failed to require NYNEX IRC to give NYT accurate revenue, cost, and profit information necessary to determine the value of its directory business at the end of the five-year term. Profits from directory operations remain available as an offset to local exchange rates and courts have consistently recognized the legitimacy of requiring telephone companies to obtain the maximum revenue from their advertising operations to help reduce the revenue obtained from subscribers of telephone service. (Regarding New York Telephone Company, Case No. 28860, Opinion No. 86-10, April 8, 1986, 73 PUR4th 537.)

TABLE E-7--Continued

Oregon	US West announced that one of its (unregulated) subsidiaries would offer reverse telephone directories and another would sell consumer and business lists and it stopped reporting revenues from these services. The Commission ordered US West to continue publishing and providing the directories and consumer and business lists because it interpreted the company's move as an attempt "to divert revenues from regulated services to unregulated operations, while leaving substantial costs to be borne by basic service customers." (*Telecommunications Reports*, October 15, 1990, 13. *NARUC Bulletin* No. 42-1990, October 15, 1990, 16-17.)

Source: Authors' research.

APPENDIX F

ISSUES CONCERNING TELEMARKETING AND THE USE OF AUTOMATIC DIALING AND ANNOUNCING DEVICES (ADADs)

TABLE F-1

STATE LICENSING/PERMIT/REGISTRATION REQUIRED OF TELEMARKETERS

States	Description of Actions
Arizona	Telephone sellers are required to file a verified registration statement with the Secretary of State before soliciting prospective purchasers within Arizona. (Arizona Revised Statutes, Section 44-1272 (1991).) Sellers must also maintain a bond of $25,000. (Arizona Revised Statutes, Section 44-1274 (1991).) Exempted are persons making solicitations for the sale of books, videocassettes through a membership or club, to persons who have previously purchased goods or services from the maker of the call, where solicitation is completed at a later face-to-face meeting, for the sale of telephone answering services, and others. (Arizona Revised Statutes, Section 44-1273 (1991).)
California	A telephonic seller who fails to register with the Department of Justice before soliciting potential purchasers is guilty of a misdemeanor. (California Business and Professional Code, Section 17511.1 (1992), approved by the Governor July 18, 1992.)
Florida	State law requires that all telemarketing companies must obtain a license from the Department of Consumer Services. Telemarketers post a $50,000 surety bond and submit telemarketing scripts and literature to be used in the sales campaign. Exceptions to the law include: isolated transactions that are not part of a marketing campaign, book, periodical and record clubs, cable TV companies, solicitations made on behalf of a regulated business, solicitations by political, charitable, educational, or religious organizations that are registered with the state as nonprofit corporations. (The Florida Telemarketing Act, S. 772, Chapter 91-237, effective September 1, 1991. Florida Statutes Section 364.183(3)(e) (1990).)
Idaho	A telephone solicitor shall register with the Attorney General. (Idaho Code, Section 48-1004 (1992).)
Indiana	A seller must register with the Consumer Protection Division of the Office of the Attorney General. (Indiana Statutes Annotated, Section 24-5-12-10.)

TABLE F-1--Continued

States	Description of Actions
Kentucky	Every solicitor, including all telephone solicitors, shall register with the county clerk of the county in which such solicitations are to occur. (Kentucky Revised Statutes, Section 367-513.)
Maryland	Professional solicitors for charitable organizations must register with the Secretary of State. A bond in the sum of $25,000 must be maintained by the solicitor for the duration of the registration. A written text containing the script to be used by the professional solicitor will be attached in the registration. This text will contain the name of the charitable organization in whose name solicitations are being made, a statement of the charitable purposes for which funds are being solicited, and the fact that the solicitor is a paid fund raiser. (Maryland Annotated Code, Article 41, Section 3-207 (1991).)
Nevada	Expanded the state's telemarketers licensing law to also require state licensing of consultants who specialize in telemarketing. Penalties for telemarketing without license include fines or jail terms. (Chapter 616, *State Telephone Regulation Report*, December 26, 1991, 2.)
Oregon	No telephonic seller shall conduct business without having first registered with the Department of Justice. (Oregon Revised Statutes, Section 646.533 (1991).)
Rhode Island	Solicitations by charitable organizations must follow registration with the Consumer Protection Division of the Attorney General. (General Laws of Rhode Island, Section 5-53-3.2 (1991).)
South Dakota	Every paid solicitor shall register with the Attorney General prior to conducting any solicitations. (South Dakota Codified Laws, Section 37-30-3 (1992).) Applicants for registration must file and have approved by the Attorney General, a surety bond in the sum of $20,000. (South Dakota Codified Laws, Section 37-30-5 (1992).)

TABLE F-1--Continued

Utah	Any person or organization which engages in telephone solicitation must annually register with the Division of Consumer Protection under the Telephone Fraud Prevention Act, (Utah Coded Annotated, Section 13-26-3 (1992)). Nonprofit organizations, public utilities, solicitors selling newspaper or magazine subscriptions, sellers who mail prospective clients catalogs which describe their merchandise, among others are exempted from the registration requirement. (The Telephone Fraud Prevention Act, Utah Code Annotated, Section 13-26-4 (1992).)
Washington	Commercial telephone solicitors must be registered with the Department of Licensing. (Revised Code of Washington, Section 19.158.151 (1991).)

Source: Authors' research.

TABLE F-2

LISTS OF CUSTOMERS WHO DO NOT WANT TO RECEIVE SALES CALLS TO BE MAINTAINED BY STATE AGENCY

Florida	No unsolicited telephone sales calls can be made to any residential, mobile, or pager telephone number which appears in the quarterly listing published by the Division of Consumer Services. Any telephone solicitor or person who offers for sale any consumer information which includes residential, mobile, or pager telephone numbers, except directory assistance services and telephone directories sold by the telephone company and exempt organizations, shall screen and exclude those numbers which appear on the Division's then-current 'no sales solicitations calls' list. (Chapter 92-186, Committee substitute for House Bill 465, approved by the Governor April 10, 1992, effective July 1, 1992.)
Utah	The Division of Consumer Protection shall create and maintain a list of individuals that do not want to receive telephone solicitation calls. The Division shall distribute copies of the list to the telephone solicitors registered with it, and to organizations that compile or sell consumer lists to telephone solicitors. (Utah Annotated Code Section 13-25-3 (1992).)

Source: Authors' research.

TABLE F-3

CUSTOMERS NOT WANTING TO RECEIVE SALES CALLS WILL BE REMOVED FROM TELEMARKETERS' LISTS AND RECEIVE NO FURTHER CALLS

Oregon	If a called party states a desire not to be called again, the solicitor cannot make subsequent solicitations of the called party at that number. (Oregon Revised Statutes, Section 646.563 (1991).) Parties identified in telephone directories that do not wish to receive any telephone solicitation cannot be called for purposes of solicitation. (Oregon Revised Statutes, Section 646.569, Section 646.571 (1991).)
South Carolina	For subscribers who ask not to be called, special procedures will be followed to ensure that these numbers are not dialed again. (South Carolina Code Annotated, Section 16-17-445 (1990).)
Washington	A commercial telephone solicitor will terminate the call within ten seconds if the purchaser indicates he/she does not wish to continue the conversation. If the purchaser indicates that he/she does not wish to be called again by the solicitor or wants to have his/her name and individual telephone number removed from the telephone lists used by the solicitor, the solicitor shall not make any additional solicitation of the called party at that telephone number for at least one year and shall not sell or give the called party's name and telephone number to another telephone solicitor (provided that the solicitor may return the list, including the called party's name and telephone number, to the company or organization from which it was received.) The WUTC will require local telephone companies to inform their customers of this section. (Revised Code of Washington, Section 19.158.110 (1990), Section 80.36.390 (1992).) Exempted are calls in response to inquiries made by the called party, calls made by nonprofit organization to its own members, calls limited to polling or soliciting the expression of ideas, opinions, votes, and business to business contacts. (Revised Code of Washington, Section 80.36.390 (1992).)

Source: Authors' research.

TABLE F-4

UTILITIES ARE REQUIRED TO INFORM CUSTOMERS ABOUT HOW THEY CAN PROTECT THEMSELVES FROM TELEMARKETERS

Louisiana	Local exchange companies (LECs) will provide information for subscribers on how to request no telephone solicitations. Telephone companies are required to inform subscribers annually how to get their names off telephone solicitation lists. (Louisiana Act 707, S. 685 (1990), approved July 20, 1990, effective September 7, 1990.)
New Jersey	LECs are required to inform subscribers through billing inserts once annually and to publish in the telephone directories information on how they may have their names removed from telephone solicitation lists. (New Jersey Public Law 1991, Chapter 150, Assembly Committee Substitute for 1990 Assembly No. 1912, approved May 28, 1991.)
New York	LECs are required to inform customers of the provisions of Section 399-P of the General Business Law, which prohibits consumer telephone calls with exceptions, as it relates to the rights of consumers with respect to telemarketers with an annual notice in customers' billing statements and by publishing a notice in the local telephone directories. (Chapter 581, Senate Bill No. 21013, approved July 24, 1992.)
Oregon	LECs shall inform subscribers of provisions concerning telephone solicitations by annual inserts in billing statements or by conspicuous publication in local telephone directories. (Oregon Revised Statutes, Section 646.565 (1991).)
Washington	LECs are required to inform subscribers of their rights concerning telemarketing through annual inserts in billing statements or conspicuous publication in the telephone directory. (Revised Code of Washington, Section 80.36.390 (1991).)

Source: Authors' research.

TABLE F-5

UTILITIES WHO DISCLOSE CUSTOMER INFORMATION TO TELEMARKETERS MUST NOTIFY CUSTOMERS ABOUT RESTRICTION POLICIES

Colorado	Commission requires that a public utility (who makes lists of customers' names, addresses, and telephone numbers available to third parties for purposes of telemarketing) shall inform customers of the availability of options to restrict the use of their name, address, and telephone number by a third party. This is to be a one-time notification in writing, specifying the availability of telemarketing restriction service and of nonlisted and nonpublished service where applicable. All new customers will be so notified at the time of establishment of service connection. (PUC rules concerning collection and disclosure of personal information, adopted January 7, 1991, effective March 3, 1991.)

Source: Authors' research.

TABLE F-6

DELINEATING WHEN A TELEPHONE SALE IS COMPLETE

Arizona	The purchaser may cancel a telephone solicitation unless informed orally and in writing of the name, address, telephone number of the seller and advised orally of the right to cancellation along with written notice containing the information that purchasers may cancel within three business days from the delivery of merchandise with assurance of full refund within ten days after notice of cancellation is received by the seller. (Arizona Revised Statutes, Section 44-1276 (1991).)
Idaho	A telephone solicitor shall allow a purchaser to cancel an order within three business days after receipt of written confirmation of these rights from the solicitor. (Idaho Code, Section 48-1004 (1992).)
Indiana	A purchaser has the right to cancel a sale for seller's noncompliance with registration requirements. (Indiana Statutes Annotated, Section 24-5-12-18.)
Kansas	Any verbal agreement made by a consumer to purchase goods/services from a telemarketer shall not be valid and legally binding unless the telemarketer receives a signed contract that discloses terms of the sale agreed upon, from the consumer. Until receipt of the signed agreement is received by the telemarketer, the customer can cancel his/her order, demand refund of down payments, return goods, etc. Exempted from these provisions are cases (1) where the sale follows negotiations made by the consumer during a visit to the seller's permanent location where goods are displayed or offered on sale on a continuing basis, (2) where a clear preexisting business relationship exists between the telemarketer and the customer and as a result of which the business name, address, and telephone number of the solicitor have become known to the customer, and (3) where purchase of goods follows examination of an advertisement or sample which divulges information (name, address, telephone number) about the telemarketer and full details of the goods or services. (Kansas Consumer Credit Code, Chapter 70, Senate Bill 133 (1991).)
Maryland	Contracts pursuant to telephone solicitations are invalid and unenforceable unless the contract is in writing and signed by the consumer, contains the name and address of the seller, and has a detailed description and prices of the goods and services being sold. These shall match descriptions provided by the

TABLE F-6--Continued

Maryland--Continued	seller and shall not exclude from its terms any oral or written representations made by the merchant connected with the transaction. (Maryland Commercial Law Code Annotated, Section 14-2203 (1991).) No charges can be submitted to a consumer's credit account unless a signed copy of the contract is received from the consumer. (Maryland Commercial Law Code Annotated, Section 14-2204 (1991).)
Mississippi	Any subscription agreement for the purchase of magazines or other periodicals made in a telephone solicitation initiated by the seller, and agreed to by the purchaser is subject to cancellation by the purchaser. Cancellation could be requested within six months after the date of the first invoice for the cost of the subscription is received. The request for cancellation must be in writing and is effective upon receipt by the seller. (Mississippi Coded Annotated, Section 75-24-131 (1991).)
Oregon	No enforceable contract may be formed by a telephone solicitation sale unless the seller receives a signed contract containing all terms of the agreement between parties. (Oregon Revised Statutes, Section 83.715 (1991).)
Washington	Purchase of goods or services following a telephone solicitation, if not followed by written confirmation, is not final. Consumers must be given three business days to cancel after receipt of the confirmation. (Revised Code of Washington, Section 19.158.120 (1991).)

Source: Authors' research.

TABLE F-7

RESTRICTING TELEMARKETING TO PARTICULAR DAYS AND HOURS

Minnesota	A caller shall not make any commercial telephone solicitations before 9 am or after 9 pm. (Minnesota Statutes, Section 325E.30 (1991).)
North Dakota	State law prohibits telemarketing of goods and services on Sunday. (North Dakota Century Code, Section 12.1-30-03 (1991).)
South Carolina	State law requires that unsolicited customer telephone sales calls be allowed only between 8 am and 9 pm. (South Carolina Code Annotated, Section 16-17-445 (1990).)
Texas	Solicitations must be made after noon or before 9 pm on Sundays and after 9 am or before 9 pm on weekdays and Saturdays. (Texas Business and Commerce Code, Section 37.02 (1992).)

Source: Authors' research.

TABLE F-8

TELEPHONE SOLICITORS MUST IDENTIFY THEMSELVES TO CALLED PARTIES IMMEDIATELY

Arizona	Telephonic sellers will disclose the address and name of the person or organization on whose behalf the solicitation is being made as well as the physical location from where the solicitation is being made. (Arizona Revised Statutes, Section 44-1276 (1991).)
Georgia	Persons soliciting charitable donations from consumers must disclose name and location of the solicitor and whom the solicitation benefits at the time of the solicitation. (Official Code of Georgia, Section 16-9-54 (1991).)
Kansas	Any solicitor who makes an unsolicited consumer telephone call must identify himself/herself immediately upon making contact. (Kansas Statutes Annotated, Section 50-670 (1991).)
New Jersey	Any person who solicits funds or a contribution or who sells goods or services, shall clearly and affirmatively disclose at the outset of the communication--for charitable solicitations, the name and address of the organization on whose behalf and in what manner the charities collected will be utilized. For the sale of goods or services, the identity of the person being represented by the solicitor and the kinds of goods or services being offered for sale. (New Jersey Statutes, Section 2A: 170-20.11 (1991).)
New York	No person shall place any consumer telephone calls unless the solicitor states at the beginning of the call, the nature of the call, and the name, address, and telephone number of the person on whose behalf the solicitation is being made. (New York General Business Law, Section 399-P, approved and effective July 24, 1992.)
Oklahoma	The name and business affiliation of persons engaging in solicitation of any item shall be given to the called party immediately and prior to any solicitation. The telephone number of the solicitor must be given upon request of the called party. These provisions do not apply to calls between persons known to each other, to religious groups or nonprofit organizations within their own membership, and to political activities. (21 Oklahoma Statutes, Section 1861 (1991).)

TABLE F-8--Continued

Oregon	At the time of the solicitation, and prior to consummation of any sales transaction, the solicitor shall provide the street address from where the solicitor is calling. (Oregon Revised Statutes, Section 646.557 (1991).)
South Carolina	Initiators of unsolicited telephone sales calls will identify themselves immediately after contact is made; the purpose of the call should be stated within thirty seconds of beginning conversation, the called person should be given the opportunity to respond, and if the response is negative, the call should be discontinued. Exceptions include calls made in response to prior requests of the person called, to pursue an existing debt, and calls to any person with whom the solicitor has had a business relationship. (South Carolina Code Annotated, Section 16-17-445 (1990).)
South Dakota	Telephone solicitors shall disclose immediately upon making contact, the name of the person or organization making the call, the purpose of the call, and the goods or services being offered. (South Dakota Codified Laws, Section 37-30-26 (1992).)
Texas	A telephone solicitor may not solicit a consumer unless the solicitor identifies himself/herself and the purpose of the call immediately after making contact with the consumer. (Texas Business and Commerce Code, Section 37-02 (1992).)
Washington	A person making a telephone solicitation must identify himself/herself and the organization on whose behalf he/she is soliciting within thirty seconds of connection. (Revised Code of Washington, Section 80.36.390 (1991).)

Source: Authors' research.

TABLE F-9

TELEMARKETING TO UNLISTED NUMBERS

Florida	Sales calls to unlisted numbers are prohibited. (H.R. 317, Chapter 90-143.)

Source: Authors' research.

TABLE F-10

ISSUES CONCERNING TELEMARKETING FRAUD

Georgia	In making a telephone solicitation for the sale of goods or services or for seeking charitable contributions, it shall be unlawful to make false statements concerning the purpose of the solicitation, the persons representing the solicitor or the person benefitting from the solicitation. (Official Code of Georgia, Section 16-9-54 (1991).)
Idaho	Idaho Telephone Solicitation Act passed as remedial legislation to safeguard the public against deceit and financial hardship, to insure, foster, and encourage competition and fair dealings among telephone solicitors by requiring adequate disclosure and by prohibiting representations that have the capacity of misleading a purchaser. (Idaho Code, Section 48-1001 (1992).) It is unlawful for a telephone solicitor to intimidate a person of normal sensitivities, to refuse to disconnect after requests from the called party, to misrepresent the price, quality, or availability of goods and services, or imply that the solicitor has a valid registration when she/he does not. (Idaho Code, Section 48-1003 (1992).)
South Carolina	The cost of merchandise, acceptable payment plan, and shipping and handling charges must be explained to the purchaser by the solicitor at the time of the solicitation. (South Carolina Code Annotated, Section 16-17-445 (1990).)
Washington	The state legislature found that the widespread practice of fraudulent commercial telephone solicitation is vitally affecting the public interest. The commercial use of telephones must therefore be regulated by law. (Revised Code of Washington, Section 19.158.010 (1991).)

Source: Authors research.

TABLE F-11

PROHIBITING/RESTRICTING THE USE OF
AUTOMATIC DIALING AND ANNOUNCING DEVICES (ADADs)

Arizona	A person cannot use an automated system for selecting and dialing telephone numbers and the playing of a recorded message for the purposes of soliciting persons to purchase goods and services or requesting survey information if the results are to be used directly for the purpose of soliciting persons to purchase goods. (Arizona Revised Statutes, Section 13-2919 (1991).)
Arkansas	The legislature found that a number of individuals and firms were using the telephone system for making automated telephone solicitations which invade the privacy of individuals and impose unsolicited and undue burdens upon thousands of individuals. (Arkansas Statutes Annotated, Section 5-63-201 (1992).) It shall be unlawful for any person to use a telephone to offer goods and services for sale or for conveying information regarding goods and services to solicit a sale or for soliciting information for any purpose connected with a political campaign when such use involves an ADAD. Exceptions are using ADADs to inform purchasers of availability of goods and services for delivery to purchasers, to convey information concerning delay or the status of a purchase order previously made. Also excluded are calls using ADADs which respond to calls initiated by the recipient of a call using an ADAD. (Arkansas Statutes Annotated, Section 5-63-204 (1992).)
Connecticut	The scope of a 1989 state law which bars unsolicited facsimile-delivered advertising messages is expanded to entirely prohibit the use of ADADs for delivery of unsolicited, prerecorded advertising messages. (H.R. 5745, Public Act 90-282.)
Iowa	The use of ADAD equipment is prohibited. Exceptions include: calls made by nonprofit organization or relating to payment for previously ordered goods (prior business relationship), collection of lawful debts, calls to employees of organizations making the calls, use of an initial prerecorded message prior to live operator intercept, and calls that terminate within ten seconds after receipt of the call which the recipient tries to disconnect. (Iowa Code, Section 476-57 (1991).)

TABLE F-11--Continued

Maryland	The use of ADAD equipment for soliciting persons to purchase, lease or rent goods or services, or for offering a gift or prize or for conducting a poll, or requesting survey information for direct use in soliciting persons is prohibited. Exceptions include use of ADADs by an agency of the federal, state, or local government for emergency purposes, calls to persons who have preexisting business relations with the solicitor, or with the consent of the person called. (Maryland Laws, Chapter 475, Senate Bill No. 411, approved May 26, 1992, effective October 1, 1992.)
Montana	A person may not use ADADs for the selection and dialing of telephone numbers and playing of recorded messages for the purpose of offering goods and services for sale, conveying information on goods or services in soliciting sales or purchases, soliciting information, gathering data, or promoting a political campaign. Exceptions include ADAD use for the purpose of information purchasers of pertinent information concerning pending purchases, responding to inquiries by persons, providing information where a business relationship exists, or where permission of the called party is obtained by a live operator before the recorded message is delivered. (Montana Code Annotated, Section 45-8-216 (1992).)
Nevada	A person cannot use an ADAD to solicit a person to purchase goods or services, to request information if that information is to be used directly to solicit a person to purchase goods or services. Exceptions include use of ADADs to dial the telephone number and play a recorded message to a person with whom the solicitor has had a preexisting business relationship. (Nevada Revised Statutes Annotated, Section 598-075 (1991).)
Oklahoma	The use of ADAD equipment for sales solicitation purposes is flatly prohibited by law. (*State Telephone Regulation Report*, December 26, 1991, 2.)
Oregon	State law prohibits the use of computer-activated recorded messages for commercial solicitation. This prohibition does not apply to public opinion polling, calls by charitable organizations and public agencies, or to calls made to a person in response to a request or inquiry from that person. (*NARUC Bulletin*, No. 28-1990, July 9, 1990, 6-7. *State Telephone Regulation Report*, December 26, 1991, 2.)

TABLE F-11--Continued

South Carolina	House Bill 3140 amends Section 16-17-446 concerning ADADs to include calls of a political nature, (that is, it prohibits the use of ADADs for political campaigning to the same extent and with similar exceptions as for the use of ADADs for other purposes). (Act 89, South Carolina Regular Session, H.R. 3140, Ratification No. 151, in Senate May 21, 1991, approved by the Governor May 27, 1991.)
Virginia	The use of ADAD equipment for sales solicitation purposes is flatly prohibited by state law. (*State Telephone Regulation Report*, December 26, 1991, 2.)
Washington	No person may use an ADAD for purposes of commercial solicitation. An ADAD is a device which automatically dials telephone numbers and plays a recorded message once a connection is made. Commercial solicitation means the unsolicited initiation of a telephone conversation for the purpose of encouraging a person to purchase property, goods, or services. The WUTC may adopt additional rules regulating ADADs. (Revised Code of Washington, Section 80.36.400 (1990).)
Wyoming	No person shall use an ADAD for offering goods or services for sale, conveying information on goods or services, for soliciting information, gathering data, or promoting political campaigns. This section shall not prohibit the use of ADADs for the purpose of informing purchasers about pertinent information concerning purchases, or responding to an inquiry from the called party. (Wyoming Statutes Annotated, Section 6-6-104 (1992).)

Source: Authors' research.

TABLE F-12

USING ADADS WITHOUT CUSTOMER CONSENT

Georgia	It is unlawful for any person, organization, or agent thereof to direct a person to use ADADs for the advertisement or offering for sale of any goods or services or for conducting polls or for soliciting information where consent is not priorly received. When a recipient gives consent to a call made with an ADAD, consent will apply to a particular call alone and must be in writing. (Official Code of Georgia Annotated, Section 46-5-23 (1991).)
Kentucky	The use of ADADs is prohibited unless the recipient consents to it. Consent applies to a particular call alone and can be obtained by a live operator, using the telephone keypad, or by prior written consent. (Kentucky Revised Statutes, Section 367-463, effective July 14, 1992.)
Louisiana	It is unlawful for any person to use or employ any other person to use ADAD equipment or to use a live wire operator to make calls to advertise or offer for sale, lease, rental, any goods or services or for the purpose of conducting polls or for soliciting information when consent is not received prior to the invitation to buy, lease, or rent. (Louisiana Revised Statutes, Title 45, Chapter 8-B, Section 811, Consumer Telemarketing Protection Act of 1991).)
Maryland	Use of ADADs is permitted with the consent of the person called. (Maryland Laws, Chapter 475, S. 411, approved May 26, 1992, effective October 1, 1992.)
Massachusetts	State law allows customers to inform the telephone company that they wish to be on a list which excludes them from telemarketing using ADADs. However the law does not require telemarketers to ask the telephone company for such a list. (*New York Times*, March 3, 1990, A:48:1.) Commission policy requires that customer information lists not be used for ADADs. Lists cannot be resold, massaged/combined with such information as demographics or psychographics. Generally, telephone customers must be given the opportunity to remove their information from lists. Thus, if a customer's information is on a list, it is generally with his/her consent. (NRRI survey response.)

TABLE F-12--Continued

Montana	Use of ADADs is permitted where consent of the called party is obtained by a live operator before the recorded message is delivered. (Montana Code Annotated, Section 45-8-216 (1992).)
New Mexico	Telemarketing by ADAD is prohibited unless the called party is given an opportunity to consent to hearing the recorded sales pitch. (New Mexico Statutes Annotated, Section 57-12-22 (1992).)
Tennessee	It is unlawful for any person, organization, or agent thereof to direct a person to use ADADs for the advertisement or offering for sale of any goods or services or for conducting polls or for soliciting information where consent is not priorly received. When a recipient gives consent to a call made with an ADAD, consent will apply to a particular call alone and must be in writing. (The Consumer Telemarketing Protection Act of 1990, Tennessee Code Annotated, Section 47-18-1502 (1991) effective July 1, 1990.)
Texas	Solicitors will comply with subscribers who do not wish to receive calls. (The Public Utilities Regulatory Act, Texas Revised Civil Statutes, Article 1446c (1992) Article XV, Section 119.)
Wisconsin	No person may use an electronically prerecorded message in telephone solicitation without the consent of the person called. (Wisconsin Statutes, Section 134-72 (1989-90).)
Federal	The Automated Telephone Consumer Protection Act bans autodialer calls to homes outright unless the called party consents. The burden is on those wishing to receive these calls. Solicitations to businesses are excluded from the prohibition and state law is not preempted. (1991 S. 1462, Public Law 102-243, 105 Statute 2394, approved December 20, 1991.)

Source: Authors' research.

TABLE F-13

USING ADADS WITHOUT REGISTRATION

Louisiana	Telemarketers who employ ADADs are required to register with the State Utility Commission before using the devices. A surety bond of $10,000 must be posted by telemarketers. ADADs must also be used only within restricted hours. The law also bans telemarketing by ADAD unless the called party is given an opportunity to consent to hearing the recorded sales pitches. (Consumer Telemarketing Protection Act of 1991, Louisiana Revised Statutes, Title 47, Chapter 8-B, Section 811.)
South Dakota	Telemarketers who employ ADADs are required by state law to register with the Public Utility Commission. They are required to disclose the name, address, and telephone number of the registrant and the nature of the solicitation among other details. (South Dakota Codified Laws, Section 37-30-25 (1992).)
Tennessee	Prior to using ADADs to call numbers located within Tennessee, anyone planning such use must register with the Commission to receive a permit. A surety bond of $10,000 is to be maintained in effect. (The Consumer Telemarketing Protection Act of 1990 Tennessee Code Annotated, Section 47-18-1503 (1991) effective July 1, 1990.)
Texas	ADADs which play recorded messages to a number are prohibited unless those using the device get a permit from the Commission. (The Public Utilities Regulatory Act, Article XV, Section 113, Texas Revised Civil Statutes, Article 1446c (1992).)
Utah	Anyone who uses ADADs for telephone solicitation must register with the state division of Consumer Protection. A solicitor need not register separately on behalf of each client it represents, nor if an ADAD is either used to place solicitation calls to existing customers or to call concerning goods or services previously ordered by customers. (Utah Annotated Code Section 13-25-3 (1992).)
West Virginia	Users of ADADs must be registered with the Utility Commission. (*NARUC Bulletin* No. 2-1992, January 13, 1992, 11.)

Source: Authors' research.

TABLE F-14

USING ADADS OUTSIDE SPECIFIED HOURS

Georgia	It is unlawful for any person, organization, or agent thereof to direct a person to use ADADs for the advertisement or offering for sale of any goods or services or for conducting polls or for soliciting information if the call is not between 8 am and 9 pm. (Official Code of Georgia Annotated, Section 46-5-23 (1991).)
Indiana	A caller may not use an ADAD so that a subscriber receives a telephone call before 9 am or after 8 pm. (Indiana Statutes Annotated, Section 24-14-8.)
Louisiana	It is unlawful for any person to use or employ any other person to use ADAD equipment or to use a live wire operator to make calls to advertise or offer for sale, lease, or rental, any goods or services or for the purpose of conducting polls or for soliciting information when calls are not between 8 am and 8 pm Mondays through Saturdays. Calls made on state holidays and Sundays are prohibited at any time. (Consumer Telemarketing Protection Act of 1991, Louisiana Revised Statutes, Title 45, Chapter 8-B, Section 811.)
Maine	Bill confines the use of ADADs for unsolicited sales calls to between 9 am and 5 pm weekdays. The law also prohibits autodialed solicitation calls to emergency numbers as well as mobile phone numbers and direct inward dial phone numbers of multiline office phone systems. ADADs which cannot be programmed to skip forbidden numbers are barred. (H.R. 1421, Public Law 775.)
Minnesota	A caller shall not use an ADAD before 9 am or after 9 pm. (Minnesota Statutes, Section 325E.30 (1991).)
New Mexico	Calls using ADADs must be received before 9 pm and after 9 am. (New Mexico Statutes Annotated, Section 57-12-22 (1992).)
South Carolina	Commercial uses of ADADs for debt collection or customer follow-up calls are limited to the hours between 8 am and 7 pm. (South Carolina Code Annotated, Section 16-17-446 (1990).)
South Dakota	Solicitations using ADADs are permitted only between 9 am and 9 pm weekdays. (South Dakota Codified Laws, Section 37-30-28 (1992).)

TABLE F-14--Continued

Tennessee	It is unlawful for any person, organization, or agent thereof to direct a person to use ADADs for the advertisement or offering for sale of any goods or services or for conducting polls or for soliciting information if the call is not between 8 am and 9 pm. (The Consumer Telemarketing Protection Act of 1990, Tennessee Code Annotated, Section 47-18-1502 (1991) effective July 1, 1990.)
Texas	ADADs which play recorded messages to a number are prohibited before noon or after 9 pm on Sunday or before 9 am or after 9 pm on weekdays and Saturdays. (The Public Utilities Regulatory Act, Article XV, Section 113; Texas Revised Civil Statutes Article 1446c (1992); Texas Business and Commerce Code, Section 37.02 (1992).)
Utah	Use of autodialers for marketing to residential telephone numbers is prohibited before 9 am or after 8 pm. (Utah Annotated Code, Section 13-25-3, Section 13-25-4 (1991).)
West Virginia	The Commission has become aware of harassing telemarketing calls generated by the use of ADADs. The PUC proposed rules covering ADADs which provide that LECs shall require that ADADs not be used between the hours of 9 pm and 9 am. LECs are required to take reasonable steps to identify ADAD users who are not in full compliance with the rules. The PSC said rulemaking on ADADs was necessary to address the issues concerning the appropriate use of ADADs and to prevent ADADs from placing unsolicited calls to emergency and public safety telephone numbers. Written comments to these rules were due by March 6, 1992. (*NARUC Bulletin* No. 2-1992, January 13, 1992, 11.)

Source: Authors' research.

TABLE F-15

PROHIBITING ADADs WHICH ARE UNABLE TO DISTINGUISH BETWEEN LISTED, UNLISTED, AND UNPUBLISHED NUMBERS

Georgia	It is unlawful for any person, organization, or agent thereof to direct a person to use ADADs for the advertisement or offering for sale of any goods or services or for conducting polls or for soliciting information if the ADAD has random or sequential dialing capabilities. Telephone solicitations using ADADs are prohibited to unlisted numbers. (Official Code of Georgia Annotated, Section 46-5-23 (1991).)
Idaho	Commission allowed LECs to connect ADADs only under certain guidelines, including a prohibition on calling unpublished numbers. (Order No. 19793, issued July 1985.)
Louisiana	It is unlawful for any person to use or employ any other person to use ADAD equipment or to use a live wire operator to make calls to advertise or offer for sale, lease, or rental any goods or services or for the purpose of conducting polls or for soliciting information when use involves random or sequential dialing of numbers. (Consumer Telemarketing Protection Act of 1991, Louisiana Revised Statutes, Title 45, Chapter 8-B, Section 811.)
New York	No person shall operate an ADAD if it uses random or sequential dialing. (New York General Business Laws, Section 399-P, approved and effective July 24, 1992.)
South Dakota	ADADs are prohibited to any unlisted or unpublished numbers. (South Dakota Codified Laws, Section 37-30-27 (1992).)
Tennessee	It is unlawful for any person, organization, or agent thereof to direct a person to use ADADs for the advertisement or offering for sale of any goods or services or for conducting polls or for soliciting information if the ADAD has random or sequential dialing capabilities. Telephone solicitations using ADADs are prohibited to unlisted numbers. (The Consumer Telemarketing Protection Act of 1990, Tennessee Code Annotated, Section 47-1-1502 (1991), effective July 1, 1990.)

TABLE F-15--Continued

Texas	ADADs which play recorded messages to a number are prohibited if the device is used for random or sequential dialing. (The Public Utilities Regulatory Act, Article XV, Section 113, Texas Revised Civil Statutes, Article 1446c (1992).)
Utah	The division by rule shall provide for the protection of the privacy of telephone subscribers with unpublished telephone numbers. Autodialers must be programmed to skip emergency and unlisted numbers. (Utah Annotated Code Section 13-25-3 (1991).) A person may not use ADADs to dial either randomly selected or incrementally sequential telephone numbers. (Utah Annotated Code Section 13-25-4 (1992).)

Source: Authors' research.

TABLE F-16

PROHIBITING THE UNATTENDED OPERATION OF ADADs

Georgia	It is unlawful for any person, organization, or agent thereof to direct a person to use ADADs for the advertisement or offering for sale of any goods or services or for conducting polls or for soliciting information if the ADAD is operated unattended. (Official Code of Georgia Annotated, Section 46-5-23 (1991).)
Louisiana	It is unlawful for any person to use or employ any other person to use ADAD equipment or to use a live wire operator to make calls to advertise or offer for sale, lease, or rental any goods or services or for the purpose of conducting polls or for soliciting information when ADAD equipment is operated unattended. (Louisiana Revised Statutes, Title 45, Chapter 8-B, Section 811, Consumer Telemarketing Protection Act of 1991.)
Tennessee	It is unlawful for any person, organization, or agent thereof to direct a person to use ADADs for the advertisement or offering for sale of any goods or services or for conducting polls or for soliciting information if the ADAD is operated unattended. (The Consumer Telemarketing Protection Act of 1990, Tennessee Code Annotated, Section 47-18-1502 (1991), effective July 1, 1990.)

Source: Authors' research.

TABLE F-17

ALLOWING ADADs WHICH CAN DISCONNECT AUTOMATICALLY

Georgia	It is unlawful for any person, organization, or agent thereof to direct a person to use ADADs for the advertisement or offering for sale of any goods or services or for conducting polls or for soliciting information if the ADAD cannot automatically disconnect when a recipient fails to give consent to hearing a message or replaces the receiver on her telephone. (Official Code of Georgia Annotated, Section 46-5-23 (1991).)
Louisiana	It is unlawful for any person to use or employ any other person to use ADAD equipment or to use a live wire operator to make calls to advertise or offer for sale, lease, or rental, any goods or services or for the purpose of conducting polls or for soliciting information when the ADAD does not disconnect within ten seconds after the called party fails to give consent or hangs up. (Consumer Telemarketing Protection Act of 1991, Louisiana Revised Statutes, Title 45, Chapter 8-B, Section 811.)
New Mexico	Law permits ADADs which are able to release the line immediately after the called party hangs up. (New Mexico Statutes Annotated, Section 57-12-22 (1992).)
New York	No person shall operate an ADAD unless it can disconnect from the line upon termination by either party. (New York General Business Laws, Section 399-P, approved and effective July 24, 1992.)
South Carolina	If a called person's response to unsolicited telephone sales calls is to hang up, the call should disconnect immediately. (South Carolina Code Annotated, Section 16-17-446 (1990).)
South Dakota	ADADs must disconnect twenty seconds after disconnection of the number called. (South Dakota Codified Laws, Section 37-30-28 (1992).)
Tennessee	It is unlawful for any person, organization, or agent thereof to direct a person to use ADADs for the advertisement or offering for sale of any goods or services or for conducting polls or for soliciting information if the ADAD cannot automatically disconnect when a

TABLE F-17--Continued

Tennessee--Continued	recipient fails to give consent to hearing a message or replaces the receiver on her telephone. (The Consumer Telemarketing Protection Act of 1990, Tennessee Code Annotated, Section 47-18-1502 (1991), effective July 1, 1990.)
Texas	ADADs which play recorded messages to a number are prohibited unless the device disconnects within thirty seconds after either party disconnects or terminates the call. If the device cannot disconnect, a live operator must be present who will seek and receive consent of the called party before beginning the sales message. (The Public utilities Regulatory Act, Article XV, Section 113, Texas Revised Civil Statutes, Article 1446c (1992).)
Utah	ADADs must disengage the telephone line of a person within thirty seconds after the person called has disconnected the call. (Utah Code Annotated, Section 13-25-4 (1992).)

Source: Authors' research.

TABLE F-18

REQUIRING IDENTIFICATION OF TELEPHONE SOLICITORS USING ADADs

Georgia	It is unlawful for any person, organization, or agent thereof to direct a person to use ADADs for the advertisement or offering for sale of any goods or services or for conducting polls or for soliciting information if the ADAD message fails to state the name and telephone number of the person or organization initiating the call with the first twenty-five seconds of the start and again at the conclusion of the call. (Official Code of Georgia Annotated, Section 46-55-23 (1991).)
Louisiana	It is unlawful for any person to use or employ any other person to use ADAD equipment or to use a live wire operator to make calls to advertise or offer for sale, lease, or rental any goods or services or for the purpose of conducting polls or for soliciting information when the recorded message fails to give the name and telephone number of the person or organization initiating the call within the first twenty-five seconds of the call and at the conclusion of the call. Calls to the telephone number so provided must be answered by someone who is able to provide information concerning automatic calls. If the number cannot be answered, soliciting calls are prohibited. (Consumer Telemarketing Protection Act of 1991, Louisiana Revised Statutes, Title 45, Chapter 8-B, Section 811.)
New Mexico	The name of the sponsor and the purpose of the contact must be promptly disclosed. Solicitations are not to be made in the guise of research or survey where the real intent is to sell goods or services. The cost of goods or services are disclosed and terms of purchase must be disclosed. (New Mexico Statutes, Annotated, Section 57-12-22 (1992).)
New York	No person shall operate an ADAD unless the nature of the call and name, address, and telephone number of the person on whose behalf the solicitation is being made are stated at the beginning of the call. (New York General Business Law, Section 399-P, approved and effective July 24, 1992.)
South Carolina	Initiators of unsolicited telephone sales calls will identify themselves immediately after contact is made, the purpose of the call should be stated within thirty seconds of beginning conversation, and the called person be given the opportunity to respond. (South Carolina Code Annotated, Section 16-17-446 (1990).)

TABLE F-18--Continued

Tennessee	It is unlawful for any person, organization, or agent thereof to direct a person to use ADADs for the advertisement or offering for sale of any goods or services or for conducting polls or for soliciting information if the ADAD message fails to state the name and telephone number of the person or organization initiating the call within the first twenty-five seconds of the start and again at the conclusion of the call. (The Consumer Telemarketing Protection Act of 1990, Tennessee Code Annotated, Section 47-18-1502 (1991), effective July 1, 1990.)
Texas	ADADs which play recorded messages to a number are prohibited unless the nature of the call, identity of the organization making the call, and the telephone number from where the call is being made is divulged to the recipient. (The Public Utilities Regulatory Act, Article XV, Section 113, Texas Revised Civil Statutes, Article 1446c (1992), Texas Business and Commerce Code, Section 37.02 (1992).)

Source: Authors' research.

TABLE F-19

PROHIBITING CALLS FROM ADADs TO EMERGENCY AGENCIES

Georgia	It is unlawful for any person, organization, or agent thereof to direct a person to use ADADs for the advertisement or offering for sale of any goods or services or for conducting polls or for soliciting information if the ADAD call is made to hospitals, nursing homes, fir protection agencies, and law enforcement agencies. (Official Code of Georgia Annotated, Section 46-5-23 (1991).)
Louisiana	ADAD use is prohibited to hospitals, law enforcement agencies, and fire protection agencies. (The Consumer Telemarketing Protection Act of 1991, Louisiana Revised Statutes, Title 45, Chapter 8-B, Section 811.)
New York	Calls using an ADAD to any emergency line including 911 or E911, any fire protection agency, ambulance service, nursing home, residential health care facility, any adult care facility, any room in any hospital are prohibited. Calls placed to these numbers inadvertently, despite good faith efforts to comply with these provisions, are exempted if procedures are implemented to prevent subsequent calls being placed to a prohibited number. Federal, state, or local municipalities using an ADAD for emergency purposes are exempted. (New York General Business laws, Section 399-P, approved and effective July 24, 1991.)
South Carolina	ADAD calls to the police, fire prevention agencies, hospitals, hotels, vacation rental units are prohibited. (South Carolina Code Annotated, Section 16-17-446 (1990).)
South Dakota	ADADs are prohibited to any emergency telephone numbers. These include hospitals, physicians, health care facilities, ambulance services, fire prevention agencies, law enforcement agencies, any paging or cellular phone, or any toll-free long distance number. (South Dakota Codified Laws, Section 37-30-27 (1992).)
Tennessee	It is unlawful for any person, organization, or agent thereof to direct a person to use ADADs for the advertisement or offering for sale of any goods or services or for conducting polls or for soliciting information if the ADAD call is made to hospitals, nursing homes,

TABLE F-19--Continued

Tennessee--Continued	fire protection agencies, and law enforcement agencies. (The Consumer Telemarketing Protection Act of 1990, Tennessee Code Annotated, Section 47-18-1502 (1991), effective July 1, 1990.)
Utah	A person may not use ADADs to place telephone calls to emergency telephone numbers. (Utah Code Annotated, Section 13-25-4 (1992).)

Source: Authors' research.

TABLE F-20

ALLOWING THE USE OF ADADs FOR SPECIFIC PURPOSES

Georgia	The use of ADADs is lawful for the following purposes: (1) in response to calls initiated by the consumer, (2) where goods have been previously ordered or purchased, (3) where the call related to the collection of unlawful debts, and (4) where the call is made to homes by public school officials to regulate absenteeism of students. (Official Code of Georgia Annotated, Section 46-5-23 (1991).)
New Mexico	A person may not use ADADs to solicit persons to purchase goods or services unless there is a preexisting business relationship between parties. (New Mexico Statutes Annotated, Section 57-12-22 (1991).)
Tennessee	The use of ADADs is lawful for the following purposes: (1) in response to call initiated by the consumer, (2) where goods have been previously ordered or purchased, (3) where the call relates to the collection of unlawful debts, and (4) where the call is made to homes by public school officials to regulate absenteeism of students. (The Consumer Telemarketing Protection Act of 1990, Tennessee Code Annotated, Section 47-18-1507 (1991), effective July 1, 1990.)
Texas	Solicitations in response to the express request of the consumer, concerning an existing debt, to consumers with whom solicitors have existing business relationships are permitted. (Texas Business and Commerce Code, Section 37.02 (1992).)
Utah	Solicitations to existing customers concerning goods or services previously ordered are permitted. (Utah Code Annotated, Section 13-25-4 (1992).)

Source: Authors' research.

TABLE F-21

TELEMARKETING USING FACSIMILE MACHINES

Connecticut	The use of facsimile machines to send unsolicited advertising messages is prohibited by law. (Kirk Johnson, "Heading off 'junk fax' at the wire," *New York Times*, January 20, 1989, 17. *State Telephone Regulation Report*, December 26, 1991, 2.)
Florida	The use of facsimile machines to send unsolicited advertising messages is prohibited by state law. (*State Telephone Regulation Report*, December 26, 1991, 2.)
Georgia	The use of facsimile machines to send unsolicited advertising messages is prohibited by law. (*State Telephone Regulation Report*, December 26, 1991, 2.)
Louisiana	The use of facsimile machines to send unsolicited advertising messages is prohibited by law. (*State Telephone Regulation Report*, December 26, 1991, 2.)
Maryland	The use of facsimile machines to send unsolicited advertising messages is prohibited by law. (*State Telephone Regulation Report*, December 26, 1991, 2.)
Montana	A person may not use facsimile machines for the selection and dialing of telephone numbers and playing of recorded messages for the purpose of offering goods and services for sale, conveying information on goods or services in soliciting sales or purchases, soliciting information, gathering data, or promoting a political campaign. Exceptions include use for the purpose of informing purchasers of pertinent information concerning pending purchases, responding to inquiries by persons, and of providing information where a business relationship exists or where permission of the called party is obtained by a live operator before the recorded message is delivered. (Montana Code Annotated, Section 45-8-216 (1992).)
Nebraska	The use of facsimile machines to send unsolicited advertising messages is prohibited by state law. (*State Telephone Regulation Report*, December 26, 1991, 2.)

TABLE F-21--Continued

Nevada	The use of facsimile machines to send unsolicited advertising messages is prohibited by law. (*State Telephone Regulation Report*, December 26, 1991, 2.)
Oregon	State law prohibits unwanted 'junk fax' advertising. (*NARUC Bulletin* No. 28-1990, July 9, 1990), 6-7. *State Telephone Regulation Report*, December 26, 1991, 2.)
South Carolina	The use of facsimile machines to send unsolicited advertising messages is prohibited unless the sender and receiver have established a business relationship. (S. 177, *State Telephone Regulation Report*, July 25, 1991, 9. *State Telephone Regulation Report*, December 26, 1991, 2.)
Tennessee	It is unlawful to initiate unsolicited transmission of facsimile messages promoting goods for purchase by recipient of the messages. This provision does not apply to someone with whom the initiator has had previous contractual or business relations. (The Unsolicited Telefacsimile Advertising Act, Tennessee Code Annotated, Section 47-18-1601 (1991), effective July 1, 1990.)
Washington	The use of facsimile machines to send unsolicited advertising messages is prohibited by law. (*State Telephone Regulation Report*, December 26, 1991, 2.)
Wisconsin	No person may use a facsimile solicitation without the consent of the person called unless the person making the solicitation has had a previous relationship with the person solicited. (Wisconsin statutes, Section 134072 (1989-90).)

Source: Authors' research.

TABLE F-22

REQUIRING COMPILATION OF "DON'T-CALL-ME" LISTS
FOR UNSOLICITED ADVERTISING FAXES

Utah	A 1991 law establishes a state-compiled "don't call me" list for fax owners who do not wish to receive unsolicited advertising faxes. (*State Telephone Regulation Report*, December 26, 1991, 3.)

Source: Authors' research.

TABLE F-23

PROHIBITING FAX MARKETING TO PERSONS WHO HAVE INFORMED SOLICITORS OF THEIR REFUSAL TO RECEIVE

Tennessee	It is unlawful to initiate unsolicited transmission of facsimile messages promoting goods for purchase by a recipient who has faxed or written to the initiator indicating she does not want to receive the messages. (The Unsolicited Telefacsimile Advertising Act, Tennessee Code Annotated, Section 47-18-1601 (1991), effective July 1, 1990.)
Wisconsin	No person may use a facsimile solicitation if a person has notified the fax solicitor that he/she does not want to receive facsimile solicitations. (Wisconsin Statutes, Section 134-72 (1989-90).)

Source: Authors' research.

TABLE F-24

USING FAX-MARKETING OUTSIDE SPECIFIED HOURS

North Dakota	A 1991 law limits transmission of unsolicited advertising faxes to the hours between 9 pm and 6 am (Chapter 523, *State Telephone Regulation Report*, December 26, 1991, 3.)
Oklahoma	A 1991 law limits transmission of unsolicited advertising faxes to the hours between 9 pm and 6 am (*State Telephone Regulation Report*, December 26, 1991, 3.)
Wisconsin	A person may use a facsimile solicitation if the transmission is received between 9 pm and 6 am and does not exceed one page in length. (Wisconsin Statutes, Section 134-72 (1989-90).)

Source: Authors' research.

APPENDIX G

CURRENT STATE REGULATORY ACTIVITY ON CALLER ID SERVICE

TABLE G-1

CURRENT STATE REGULATORY ACTIVITY ON CALLER ID SERVICE

States	Description of Activity
Alabama	A tariff filing of South Central Bell was approved by the PUC. It is to be monitored by the PUC for one year, December 1990 to December 1991, to determine its effect upon the public. It is available in Birmingham area exchanges only, and is not to be phased-in in other areas. (AL PSC Docket 21592, Order dated December 4, 1990.) During the allotted one year period, South Central Bell chose not to implement Caller ID. Instead it petitioned for reconsideration. By December 1991 the Commission had no implementation experience and limiting Caller ID to Birmingham would not give it sufficient information to examine the impact of the service. Therefore the PSC ordered that Caller ID be made available state-wide to be monitored for one year. (*Telecommunication Reports*, November 18, 1991, 37.) Free per-call blocking would be available to all, and per-line blocking was required for at-risk customers. (*Telecommunication Reports*, November 18, 1991, 37.) Earlier free per-call and per-line blocking were required and to be advertised as available upon request for the one-year trial. Blocking is available to domestic violence intervention agencies, state and county human resource shelters and other agencies where it can be certified that the personal safety of employees would be jeopardized without blocking. (AL PSC Docket 21592, Order dated December 4, 1990.)
Alaska	No provider has yet proposed providing Caller ID. (Francis, A.R. Nationwide state status on Caller ID: Summary, Staff Exhibit 5 in PUCO case 90-467-TP-ATA and 90-471-TP-ATA, September 30, 1991, hereafter, Francis.) No regulatory action. (NRRI survey response.)
Arizona	The Commission recommended approval of name and number Caller ID service. US West proposed to begin offering service in the metropolitan Phoenix area in 1992. (*NARUC Bulletin*, No. 6-1992, February 10, 1992, 21.) Following the Commission's free blocking conditions, the telephone company has decided to pull entire CLASS tariff including selective call forwarding, continuous redial, priority calling, call rejection. (*Communications Daily* (electronic newsmagazine), 12 no. 67, April 7, 1992, 6.)

TABLE G-1--Continued

States	Description of Activity
Arizona--Continued	In February 1992 the Commission required free per-call blocking for all. (*NARUC Bulletin*, No. 6-1992, February 10, 1992, 21.) In early April 1992 the Commission ruled that US West would be required to offer free line blocking as well. Commission allowed a one-time $5 charge for line blocking after a ninety-day introductory period during which service would be free. For unpublished customers blocking would be free. (*Communications Daily* (electronic newsmagazine), 12 no. 67, April 7, 1992, 6.)
Arkansas	No finalized tariff yet. (Francis.) No regulatory action. (NRRI survey response.)
California	The PUC approved Calling Number ID on a two-year 'interim' basis on June 17, 1992. The PUC recommends (but does not require) that telcos offer Anonymous Call Rejection (not proposed by the telephone company) which automatically blocks all 'unidentified' calls. Call Block, Call Return, Call Trace, Priority Ring, Repeat Dialing, Select Call Forward were all approved. ("Two-year trial: Cal. regulators approve strong blocking rules with Caller ID," *Communications Daily* (electronic newsmagazine) V. 12, No. 118, June 18, 1992, 3. "California CNID ruling," electronic message from Jeff Johnson to CPSR Activists, 19 June 1992.) This ruling overturns the ALJ's recommendation that Caller ID service proposed by Pacific Bell, GTE-California and Contel not be approved. (Proposed decision of ALJ Lemke, Case A. 90-11-011, January 12, 1991. Telephone interview with M. J. Purcell, CA PUC February 24, 1992.) Customers assured choice of three blocking options: per-call blocking (required by CA law), per-line blocking, per-line blocking with per-call enabling capability. Those customers who fail to specify an option will be assigned blocking as follows: unlisted subscribers and emergency service providers will get per-line blocking with per-call unblocking, other residential customers will get per-call blocking. ("Two-year trial: Cal. regulators approve strong blocking rules with Caller ID," *Communications Daily* (electronic newsmagazine), 12 no. 118, June 18, 1992, 3.)

TABLE G-1--Continued

States	Description of Activity
Colorado	The PUC approved a one-year trial of Caller ID service on May 20, 1992. ("Two-year trial: Cal. regulators approve strong blocking rules with Caller ID," *Communications Daily* (electronic newsmagazine), 12 no. 118, June 18, 1992, 3.) As a result of blocking conditions, US West sought to withdraw its tariff for CLASS services which have been approved by the PUC. This has prompted the PUC to investigate whether withdrawal of approved services constitutes repudiation of exclusive franchise for CLASS services. ("Caller ID may be problem," *State Telephone Regulation Report*, April 23, 1992, 13.) The PUC required free per-call and free per-line blocking on a generally available basis. Unpublished subscribers would have free per-line blocking automatically (default) and others would automatically get per-call blocking. The per-line option would be available free for the first six months after introduction of service. Then a one-time $8 charge would apply. ("Caller ID may be problem," *State Telephone Regulation Report*, April 23, 1992, 13.) US West had proposed free per-call and pay per-line blocking. (*State Telephone Regulation Report*, July 11, 1991, 2.)
Connecticut	The Public Utilities Control Authority permitted Southern New England Telephone (SNET) to offer a package of services which includes Caller ID. ("Regulators clear way for caller identification," *Hartford Courant*, June 18, 1992, b1.) Other features of the package include selective forward, repeat dial, auto call return, selective blocking, distinctive ring and call trace. (*State Telephone Regulation Report*, February 27, 1992, 4.) Call trace had been available as part of SNET's StarCall package--a limited 1 year trial which ended December 1991. Caller ID was not part of the package. (Judy Humphrey, Consumer Information Representative, DPUC, interview on November 18, 1991). SNET required to provide per-call blocking free to all customers. Free per-line blocking was required to all law enforcement agencies, domestic violence shelters and nonprofit crisis intervention centers and help lines, to all coin-operated telephones and to all customers who certify that disclosure of their numbers could jeopardize their safety. SNET had proposed free per-call and pay per-line to all and free per-line to law enforcement agencies and domestic violence shelters. ("Regulators Clear Way for Caller Identification," *Hartford Courant*, June 18, 1992, b1.)

TABLE G-1--Continued

States	Description of Activity
Delaware	Diamond State Telephone Company allowed to offer Caller ID with free per-call blocking. (PSC Docket 90-6T, Opinion dated December 21, 1990. 1990 Del. PSC LEXIS 31.) Service is expected to begin April 1, 1991. (*Telecommunication Reports*, February 11, 1991, 9.) Free per-call but no per-line blocking required. (*State Telephone Regulation Report*, July 11, 1991, 3. *Telecommunication Reports*, February 11, 1991, 9.)
District of Columbia	Bell Atlantic's C&P Telephone Company's Caller ID tariff authorized in July 1990. (*NARUC Bulletin*, August 13, 1990, 18, citing *Washington Post*, July 19, 1990.) Service has been available since March 1991. (Francis, 1991.) The Office of People's Counsel (OPC) brought action (Case No. 891) requesting reconsideration of PSC decision. (*Telecommunication Reports*, March 11, 1991, 41.) The PSC decided that Caller ID did not violate federal ECPA--wiretap protection is for telephone communication which a phone number has not been held as being a part of, and that C&P's tariff on nonpublished phone numbers was not violated because option of per-call block was available. The telephone company is responsible to ensure that nonpublished numbers are not disclosed by directories or information operators only. Caller ID is not within its responsibility. (*Telecommunication Reports*, September 9, 1991, 11.) Free per-call but no per-line blocking required. (*State Telephone Regulation Report*, July 11, 1991, 3). Although OPC argued for per-line blocking, the PSC reaffirmed decision to require per-call and not to require per-line blocking. (*Telecommunication Reports*, September 9, 1991, 11.)
Florida	The PSC permitted Southern Bell to offer the service in a limited area. It may be available by July 1, 1991. (*NARUC Bulletin* No. 20-1991, May 20, 1991, 15-6. *State Telephone Regulation Report*, 9 no. 9, May 2, 1991, 1+; Francis, 1991.) The Commission also decided that Southern Bell should re-file its Call Tracing tariff allowing customers access to the service on a usage-charge basis instead of the current monthly charge. (*NARUC Bulletin* No. 20-1991, May 20, 1991, 15-6. *State Telephone Regulation Report*, May 2, 1991, 3.) The telephone company may offer "block the blocker" option when ready. (*NARUC Bulletin* No. 20-1991, May 20, 1991, 15-6. *State Telephone Regulation Report*, May 2, 1991, 2.)

TABLE G-1--Continued

States	Description of Activity
Florida--Continued	Southern Bell must amend its Caller ID tariff to include free per-call blocking to all. (*NARUC Bulletin* No. 20-1991, May 20, 1991, 15-6. *State Telephone Regulation Report*, May 2, 1991, 2. *State Telephone Regulation Report*, July 11, 1991, 3. *Telecommunication Reports*, April 29, 1991, 20.) Free per-line blocking is available to all customers with a proven need for extra privacy, police departments and battered spouse shelters (*NARUC Bulletin* No. 20-1991, May 20, 1991, 15-6. *State Telephone Regulation Report*, May 2, 1991, 2.)
Georgia	The PSC permitted Southern Bell to provide per-call blocking in its one-year trial starting August 1991 in five cities. (Amendatory Order dated July 16 1991.) The PSC had approved Southern Bell's Caller ID tariff for a one year trial from February 1991 to February 1992 in Atlanta extending to all of Southern Bell's territory by end of the second quarter. (PSC Docket 3924-U, Order dated December 4, 1990.) Proposed changes in the tariff concerning nonpublished numbers must be approved by the Commission. (id.) Bill inserts to notify customers that Caller ID will display nonpublished as well as published numbers. (id.) The Commission required per-line blocking in 1992. ("Preserve privacy: Permit blocking of Caller ID," *USA Today*, April 16, 1992, 12A.) Per-call blocking required. (Amendatory Order dated July 16 1991.)
Hawaii	Hawaiian Telephone Company has not filed tariffs. (Francis, 1991.) No regulatory action. (NRRI survey response.)
Idaho	The US West eight-month name/number trial in Boise, ended October 25, 1991. Now six CLASS features including name and number Caller ID, are permanent offerings in Boise. In 1991 the PUC found that it lacks authority to regulate and prohibit Caller ID on the ground that the service was not a basic local exchange service. (By 1988 state law, the PUC could only regulate basic local exchange service to residential and small business customers. Local exchange companies (LECs) like US West could choose to free themselves from traditional regulation in their provision of other services.) The ACLU's petition that Caller ID and blocking are part of basic service and the display device as an "illegal trap and trace" device is partially granted and partially denied. (Case USW-T-91-2, Notice of Hearing 23669 dated May 10, 1991.) Hearing held June 13, 1991.

TABLE G-1--Continued

States	Description of Activity
Idaho--Continued	Commission found that Caller ID and blocking are not basic local exchange services. However, because of the effects that Caller ID would have on the manner in which basic local exchange service is provided, the Commission has the statutory obligation to ensure that US West offers the service so that it promotes the "safety, health, comfort and convenience" of its customers and the public. Caller ID display of the calling party's name and number on Customer Premises Equipment (CPE) does not violate Idaho's Telecommunications Security Act. (Investigation into the provision of Caller ID by US West Communications, Order No. 23860, August 27, 1991.) Per-call and per-line blocking are available to all customers. (*Telecommunication Reports*, November 4, 1991, 12.) The Commission found that there should be no charge for per-call blocking while per-line blocking may be offered for a fee.
Illinois	The Illinois Commerce Commission approved Central Bell's (Centel) tariff while it denied Illinois Bell's. (*State Telephone Regulation Report*, July 11, 1991, 3; Francis.) The Commission found that the potential harms of Caller ID without blocking far outweighed its alleged benefits. Illinois Bell's exception plan unreasonably required persons seeking to protect the anonymity of their telephone numbers to do so at added expense and inconvenience. (Proposed establishment of Caller ID for Central Bell Tel Co of Illinois and Illinois Bell Tel Co, Case Nos. 90-0465 and 90-0466, October 3, 1991.) All Illinois Bell customers will be able to buy Caller ID by the end of 1992. (*State Telephone Regulation Report*, January 16, 1992, 1-3.) Centel had proposed Caller ID with free per-call blocking to all single-line business and residential users while Illinois Bell proposed unblockable service with exceptions for some interventions and law enforcement agencies. (*State Telephone Regulation Report*, July 11, 1991, 3. Francis.) Illinois Bell launched Caller ID with free per-call blocking in some areas recently. (*State Telephone Regulation Report*, January 16, 1992, 1-3.)
Indiana	Senate Enrolled Act No. 222 passed the legislature and requires that the Commission approve any petition for approval of Caller ID service. (1992 Ind. SEA 222, Sec 2. IC 8-1-2.9, Chapter 2.9: Telephone Caller Identification Services, passed February 27, 1992.)

TABLE G-1--Continued

States	Description of Activity
Indiana--Continued	SEA 222 prohibits Caller ID blocking except for 'at-risk' agencies. The Commission may not require that service be provided with blocking, except for per-call or per-line blocking for law enforcement and crisis intervention agencies that are certified by the Commission. (1992 Ind. SEA 222, Sec 2. IC 8-1-2.9 Chapter 2.9., Telephone Caller Identification Services, passed February 27, 1992.) But the power to define an 'at-risk' agency eligible for blocking rests with the telephone company. (*State Telephone Regulation Report*, January 16, 1992, 1. *Telecommunication Reports*, January 6, 1992, 9-10. *NARUC Bulletin* No. 2-1992, January 13, 1992, 16. *Telecom-Digest* (electronic newsmagazine), 12 Issue 7, January 5, 1992.)
Iowa	The Iowa Utility Board issued an order requiring blocking with Caller ID service. (Docket RPU-913, (TF-91-280) Final Decision and Order, Issued October 11, 1991.) US West has requested a stay of order which was approved by the Board. (Application for Rehearing and Petition for Stay, Docket RPU-913, (TF-91-280), Order Granting Stay, Issued November 5, 1991.) Caller ID is available in Iowa only in areas served by the Lincoln Nebraska, T&T Company, a very small area in the Northwest corner of the state. (Phyllis Finn, Senior Utility Analyst, Telecommunications, interview November 28, 1991.) US West proposes free per-call blocking, free per-line blocking for domestic abuse centers and law enforcement agencies, and pay per-line blocking for all others in its tariff. (*State Telephone Regulation Report*, July 11, 1991, 2; Francis, 1991.) The Board requires free per-call blocking. For first six months after Caller ID becomes available, free per-line blocking upon request is required. After the first six months, pay per-line blocking is available ($1 for residential, $2 for business). (Phyllis Finn, Senior Utility Analyst, Telecommunications, interview November 28, 1991.) US West provided free per-call blocking in its Council Bluffs trial. (*State Telephone Regulation Report*, July 11, 1991, 2).
Kansas	The Kansas Corporation Commission has not considered the issue. (NRRI survey response.)
Kentucky	The Kentucky PSC has required both South Central Bell and GTE-South to offer Caller ID with free and universally available per-call and per-line blocking. (*State Telephone Regulation Report*, December 26, 1991, 10.) Earlier the PSC had allowed GTE-South to provide Caller ID with per-call

TABLE G-1--Continued

States	Description of Activity
Kentucky--Continued	blocking in Lexington and Elizabethtown. (*Telecommunication Reports*, January 6, 1992, 42.) GTE had been offering the service with per-call blocking since October 1990. It is now required to add the per-line option as quickly as possible. Following this change, GTE-South is considering withdrawing its Caller ID service. (E-mail message from L. J. Hoffman, GWU, January 22, 1992.)
Louisiana	The Louisiana PUC approved South Central Bell's tariff effective May 27, 1991. (Francis.) South Central Bell proposes unblockable service. (*State Telephone Regulation Report*, July 11, 1991, 3.) Blocking will be available to agencies providing confidential services. (Francis.)
Maine	State House proposal 1118 creating an Act to Protect Telephone Customer Privacy (Chapter 654) was approved by the Governor on March 9, 1992. It provides that telephone subscribers have a right to privacy which enables them to limit the dissemination of their telephone numbers to persons of their choosing. (5-A MRSA, Sec. 7101, 1992 Me. ALS 654; 1992 Me. Laws 654; 1992 Me. Ch. 654; 1992 Me. HP 1118). Free per-call (but no per-line blocking) as provided in a one-year trial by NET&T. (*State Telephone Regulation Report*, July 11, 1991, 3. (*Telecommunication Reports*, September 17, 1990, 34.) Caller ID services are subject to the following conditions: 1. Free per-call blocking to all subscribers at least two months prior to the introduction of service. 2. Telephone companies are required to provide per-line blocking to individuals, agencies and groups that request it in writing asserting a specific need based on health and safety. There will be no charge for the first request for per-line blocking or unblocking. Except as otherwise authorized by law or to confirm that a subscriber has made a valid request, telephone utilities may not disclose information concerning the request for per-line blocking submitted by a subscriber. (5-A MRSA, Sec. 7102, 1992 Me. ALS 654; 1992 Me. Laws 654; 1992 Me. Ch. 654; 1992 Me. HP 1118.)

TABLE G-1--Continued

States	Description of Activity
Maryland	C&P Tel's Caller ID tariff was approved. (*State Telephone Regulation Report,* May 17, 1990, 7.) Special Identification Arrangements (SIAs) are to be offered after July 2, 1990. (*Telecommunication Reports*, November 26, 1990, 5.) These provide free per-line blocks in effect. (M. Rotenberg, Testimony in VT PSB investigation of NET&T Company's PHONESMART Call Management Services, Docket 5404, July 17, 1991, 41.) A PUC Order mandated the offering of per-call blocking service as a condition for the continuation of Caller ID telephone service. (Concerning Chesapeake and Potomac Telephone Company of Maryland, Case No. 8283, Order No. 69021, November 20, 1990, 118 PUR4th 464). Earlier the service had been approved unrestricted. (*State Telephone Regulation Report,* May 17, 1990, 7.) The telco's petition for rehearing of the order requiring per-call blocking was denied. (PSC Case 8283, Order 69056 dated December 21, 1990.)
Massachusetts	The Department of Public Utilities issued an Order which approved Caller ID on October 9, 1991 for NET's Phone Smart services. Call Return and Repeat Dialing were approved as submitted. Call Trace was approved--payment on a per-activation basis rather than monthly subscription charge. NET has re-filed for three of the original four "Phonesmart" features in the original filing. NET proposes to offer Call Trace, Return Call, and Repeat Call but not Caller ID. (*Telecom-Digest* (electronic newsmagazine) 12, Issue 114, Feb 4, 1992.) The Commission is among the first to approve per-call unblocking as a feature of per-line Caller ID blocking. (*State Telephone Regulation Report*, January 1992, 4-5.) Caller ID approved with per-call (as proposed by NET) and per-line blocking for all customers. No charge would apply to an initial request for per-line blocking but a tariffed service order charge would apply for additional requests to implement or remove per-line blocking. (Open Docket DPU-91-64, Order issued October 9, 1991. *State Telephone Regulation Report*, July 11, 1991, 3. *Telecommunication Reports*, Oct 21, 1991, 6. *Telecommunication Reports*, March 18, 1991, 11. Paul Vasington, Economist, interview November 18, 1991.)

TABLE G-1--Continued

States	Description of Activity
Michigan	Parts of Michigan will have Caller ID in March 1992 along with the other CLASS features on a nonregulated basis. This decision follows the 1991 state telecommunications bill which greatly limits the PUC's ability to regulate Michigan Bell's activities. The Michigan Telecommunications Act of 1991 allows the Commission, after complaint and review, to impose regulation on a new service if the Commission determines the service adversely affects the public welfare or the quality of basic local service. To avoid regulatory action, Michigan Bell has chosen a privacy option which it hopes will satisfy public concerns about phone number disclosure--it will offer per-call blocking. Service is to begin in Detroit March 1, 1992 following an "extensive consumer education campaign" (details unknown). Michigan Bell differs from its parent's (Ameritech) position which advocates unblocked Caller ID. (*State Telephone Regulation Report,* January 16, 1992, 1-3; *Telecom-Digest* (electronic newsmagazine) 12 Issue 123, Feb 8, 1992).
Minnesota	No tariff filed. (Francis.) No regulatory action. (NRRI survey response.)
Mississippi	South Central Bell's tariff was approved August 1991. (Francis.) The Bell operating company proposes unblockable service. (*State Telephone Regulation Report,* July 11, 1991, 3.) Free blocking is offered for agencies providing confidential services. (Francis.)
Missouri	No action. (NRRI survey response.)
Montana	No action. (NRRI survey response.)
Nebraska	US West trial service in Omaha provided with free per-call blocking at the telco's initiative (*State Telephone Regulation Report*, 9 no. 14, July 11, 1991, 3. *Telecommunication Reports*, September 3, 1990, 10.) US West tariffed Caller ID on June 18, 1991. Ten days after the tariff was filed, the service was available to the public. (John Burvainis, Accountant, Telecommunications, interview November 18, 1991. Francis.) Also there is a Last Call Return trial. (*Telecommunication Reports*, November 5, 1990, 21.) Per-call blocking with a charge and per-line blocking for emergency agencies is available. (John Burvainis, Accountant, Telecommunications,

TABLE G-1--Continued

States	Description of Activity
Nebraska--Continued	interview November 18, 1991.) The telephone company conducted a trial with free per-call blocking. (*Telecommunication Reports*, November 5, 1990, 21.)
Nevada	The Nevada PSC has approved Central Telephone Company's (Centel) Caller ID tariff to be offered with two free blocking options. (*NARUC Bulletin* No. 37-1990, September 10, 1990, 12.) The Nevada Commission is among the first to approve a tariff (proposed by Centel) for blocked call rejection (or block-the-blocker) feature that automatically rejects anonymous calls. (*State Telephone Regulation Report,* January 1992, 4.) Centel began service promptly after PSC approved in August 1990. (Francis.) PSC also approved Call Trace trial. (*NARUC Bulletin*, No 37-1990, September 10, 1990, 12.) Although Centel's original tariff only provided free per-call blocking, (*NARUC Bulletin* No. 37-1990, September 10, 1990, 12) both per-line and per-call blocking was required. (*State Telephone Regulation Report,* July 11, 1991, 3.) The Commission decided against per-call unblocking for callers ordering per-line blocking. (*State Telephone Regulation Report,* January 1992, 4.) All phone lines will have free per-call blocking except for those subscribers who fail to request per-line blocking within specified limited time and pay phones which have no blocking. (*NARUC Bulletin* September 10, 1990, 12.) Special blocking arrangements free of charge to hot lines and crisis centers are available. (id.)
New Hampshire	NET&T planned to offer service in 1992 with free per-call blocking. (*Telecommunication Reports*, September 17, 1990, 34; *Telecommunication Reports*, March 18, 1991, 11.) But after regulators placed conditions on the service on June 1, 1992, the telephone company asked for postponement of the hearing on approval for Caller ID and may drop request for service. ("New Hampshire chooses per-line blocking, Bell unhappy," *Communications Daily* (electronic newsmagazine), 12 no. 116, June 16, 1992, 4.)

TABLE G-1--Continued

States	Description of Activity
New Hampshire--Continued	The Commission ordered that per-line blocking be available without charge to unpublished and unlisted customers and to customers who believe their health or safety would be threatened. All customers have a ninety day promotional period to decide if they want per-line blocking. ("New Hampshire chooses per-line blocking, Bell unhappy," *Communications Daily* (electronic newsmagazine), 12 no. 116, June 16, 1992, 4.)
New Jersey	NJ Bell Telephone Company has been offering no-block Caller ID since October 20, 1988. (Francis.) In October 1990 there were 87,000 Caller ID subscribers. Forty-eight complaints had been received by the telephone company and 300 by the NJ Board of Public Utilities. (*Telecommunication Reports*, June, 3, 1991, 21.) The New Jersey Board of Public Utilities has allowed United Telephone Company to offer CLASS including "all-number delivery" Caller ID. United was offering services on trial basis since September 1990 and received no complaints. (*Telecommunication Reports*, June, 3, 1991, 21.) No blocking is required. (NJ Board of Public Utilities Docket TT88070825, Order dated October 20, 1988.)
New Mexico	US West filed tariffs for CLASS services with per-call blocking in March 1992. (*Communications Daily* (electronic newsmagazine), 12 no. 67, April 7, 1992, 6.) The telephone company proposes services with per-call blocking. (*Communications Daily* (electronic newsmagazine), 12 no. 67, April 7, 1992, 6.)
New York	The Commission permitted New York Telephone to introduce Caller ID service throughout its service territory at a monthly charge of $6.50 for residential customers and $8.50 for business customers. Before introducing Caller ID service, the company should devise and carry out an outreach and educational plan to familiarize customers with the service, its use, and available blocking options. The plan should include material directed particularly toward nonpublished subscribers and explaining the implications for them of Caller ID service. During the initial eighteen months of the service, the company will be required to report to the Secretary every three

TABLE G-1--Continued

States	Description of Activity
New York--Continued	months. In addition, the company should explore several modifications and innovations, including mechanisms for informing callers of the blocking status of a line or a call. Conditions here imposed will apply to all telcos planning to offer the service. (Proceeding on Motion of the Commission to Investigate New York Telephone Company's Proposal to Institute Caller ID Service, Case 91-C-0428; Opinion No. 92-5, April 9, 1992.) All customers should be permitted to elect, at no charge, per-call blocking or per-line blocking; a customer making no election should be provided per-call blocking. A customer may change his or her blocking option twice at no charge during the first six months the service is offered in any area and any new telephone customer may do so twice during the first six months that the customer takes telephone service; thereafter, the company may impose a charge of $5.00 for each change. (Proceeding on Motion of the Commission to Investigate New York Telephone Company's Proposal to Institute Caller ID Service, Case 91-C-0428; Opinion No. 92-5, April 9, 1992.)
North Carolina	Centel's tariff has been suspended until data is provided on lines where blocking is technically infeasible. (*State Telephone Regulation Report,* July 11, 1991, 2.) Lexington Telephone (a small company) has requested permission from NCUC to provide the service with free per-call blocking and per-line blocking for certified "at-risk" customers such as law enforcement agencies and crisis intervention centers. (*Telecommunication Reports*, April 1, 1991, 12.) The Commission approved Southern Bell tariff for intrastate SS7 access (including Call Trace) but features which forward a caller's number are to be withheld. (*State Telephone Regulation Report,* July 11, 1991, 2.) Southern Bell will offer the service on an experimental basis for two years (until June 1993). (*Telecommunication Reports*, June 3, 1991, 6.) Telephone companies without approved Caller ID tariffs cannot transmit a calling number to another telephone company. (*State Telephone Regulation Report,* July 11, 1991, 3. *Telecommunication Reports*, May 6, 1991, 16.) Southern Bell must amend its interstate Signalling System-7 (SS7) access tariff. Pending implementation of Caller ID, the calling number option on

TABLE G-1--Continued

States	Description of Activity
North Carolina--Continued	interstate calls originating in North Carolina must be restricted. (*State Telephone Regulation Report,* July 11, 1991, 3.) The Commission ordered Southern Bell to provide free per-line and per-call blocking in a May 31, 1991 order. To obtain per-line blocking, a subscriber will need to notify the telephone company of his desire for such blocking. (*State Telephone Regulation Report*, July 11, 1991, 3. *Telecommunication Reports*, June 3, 1991, 6-7; *NARUC Bulletin* June 10, 1991, 24.) Southern Bell agreed to provide per-line blocking option to all certified "at-risk" customers. Originally Southern Bell filed tariffs with no blocking provisions. (Mary Steele, Telecommunications Advisor to Commission, interview November 18, 1991. *Telecommunication Reports*, April 1, 1991, 13.) Southern Bell may not offer the service if per-line blocking is required by the Commission. However it has not yet refiled tariffs. (Mary Steele, Telecommunications Advisor to Commission, interview November 18, 1991; *State Telephone Regulation Report,* July 11, 1991, 2.)
North Dakota	State legislature passed a bill (H.R. 1556) which authorizes Caller ID with free per-call blocking as a condition. (Francis.) US West completed name/number trial in Grand Forks between December 1989 and July 1990. (*Telecommunication Reports*, August 20, 1990, 19.) No service is available currently. (Patrick Fahn, Chief Engineer, Public Utility Division, interview November 18, 1991.) A new service, 'Caller ID on call waiting,' allows identification of the second waiting call without customers needing to interrupt their current call. Feasibility tests conducted by US West and Northern Telecom in Grand Forks were successful. (*State Telephone Regulation Report,* October 3, 1991, 11.) Free per-call blocking available. (*Telephone News*, February 25, 1991, 5; *Telecommunication Reports*, August 20, 1990, 18.)

TABLE G-1--Continued

States	Description of Activity
Ohio	On March 26, 1992, the Commission issued an Opinion and Order that held the applications for Caller ID in Case No. 90-467-TP-ATA (90-467) and Automatic Callback in Case No. 90-471-TP-ATA (90-471) filed by Ohio Bell to be unjust and unreasonable without the implementation of certain safeguards which would permit callers to preserve their anonymity where circumstances warrant. The Commission concluded that if Ohio Bell offers Call Reject (henceforth known as Call Screen) and Automatic Callback it must preserve the privacy of callers; the offering of Caller ID is contingent upon an offering of Call Trace and Call Screen; and Caller ID and Automatic Callback are not competitive services. Ohio Bell was also directed to provide actual notice to its customers, file updated tariff sheets reflecting the impact of blocking and blocking for telemarketers, and provide information regarding blocking and telemarketers in quarterly reports to the Commission. On May 21, 1992 the PUCO issued clarifications to its March 26 order following requests for rehearing from several parties. Among other issues the PUCO held that upon formal request from a public service-oriented organization, Ohio Bell should conspicuously list in its telephone directories that the requesting organization does not subscribe to Caller ID. Although the order requires the contemporaneous provision of Caller ID, Call Trace, and Call Screen, where facilities do not yet permit, Ohio Bell may offer Caller ID prior to offering Call Trace and Call Screen while pursuing changes in network configurations. (Opinion: Entry on rehearing, Cases 90-467-TP-ATA, 90-471-TP-ATA, 1992 Ohio PUC LEXIS 354, May 21, 1992.) Cincinnati Bell filed tariff application with the PUCO to offer Custom Calling Plus which includes Call tracing and Call block, Priority Call, Priority Forward, Repeat Dialing. The tariff does not include Caller ID. (Cases 91-1636-TP-ATA and 91-1648-TP-ATA, applications filed September 5, 1991 and September 9, 1991.) The Commission required the following blocking options: (1) make available free universal per call blocking to all subscribers; (2) for those

TABLE G-1--Continued

States	Description of Activity
Ohio--Continued	customers who subscribe to nonpublished number service, both current and future, per line blocking must be provided automatically without any additional charges, or the customer may affirmatively choose to have free per call blocking after being fully informed of the availability of per line and per call blocking; and (3) subscription per line blocking must be made available for published customers at a charge equivalent to nonpublished number service rates. The May 21, 1992 order clarifies that the default requirements are not intended to be permanent but are in effect for twelve months upon introduction after which they could be modified based upon the quarterly reports and other available information. The Commission will not further require default per line blocking if Ohio Bell provides customer notices with special mailings to nonpublished customers, and an education period (concerning blocking) of not less than ninety days is observed before services are deployed. Ohio Bell is free to advertise Caller ID and Automatic Callback services during this 90-day period. Where it is not technically feasible for Ohio Bell to prevent the forwarding of other telephone companies' nonpublished customer numbers to Ohio Bell's ACCS subscribers, more exploration into the options is called for. (Opinion: Entry on rehearing, Cases 90-467-TP-ATA, 90-471-TP-ATA, 1992 Ohio PUC LEXIS 354, May 21, 1992.)
Oklahoma	The Oklahoma Corporation Commission has issued an interim order on May 14, 1991 requiring per-call blocking in Southwestern Bell tariff. Hearings were scheduled for January 7, 1992. (Francis, 1991.) The Commission approved a trial tariff. The trial is being offered in Muskogee and will last a maximum of twenty-four months (from May 15, 1991 to 1993). The trial tariff consists of Call Return, Call Blocker, Priority Call, Call Cue, Selective Call Forwarding, and Call Trace. (Sheree King, Rate Analyst, interview November 18, 1991; *Telephone News*, February 25, 1991, 5-6.) Per-call blocking is required in Southwestern Bell tariff. (Francis.) The Oklahoma legislature enacted H.R. 1568, which excludes Caller ID from trap and trace provisions of the state's wiretap act. (*Telecommunication Reports*, July 29, 1991, 24.)

TABLE G-1--Continued

States	Description of Activity
Oregon	The Commission ruled on May 6th, 1992 allowing customers the choice between free per-call and free per-line blocking. ("Two-Year Trial: Cal. Regulators Approve Strong Blocking Rules with Caller ID," *Communications Daily* (electronic newsmagazine), 12 no. 118, June 18, 1992, 3.)
Pennsylvania	The Supreme Court affirmed the decision of the Commonwealth Court and ruled that "Caller ID" violates state Wiretapping and Electronic Surveillance Control Act, 18 P.S. Secs. 5701-5781, and hence cannot be offered in Pennsylvania. (Pennsylvania Public Utility Commission v. The Bell Telephone Company of Pennsylvania, 1992 Pa. LEXIS 242, October 24, 1991, Argued, March 18, 1992, Filed. 130 PUR4th 280.) The service is prohibited.
Rhode Island	NET&T's plans to offer the service in 1992. (*Telecommunication Reports*, September 17, 1990, 34, *Telecommunication Reports*, March 18, 1991, 11.) There has been no commission action. (NRRI survey response.) NET&T will offer service with free per-call blocking. (*Telecommunication Reports*, September 17, 1990, 34.)
South Carolina	In February 1992 the Commission decided to reverse itself on the need for blocking with Caller ID. *State Telephone Regulation Report*, February 27, 1991, 3.) In March 1990, the Commission approved Southern Bell's tariff for Caller ID with all-number delivery. (Francis, 1991.) The South Carolina consumer advocate appealed the PSC's decision to the Richland County common pleas court, contending that "Caller ID without universally available blocking is in violation of state laws." (*Telecommunication Reports*, July 2, 1990, 12.) The court ruled that Caller ID neither violates the state trap and trace laws nor any provisions of the United States or South Carolina constitutions. (Southern Bell v. Hamm, SC Dept. of Consumer Affairs, PSC Case 90-CP-40-2685, Order of November 20, 1990). It was appealed to the state Supreme Court. (*Telecommunication Reports*, November 26, 1990, 1.) The Supreme Court sustained the Commission and lower court position on

TABLE G-1--Continued

States	Description of Activity
South Carolina--Continued	October 7, 1991. (Southern Bell v. Hamm, No. 23488, Supreme Court of South Carolina 1991 S.C. LEXIS 208, heard May 20, 1991, filed October 7, 1991.) No service is available yet. (Joe Rogers, Rate Analyst, Telecommunications, interview November 18, 1991.) The Commission reversed itself requiring free per-call blocking with per-line blocking available for $2 each month. (*Enhanced Services Outlook* (ESO), March 1992, 11-12. Quoting from Docket 89638-C. *State Telephone Regulation Report*, February 27, 1991, 3.) Southern Bell had been permitted by the Supreme Court of South Carolina to provide no-block Caller ID. (Joe Rogers, Rate Analyst, Telecommunications, interview November 18, 1991.) Free per-call blocking proposed by Chesnee Tel (*Telecommunication Reports*, March 18, 1991, 10) will be rejected by the latest PSC ruling requiring both per-call and per-line blocking. (*State Telephone Regulation Report*, February 27, 1991, 3.)
South Dakota	No action. (NRRI survey response.)
Tennessee	South Central Bell's tariff was approved at an administrative hearing; no orders were issued. (Francis, 1991.) Caller ID available in Nashville since September 1989 and in Memphis since early 1990. (*State Telephone Regulation Report*, May 17, 1990, 7.) No blocking is required. (*State Telephone Regulation Report*, May 17, 1990, 7.)
Texas	No Caller ID tariffs have as yet been filed. (*State Telephone Regulation Report*, May 2, 1991, 1+.) The Commission has proposed a rule which would require local exchange carriers that provide caller identification services to offer free per-call and per-line blocking options to all customers unless otherwise ordered by the Public Utilities Commission. (Rule 16 TAC 23.57, Proposed July 3, 1992; Comments due August 2, 1992.)
Utah	No action. (NRRI survey response.)

TABLE G-1--Continued

States	Description of Activity
Vermont	Although Caller ID itself cannot be regulated under Vermont's social contract system, the board has retained jurisdiction over blocking policy. New England Telephone was required to make free per-call blocking available to all subscribers. Free per-line blocking will be required for all subscribers with unlisted telephone numbers. Caller ID operations undercut the basic condition of unlisted service that persons who buy unlisted number service do not want their numbers disclosed. Free per-line blocking will also be required for all subscribers who have "a legitimate concern that it would be unsafe to transmit" their telephone numbers, including clients, volunteers and staff associated with domestic violence and sexual assault agencies. (*State Telephone Regulation Report*, December 12, 1991, 3-5.) These subscribers would be entitled to per-line blocking through a "simple declaration." Difficult problems such as who is entitled to greater privacy protection, who makes the decision and how adverse decisions could be appealed, are avoided by this decision. (Electronic mail message from M. Rotenberg-CPSR, February 19, 1992.)
Virginia	Caller ID is available (typically only the calling number is displayed). (*State Telephone Regulation Report*, May 17, 1990, 7.) There was an administrative hearing; no orders were issued. (Francis.) The Commission authorizes Contel to conduct a sixty day voluntary experimental offering of Caller ID service and name display Caller ID in part of its service area. Contel planned to offer per-call blocking, which is its company policy, and would at the end of the trial period submit a report to the Commission. The Commission found that the trial was necessary to assess customer demand for Caller ID both with and without name display. (Application of Contel of Virginia Inc. for authority to conduct a Caller ID experiment, Case No. PUC910026, July 29, 1991.) No blocking is required. (*State Telephone Regulation Report*, July 11, 1991, 3) C&P is being encouraged to deploy block-the-blocker technology, which allows customers to block incoming calls from parties who have blocked their telephone numbers from appearing on Caller ID devices, because of the inequity that Virginians face against residents of Washington DC and Maryland. The latter two jurisdictions have required per-call blocking and

TABLE G-1--Continued

States	Description of Activity
Virginia--Continued	residents can block their numbers from Caller ID displays. With block-the-blocker, residents of Virginia will not have to bother with calls from blocked numbers. (*Telecommunication Reports*, October 28, 1991, 15.) Contel refiled its tariff and is offering Caller ID with all-number delivery until the availability of block-the-blocker. When the technology becomes available, Contel (and maybe C&P) will refile proposing per-call blocking.
Washington	The Commission adopted the new rule WAC 480-80-049. ("Order Adopting Rule Permanently; In the Matter of Adopting WAC 480-80-049 Relating to Caller Identification Service Provided by a Telecommunications Company," Docket No. UT-920162, General Order No.R-371, 1992 Wash. UTC LEXIS 55, March 30, 1992.) The new rule requires that any caller identification service shall include the option for calling parties to block the delivery of their numbers, names, or locations either on a per-call or per-line basis without any recurring charges. This section does not apply to the delivery of caller numbers, names, or locations to a 911 or enhanced 911 service, or other emergency service, or a customer originated trace. (WAC 480-80-049, proposed March 4, 1992 and effective March 30, 1992.) US West may pull its service due to these conditions. (*Communications Daily* (electronic newsmagazine), 12 no. 67, April 7, 1992, 6.)
West Virginia	Caller ID is available in limited parts of the state pursuant to C&P's tariff filing. (*State Telephone Regulation Report*, May 17, 1990, 7; Francis.) No blocking restrictions are required. (*State Telephone Regulation Report*, July 11, 1991, 3).
Wisconsin	No action.
Wyoming	No action.