The Impact of American Telecommunications Policy in Europe

by Eli M. Noam

Columbia Institute for Tele-Information
Graduate School of Business
Columbia University
809 Uris Hall
New York, NY 10027
(212)854-4222

THE IMPACT OF AMERICAN TELECOMMUNICATIONS POLICY ON EUROPE

Eli M. Noam

Associate Professor

and

Director
Research Program in Telecommunications
and Information Policy

Columbia University
Graduate School of Business

May 1984

The Impact of American Telecommunications Policy on Europe

Recent US developments in the telecommunications field have not gone unnoticed in Europe, and are having their effects, intended or unintended, on the other side of the Atlantic. In this paper I will discuss the forces in Europe which shape telecommmunications policy, and the effects of the American deregulatory trend on European telecommunications equipment and service markets.

Much of the analysis across the Atlantic interprets US events selectively, and, not surprisingly, according to the economic and political orientations of the observers. Developments in the US challenge the status quo and thus threaten the broad coalition that supports and benefits from the monopoly position of the PTT. This coalition, which can be termed the "postal-industrial complex," includes the government itself through the PTT, the equipment manufacturing industry, trade unions, intellectuals, the elderly, churches, the political left, "good government" advocates, the poor, rural inhabitants, and small towns. Increasingly, it can also count on the computer and high technology industry, which is drawn into the coalition by the PTT's central role in industrial policy, equipment procurement, and trade protectionism.

Given the scope of this coalition, it is not surprising that informed European discussion of US developments is

dominated by experts who are closely affiliated to the postal-industrial complex. Those involved have a great amount of respect for the old AT&T. The American company, though private, had a monopoly similar to the PTTs, and its engineering and operating excellence were a model to the Europeans. The PTTs and AT&T were partners in the provision of international services rather than competitors, and AT&T's avoidance of exporting equipment kept it out of rivalry with European manufacturers.

European experts were therefore bewildered by the dismantling of AT&T. The PTTs in particular, with an engineer's point of view, saw the elimination of end-to-end service as detrimental to a system which is orderly, continuous and centrally planned, all while satisfying the needs of the economy and fulfilling social policy functions. Since this describes the PTTs' self-image, the fact that the US voluntarily chose to dismember such a system causes a great institutional insecurity. The result has been a defensive reaction to the changes, including an interpretation of American events as being arbitrary, inefficient, and resulting from politics and ideology rather than engineering and technological considerations.

A main point made by the PTTs was that American circumstances are inherently different from those in Europe, and thus developments in the US are not relevant to Europe. When Europeans assert that the U.S. system is "different" they usually mean that the American system is run for a

profit, while in Europe telecommunications serves the greater welfare of the society.

There are serious flaws in this simple contrast. On the most basic level, the US telecommunications system, for more than half a century, successfully embodied social goals such as universal service, reaching more subscribers at generally lower rates and higher quality than in any European country. This commitment to universal service has not changed with divestiture, as can be seen by recent Congressional and state commission proceedings. The percentage penetration of telephones in the US is higher than in Europe [ITU in World Communications], despite the less favorable geography and demography. (Furthermore, the quality of service in the US is higher; examples are convenient operator assistance, itemized telephone bills, collect and credit card calls, and rapid installation.) Residential rates in the U.S. are usually only one half of that of business rates, unlike in Europe; rural subscribers are supported in the U.S.in a variety of ways, and public phones are plentiful and inexpensive. Hence the image of a hard-nosed, cold-hearted, business-oriented telecommunications system is at variance with reality.

European commentators tend to interpret the impact of the AT&T divesture as a zero-sum game, in which consumers lose and business gains, and as such an integral part of the economically conservative philosophy of the Reagan administration.

Only rarely does one see references to cost reductions

in the U.S. due to competitive pressures, or to the lower cost of service in general. For example, AT&T claims to have cut production costs on a telephone receiver, from $2.30 to $.99 within one month! [J. Olsen, cited in The Economist, Dec. 24, 1983, p. 76] In June 1984 it announced the goal to cut its cost in all manufacturer's divisions by 20-25% [Electronic News, June 18, 1984, p.67]. In the area of long distance transmission, operating costs for AT&T have been estimated to be 34.2 cents per revenue minute, while for its rival MCI they were only 17.9 cents [S. Chrust, Stanford C. Bernstein & Co., in Fortune, April 16, 1984, p. 112]. This seems to indicate a substantial potential for cost savings in the old AT&T system, which the PTTs had admired as a paragon of efficiency. Even with such slack, an O.E.C.D. report found that public switching equipment in the U.S. cost only about one third to one half of the European average [OECD 1983].

Another interpretation of the AT&T divestiture, espoused in the major French daily Le Monde, sees it as part of a general American economic offensive against Japan and Europe. In addition to the threat posed by a divested AT&T, there is also the ubiquitous presence of the great IBM, which is portrayed as being bent on world domination. [Le Monde, Jan. 1984] This theme was also presented in detail in the widely noted French Nora-Minc Report of 1978 [Nora, 1980], which had compared IBM's powers and global scope with those of the Catholic Church and the Communist

International. This view, however, does not explain why the American technological offensive would be advanced by reducing the power of its major telecommunications company. Assuming a global offensive strategy, it would seem more sensible to unleash AT&T with all of its resources, rather than reducing them and tying up the giant for years with reorganization. Unless, of course, one accepts the US premise that a competitive environment creates the underlying strength for world export markets.

From this strategic point of view, the response of European PTTs and the postal-industrial complex to the American developments is to close their ranks, domestically and internationally, and to tighten the present institutional setup in order to defend Europe from the American onslaught and the infection of liberalization. However, in the interdependent world of communications, they cannot insulate themselves from the fall-out from the American developments.

The Equipment Market

In the telecommunications equipment market, the AT&T divestiture led to the emergence of AT&T as a competitor in European markets, a sharp break with the past. For more than fifty years AT&T stayed out of international equipment activities, despite its being the largest equipmenmt manufacturer in the world.

With constraints removed, AT&T embraced an international orientation, and began to see Western Europe

as a potentially lucrative market. To gain local acceptance, the company has restricted itself to alliances with European domestic companies, in effect establishing beachheads. Given the nationalistic and protected nature of the European market and AT&T's lack of international experience, this strategy seems to be the most realistic way for AT&T to establish its presence in Europe. Two major instances are AT&T's purchase of 25% of Olivetti in early 1984, and its cooperative agreement with Philips.

Although this entry into Western Europe has not resulted in major sales, the mere threat of AT&T as an active competitor is enough to set off resistance among the postal-industrial coalition.

The French especially have interpreted these deals as the death knell for Europe's ability to challenge AT&T [Business Week, Oct. 11, 1982, p. 47; Le Monde, Jan. 14, 1984] Protectionism is portrayed as the only way to ensure that Europe retains control of its own telecommunications industry and its ability to develop new high technology products for export. Given the restrictions on use of tariffs in GATT and other trade agreements, in order to protect their markets Europeans must rely on non-tariff barriers. It is in this area that PTTs are particularly effective through their role in industrial policy.

A protectionist mentality in telecommunications is present in most West European countries, with the result that few markets remain open, which also greatly limits

intra-European export opportunities and fragments the market. In order to overcome this, there have been proposals, especially by the French, to open the European market to European manufacturers, while excluding North Americans and Japanese. This strategy reflects the belief that given larger markets and thus larger economies of scale, French manufacturers will be able to move down the cost curve, while being protected from their most serious overseas rivals. Americans consider economies of scale secondary in a time of dynamic change. Their strategy is to shift the cost curve itself through liberalization of the telecommunications environment.

Ironically, the very US liberalization which is raising European anxiety and protectionism in its wake is providing European manufacturers with opportunities in the US equipment market. The Bell companies, which prior to divestiture had relied largely on Western Electric equipment, are now free to obtain equipment from other suppliers, and are indeed actively doing do.

In the forefront of European companies active in the US market is Plessey, a British company which has acquired the public switching business of the American manufacturer Stromberg-Carlson; likewise, the Swedish firm, Ericsson, a major player in the international telecommunications export market, has been actively approaching the new Bell regional operating companies, after already establishing itself among American independent telecommunications companies.

The opening of the American market is among the best

news that European firms have had for a long time. As mentioned, the other European markets are largely closed to European firms, even within the Common Market, and demand in the developing countries, including the OPEC countries, has declined. In addition, many countries use development of their telecommunications industry to spur their own domestic electronics firms, and rely on a less than state-of-the art technology suitable to local servicing skills. Often these countries have set up domestic equipment manufacturers with government protection similar to those in Europe. Thus there is a very limited number of markets for telecommunications equipment which are really open. The OECD estimated that in 1982 open markets accounted for less than 10% of the world market [OECD 1983]. In fact, by far the largest such market is now the US. The irony is that the strong advocates of protectionist policy in telecommunications equipment now are beginning to seek their fortunes in the newly-liberalized US market! This asymetric situation cannot continue for long. It is highly unlikely that the US will stand by passively if Europeans can freely sell equipment in the US, while American manufacturers are shut out of European markets. Undoubtedly the US would pressure the Europeans for reciprocity. Thus the opportunity to enter the US market is in fact a double-edged sword which threatens to bring about a reduction or elimination of European firms' own protected position.

International Telecommunications Services

The clash of different policy approaches on the two sides of the Atlantic is particularly acute in the field of international telecommunications services. In this area, US policy has restructured the rules of the game radically within a short period of time, thus forcing their European correspondents at the other end of the pipe to unwillingly respond to the new situation.

Historically, US regulation of telecommunications firms had carved up the global market into distinct segments, each assigned to different carriers. These included: domestic telephone carriers; domestic telegraph carriers; domestic satellite carriers; international voice carriers; international record carriers (IRCs); the international satellite carrier; the international marine cable consortium; and carriers for domestic non-voice satellite communications. Though AT&T participated in several of these market segments, as a rule the different sectors and firms were highly segregated.

On the European side, things were much less complex. The typical arrangement was for the domestic PTT to control all communications, domestic or international, voice or record.

Eventually, the FCC realized that US regulations were handicapping US firms, given the technological advances in the telecommunications field. This and the trend towards deregulation resulted in the FCC reversing past policies. In a series of rulings in 1979-80 [FCC 79-842; 80-523; 80-

585), the FCC largely eliminated the rules which prohibited AT&T and the IRCs from entering each others' markets. In 1981 the International Record Carrier Competition Act [Public Law 97-130, Dec. 29, 1981] eliminated the separation between domestic and international telegraphy that had kept Western Union and the IRCs apart.

In the satellite field, the FCC continued this trend in 1982 (FCC 82-357) by permitting Comsat to go beyond its carriers' carrier limitation and service customers directly. This action was contingent on a major restructuring of Comsat (FCC 82-372) to separate its unregulated competitive activities from those that were left regulated. At the same time, the FCC was considering direct access of carriers other than Comsat to Intelsat, bypassing Comsat. The FCC also decided to limit, as far as possible, its role in the allocation of communications circuits between cable and satellites, and to rely on competition.

In the Second Computer Inquiry [77 FCC 2nd 384 (1980)], the FCC deregulated enhanced telecommunications that go beyond "basic" and regulated transmission. In the Telenet-Tymnet decision (FCC 82-377), the Commission reaffirmed that the Second Computer Inquiry decision extended also to international telecommunications services [GAO, p. 11]. The implication was that enhanced communications services from the US to other countries would not be subject to facilities or rate of return regulation.

Proceeding to the next step, the FCC reconsidered its attitude toward the Intelsat cartel arrangements and the

liberalization of the international satellite transmission market. In an extension of its well-established domestic policy, the FCC accepted applications from a group of private entrepreneurs for a license to operate a private trans-Atlantic satellite system under the name of Orion.

Once again, American deregulation threatened the protected status quo, this time in an especially profitable sector. Neither Intelsat nor its constituent organizations wanted to see their substantial revenues, both as users and shareholders in the consortium, being whittled down by competition. The argument of cross-subsidization is internationalized insofar as profits from the high density trans-Atlantic and North Pacific routes subsidize the low density traffic to and among less developed countries. However, it is doubtful whether the monopoly profits are fully offset by subsidies and the overall system realizes only normal profits. Concern with the telecommunications needs of developing countries could just as well be expressed through direct financial contributions or aid in tne form of equipment, subsidies, expertise, or lower communications rates to these countries. More likely, the PTTs are particularly worried about the threat that competition on trans-Atlantic routes would pose to their own highly profitable international service.

But at heart, the fierce opposition to the liberalization of the international satellite communications

system -- was witnessed for example at the April 1984 meeting of Intelsat where the members unanimously adopted a resolution urging all members to "refrain from entering into any arrangements" with other satellite systems [Broadcasting, Apr. 16, 1984 p. 44] -- stems not as much from the potential financial effects of liberalization as from its very principle. Once it is shown that service competition is possible, and that there are advantages in terms of service options and rate reductions to changing the status quo, competition would be harder to avoid in domestic long distance transmission.

To defend the present system, PTTs pursue various defensive strategies against the potential American entrants. The first of these can be described as an "up-link" strategy, the aim of which is to prevent the FCC from granting a license to any private applicants, American or foreign. One argument used is that Intelsat had been given a monopoly for international satellite telecommunications by the Intelsat agreement. Orion counters that the agreement does not include private line leasing. On the other hand, International Satellite Inc. which planned to offer 15% to 30% of its capacity for non-private line service, maintains that the agreement prohibits only such new systems that would cause substantial harm to Intelsat, and that its limited operations would not cause such harm. As an example it points to various regional satellite systems such as Arabsat and Nordsat which have used the same clause in the agreement.

The second strategy centers on the "down-link" by eliminating the new satellite carriers' ability to connect into European national networks. The PTTs attempt to maintain a unified front of all European countries against a beachhead or, if that is not possible, to prevent it from becoming a transfer point to other European countries. As with every cartel-like agreement, it is only as strong as its weakest link. The United Kingdom, which is moving towards liberalization of telecommunications, may not go along with such an arrangement, and given the importance of London as an international telecommunications center, any British agreement with private satellite carriers would be a major blow to the united PTT front.

Similarly, as in the case for tax havens, some small European countries would probably find it to their advantage to serve as a telecommunications hub, and to permit downlinks from non-Intelsat carriers. To prevent such backdoor liberalization, PTTs could try to block retransmission arrangements. But it is questionable whether such restrictions would be enforceable or whether they would be legal. In a factually similar case, European governments, invoking CEPT and CCITT rules, had attempted to impose restrictions on the use of Britain as a telex hub by private British telex bureaus. However, the European Commission in an anti-trust proceeding resoundingly struck down these attempts as a violation of the intra-European competitive rules of the Rome treaty establishing

the EEC. (The case is on appeal at present.) [European Commission Official Journal L360, 21 December 1982, p. 36; as cited by Dumey, 1983, pp. 3-6]

In the area of telecommunications services, the emergence of MCI and other potential international carriers challenges the orderliness of the carefully protected international telecommunications regime. There are, however, potential benefits for the PTTs from this situation. Being the only address within their countries for AT&T, MCI, and others, PTTs are in a position to choose which American carrier will be allowed access to their market, and can play off -- or "whip-saw" -- the rival American carriers against each other to obtain advantageous operating agreements. For example, instead of splitting revenues 50-50 as is customary, the PTTs could demand a 60% cut. In recent years, the Benelux and Scandinavian countries have invited bids. To prevent whip-sawing, the FCC since 1977 has required that international settlement arrangements must be uniform for identical routes, thereby officially enforcing a cartel on settlement agreements.

The new carriers are less than happy with these anti-whipsaw rules. In order to be admitted into otherwise hostile territory, the American would-be entrants need to offer attractive deals to the PTTs. Their ability to compete with AT&T for PTT business is severely reduced by this type of rule. AT&T's competitors thus argue that although the PTTs may benefit from whipsawing, at the same time they may be "infecting" themselves with this

competition.

Of the new United States long-distance carriers, MCI has in particular been active in pursuing an ability to provide an end to international voice traffic in the same way that AT&T does today. The company has actively pursued negotiations with a good number of countries. By mid-1984 it had largely concluded an agreement with Australia. In Europe, negotiations with Belgium, Greece, and Spain had progressed substantially, and the company was at the stage of testing equipment.

PTTs have not been particularly hospitable to new U.S. carriers. An example is Japan, which has refused to come to an agreement with Western Union, a new entrant in the international record traffic. The company, however, has managed to undercut this Japanese policy by routing its communications traffic to Japan through another country. Since the benefits from a low rate agreement with Japan on that route are high, the Japanese were actually losing revenue of more than one million dollars per year, according to Western Union. [Business Week, Oct. 24, 1983, p. 140-144] This example illustrates how difficult it has become, in an era of instant inter-linkage and distance insensitivity of cost to man the protective ramparts.

Another issue created by American deregulation is the ability of PTTs to choose among the new American carriers for communications originating in Europe. An American customer can choose between AT&T, MCI, GTE or Sprint, to

name a few, as his carrier of choice. But when a European places a call to an American city it is his national PTT which decides which US long-distance company carries the call within the US and thus realizes the revenue. Until now, all voice traffic was routed through AT&T. But how should the PTTs react to the competitive environment in the US?

One possibility, of course, would be to give European users the choice to indicate which American long-distance carrier they prefer, for example by assigning several country codes to the US, each corresponding to a carrier, rather than the present single code. Although this would add extra costs, these could be made up by the American firms, who would be more than willing to gain such traffic.

Once again, the primary problem seems to be the threat to the principle of a government monopoly in telecommunications. The introduction of choice in communications service, and the possibility of accompanying advertising campaigns directed at European customers by American carriers would demonstrate to users that network competition may benefit them. For this reason, it is unlikely that PTTs will at present grant to consumers the ability to choose among carriers. Instead, negotiations center around the PTT allocating traffic among AT&T and its competitors. The ways to do so include negotiating market shares in advance, determining shares through a formula, or, most logically, allocating American-bound traffic in the same proportions as the different American carriers bring in

Europe-bound traffic.

Just as in the equipment market, deregulation of US domestic telecommunications provides Europeans with new opportunities to enter the American market, since the liberalized environment makes it possible for European carriers to acquire or set up American long-distance companies. The British company Cables and Wireless PLC now owns TDX systems, an American discount long distance company. France Cables and Radio, the international subsidiary of the French PTT, in 1983 acquired shares of Argo Communications, an American inter-city carrier [Business Week, Oct. 24, 1983]. Such entry can be accomplished without the need for international agreements or negotiations. Under the Second Computer Inquiry decision, enhanced service providers are unregulated. Thus Pacnet Communications, which had been acquired by the British firm Cable and Wireless, requested an FCC status to provide overseas customers with American resale packet switched network services [GAO year p. 27]. With such a status, Pacnet would not had have to file with the FCC, and could even have acquired satellite circuits from Comsat without requiring authorization. This arrangement creates the possibility that European PTTs could not only set up their own unregulated distribution networks in the US, but also at the same time restrict their competitors in the US from entering the domestic markets.

Although the Pacnet application was withdrawn, similar

actions are a clear possiblity in the future. This situation again raises serious issues of reciprocity and imbalance.

American deregulation is plainly having its effects in international markets. The US policy shifts were triggered by technological developments that were exploited by entrepreneurialism and financed by capital markets. Much of the dynamism and resources are now consumed by the exploitation of new domestic opportunities, or, in the case of AT&T and the Bell companies, by adjustment to the new environment through massive internal reorganizations. However, it seems clear that the US domestic telecommunications liberalization will accelerate the already strong tendencies for change in the international market. Since marginal costs in telecommunications are relatively low, systems that are set up in the US can extend abroad with relative ease. Long distance satellite service providers can readily expand into international traffic: data-base suppliers also could easily service the European market, as could equipment manufacturers. In short, the energies that brought about the shift in US policy towards deregulation will not stop at the US border. This trend is seen by the PTTs and their supporting "postal-industrial" coalition as a major threat to the stability of the time-tested and mutually beneficial coexistence. Given the breadth of the coalition, it will, no doubt, succeed for some time in its essentially defensive posture. However, the technological opportunities will not pass Europe without

generating internal challenges to a telecommunications system based on monopoly. The new opportunities in America, as well as a US export offensive, are likely to lead to further breaches in the system. And the demonstration effect of what is likely to be technologically a significantly superior and socially not regressive telecommunications service will also pose a major challenge to a telecommunications system based on monopoly. This is not to say that the American model can be applied in Europe, or that the days of the PTTs are numbered. But changes in the US, and their unavoidable interactions across the Atlantic, are likely to nudge along a process of liberalization in which PTTs are still the major force, but not as monopoly. As this process unfolds, defensive and offensive reactions are likely to be acrimonious; cooperation, however, is inherently unavoidably and it provides the formulation for transition into the next phase of global communications.

References

1. Broadcasting, "Intelsat Members to Bar Competition," April 16, 1984, p. 44.

2. Business Week, October 11, 1982, p. 47

3. Business Week, October 24, 1983, p. 140-144

4. Dumey, R. "Telecommunications and the EEC Competition Rules," unpublished speech given at Brussels anti-trust luncheon, 1983.

5. The Economist, "And a Prosperous New Year," Dec. 24,

1873, p. 76.

6. Electronic News, "Say AT&T to Cut Mfg. Costs'" June 18, 1984, p. 67.

7. Fortune, "Can AT&T Compete in Long Distance?" April 16, 1984, pp. 112-116.

8. General Accounting Office, "FCC Needs to Monitor a Changing International Telecommunications Market," GAO/RECD, March 14, 1983, pp. 86-92.

9. ITU, World Communications

10. Le Monde, "La Guerre Mondiale de la Communication," Jan. 11-14, 1984.

11. Nora, Simon, The Computerization of Society, MIT Press, 1980.

12. OECD, "Telecommunications: Pressures and Policies for Change," Paris, 1983.