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Special report: Towards a National Telecommunications Policy

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Imagine, if you will, the following scenarios involving the American Telephone and Telegraph Co., the nation's largest monopoly with almost one million employees; the world's biggest business with $85.9 billion in assets; and the only private organization in the country with more than $1 billion in profits earned in a single quarter (which it has earned now for the last three consecutive quarters). In the first scenario, suggested by critics of the Bell System, AT&T has a monopoly on telecommunications; it can (as one consumer group has conjectured) "ignore" IBM, RCA, Western Union, and "anyone else."* As actually predicted by the same consumer group, let us imagine that the Department of Justice has discontinued its antitrust suit against AT&T seeking divestiture of Western Electric Co., Inc., the manufacturing and research subsidiary of the Bell System.

In this scenario, AT&T is in a position to determine the information systems of the future. With its data communications revenues growing from $5 billion in 1975 to $22 billion in 1985, it can dominate the country's data communications systems. Some 150 million Touch Tone/Picturephones are employed throughout the U.S. to place orders, pay bills, and register preferences in national check depository accounts. To ensure the integrity of the utility's communications network, Bell customers are prohibited from connecting "foreign attachments" to their telephones.

Or imagine another scenario, suggested by supporters of AT&T, in which the terminal equipment market, encompassing telephone answering and data entry devices, and the intercity private line market, including TWX, Telex service, and all message switching, are dominated by private industry. In this scenario, Bell is unable to support public services (i.e., household telephone operations) because it is losing money to private competitors, which have entered the terminal equipment and intercity private line markets without any obligation to serve unprofitable rural areas. In contrast, AT&T is (as a monopoly) compelled to provide costly telephone services to such isolated groups as Arizona's Harapai Indians who live at the bottom of the Grand Canyon. Thus, many of the more than 1000 independent telephone companies are "put out of business"** because they receive smaller prorated payments from AT&T for long-distance services covered in their jurisdictions.

Meanwhile, according to this scenario suggested by supporters of the Bell System, charges on phone bills rise as much as 75 to 85 percent at a time, placing telephone utilities on a par with electric utilities, already exceeding the monthly mortgage payments in many U.S. households. Despite the substantial increase in costs to the consumer, Bell records its third consecutive quarter of over $1 billion in profits (less than 9 percent return on capital invested), while private competitors dominate the equipment and private line market.

Each of these scenarios is suggested by supporters and opponents of the AT&T-supported telecommunications legislation, entitled the Consumer Communications Reform Act. The CCRA, also known as the Bell Bill, was introduced in Congress for the second consecutive year in January by Sen. Clifford P. Hansen (R-Wyo.) and Rep. Teno Roncalio (D-Wyo.). The scenarios presented above serve to dramatize the extremes to which each side retreats on the issue of providing the best possible telecommunications service.

On the one hand, Bell claims that a regulated monopoly is the preferred and proven means of providing telecommunications services. Thus, AT&T supports efforts to preserve the "integrity" of the communications network from challenges by private enterprise in the lucrative equipment and private line markets. According to Bell, it relies on "cross-subsidies" from equipment and private line services to support public telephone usage, hence American consumers will have to pay higher phone bills if the monopoly cannot depend on income earned through the provision of equipment and private line services. Thus, AT&T supports legislation which labels duplication of services "contrary to the public interest."

On the other hand, opponents of the Bell Bill argue that the legislation is "anticompetitive" in that it imposes the burden of proof on competing companies to demonstrate that their telecommunications offerings do not interfere with "existing" or "potential" services of AT&T. According to these


same critics, state regulatory agencies have found that cross-subsidies flow from public telephone services to support equipment and private line services, not in the opposite direction, as the phone company claims. CCRA opponents contend that Bell's competitors in the equipment and private line services markets provide only 5 percent of the private line and equipment business in the country, and only 0.5 percent of the total U.S. telecommunications output. Finally, they criticize returning to the state regulatory agencies control of what can be connected to the telephone network—e.g., telephone answering and data entry devices.

Each side in the CCRA debate obviously employs its own carefully planned strategy. Opponents of the bill favor a broader approach to communications issues in general. Late last year, Rep. Lionel Van Deerlin (D-Calif.), chairman of the House Interstate and Foreign Commerce Subcommittee on Communications, called for a "basement to attic" revision of the Communications Act of 1934, legislation that created the FCC and provides the basis for regulation of the nation's telecommunications systems. Rep. Van Deerlin suggests that an overall consideration of communications issues will prevent special interest groups (presumably including AT&T) from criticizing isolated aspects of communications policy.

With continued lobbying for the CCRA, it appears to be the strategy of Bell to divert attention from consideration of a general aspects of communications policy considered in the revision of the Communications Act. Bell contends that its legislation takes precedence over review of the Communications Act because the Bell Bill was introduced in early 1976.

However, the CCRA has attracted support from only about 50 Congressmen this session contrasted with over 200 last year, when Bell is estimated to have spent $2.5 million on intense lobbying efforts in local districts. The bill may not even get out of the House Subcommittee on Communications. Thus, AT&T's primary objective in supporting the legislation seems to be to neutralize the impact of "procompetitive" decisions by the FCC—e.g., authorizing a registration program last year for connection of noncarrier supplied terminal equipment (including modems and PBX's) to the telephone network, now under review by the federal courts.

In opposing the legislation, Rep. Timothy E. Wirth (D-Colo.), member of the Subcommittee on Communications, cites a January study he requested by the Justice Department which finds precedence for the FCC's recent "procompetitive decisions" in the Communications Act of 1934. In addition, Rep. Wirth and Sen. Gary Hart (D-Colo.) introduced a joint resolution in February seeking reaffirmation of "competitive principles" in telecommunications. Wirth concedes the resolution is not expected to come to a vote, but that it is part of a strategy to offer an alternative to Congressmen who are disillusioned with the Bell Bill. Rep. Louis Frey, Jr. (R-Fla.), member of the House Communications Subcommittee, suggests that at least some Congressmen are unhappy with the "band aid" approach to telecommunications issues reflected in the CCRA hearings last year.

Debate on the CCRA will have to address what are at least internally inconsistent regulatory actions by the FCC. (Of course, the commission can and does disagree with its own staff.) The FCC has been supporting interconnection of non-carrier terminal...
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equipment to the telephone network since the 1968 Carterfone decision, affecting mobile radios. It is also opposing the Bell Bill which would allow state regulatory bodies to determine what will be attached to the network. However, at the same time that the FCC trial staff was supporting divestiture of Western Electric as a means of increasing competition in the telecommunications industry, the commission decided last February, after a six-year study, that there is presently no reason to support divestiture. It concluded that AT&T does not engage in unfair practices to prevent competition.

A similar inconsistency occurred when the FCC's Common Carrier Bureau ruled to disallow Bell's Data speed 40/4 asynchronous data terminal offering last year, calling it primarily a data processing service, not subject to regulation, nor an approved offering for a regulated monopoly. The commission proceeded to overrule its own Common Carrier Bureau later that year when it approved the tariff for the Data speed device, calling it primarily a communications device which can be regulated.

The FCC's Second Computer Inquiry, expanded in March to include processing activities outside the CPU, might still sanction the Data speed offering. A new definition for data processing distinguishes between what the device does and how it is used. Conceivably, the terminal could be employed in a non-data processing context, while at the same time being considered primarily a data processing device.

There are important questions still to be answered about the nation's telecommunications systems. We are, as House Communications Subcommittee counsel Harry M. Shooshan said on a "collision course between communications and computer technologies—one regulated by the FCC, the other not." Another problem to be addressed is the role the U.S. Postal Service in electronic message systems, discussed in a February report to the USPS by the National Research Council. The report suggests a potential conflict between separate government and private offerings in the electronic mail business.

Finally, there is the broad question of what to do about all regulations in the context of President Carter's attempts to bring government closer to the people. With the support of the President, Congress is considering easing of government regulation, especially in such areas as transportation—e.g., in the airline and trucking industries. This trend towards less government regulation and more competition is likely to spread to telecommunications.

Competition is advanced by its proponents as a means to encourage technical innovation and provide services at the lowest possible cost. However, there is also a need to balance competition with the public's requirement for essential services, however unprofitable. Monopolies and regulation can act to protect the "public interest." Whether our lawmakers decide in favor of "unfettered competition" (as one Senator suggested), or regulated monopolies, or some combination of both, increasing support for alternatives to the Bell Bill suggests that Congress is entertaining a less fragmented, broader approach to telecommunications policy.

IEEE nominates Brown, Ray, and Watson for NRC committee

IEEE officers have selected Owen K. Brown, Jeremiah J. Ray, and James E. Watson as candidates to serve on the Advisory Committee on Reactor Safeguards (ACRS) of the Nuclear Regulatory Commission (NRC). The NRC committee is a 15-member panel of experts from various technical and scientific disciplines who serve in an advisory capacity to the NRC on public health and safety aspects of nuclear facilities, the adequacy of proposed standards, and general aspects of nuclear regulation.

Brown served until 1975 as manager of equipment analysis and quality control for Niagara Mohawk Company. In this capacity he was responsible for the analysis of all equipment specifications and proposals for electric generating stations and the quality assurance program for nuclear generating stations.

Until his retirement last year, Ray was chief electrical engineer, Electrical Engineering Division, of the Philadelphia Electric Company Engineering and Research Department. He administered a program of electrical engineering associated with the design and construction of generating stations (including nuclear power stations), substations, and electric power transmission and distribution systems.

Watson served his entire professional career with the Tennessee Valley Authority. Prior to his retirement last December, he was a senior advisor for the TVA.

The NRC will soon make the final selection of the new ACRS committee members from all the candidates submitted throughout the nation.

Microcomputers to affect all aspects of life says CSI

Microcomputer industry gearing for growth. Microcomputers will increase from just about zero in 1973 to an installed base of 60 million by the end of 1980 says Creative Strategies, Inc. They will affect essentially all aspects of life in the industrialized world, with the diverse market ranging from automobiles to microwave ovens to computers.

Microprocessors, the basic building blocks of a microcomputer, will grow at the rapid rate of over 110 percent per year through 1980, with unit sales accelerating even faster after 1980. Many of the large volume markets will not fully develop until then, either because of the time required for technical evaluation or because of the reluctance to redesign products before the end of their life cycles.

In a recently published report, entitled The Microprocessors/Microcomputer Industry, Creative Strategies thoroughly analyzes the microcomputer market, breaking it down by end user market into ten segments: business and education, communications, consumer, computer, terminals and peripherals, transportation, industrial, government and military, medical and miscellaneous. The consumer segment will produce the largest sales volume through 1980, while the computer terminal and peripheral segment will have the largest dollar value.

The United States dominates the microprocessor/microcomputer industry and will continue to do so, at least for the next several years. The Japanese, however, have several microcomputers in the production stages, and the Europeans are expected to become more active in the near future.

Electronic banking, soon a $2 billion field. In its recent study discussing three major types of banking automation terminals, Creative Strategies, Inc., states that the installed base of the terminals is expected to more than double over the next five years, increasing from $906.5 million to $2.115 billion. The anticipated rise in sales is dramatic, considering that the banking automation is caught up in a series of hassles ranging from consumer resistance and technological roadblocks to legal and regulatory decisions about whether or not automated terminals should be considered branches of the installing financial institutions.

To order either report or request more information, contact Creative Strategies, Inc., 4340 Stevens Creek Boulevard, Suite 275, San Jose, California 95129.