The future of German telecommunications

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On January 1, 1984, the largest enterprise in the world, AT&T, was divided into eight pieces in the largest antitrust settlement in history. On January 1, 1989, the largest enterprise in Europe, the German Bundespost, was divided into three pieces in the largest organizational reform of public enterprises in Germany. These two divestitures do not have many similarities, but the divestitures represent major steps in the worldwide reform process in telecommunications. It is instructive to analyze the reform process in Germany and its probable outcome, and compare it with reform in other countries, specifically European ones.

The political reform package in Germany is larger than that in other western countries with telecommunications policies. Its size is due to the fact that we are trying to take two major steps in our telecommunications structure. The first – and in many countries the only – step is the formulation and implementation of a competitive environment in telecommunications. The step is one of liberalization, not deregulation. The second step is the shaping of a new regulatory structure and an organizational restructuring of the major supplier.

The second major aspect consists of four elements:

- Separating regulatory from business functions in telecommunications;
- Separating postal functions from telecommunications;
- Defining the regulatory models and instruments;
- Shaping the managerial structure of the Bundespost and legislative requisites for better internal efficiencies.

It is essential to separate regulatory from business functions in Germany because those functions are incorporated according to the old-fashioned PTT structure in a federal ministry. And separating postal functions from telecommunications will bring us in line with the major industrialized countries, which now have the two businesses separated. The

United States, for instance, separated the business and regulatory functions from the beginning. In Japan, telecommunications was separated from the postal services in the late 1940s, and it has become organizationally independent from the managerial administration. In Great Britain, the post office was separated from the governmental administration and was organized as a public enterprise in 1969. In these and other countries, telecommunications has been independent and directly regulated.

The industrialized countries not only differ in the speed with which they change their policy and structure, they also differ in the starting points for liberalization. The starting point in Germany is not as bad as often stated abroad. Although the Bundespost is currently the only provider of the transmission network, resale and shared use of voice leased lines are restricted though resale and shared use of data leased lines are relatively free. The Bundespost has a formal monopoly on basic services, but much data communication is transmitted and switched by private leased line networks.

The value-added service market is a competitive market dominated by private suppliers with limited market participation from the Bundespost. In the late 1980s the market volume was estimated to be 8 billion German marks per year. Nevertheless, there are still restrictions against using public network services to offer value-added services, thereby limiting an exhaustion of the market potential.

Concerning the customer premises equipment (CPE) market, we must distinguish between manufacturing and supplying CPE. Manufacturing of CPE in Germany is carried out exclusively by private industry. The Bundespost does not conduct any development or manufacturing activities, although it does supply some CPE with minor market shares. There is a monopoly only on simple main station telephone handsets. It is evident that the status quo of other countries, which started liberalization earlier and are discarding it now, has been less liberal. Nevertheless, the competitive part of Bundespost's activities in telecommunications is less than 10 percent, but the overall Bundespost market share in telecommunications is slightly less than 75 percent. In comparison, the Bell system market share was much higher in the 1970s.

Reform started with a change in government in 1983. When the new government was re-elected in 1983, it declared information and communications as a major reform area. Most of the early activities of the new government concentrated on cabling and therefore media policy. Another activity, centered on information, communications technology, and microelectronics, began in 1984. In 1985, a govern-

mental commission was formed to make recommendations on the future structure of telecommunications. Eberhard Witte's report on the results of this commission's work is included in this volume (Chapter 11).

The governmental commission on telecommunications somehow has been a typical German commission with regard to its structure and mandate. The commission's members should and did reflect vested interests in the telecommunications policy debates and all political parties. It was not a pure expert commission but a typical German pluralized commission, as we call it, of opinions and interests. The mandate was not only to develop a consistent new model for structuring the telecommunications market, but also to discover the opinions of social groups with special interest in that area and to factor these opinions into their recommendations.

Taken together, these aspects did not allow for recommendations based solely on economic considerations. Rather, the main task of the commission was to construct a new social and political consensus in organizing telecommunications. In evaluating the recommendations, therefore, one must take into account these conditions. The progress and impact of the commission's work can best be attributed to the change of thinking between a few years ago and the present. A few years ago, no one would have regarded the proposed model as realistic for political implementation. Today, the model has a good chance of becoming a reality.

What has happened since September 1987, when the commission finished its work – and what will happen in the future? In September 1987, the Minister for Posts and Telecommunications received the mandate to formulate the government's new policy for telecommunications, to come up with a restructuring plan for the Bundespost along the lines recommended by the commission, and to prepare a cabinet decision. This work is now coming to an end. After that, there will be negotiations between the ministries that have responsibilities for this field; besides the Ministry of Posts and Telecommunications, the ministries of economics, finance, and interior are involved.

The organizational elements of the reform called for a new legal structure upon which the Bundespost can base its activities. Therefore, it is planned to replace the current postal administration law with a completely new law that defines the structure of the Bundespost and the responsibilities of governmental authorities in its regulatory and controlling functions. Furthermore, there will be small but important changes in the current telecommunications law. After some experience

with a new competitive situation, the government is planning to create a new telecommunications law early in the 1990s. In addition, a governmental document will define the new policy in terms of its reasons, context, and details. This document will include all political decisions on structure and policy that are not reflected in changes of law. Thus, the reform will require parliamentary involvement, which will occur after the cabinet's decision goes into effect. Given the usual time for parliamentary debate, it is possible that the new laws and therefore the new telecommunications structure will be enacted within a year.

The probable outcome of the political debate on telecommunications reform is uncertain. I predict that there will be two major organizational elements of the reform. The first is separation of regulatory and business functions, where the regulatory functions will go to the new Ministry of Postal Services and Telecommunications. It is likely that there will be an organizational separation of postal services, telephones, and postal banking services; so in the future the Bundespost will be an umbrella organization for three different public enterprises.

A network monopoly will exist for the Bundespost in general, but it will be only a transmission monopoly and not a monopoly for public switches. Moreover, the network monopoly may have two major extensions: satellite communications (we want to introduce competition) and mobile communications, where we are considering competition in all three aspects of mobile communications – radio paging, private mobile radio telephones, and public mobile telephone communications.

Competition will be introduced in all kinds of telecommunications and value-added services except for the telephone service. There will be no regulation of private service providers except registration procedures. Free and unrestricted competition will exist in all areas of the CPE market, including the market for telephone answering. The Bundespost will reform its tariffs on telecommunications to effect more cost control for leased lines and switched telephones. Long-distance tariffs will be reduced by the early 1990s to one-third of their current level.

Due to its position as a monopolistic network provider, the Bundespost will be prohibited from having a competitive advantage, but we are considering no structural separation or safeguards in preference for nonstructural safeguards against anti-competitive practices. There will be competition in services by regulatory control of cost allocation and pricing.

The question has been asked, Why will the German telecommunications system in the future not be a totally liberalized and competitive one? For one thing, nowhere in the world market is the telecommunications industry an unrestricted one. Everywhere in the world, telecommunications is a highly regulated market with various degrees of competition in its different segments. Even in countries that have opened up all parts of the market to competition, regulation has increased, not decreased. Therefore, it is incorrect to say that we are observing a move toward deregulation in telecommunications.

Why will we sustain a network and a voice communications monopoly? In answering this, we should consider the four policy options that demonstrate degrees of service competition. The first option is to have unrestricted competition in all kinds of telecommunications and value-added services. The second option is to have unrestricted competition in all services except the telephone service. The third option is to have a monopoly on basic services and competition in value-added services. And the fourth theoretical option is to have a monopoly on basic services and some value-added services.

These policy options were the starting point in many countries for deregulating the service sectors, and they cannot be combined with models of organizing the competitive environment on the network side. From an economic point of view, the most logical arrangement does not have different competitive models for the network and the services side. In both segments of the market, competition should be allowed. Unrestricted competition in the service sector and a continued network monopoly is possible, but it makes no sense. Yet under a regime of unrestricted service competition, including resale and shared use, a network provider has no option but to choose a cost-based pricing strategy for the services provided: There is no opportunity to finance far-reaching social or infrastructural obligations, which is exactly the reverse of network competition. Thus, if unrestricted service competition is politically feasible and desired, there is no reason for any kind of network monopoly. If the political or regulatory process, however, imposes social infrastructural or financial obligations on the telecommunications system, they can be financed only by external subsidies or by restrictions on competition in the service field.

A monopoly in the service market, including telephony or basic services, is not compatible with network competition; however, the telephony monopoly allows for exemptions from the network monopoly. These policy options show that telephony is the last step in opening the telecommunications sector for competition. Hence, telephony monopoly is sustainable only in conjunction with a network monopoly.

In Germany, the future Telekom's telephone services must be a main source for financing social, infrastructural, and financial obligations (e.g., the subsidy for postal services, the subsidy for the general budget, and the financing of far-reaching infrastructural needs). We are in a situation where soon this kind of subsidizing will not be possible or compatible with competition in the service area. On the basis of the current market volume, about one-third of the whole market will be open to competition in Germany; but in a few years this will be more than 50 per cent because the competitive parts of the business have far higher growth rates than the monopoly parts – and the growth rates will accelerate with competition. But one should look not only at this quantitative dimension but also at the more important qualitative dimension. The most innovative and dynamic part of the market will be open to competition, while the monopoly relies on more traditional areas retained with only average growth rates.

In Europe there is a common conception of how to structure telecommunications. Accordingly, a common policy is emerging, with every country reforming and restructuring telecommunications. This movement is pushed and defined by a common authority, the European Commission. Although the European Commission is only partially endowed with the legal power to implement policy, this model will form the benchmark for national models. The German model fits totally with the European model and therefore has a healthy future with respect to the European community.

These considerations may be astonishing to those in the United States, but in Europe we have a dual legal system, and the European one dominates that of the national member states. By 1992 we want to have a bona fide common market, which means that we in Europe have to share ideas rather than try to export our individual national models.

The regulatory model is being criticized in Germany from one side as too liberal, and from another side as not liberal enough. Thus, simple logic would assure us that the model must be a good one! For economists, the arguments for a less liberal market environment are not very serious. Most of these arguments are ideological in nature or are based on economic interests. The inherent characteristic of the German model favors more competition and thus gives hope to an economist. But the model may be too cautious as compared with today's possibilities of competition. Even so, it has a good chance of fitting the economic environment.

We still observe different regulatory models in the western world in telecommunications. Yet all countries are moving in the same direction of organizing telecommunications as an open and competitive market. This process took more than two decades in the United States and is still going on. In Europe, the process, which started later, will need less than a decade, which is partly a function of learning externalities from the United States' experience. I am convinced that sometime in the first half of the 1990s we will make regulatory structures and telecommunications as homogeneous as we had them up to the 1970s. I am also convinced that these structures will be different from those in the 1970s, and that the German regulatory model will fit in with the competitive environment.