## **Telecommunications Enter New Era**

## **Recent Trends**

Structural change begins in telecommunications industry

Fiscal 1997 was a year of big change for the telecommunications industry.

The problem of how to reorganize NTT, a matter pending for more than 10 years, has been settled with the decision to reorganize it into a new system in 1999. In response to the abolition of regulations on new entries on a mode-by-mode basis, such as long-distance communications, international communications and mobile communications, Japan Telecom Corp., a long-distance operator, merged with International Telecom Japan, Inc., an international operator, in October 1997; KDD and Teleway Japan, Inc. have also begun preparations for a merger. Thus, moves for the reorganization of the telecommunications industry acquired momentum. Moreover, NTT began to face competition in the local telephone market, as Tokyo Telecommunication Network Corp. (TTNet), a regional communications company affiliated to an electric power company, began a general telephone service in the Kanto region and some parts of Shizuoka Prefecture, relaying long-distance calls throughout Japan in January 1998 and charging ¥9 per three minutes for local calls, which is ¥1 lower than NTT's rate. Thus, full-fledged competition has begun.

This series of developments differs greatly in character from developments which occurred during the 10-year period since the information and telecommunications reform of 1985 (the privatization of Nippon Telegraph and Telephone Public Corporation into Nippon Telegraph and Telephone Corporation (NTT) and the entries by new common carriers in the telecommunications market). It represents such a change in the environment that it could be called the second information and telecommunications reform. The reform of 1985 can be summarized as

one aimed at stimulating competition under regulations by privatizing Nippon Telegraph and Telephone Public Corporation into NTT, and enabling new entrants into the telecommunications market to compete on equal terms with NTT. The second reform is aimed at ensuring free competition without limits, on the assumption that an environment for fair competition has been created by reorganizing NTT. It may be said that Japan's telecommunications industry has entered an age of full-fledged competition for survival. The race for survival will gather additional momentum hereafter.

Mobile telecommunications growing, but in unbalanced way

In the mobile communications industry, which has been growing rapidly in



First telecom merger-Japan Telecom & ITJ: Sakata Koichi, present chairman of new Japan Telecom (right) and Ogawa Toru, present vice-chairman of new Japan Telecom (left)

recent years, there has been a noticeable difference in the growth rate of cellular telephones and PHS (Personal Handyphone System) phones.

In the cellular telephone market, there is competition among four companies in each of the Tokyo, Nagoya and Osaka areas, and three companies in other areas. As a result, the expansion of service areas, improvement in service quality, reduction and diversification of telephone charges have been given impetus, and the number of subscribers has increased smoothly, reaching 31.52 million at the end of fiscal

1997. The digital PDC system introduced during the 1990s seized a market share of more than 90% in 1997.

As regards the performance of individual common carriers, it deserves special mention that the NTT DoCoMo group is expanding its market share. New Common Carrier (NCC), too, is acquiring new subscribers. However, some new entrants which have not yet emerged from the initial stages are operating at a heavy deficit as the cost of operations swells as a result of an incentive race (payment of incentives to sales agents), in addition to capital investment and a rate cut.

PHS, which began service in 1995, initially saw a rapid increase in the number of subscribers and grew smoothly until the first quarter (April-June) of fiscal 1997. In the second quarter of fiscal 1997, however, the number of PHS subscribers stopped increasing and in October, the number showed the first net decrease. Moreover, the downward pace has not stopped since November 1997. The reasons for this are (1) the difference in telephone charges for cellular telephones and PHS has narrowed as a result of the successive rate reductions for cellular telephones, (2) PHS has been found faulty as a means of communication in residential areas, although it was advertised as a means of personal communication and (3) cancellations of PHS contracts are easy because the PHS companies pay a high incentive to sales agents to acquire subscribers, and as a result, the handset prices have declined to a very low level and terminal devices have been distributed even to people who do not really need PHS.

## **Future outlook**

Reorganization to continue in telecommunications industry

For the telecommunications industry, fiscal 1998 will be the year when the reform in fiscal 1997 will show a clearer impact.

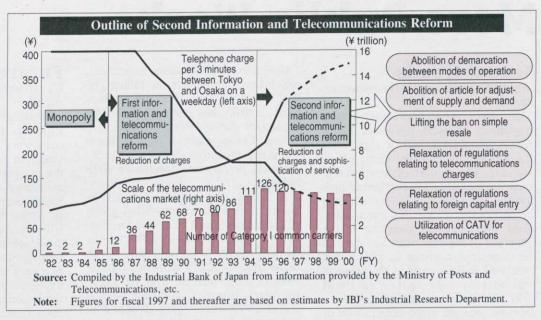
If the merger between KDD and Teleway Japan, Inc., now under negotiation, materializes in October 1998 as scheduled, it will become possible for the new company to furnish an integrated service consisting of long-distance calls and international calls, as Japan Telecom Corp. is now doing, and the "one-stop shopping service" race in the telecommunications industry will accelerate.

The rate-cutting war, which began when TTNet joined the general telephone service, will escalate further, involving not

only local telephone service but also long-distance service.

NCC, a long-distance service provider which has been enjoying big earnings, will find itself in a rather difficult business climate. Long-distance telephone charges, which were lowered step by step under the pressure of competition since 1985, are now about 25% of the level before competition began. Traditionally, there was a beneficial circle in which a rate reduction stimulated telecommunications demand and a decline in income due to a rate reduction was offset by an increase in telecommunications traffic. As a result of the successive rate cuts, however, price elasticity in telecommunications traffic must have weakened considerably, and a further rate reduction will possibly erode common carriers' profits considerably. Differentiation through sophistication of service, such as combining diverse services into a package, instead of merely offering lower charges, has now become an important strategic task.

In response to the WTO basic telecommunications agreement, Japan has, in effect, abolished restrictions on foreign capital investment in Category I common carriers other than NTT and KDD (less than one-third in the past and less than one-fifth in the case of



NTT and KDD). As a result, it has become easy for major foreign telecommunications companies to enter the Japanese market. Major foreign telecommunications companies have always eyed the Japanese telecommunications market, which is the second largest in the world. Now they want to obtain a foothold in Japan by taking advantage of deregulation to make big earnings. Some may form alliances with Japanese common carriers, while others may structure a network of their own in high-traffic areas, and enter the Japanese market independently. Global tie-ups including alliances between Japanese and foreign common carriers and industrial reorganization involving both are expected.

Sophistication of services and "habitat segregation" (serving different customer categories) in mobile communi-

cations market expected

In the mobile communications market, the number of subscribers will continue to tend upward hereafter, but gradually slow down in growth because the number of cellular telephone subscribers has already reached about 50% of the number of subscribers to ordinary telephones, and market penetration by cellular telephones is nearing 30% of the population of Japan.

In such a situation, service by the

CDMA (code division multiple access) system, a new digital system, will be starting soon. Moreover, work to commercialize W-CDMA, the next-generation cellular telephone system, is moving into high gear.

As said earlier, PHS has lost price competitiveness and the number of PHS subscribers is showing a net decrease due to the cellular telephone rate having been lowered drastically. In fiscal 1998, PHS operators will have to restructure their service concept and drastically overhaul marketing methods.

Fiscal 1998 will be the year when the telecommunications industry takes a major stride toward structuring a new industrial framework. The industry will have to compete in an almost completely free market, and the survival of the fittest and the dropping out of the weak will accelerate. In such a business climate, common carriers must have a research and development ability to keep abreast of innovations, the financial capacity to undertake large-scale capital investment, and the power to make quick decisions. While each company is engaged in the quest for economy of scale, formations of alliances will accel-

(Nohara Akihito, senior economist)