Chapter 15

The politics of international telecommunications reform

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Since its beginnings with the telegraph, the telecommunications industry has been closely linked with governments.[1] For many years, despite differences in ownership between AT&T and other posts and telecommunications administrations (PTTs), there was a remarkable unanimity of purpose in governmental telecommunications policies. The old concept of telecommunications was that of a natural monopoly; that is, it was argued that the entry costs in fixed capital investment were economies of scope and scale such that a duplication of facilities would increase unit costs and hence prices to the consumer. The old system involved hidden cross-subsidies from long-distance to local services, from business to residential access, from existing consumers to potential consumers, and from urban to rural areas. Telecommunications policy held within it elements of social policy and also goals belonging more to macroeconomic, employment, industrial, defense, or science policy than the expansion of telecommunications. Hence the old policy benefitted similar constituents in all industrialized countries: individual residential consumers, rural areas, trade unions, and telecommunications equipment manufacturers. Concomitantly it disadvantaged large distributed businesses, urban areas, and potential entrants either to the network operating markets or to the equipment markets.[2]

Many changes have taken place in the telecommunications sector, beginning with the liberalization of equipment in the United States and gathering force over the last five years. Yet no similar cross-national consensus on what market structures should look like or who should benefit has yet emerged.[3] Countries' policies differ on structures and goals, and so my purpose in this essay is to explain policy changes within three industrial countries - the United States, Japan, and Britain.

I maintain that economic interests arise and shift according to the opportunities afforded by new technology and to the position of domestic industry within the world economy. But the ability of economic interests to influence policy depends on their ability to co-opt bureaucratic interests and to establish legitimacy in the eyes of the public through their use of ideology. The ideology itself is a product of long-term historical relations and short-term pushes and pulls of economic interests. In the United States and Britain, ideology relating to the market historically emphasizes the autonomy of the firm, whereas in Japan it stresses the primacy of the state.[4]

Within the telecommunications industry, the picture is one of competing interests within business as well as competing interests in bureaucracies. Bureaucracies have their own private agendas, and at times these state interests may prevail, as currently in Japan. In general, however, shifting coalitions of state and private capital, bolstered by the legitimacy of ideology, are responsible for shifts in policy.[5] Despite differences, in all three countries government regulation of telecommunications is becoming more politicized as losers in the market turn to political activity for compensation and as bureaucrats strive to extend their control.

Several technological developments in telecommunications have produced changes. First, and perhaps of greatest importance, has been the digitalization of switching, which has led to the convergence of traditional telecommunications (voice transmission) with that of computing (data transmission) and video transmission – and to conflicts between the systems of regulation prevalent in the previously discrete industries. The reduction in costs of fixed investment through optic fiber and satellite technology has brought into the market new equipment manufacturers and new operators. At the same time it is now possible for large businesses to construct their own private networks for less than what it would cost for continued usage of PTT long-distance networks. In addition, information provision and other specialized services or niche sectors in the business community have brought new service suppliers into the market.

New facilities providers, new equipment manufacturers, new service suppliers, and large users have invaded a sector that was previously the prerogative of government-backed PTTs. In turn, the new entrants have their own agendas and interests, not necessarily married with those of the incumbents. Alliances have been formed between new and old interests and with elements of the state in order to swing policy in their

favor; much of this activity is intended to change governmental rules for the market.

Where competition has been allowed with the PTT, these rules or regulations have been necessary for fear of cross-subsidization between monopoly and competitive services. Much of the experience in this matter came from the pre-divestiture behavior of AT&T.[6] The result of continued regulation to effect liberalization has been that companies depend on bureaucracies for permission to enter markets or to pursue strategies within markets. In general, competition has had the ironic effect of increasing, rather than decreasing, the relation between state and industry.

Despite the usage of the terms deregulation, re-regulation, and privatization to describe the divestiture of AT&T and the entrance of competition into the British and Japanese markets, the initial regulatory frameworks for each were considerably different. Also different were the pressures that brought each about, ranging from large users and potential entrants in the United States who were allied to a political ideology antipathetic to regulation, to the Thatcher government's ideological predisposition to the needs of the city, to pressure from new Japanese capital and foreign entrants who allied themselves to bureaucratic interests in Japan.[7]

In the United States the regulatory framework established by the Federal District Court in 1984 provided for the breakup of AT&T into seven regional operating companies and a long-lines company, on the basis of a market segmentation between regulated monopoly services and unregulated competitive services. The stated intention of this market segmentation was to stop AT&T from using its local service as a bottleneck to competitors. At the time the RBOCs (regional Bell operating companies) and AT&T were split into regulated companies, responsible for network operation (primarily voice), and unregulated ones, responsible for enhanced services. AT&T, allowed to keep its manufacturing and R&D, was split from the major market for its equipment – the local operating companies. Although AT&T was allowed to manufacture, the RBOCs were not. The court did allow the RBOCs to take over AT&T's Yellow Pages and introduced a waiver clause permitting them to return to court to apply for entry into any market in which they would not be dominant. AT&T rates remain regulated through the FCC, while the RBOCs are separated into voice carriage (regulated by the states) and unregulated companies, with market segmentation policed by the court.[8]

The court added to the regulatory framework of the FCC and the individual states a further but autonomous system of regulation. However the FCC still remains responsible under the Federal Communications Act for the provision of universal service at a reasonable price. Other agencies such as the NTIA of the Commerce Department, the State Department, the Office of the Trade Representative, and the Pentagon, as well as Congress, have all become directly or indirectly involved in domestic telecommunications policy.

In Japan the regulatory framework established by the 1984 Telecommunications Business Law freed the equipment market of regulation and split carriers into Type I (facilities providers), Special Type II (national or international leased line service suppliers), and General Type II (dedicated networks). Type I had to be owned by a 70 percent majority of Japanese, and Special Type II could be foreign controlled; both could operate internationally, although it was assumed that international competition with KDD, the sole Japanese international carrier, would come from Type II entities.[9] NTT was to be privatized, but the government continued to hold 30 percent of its shares. Its future organization was to be reviewed in 1990. Obligations of universal service and the retention of R&D were placed on NTT. The only further market segmentation is a ban on the connection of voice-only private networks to the switched network.

Subsequently the Ministry licensed three terrestrial Type I long-distance competitors with NTT and two satellite competitors. Several hundred General Type II service suppliers have also been registered by the Ministry (regulation is lighter than for Type I entities), although less than twenty are thought to be active. In the international market the Ministry has licensed a Type I facilities provider, of which Cable and Wireless of the UK and Pacific Telesis are the major foreign participants and has further licensed a Japanese consortium to provide international service via leased lines. In addition, an agreement with the United States has allowed Type II suppliers to market value-added networks on an international basis, and an amendment to the Business Law to this effect was made in 1987.

The telecommunications law of 1984 gave the Ministry of Posts and Telecommunications a greater role in the regulation of telecommunications. The Ministry of Trade and Industry stays involved through the promotion of R&D projects and because it views the wider area of information technology (of which telecommunications is part) as its rightful territory.[10]

In Britain the liberalization of the equipment market in 1982 was then regulated by the Department of Industry. Its failure to control British Telecom (BT) was the prime reason for the establishment of the Office of Telecommunications (Oftel) to regulate the sector. The Telecommunications Act of 1984 which allowed for the privatization of BT also set up Oftel, under the direction of Bryan Carsberg, an accountancy professor. Under the Act the primary duty of Oftel's director is to exercise his powers relating to the licensing of BT and other operators in order to secure telecommunications services that satisfy all reasonable demands for them; several secondary duties, such as promoting the interests of consumers, promoting R&D, promoting foreign business use of UK telecommunications, and promoting international transit services, are placed on the Director. He exercises power in relation to existing licenses independent of the Ministry, but the Minister continues to have the power to issue new licenses and to have responsibility for international telecommunications.[11]

Market segmentation was originally based on liberalization of the equipment market, a duopoly of voice carriage between BT and Mercury (now wholly owned by Cable and Wireless), and the further liberalization of value-added network (VAN) services. Because of difficulties in defining VANs, however, all data transmission was subsequently liberalized. Simple resale of voice transmission was subsequently liberalized in July 1989. Cellular mobile radio is divided between a BT company and Racal Vodaphone. Oftel is responsible for regulation of the whole sector together with the licensing of cable TV transmission. It is also responsible for consumer complaints and for the provision of information.

BT is regulated by price cap. Its license divided services into those whose tariffs would be regulated by Oftel - a basket of services including monthly access charges, long-distance tariffs over the PSTN, and local calls - and others. BT was obliged not to raise tariffs over that basket of services by more than the Resale Price Index of inflation minus 3 percent, but it could rebalance tariffs within the basket. A further provision limited it to no more than a 2 percent increase per annum in residential access charges.[12] In view of the limited competition offered by Mercury, which has primarily concentrated on major business customers in London and other major cities, Oftel has also moved into the regulation of services not covered by the basket, such as leased lines.

Turning to the American market, in 1968, when the Carterfone decision liberalized the use of equipment in the United States, there was

no consideration of the trade implications, which did not become apparent until the maturation of the Japanese market in the early 1980s. Nor were the industrial policy implications of the AT&T divestiture taken into consideration. But with a Schumpeterian analysis one could argue that monopoly profits are necessary to fund innovation, and that the divestiture has exacerbated the present condition of American trade balances and innovation.[13]

The liberalization of the American customer premises equipment market (CPE) that preceded AT&T's divestiture opened it to foreign penetration. The balance of trade went from a surplus in 1981 of $1.5 billion to a $2 billion deficit in 1986, with the largest share of imports coming from Japan and the Asian newly industrializing countries. In response, American companies have taken to manufacturing in lower wage economies such as Singapore and Mexico. The CPE market is now almost lost to American domestic manufacturing production.[14]

In the switching market the divestiture not only released the regional Bell companies from purchasing switches from AT&T's subsidiary, but demanded that they should not discriminate in favor of AT&T. By the late 1980s AT&T had lost its near monopoly, sharing the market instead with Northern Telecom, and competing with foreign manufacturers. AT&T badly needs switching export markets, of which the European is the most important. It has attempted to make that entry through alliances with European firms such as Philips and Olivetti. Although there is no evidence that AT&T is cutting back on R&D, the lack of expansion in its domestic market share without commensurate export markets seems likely to lead to a downgrading of technology.[15]

In general, then, the American telecommunications equipment market is characterized by increasing foreign penetration of investment, a faster increase in imports than exports, an increase in overseas manufacturing by American firms, and a decreasing share of the home market for American companies. Coupled with the competitive fragmentation of the bureaucracy, it is this economic situation together with market fragmentation that has encouraged companies in the use of political rather than market competition.

A major factor in the bureaucratic standoff has been the overlay of an autonomous system of regulation by Judge Harold Greene's court on that already operated by the FCC and the state regulators. Yet, in undermining the authority of the FCC, the court continues a trend begun in the early 1980s. At that time, under the chairmanship of Mark Fowler, the FCC became a body occupied with deregulating the telecommunications and broadcasting markets, thereby bringing it into conflict with

Congress.[16] During the divestiture the issues of faster depreciation and of access costs, as well as the FCC's belief that interexchange carriers should be freed from all such charges, further alienated a Congress concerned to protect individual consumers. Challenges to the FCC by state regulators through the courts have limited even more its operations to inter- rather than intrastate regulation.[17] The FCC's efforts to compensate for the erosion of its base by entering the fields of technical regulation at the national level, and attempting to regulate at the international level, originally foundered, partly because of its hands-off ideology and partly because of bureaucratic competition.

Allied mainly with the old telecommunications sector, represented by AT&T and its divested RBOCs, the FCC has come under pressure from new entrants such as information processing companies and AT&T's long-lines competitor, MCI, from a Congress concerned about rising residential telephone bills, and from the court itself. Judge Greene has made no secret of his belief that the FCC is incapable of regulating the RBOCs. Nor are its major client groups unified. The *Modified Final Judgment* (MFJ), with its emphasis on forbidding RBOCs preferential treatment of AT&T, effectively isolates them from each other, while they remain in the wings as possible competitors to AT&T if the MFJ were lifted.

The perception at the time of the divestiture was that AT&T had the better prospects. The RBOCs were expected to perform as public utilities with a maturing market and high costs, and they immediately exploited fears that they would be uneconomic entities in order to gain concessions from the court and increased tariffs from state regulators. Subsequently, the RBOCs have moved into non-telecommunications businesses as well as pressing to remove market divisions imposed on their activities. Forbidden to manufacture, at first BellCore influenced product manufacture through R&D, but the RBOCs spend little on R&D. For the FCC, one way to solve the trade imbalance would be to allow the RBOCs into manufacturing. In its application to the court it was joined by the NTIA and Congress itself. But the application worsened the situation since Judge Greene determined that R&D also constituted manufacture. Only later was it acknowledged that even if the RBOCs were to manufacture CPE, they would also manufacture abroad.

Other FCC actions related to the trade deficit can be viewed as responding to AT&T's need for overseas markets. During the confrontation with the French government over the penetration of AT&T into the French market, it demanded details of foreign purchases by RBOCs.

Its action trod on the toes of other agencies, as did its review of access charges for enhanced service suppliers.[18] The issue of whether AT&T should be regulated by means of a price cap as in Britain or by rate of return brought the FCC into more conflict with a Congress concerned that the proposals would be to the detriment of the individual consumer.[19] Although the court's autonomy eroded the power of both the FCC and Congress in domestic telecommunications, their competition with each other further weakened their influence. A movement headed by the NTIA in 1988 to remove policymaking from the court came to nothing and was replaced by a demand that the FCC should be placed under the executive branch.[20] The poor rating given to the FCC was also evident in the removal of its power over international telecommunications contained in the revised trade bill of 1988.[21] However, the appointment in 1989 of Alfred Sikes from the NTIA to head the FCC has brought rapprochement between it and Congress, and the establishment of a division within the FCC to oversee international telecommunications.

The burgeoning trade deficit in telecommunications equipment has provided the only unifying theme for policy in a fragmented market and a fragmented bureaucracy. In response, in 1988, Congress enacted a bill that demands reciprocity from countries running a telecommunications deficit with the United States. The bill is therefore primarily concerned with manufacturing and exports. Similarly, a further attempt by the FCC and Congress to legislate the takeover of telecommunications policymaking from the courts, scheduled for 1990, centers on the RBOCs and manufacturing. But Congress has left untouched so far the whole issue of export controls, the relation of controls to export markets of equipment, and the relation of regulation to innovation.[22]

With the bureaucratic standoff continuing, attention has shifted to international policy where the new service suppliers are the dominant economic coalition. These suppliers are a small, unified group intent on increasing their foreign investment. Their contribution to the balance of payments is not large, yet in an alliance with the USTR, Commerce, and State they have appealed to the ideology of free trade to further their aims through the ITU and GATT.[23] Hence, despite the intention that in the United States the manufacture of high technology products should be increased, the implications of current policy developments are of fragmentation, lack of standardization, failure to take advantage of economies of scale and scope, and disintegrating domestic manufacture. Bureaucratic competition has led to a policy vacuum filled by the only unified group in the market.

Turning to the Japanese, we see that the past mercantilist industrial

policy has been held up as a model for Western European democracies to emulate. Underlying the models of Japanese policymaking is an inherent proposition that it is a rational one, led by bureaucrats with long-term goals for enhancing the Japanese national interest.[24] Because the Ministry of Trade and Industry (MITI) has always been regarded as the strongest ministry, even when there is conflict, the pattern has been to view that ministry, in conjunction with the Ministry of Finance, as the long-term industrial decisionmaker. Nevertheless, the internationalization of Japanese manufacturing has eroded MITI's power base, and the recent Telecommunications Bill has turned power over telecommunications to the Ministry of Posts.[25]

Under Prime Minister Nakasone, who left office in 1987, the power of bureaucrats was reduced. To circumvent the policy bottleneck of interministerial competition and to coordinate privatization policy proposals across several ministerial areas, he established bodies such as the Ad Hoc Administrative Council, which made recommendations on the privatization of government monopolies such as telecommunications and railways. Since then, the fall from power of Prime Minister Takeshita and the weakening of the ruling Liberal Democratic Party by the Recruit Scandal has left the way open for bureaucrats to compete for power.[26]

In the telecommunications sector, from the early 1980s Japan has depended on exports to the United States for most of its total output. The liberalization of telecommunications equipment has brought in major exporting electronics companies such as Sony, Sharp, and Matsushita. In general, manufacturers who rely on the American market have interests which demand that American pressure for entry to Japanese domestic markets be met. Therefore, American interests have forceful advocates within the domestic arena.

In contrast to the rest of the world, data-processing companies grew out of telecommunications companies, so the convergence of technology between the two manufacturing industries had little salience for market entry. But in the bureaucratic world it sparked a turf war between MITI and the Ministry of Posts and Telecommunications. Hence there are duplicate advisory committees in each ministry, with the same personnel sometimes serving on both. Some issues such as standardization of equipment have occasionally reached an impasse, with both ministries aspiring to leadership. Others, like the entry of a foreign-backed competitor in the international market, have seen an alliance between exporters and MITI. Each issue produces a new alliance.

Just as the worldwide constituency in the telecommunications sector has multiplied, so has that within Japan. If those in this sector could be said previously to talk with a collectivist voice, they do not do so now. NTT itself buys from and competes with the manufacturers. These trends in a loosening of ties between manufacturers and NTT have been furthered by NTT's diffusion of procurement. In turn they have increased NTT's political isolation.

NTT and KDD were the monopoly operators of the telecommunications network until 1985 – the one a public company, the other privatized but under governmental control. Relations between the two entities and MPT have been the opposite of that which might be expected by their formal status, however. Whereas NTT was historically autonomous from the ministry, KDD had very close relations, often headed by retired bureaucrats in the Japanese system of 'amukudari' or descent from heaven.

It seems that in the period following liberalization MPT has exerted far greater control over NTT than either American or British regulators have done to their counterparts. NTT's activities are constrained by the need to apply to the ministry for permission to provide new services, to form new subsidiaries, to alter tariffs, and to authorize its business plans. NTT is limited from entering manufacturing by an undertaking which it gave during the passage of the privatization legislation in 1984. Also, whereas BT has signed agreements with other European PTTs to provide one-stop shopping for large corporations wanting private networks, after liberalization NTT was forbidden to enter the international market in competition with KDD, although KDD was allowed to enter the domestic market.

NTT has been under an obligation to cooperate with its competitors; but as NTT has increased productivity and has introduced many new services, so MPT has found it more difficult to control. The introduction of ISDN in April 1988 illustrates the division of opinion between NTT, seeking profits and targeting mainly business customers, and MPT. The ministry stated that it wished to see NTT's monthly ISDN access charges to business reduced by 60 percent and the cost to individuals reduced by 70 percent. It also called for the related consumer equipment to be reduced in price by 75 percent. So far as it is possible to ascertain, the MPT's desire to see lower access charges is not based on cost or profit criteria. Rather it demonstrates the ministry's political efforts to widen its public support.[27]

What is conspicuously lacking is economic regulation of NTT in terms of clearcut rules. The ministry's political orientation – fueled by

its endemic competition for status with MITI – leaves the system of regulation open to abuse. For instance, NTT's request for an increase in its local call tariff held at ¥10 since 1977, has met with demands from MPT that the company make public its costs and profits on its various services. The intention seems to be that the ministry should be absolved from responsibility for any increase. In 1984 MPT stated that it was not in favor of NTT's reducing its tariffs below those of its competitors, and subsequently NTT has been obliged to keep its tariffs about 10 percent higher than theirs in order to allow them to gain market share. Yet NTT had a return on turnover of only 8 percent in 1986, 10 percent in 1987, and 9 percent in the 1988 financial year. Its 10 percent reduction in profits follows the entry of three long-lines competitors and the divestment of its data-processing business to a separate company, and has resulted in a reduction in the value of its shares.

NTT has previously seconded personnel to the MPT, but several of its competitors already have ex-MPT personnel in senior positions. The most recent recipient is Motorola, where several MITI personnel were already in place. In contrast, MPT's bid in 1987 to have its own person replace Dr Shinto as the president of NTT failed, primarily due to the opposition of Dr Shinto himself; in turn, the need for politicians' support may relate to Dr Shinto's involvement in the Recruit Scandal. His resignation from the chairmanship in late 1988 once again opened the door for ministry influence over NTT.[28]

The Telecommunications Business Law passed in 1984 provided for a review of the network's structure after five years. In November 1987 MPT announced that it would undertake this review and in April 1988 received the support of the Telecommunications Council, an advisory body to MPT that is run by the ministry, but endows MPT plans with a seemingly independent legitimacy. Although Prime Minister Takeshita and the LDP were then reported to be unenthusiastic, MPT announced that it would set up an advisory council to consider the breakup of NTT along the lines of the AT&T divestiture. The Council duly reported in 1989 in favor of breaking NTT into regional companies.

The proposal for the divestiture of NTT had originally been made by the Ad Hoc Council on Administrative Reform in 1982, but it was rejected by the LDP, still heavily dependent on rural votes, which feared the costs to rural areas. The proposal is being pursued despite the views of Keidanren (the economic organization) that it is too soon to revise the law. MPT's stated aim is to lower telephone rates and improve service.[29] However, a divested NTT would not only solve the problem of how to control a company that was gradually becoming formidable to

regulate, but would also give MPT the opportunity to place its own people at the helm of the ten regional companies. Rather than diminishing MPT control, it would increase it. MITI has opposed the plan. Ironically, while the weakening of the LDP by the Recruit Scandal has opened the opportunity for increased bureaucratic competition between MPT and MITI, the potential electoral implications of divestiture mitigate against its adoption. Currently Japanese telecommunications policymaking is little more than a ritualized game of inter-ministry competition.

Britain is widely seen to have a telecommunications policy similar to that of the United States and to be its ally in the international telecommunications community. In actual fact Britain's liberalization has been far more tightly controlled than that of the United States, and it has gone less far than in either America or Japan. The prime limiting factors have been the government's intention to sell British Telecom's shares and the desire to ensure British Telecom and Mercury's profitability.[30] Regulation of BT demanded by computer manufacturers following BT's liberalization was instituted in terms of a 'light rein.' Thus, in a crucial sense, possible competition has had to meet the test of its potential impact on the duopoly's profitability and on the government's ability to sell other state monopolies. The conflict between this desire and the liberalization of markets has resulted in selloffs, like that of BT, in which little competition has been introduced into the markets and in which the consumer has been left to the mercy of private rather than public monopolies. A failure by Oftel to address these problems for the consumer, except on an individual basis, led to a public backlash in 1987. This public backlash has eventually instigated not only stricter control of BT, but renewed emphasis on liberalization on the part of government.

The previous consensus of limited competition within the domestic market coupled with pressure for liberalization within the rest of Europe has shifted. Whereas previously a coalition of DTI, Cable and Wireless, and large user groups provided the major impetus, and in particular the demands of Cable and Wireless for support in its international strategy for a global network met with government approval, primacy is being given to domestic liberalization once more. Although international policy mirrors that of America, the British are less handicapped by a fragmentation of bureaucracy and competing agency agendas. Oftel does not have the autonomy to introduce competition into the domestic market that might undermine international policy, but the government has shifted domestic policy away from the protection of BT and

protection of domestic manufacture.[31] In so doing it places at risk both BT's research and development of new technologies and its leading role in the standardization of equipment within Europe. Yet despite a growing trade deficit in telecommunications equipment, industrial policy currently plays no part in telecommunications policy, which has become entwined in policy toward the mass media.

Foreign, and particularly American, capital is entering Britain in the telecommunications market, but indirectly through holdings in cable TV companies. Cable TV has been slow to start in Britain, partly because of lack of funding but also because Britain has one of the highest rates of penetration of video recorders.[32] The original intention of market segmentation has been compromised by the lack of investors. BT has entered the market for carriage of local franchises and for programming: It has interests in four of the ten franchises given. Cable TV companies can compete in telecommunications only if they ally themselves with either BT or Mercury. Since BT has no interest in competing with itself, the three companies providing local service are all linked to Mercury.[33] The White Paper on broadcasting of 1988 suggested, however, that carriage of cable should be delinked to programming.[34] Coupled with a loosening of regulations governing foreign investment, the threat of such a delinkage has had the effect of bringing American companies, faced with a maturing American market, into the British sector. A further incentive is the possibility of the breakup of the duopoly on voice transmission. American investment in cable TV operation now rings London, and operators are demanding the license to switch voice traffic among themselves. The effect of these developments would be to regionalize competition in local service.

Meanwhile, BT would like to extend its license to carry programs on its terrestrial network, thereby enabling the provision of optic fibers in the local loop to be an economic possibility.[35] This request has been rejected by government. Instead, the policy emphasis is on separation of markets based on technology and BT's exclusion from those markets. Under current thinking, BT would be excluded from the 'personal communication network' to be installed in the 1990s as a radio-based bypass of the local loop; furthermore, it may only participate in a minor fashion in the 'telepoint' licenses to complement existing public pay phones, and may only compete in cable TV through separate subsidiaries. In contrast, Cable and Wireless has been promised a license for the personal communication network. Oftel has been involved in picking the winners in each contest for licenses.

In terms of public debate the institution of Oftel has effectively depoliticized telecommunications. In the past, Members of Parliament received individual complaints regarding BT's service, but now they go directly to Oftel, which acts as the gatekeeper of generic information on telecommunications. This gatekeeper function and thereby the autonomy of Oftel have been strengthened by the failure of the government or of BT since 1982 to publish telecommunications statistics. Information on costs to the consumer, access, usage, and distribution is poor – a matter that Oftel is planning to rectify.[36]

Oftel itself has come under public criticism, following a strike by BT engineers in 1987 and a decline in the public pay-phone service. Oftel's close linkage to BT and the poor public opinion of BT tarnished Oftel's image as a successful regulator.[37] Oftel's first response was to distance itself from BT. It allowed Mercury to compete for the provision of public pay phones, despite the fact that it would skim a loss-making service. Moreover, Oftel demanded better quality of service from BT.[38]

The incident weakened Oftel's autonomy from political control. Soon after, the right wing of the Conservative Party lobbied Oftel effectively on the issue of the teenage chatlines provided by BT. It was claimed that despite the provision of monitors to prevent an exchange of addresses, teenagers regularly evaded such controls. BT's inability to provide technology that would enable parents to curtail use of the service, and its consequent high bills, led to Oftel's demand for rigorous controls from BT. This made the service so uneconomic that it closed almost overnight.

Although BT did not challenge Oftel in the courts, other countries are now doing so, and doubt remains as to whether the powers given to Oftel were intended to include what amounted to censorship. Since these events Oftel has introduced a heavier price cap of BT. The company may raise prices on a basket of services, which now includes connection charges, by the Resale Price Index minus 4.5 percent.[39] Current attention to the individual consumer's interest, including the appointment of a consultant on consumer affairs, suggests that Oftel is seeking to protect its political legitimacy.

The weakening of Oftel's legitimacy has had a further effect. The potential conflict between Oftel's institutional need for autonomy and government priorities has been solved by the co-option of Oftel into government policymaking. In 1988, the Director General of Oftel became a member of the government policymaking committee on the future communications infrastructure, thereby abrogating his independence.

The combined effect of Oftel's weakening, the events in Hong Kong which affect Cable and Wireless, BT's vulnerability produced by its poor quality of service, the entry of new players into the domestic market, and the convergence of telecommunications with broadcasting (which has a high political saliency to the government) is that further liberalization of the telecommunications market has been placed on the political agenda. The aim of the Department is to introduce competition to BT at the local level, through cable TV, through telepoint and the personal communications network. Despite talk of a third company being allowed entry into the duopoly in 1990, this seems unlikely given Cable and Wireless' needs. However, Oftel's co-option into the policy-making process leaves it no room for an independent assessment of BT's arguments or those of manufacturers.

In summary, I have attempted to explain some of the policy initiatives and differences in structure of the markets and deregulation in the US, Japan, and Britain. Each is subject to the constraints of historically varied government relations with industry and with particular companies. Each is differently affected by economic coalitions arising from technological opportunities. And each displays differing strengths in bureaucratic private agendas.

In the US the introduction of a second autonomous system of regulation through the court has produced additional bureaucratic overlap and in-fighting in a policymaking process that was already fragmented. State regulators, the FCC, and the court each may determine the entry conditions to new markets or the ground rules by which companies can compete within markets. With so many bureaucratic and business interests affected by potential legislation, Congress has been unable to achieve the consensus necessary to regain the leadership in policy.

In these conditions companies have developed political strategies in order to gain market advantage. And as AT&T regains its pre-divestiture market share, so competition becomes increasingly political rather than market oriented. The one unifying factor – concern for the trade deficit – has produced a coalition of bureaucratic and commercial interests strong enough to motivate American actions within GATT and the ITU, yet has not produced a strong enough coalition to alter the domestic conditions that have contributed to the deficit.

In Japan the political weakness of the Liberal Democratic Party has given renewed opportunity for the Ministry of Trade and Industry and the Ministry of Posts to pursue their traditional bureaucratic competition. The loosening of ties between the major manufacturers and NTT

and the introduction of new network competitors has tended to isolate the company and allow increased economic coalitions against it. The Recruit Scandal and the involvement of Dr Shinto, NTT's president, who had been the most vociferous defender of the company against bureaucratic control, further weakened it and left the way open for MPT to propose its divestiture into regions. This proposal to establish further political control over the company is unlikely to be successful, not only because of MITI's opposition, but because of the changing electoral circumstances in Japan. Not only would such legislation be unlikely to pass an Upper House where the LDP no longer retains a majority, but would also carry the risk of further electoral damage to the ruling party. Hence current bureaucratic games are likely to be defeated by the realities of electoral politics.

In Britain, the establishment of an independent regulatory agency at first took debate on telecommunications policy out of the political arena. But as public impatience with British Telecom increased, so the legitimacy of Oftel as an independent regulator, separate from BT's interests, came under question. Although prior to the 1987 engineering strike Oftel seemed primarily concerned with BT's profitability, since that time government policy has been redirected toward further liberalization and competition. As a result of regulatory control of market entry, BT is being prevented from competing in new markets, while facing increased competition in its previous domestic markets. The result is likely to be not only a curtailment of its research and development work but also an increase in its investment abroad. In contrast to the US, the government is less concerned with the trade deficit in telecommunications equipment than with the convergence of telecommunications and broadcasting and its policy toward the latter. Although Oftel's sudden conversion to the interests of small consumers and its increased control of BT can be seen as an attempt to re-establish its public legitimacy, its co-option into government undermines its independence and benefits BT's competitors.

The regulations of telecoms in all three countries demonstrate one common factor – the increasing politicization of telecommunications as bureaucracies fight for territory, as they appeal to the general public for legitimacy, and as those who have lost their edge in the market (be it national or international) appeal to government to act on their behalf and alter the rules of the game for their benefit. In 1990, despite formal liberalization and privatization, telecommunications is a market as much if not more dominated by political priorities as it was twenty years ago.

NOTES

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