The Impact of Liberalisation:

Communicating with APEC Communities

Telecommunications Industry in the Philippines

November 1998

Acknowledgments

In Vancouver in November – 1997, APEC Leaders and Ministers requested that work be undertaken to promote community understanding of the impact of liberalisation. A broad project was conceived by a Steering Group established under the APEC Committee on Trade and Investment (CTI).

This series of papers, "The Impact of Liberalisation: Communicating with APEC Communities", was prepared as part of the broader initiative. The papers include a review of research on the effects of liberalisation, a series of case studies and a summary report.

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Contents

Summary

The Philippines was, until ten years ago, notorious for its poor telecommunications. There were more names on the waiting list than there were in the telephone book. There were barely half a million lines servicing a population of 60 million people. Many non-metropolitan communities not being served at all.

Under the Marcos administration, four private companies held government protected monopolies over all the key aspects of telecommunications. By far the biggest was the Philippine Long Distance Telephone (PLDT) company, which had a monopoly over international and domestic calls. Two other companies had monopolies over domestic and international satellite services, while the fourth concentrated on international telex and data communications. Investment and service levels were low.

The first moves to introduce competition were made by the administration of Cory Aquino, which took the view that competition was needed to improve the efficiency of the telecommunications industry. New licences were issued for operations of international gateways, cellular mobile services, and Cable television.

The pace of liberalisation increased under President Ramos, whose administration introduced a new law to create a better climate for industry growth and investment. The Public Telecommunications Policy Act, which established the policy framework for the industry, was supplemented with two specific regulations. The first, EO 59, requires compulsory interconnection of all authorised public telecommunications carriers. The second, EO 109, requires cellular mobile telecommunications service providers to install at least 400,000 fixed telephone lines over three years, and international gateway facility operators to install at least 300,000 lines within five years.

The country was divided into 11 geographic areas, with each service area including some profitable and some unprofitable zones. Operating licences for these areas were distributed among 8 telecommunications carriers.

The strategy has been successful in its primary aim of raising the level of telecommunications coverage in the Philippines. The number of telephones lines has risen from just over 1 million, prior to the introduction of the new policy in 1993, to reach 6.5 million lines by the first half of 1998. Cellular telephony has grown rapidly rising almost 30 percent in 1997 to reach 1.3 million subscribers.

The spread of telephone services throughout the country has also improved. The proportion of municipalities serviced by telephones has increased from 20 percent to 37 percent since 1992. The objective under the Basic Telephone Program is that telecommunications should reach 87 percent of communities.

There has been an explosion in the number of participants in the industry. In the basic local exchange segment, where the PLDT had a monopoly, there are now 12 companies operating. The number of companies operating international gateways has increased from one to 11. The number of cellular companies has increased from two to five.

The new participants have included many partnerships between local and international companies. Foreign ownership of telecommunications companies is limited to 40 percent, although there is some pressure to have this limit raised. International companies involved in partnerships in the Philippine market include Singapore Telecom, Deutsche Telekom, First Pacific from Hong Kong, NTT from Japan and Nynex from the US.

Not all the new ventures have been successful. A number of companies have not been able to fulfil their commitments to establish the required number of lines in their geographic area, and many of the lines that have been laid have not yet found subscribers.

There has been an explosion in the number of participants in the telecommunications industry.

Some of the businesses are running at substantial losses.

The most spectacular new entrant has been SMART. It started providing cellular services in 1994 and had, by 1997, seized 46 percent of the cellular market, overtaking the long established leader Pilipino Telephone (PILTEL). It has strategic alliances with NTT, from Japan, and First Pacific from Hong Kong. Its success has been largely based upon aggressive price based marketing and establishing a clear brand identity.

The size of the network SMART has built brings its own marketing advantages, with the ability to offer local call charges for calls between "Smart" telephone subscribers in different parts of the country, and the ability to offer widespread dealer and service support. The company took careful precautions against fraud in setting up its systems and has been spared the losses suffered by some competitors. It is strongly profitable.

Another strongly competitive participant in the market is Globe Telecom, which is a joint venture between Ayala Corporation and Singapore Telecom. Globe has pursued a strategy of technological leadership. It was the country's first GSM (Global System Mobile) cellular operator and has built capacity for ISDN (Integrated Services Digital Network) into its fixed line network. Its network is designed to support features such as caller ID, last call memory, three-way calling, call forwarding and phone lock. As a development business, Globe is not yet profitable, although it achieved a positive cash flow in 1997.

The incumbent, Philippine Long Distance Telephone Company, has had a lot of adjusting to do as it has faced up to competition. It has dramatically increased the size of its network and plans to have it fully digital by 2002. It did so while reducing its workforce, and embarking on programs to improve the quality of service, and process re-engineering to reduce problems in the network. It remains one of the largest companies in the Philippines and is strongly profitable.

Although deregulation is seen as a success, problems remain. The legislation that ordered interconnection of networks did not specify the price of that interconnection. PDLT has been accused of making it hard for newcomers to gain interconnection and of charging prohibitive rates.

The policy has given the Philippines an active telecommunications industry, but it is fragmented with operators having regional franchises as a result of the service area agreements. Regulators have yet to develop policies to ensure that healthy competition takes place once the exclusive licences in the service area scheme are phased out.

Background

The Philippine telecommunications industry is regarded as one the strongest performers in the economy today. It is also recognised as one of the industries were government efforts to introduce competition succeeded. For many years, the industry languished due to the absence of competition.

By 1989, the industry could only account for 506,000 available phone lines for a population of more than 60 million people. This produced a large gap in supply and demand. Phones were treated as a luxury. High social costs resulted with the inequitable distribution of phones throughout the country (most the lines installed in urban areas). Metro Manila, the country's capital, represented 15 percent of the population and accounted for more than half of all installed lines.

In search of a solution, the government experimented with an untested scheme. Licenses for international gateway facility (IGF) and cellular mobile telephone system (CMTS) were handed out at a stiff price.

IGF and CMTS licensees were required to install 300,000 and 400,000 fixed lines, respectively. (A fixed line is defined in terms of installed capacity and not actual subscriber lines.)

A Service Area Scheme was also created. This scheme scattered new operators across 11 service zones covering the country. Each zone represented a combination a profitable and unprofitable area.

Along with policies aimed at attracting investments, both foreign and local, the industry grew at a phenomenal pace. Gross value-added, a measure of industry output, has grown by an average of 13 percent in the last three years.

The telecommunications services industry can be divided into the following areas:

- *Local Exchange Carriers (LEC);*
- *Inter-Exchange Carriers ;*
- *International Carriers or International Gateway Facility Operator (IGF) ;*
- *Cellular Mobile Telephone System (CMTS);*
- *Paging;*
- *Mobile Radio Communication Systems;*
- *Record Carrier Service or Telex/Telegraph.*

Given its important role in facilitating basic access to everyone, the following report focuses more on the local exchange segment of the market. However, the evolving telecommunications environment also places particular emphasis on the role of wireless technologies. Therefore, the cellular business and other types of services are also explored.

For many years, the telecommunications industry languished in the the absence of competition.

Policy Review

Effective regulation and policy formation have played key roles in driving the telecommunication industry's turnaround. The industry suffered greatly during the Marcos years. When the Aquino administration took over government in 1986, telecommunications became a priority area for reform. New licenses for the operations of IGF, CMTS, paging, Cable TV, and entirely new telecom services, such as trunked mobile radio, were given out to new operators.

Although the process of deregulating the industry started in 1987, it was only in 1989 when new licences were granted and new operators allowed in the market. In 1989, several telecommunications markets were opened. Two firms were allowed into the cellular mobile telephone market. Four years later, three more firms were authorised to operate cellular services. The domestic and international trunk services were also opened to competition.

Along with the decision to allow new companies to enter the previously monopolised telecommunications market, came the influx of foreign investors. Local carriers recognised the need for foreign funds, expertise, and technology. Foreign telecom companies also saw the opportunity presented by these new markets.

The government instituted reforms to make the industry more attractive to foreign investors. The 1987 Constitution established the regulation that foreigners can only own up to 40 percent of telecommunication entities. The Omnibus Investment Code of 1987, the Foreign Investment Act of 1991, and policies drafted by the Board of Investments (BoI), as well as various executive orders and laws, also served to define the extent of foreign equity participation, land ownership and various fiscal and non-fiscal incentives.

The Ramos administration furthered the process of liberalisation. With transparent rules of foreign ownership in place, the government aimed to create an environment conducive to foreign investment. In the telecommunications industry, the administration undertook several crucial initiatives. First, it drafted a new law to promote a better climate for growth and investments. The industry had previously functioned under the Public Service Act of 1935 (amended in 1947), which contained obsolete and inefficient rules of operation. Second, it granted licences for IGF, CMTS, and radio paging. Trunked mobile radio services were also issued. Third, it opened the local exchange segment to competition.

Three essential regulations supported the above mentioned changes:

- *EO 59*, requires compulsory interconnection of authorised public telecommunications carriers in order to create a universally accessible and fully integrated nationwide telecommunications network, thereby encouraging greater private sector investment in telecommunications (Issued February 1993);
- *EO 109*, requires all CMTS operators to install at least 400,000 telephone lines in three years, and IGF operators to put up 300,000 lines within five years. EO 109 served as the vehicle to implement the Service Area Scheme and the Basic Telephone Program, wherein the country was divided into 11 service areas (combining profitable and unprofitable areas) and given out to 8 telecommunications carriers (Issued July 1993);
- *Public Telecommunications Policy Act of the Philippines (RA 7925)*, promotes and governs the development of Philippine telecommunications and the delivery of public telecommunications services. RA 7925 serves to address the need for a established policy framework in the industry. It laid down the foundation for the administration, conduct and direction of the telecommunications industry (Issued March 1995).

In addition, the Domestic

Satellite Communications Policy was issued in 1993 to promote the development of a satellite-based telecommunications industry. In 1994, the International Satellite Communications Policy was established. It defines the country's position regarding the use of new satellite-based technologies. It also aims for broader access to international fixed and mobile satellite systems. In 1997, new policy guidelines were released to develop the Cable TV industry.

Overall, telecommunications policies developed throughout the Ramos years helped create an environment conducive to growth and sustained investments. Competition entered all segments of the industry, providing incentives for firms to expand their networks, introduce new technologies and services, and embark on new business ventures. Foreign technology, financing and expertise was made accessible. As a result, telecommunications services improved throughout the Philippines.

Several other conditions also prompted renewed investor sentiments towards the industry, including:

- The large unmet demand for telecommunications services;
- The availability of new and cheaper technology to provide services;
- The establishment of rules governing foreign investments;
- The availability of fiscal and non-fiscal incentives such as zero-tariff on imported equipment, income tax holiday of 4 and 6 years to new-non-pioneer and pioneer projects;
- The introduction of simplified customs procedures; and
- The commitment of government to pursue more market-oriented reforms became credible and firmly established.

Perhaps, more importantly, economic and political stability was achieved. Access to international capital markets improved, and financing became more easily available in greater volumes and at lower rates than previously accorded the Philippines.

Competition entered all segments of the industry, providing incentives for firms to expand their networks, introduce new technologies and services, and embark on new business ventures.

Impact of Trade Liberalisation

Reform of the telecommunications industry in the Philippines has created market entry opportunities, lowered prices, and improved service availability, quality and variety.

The first effect of reform has been the entry of more firms into the industry. The number of players in the international gateway facilities market has increased from one in 1989 to nine. The cellular market has also grown from two before 1993 to five. In 1993, paging companies grew from 6 to 15. Eleven strong competitors have joined the local exchange segment where PLDT had a virtual monopoly until 1994. In 1992, the trunked mobile radio system sector also expanded from 7 providers to 10.

PLDT remains a dominant force in the industry. In the local exchange market, it accounted for 2,098,688 or 45% the total installed landlines in 1997. In terms of subscribers, it corners approximately 80% of the market.

Throughout the country, some small companies continue to provide local lines attached to long distance operator services. In light of the new policies, some companies have been forced to upgrade their services. Many continue to operate through close ties with the dominant player PLDT and now, strategic partnerships with new firms. They have also become a target for acquisition by the new players.

Liberalisation has affected the prices of telecommunications. Relaxed policies on imported equipment have introduced new technology and greater efficiency into the industry. As a result, the local industry has been able to pass on the cost-savings to customers.

Airtime rates have also declined by an average of 20% over all services in the last five years. Similarly, more innovative plans have been introduced lowering costs and giving consumers more control. Competition in the pre-paid card segment is also leading to lower airtime costs, more features and added convenience.

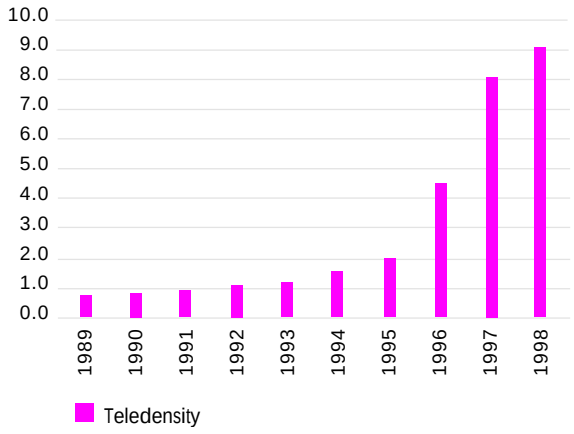
While the National Telecommunications Commission (NTC) continues to regulate rates, policy flexibility enables it to offer lower prices. These might include special arrangements for particular time periods, types special services, and volume discounts for large groups of users.

Relative prices of different services, however, may shift in the future. Intense competition in the international gateway services is leading to a restructuring of rates. This includes higher prices for some services that previously had been cross-subsidised under regulatory arrangements. PLDT, for example, has proposed to introduce a scheme for time charges on local calls. The proposal, however, has generated a strong public reaction and has prompted President Estrada to order a review of the decision of the National Telecommunications Commission approving the new PLDT billing system.

The present economic situation and the devaluation of the peso are other factors which have led to shifts in charges. The NTC pricing formula includes a currency adjustment mechanism which will lead to higher rates in future.

Accessibility and availability of phone lines have grown. The industry expanded from a teledensity of

Chart 1: Telephone Density in the Philippines (lines per 100 people)



1.67 (lines per 100 people) in 1994 to that of 8.06 in 1997, representing about 5.78 million lines (see chart 1). The results for the first half of this year reveal further expansion to a teledensity of 9.05, or 6.54 million lines.

The coverage of telephone services in the country has also improved. In 1992, only 20% (309 of 1,601 municipalities) enjoyed the benefits of having a phone. By 1997, nationwide coverage was about 37% (596 municipalities). By the end of the Basic Telephone Program, this figure is targeted to reach 87%.

Among the regions, the National Capital Region (NCR), which includes Metro Manila, had the highest teledensity of 28.62. This is close to three times its 1992 level of 7.287. Regions VII (Western Visayas) and IV (Southern Tagalog), covering Cebu and the Calabarzon area, followed with an average teledensity of 7.29 and 7.02, respectively (see chart 2). Growth in teledensity was highest in urban areas such as NCR and Region VII and IV, where income growth has also been significant.

The increase in teledensity in rural areas was not only a result of competition but also of regulation. EO 109 forced firms to install land lines in both urban and rural areas. EO 109 created a contract between government and private firms where a licence for a lucrative or profitable service was given in exchange for land line obligations. EO 109, in its implementing guidelines, prescribes an urban/rural ratio of 10:1. The NTC is still in the process of evaluating the extent to which companies have complied with buildout obligations.

In the past few years, the quality of phone lines has improved significantly. New carriers utilised state-of-the-art digital technology, thus facilitating the introduction of better services, such as handling calls, correcting disconnections and processing payments. New technology has also introduced features such as

Chart 3: Cellular Phone Subscribers

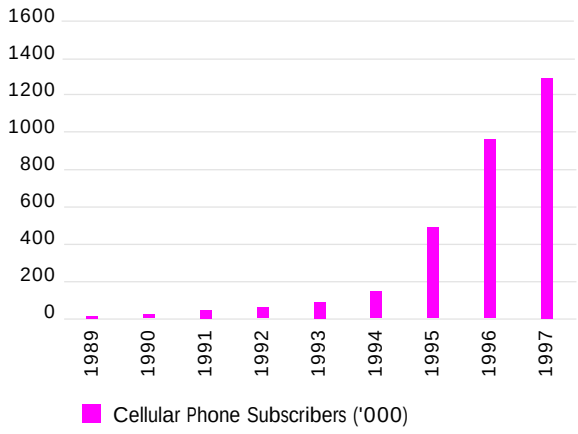


Chart 2: Regional Income and Teledensity, 1997

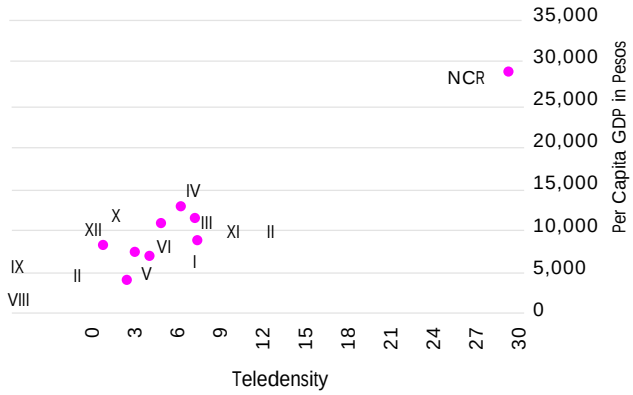
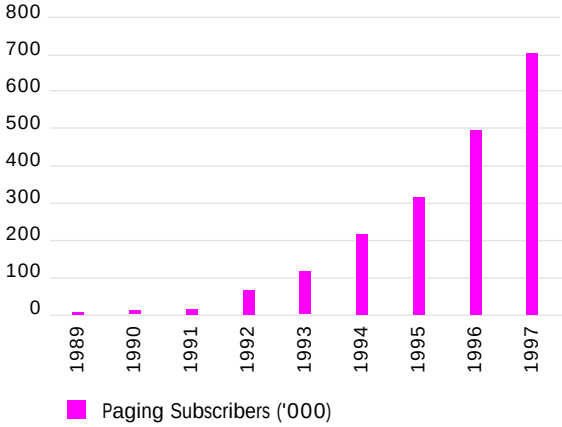


Chart 4: Paging Systems Subscribers



call-waiting, called identifications, three-way calling, and call barring.

The CMTS segment of the market is highly competitive which has impacted on growth. Between 1996 and 1997, total cellular subscribers increased by 29% to 1,343,620 from 959,024 (see chart 3).

Deregulation of the paging industry has also impacted subscription rates. The number of subscribers increased from 491,025 in 1996 to 704,138 in 1997(see chart 4). The number of trunked radio subscribers is also growing. In 1997, they numbered 45,859. Value-added service operators such as Internet Service Providers (ISP) are also increasing. Today, there are about 140 registered ISPs throughout the country.

Internet services only began as a commercial service in 1996. Although some research suggests that there are currently 200,000 subscribers, other research suggests the actual number may be closer to half that.

The intensity of competition in the cellular and paging sectors of the market has created some dificulties. Companies driven to lower the required downpayments for phone and pager units and to relax credit investigation procedures, have been made vulnerable to payment defaults and to fraudulent subscriptions. Bad debts have accumulated and the write-offs of such debts have contributed to substantial losses.

Foreign Investment Developments

Liberalisation policies have triggered foreign investment interests. Foreign technology, funds and expertise have become accessible to firms in the industry. Foreign suppliers such as Lucent Technologies, Siemens, Northern Telecom, Motorola, Nokia, and Ericsson have expanded their operations in the Philippines. Such developments have improved the transfer of new telecommunications technology and generated new employment opportunities.

Partnerships have been forged between local carriers and foreign companies. Examples include: Globe Telecom and Singapore Telecom; Islacom and Deutsche Telekom; Smart with First Pacific Ltd. of Hong Kong and NTT of Japan; and Bayantel and Nynex. Partnerships have enabled local firms to increase their understanding of the dynamics of the industry. Foreign funding, financial instruments and expertise also became available.

At present, ownership of foreign firms in telecommunications companies is set at a maximum of 40 percent. In the broadcast sector, ownership remains restricted to Filipinos. Efforts, however, are underway to further relax these rules to attract more foreign capital and expertise. The industry requires large infusion of funds for building and improving networks, and obtaining new technology. Given the limited sources of funds locally, the industry must look to international sources.

Foreign investment developments have improved the transfer of new telecommunications technology and generated new employment opportunities.

Implications for Trade Opportunities

In the telecommunications industry, trade can occur in both goods and services. Telecommunications firms require sophisticated technology. As such, the first component traded in the business is telecommunications equipment.

The telecommunications equipment industry comprises manufacturers of equipment used in transmitting, switching and distribution of voice, data and video information used in public and private networks. The sector can be examined using three major equipment classification: switching equipment (telephone exchanges), transmission equipment (fiber optic cables, microwave equipment, satellites, base stations), and customer premises equipment (telephone sets, cellular phones, facsimile machines). The principal customers of the industry are telecommunications service providers such as local exchange carriers, cellular operators, and international gateway providers.

As comparative advantage would have it, the Philippines is unique because it has no telecommunications equipment industry. All equipment is bought outside of the country. Switching and transmission equipment are provided by foreign suppliers such as Alcatel, Lucent Technologies, Northern Telecom, NEC, Fujitsu and Siemens. Similarly, cellular equipment vendors which serve the industry include global companies such as Nokia, Motorola, and Ericsson. Given the large investment requirements of new companies in the industry, imports of telecommunications equipment have been on a steep rise. In 1996, the equipment market in the country was estimated at about Php 38 billion (see chart 5).

Local tariffs on telecommunications equipment are currently at negligible levels. These were addressed by the Information Technology Agreement (ITA) under the World Trade Organisation (WTO). The ITA calls for the total elimination of tariffs on a wide range of information and communications technology product by the year 2000. The Philippines is committed to the full reduction of tariffs without prejudice to any local or foreign operator.

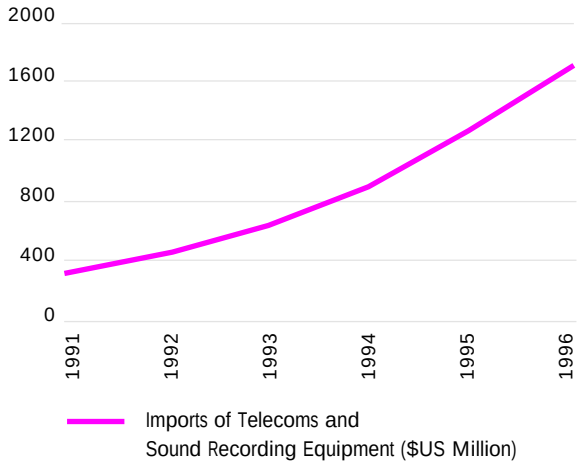
Non-trade barriers such as those related to standards and testing are also expected become easier with APEC calling for the development of a framework for Mutual Recognition Agreements (MRAs) in telecommunications. The Philippines still has to draft its position on MRAs for telecommunications. Although there is no standing opposition to adopting the MRA framework, several issues exists, including; the choice of implementing agency; upgrading local testing capabilities; level of commitment; and resource constraints.

Trade in services also occurs the telecommunications industry. This takes place through the revenue-sharing mechanism enforced in handling international calls. A carrier in country A collects payment from a customer making an international call and shares the settlement rate (usually one half the accounting rate) with the carrier in country B, the receiving country. Accounting rates are the charges for international calls negotiated between the originating carrier and terminating carriers.

Most developing countries use the revenues from international calls to finance the expansion of the local exchange (cross-subsidy). This includes the Philippines where the cross-subsidy scheme occurs through the NTC's regulated rate setting mechanism. NTC sets artificially high rates for international calls and uses the profit to subsidise the so-called "unprofitable" local exchange operations.

Wide disparities in accounting rates are created by this practice. International calls covering the same distance but originating, passing and terminating in different countries can be charged very different rates. With inherent imbalances in call traffic, a country such as the US, which has more originating international calls, ends

Chart 5: Imports of Telecommunications Equipment



up being a net payee (or importer of international telecommunications services). In fact, US carriers paid out $5.5 billion net to foreign carriers for terminating US originating international calls in 1995.

The situation has led developed telephone markets, such as the US, to push for cuts in accounting rates. The US argues that accounting rates are set at artificially high levels, meaning that they are being overcharged for the service. By lowering accounting rates, they also expect the imbalance in call traffic and revenue flow to be corrected.

To address this matter, the US Federal Communications Commission (FCC) has announced a plan to unilaterally cut accounting rates. The US has also sought the assistance of the WTO. Last year, a WTO accord on telecommunications was signed. It is expected to lead the way in dismantling monopolies, drafting global rules on competition in telecoms services, and opening up the $650 billion global telecommunications industry.

Technology can help where multilateral negotiations have not yet achieved. New technologies have been developed to bypass the accounting rate system, including callback services, international resale, and internet telephony. While certain services such as callback, and ISRs are considered illegal in the Philippines, government thinking is slowly shifting. New rules are now being studied which cover emerging services such as internet telephony.

Response from Local Firms

The following case studies highlight a number of features in the process of deregulation in the telecommunications system.

These features include the extent to which firms compete on the basis of differentiating their products and services and the important role that access to new technologies plays in developing those competitive strategies.

The case studies discuss the industry's increasing reliance on new technology. They reveal the growing importance of foreign alliances for new entrants into the telecommunications market. Further, they examine the nature of competition in these markets, and the role of regulatory and competition policy.

BayanTel

Bayan Telecommunications Holdings Corporation (BayanTel) was established in 1994 to consolidate the investments of Benpres Holdings Corporations (Benpres) in telecommunications. BayanTel is owned primarily by Benpres Holdings Corporation (37.41%); Lopez Incorporated (31.35%) and its strategic partner Bell Atlantic Network Systems Corporation (20.01%).

BayanTel has majority equity positions in International Communications Corporation (ICC), the local exchange and IGF carrier, Radio Communications of the Philippines, Inc. (RCPI), Eastern Visayas Telephone Company (EVTELCO), Naga Telephone Company (Nagatel) and Butuan Telephone Company (Butelco).

By virtue of Executive Order 109 and the Republic Act 7925, BayanTel was tasked to install 300,000 land lines on selected areas around the Philippines for a period of three years. This was done in exchange for a license to operate an international gateway facility (IGF). The company was able to put up 330,000 lines 15 months ahead of the deadline. By end 1997, it had about 393,683 installed telephone lines.

Through its IGF subsidiary, International Communications Corporation (ICC), BayanTel has established itself as an early market mover and a formidable competitor.

ICC telecommunications started operations in 1991 to supply the business sector reliable voice and data transmission facilities using satellite-based communications. It was among the first private companies authorised by the NTC to operate VSATs. It was acquired by BayanTel to serve as its vehicle for the operation of an IGF.

RCPI, on the other hand, started as telex and telegraph company in 1958. It was acquired by BayanTel in 1993. The company was thus infused with new capital.

Having established itself in the local exchange and international calls market, BayanTel continues to pursue its goal of becoming a full service telecommunications company by buying into Express Telecommunications Co – Extelcom – the country's third largest cellular operator in terms of subscribers. It is now the largest single shareholder of Extelcom with 46.6 percent.

BayanTel is continuously challenging the dominance of PLDT. The company owns majority of Telicphil, a consortium of new telecommunications players seeking to construct a fully digital backbone to compete with PLDTs.

Benpres is majority owned by the prominent Lopez family. The family owns ABS-CBN, one of the country's largest media networks; SkyInternet, an internet service provider; and SKYCable, the largest CATV company in the country.

BayanTel's strategic partners are NYNEX and its affiliate Telecommunications Holdings Co. Ltd. of Thailand (TelecomAsia).

BayanTel offers international long distance (Bayan 123) services with access to more than 200 international call destinations, direct dial facsimile service (Bayan Fax 1233) that uses fully digital fiber optic transmission facilities, local exchange services, private networks (Bayan Link) and domestic lease line services. BayanTel is focusing on the following five strategic lines of business: international long distance, local exchange, national transmission, private network for business and storefront services.

The company has also developed a Network Operations Center (NOC), and a network monitoring, traffic control and analysis system using state-of-the-art technology. The NOC is the first and only network surveillance system of its kind operating in Asia outside of Japan.

BayanTel has been petitioning the National Telecommunications Commission (NTC) for additional service areas and for permission to assume the land line obligation of delinquent LECs covered by EO 109. It has also looked into buying small provincial operators.

Notwithstanding its problems related to interconnection with PLDTs network, BayanTel remains in contention to become a dominant presence in the industry in the long run. Given the various other business interests of the Benpres Group, it is in a good position to take advantage of the impending convergence of information technology, broadcast and telecommunications.

By late 1997, Bayantel had registered 244,442 subscribers. This represented a 56 percent expansion in its subscriber base. Net revenues from its international long distance operations also grew by 194 percent in 1996. In its domestic long distance operations, net revenues expanded to Php 579 million from Php 421 million.

Globe Telecoms

Globe Telecom's vision of leadership through technology led the company to carve its own niche in the market. It embarked on an ambitious telecommunications infrastructure program aimed at installing and providing consumers state-of-the-art telecommunications products and services. Choosing the most sophisticated digital equipment for its local exchange service and the digital standard GSM for its cellular services, the company has slowly built an image of being the premier provider of high quality telecommunications services. Among its products are Globelines for its local exchange services and Globe Handyphone for the cellular market. Other Globe Telecom services include domestic satellite international leased lines, data communications and value-added network services like G-Net Internet Access.

Both Globelines and Globe Handyphone integrate features that are not available from other carriers. Globe Telecom's network supports Integrated Services Digital Network (ISDN) and Centrex applications, as well as: caller ID, call waiting, 3-way calling, call forwarding, last call memory and phone lock.

Globe Handyphone, on the other hand, distinguishes itself through its security feature or protection from being cloned. It also enjoys high consumer acceptance due to its other services such as text messaging, voice mail, 6-way teleconferencing, mobile office, international roaming, NDD/IDD, caller ID, and call forwarding/barring/hold.

While the company's commitment to provide consumers with the best products served as a cornerstone for long-term growth, presence was still difficult to establish. Globe Telecom faced its biggest test when its largest client, the US, was compelled to leave the country in 1992. With this, the company was left with little choice but to transform itself into a full-service telecommunications firm. The company has distinguished itself by providing high-end products and services to the residential and business sector.

From its niche as a traditional provider of telex/telegram and VSAT services, Globe Telecom has shifted its business focus to cellular, landline and international gateway facility services for long distance telephone calls. The company's evolution into a full-line telecommunications firm came about in 1993. It was a result of the Philippine government's efforts to liberalise the industry through Executive Orders 59 and 109 and Republic Act 7925. These acts enabled the company to acquire the provisional authorities for a nationwide digital cellular mobile telephone system (CMTS) and international gateway facility (IGF) service in 1993, and local exchange carrier (LEC) service at the end of 1994.

In exchange for these licenses, Globe was required install 700,000 fixed lines. Three years later, and in time for the deadline, Globe completed its network roll-out obligations with 730,036 equipped lines for a corresponding 705,288 equivalent installed lines.

Its cellular service, Globe Handyphone, is easing its way into the market. In 1997, number of subscribers increased by 106% from 50,697 to 104,345. Major improvements in the Globe Handyphone service were put in place with cell sites increasing to 175 for improved nationwide coverage. International roaming agreements with 50 operators in 28 countries were similarly forged. More significantly, the average revenue per subscriber continues to be the best in the industry.

On the international services side, Globe Telecom accounted for the largest share of international traffic among the new operators. The IDD Paid 800 service, a value-added feature that enables Globe IDD and 12800 Access subscribers to dial US domestic toll-free numbers, was introduced. New territories were added to the Globe Country Direct Service.

As its continues as a provider of quality telecommunications services in the Philippines, Globe has made use of the expertise of its foreign partner, Singapore Telecom International (STI). Singapore Telecoms is ranked as the number one company in Singapore. It has over S$23 billion in capital. Success has also come through the strength of its local owner, the Ayala Corporation, one the country's leading conglomerates.

Due to its aggressive investments in local exchange, GSM network, and national transmission network, the company registered a net loss of Php 870 million in 1997. Revenue sources are, however, growing regardless of this. The Company's total net revenues at the end of 1997 amounted to Php 2,635 million, an increase of Php 719 million or 38% from the same period last year. Total assets were Php 16.295 million, 64% higher than Php 9,917 million in 1996 while Debt-to-Equity ratio has remained healthy at 60:40.

Having installed the needed infrastructure and systems, the company has set its sights on the market. It is now unfolding is management's philosophy of laying the right foundation for growth first and then marketing aggressively.

PLDT

A company that has crossed the threshold from a monopoly to a strong competitor is the Philippine Long Distance Telephone Company (PLDT). PLDT is the country's largest telecommunications operator. Prior to 1989, the company had a virtual monopoly in all segments of the telecommunications market.

However, after more than 60 years of operation, the company had barely installed 1 million lines. It also faced a backlog of phone applications numbering more than 800,000. When the industry was liberalised in 1993, PLDT embarked on its Zero Backlog Program. It sought double the company's network in three years and by the of 1996, it had achieved it. Its network expansion and modernisation program gave the company a total of 1.52 million lines or 85% of all lines in the country.

Today, the company retains a modest 28% of all installed landlines accounting for 2,114,780 lines. However, with the slow absorption of most of the new lines, PLDT continues to corner around 80% of the market.

Although one of nine IGF's in current operation, PLDT remains a dominant force in the industry. By end 1997, PLDT had a network of 174 central office exchanges servicing the Metro Manila area and 188 other cities and municipalities throughout the country.

The company also dominates the international calls market with two international gateway switching exchanges, submarine cables and satellite systems that connect its network worldwide. PLDT operates the only nationwide digital microwave backbone in country, connecting its own exchanges with 466 other local exchanges, and 3 exchanges operated by the Philippine government. Its national long distance network links 1,106 calling points in 806 municipalities throughout the country.The company provides additional services such as digital leased lines form domestic and international communication, high-speed data transmission, high performance packet switching service and private networking.

The Philippines Long Distance Telephone Company (PLDT) is among the first private telecommunications companies in the world. It is a publicly owned company with its shares traded on the New York Stock Exchange and the Philippine Stock Exchange. Among its subsidiaries are Infocom Technologies, Inc., an Internet service provider; Mabuhay Philippine Satellite Corporation; and Clark Telecommunications Company, Inc.; the Philippine government; and the Cojuangco's own controlling interest in the company. The company is enfranchised to operate until 2028 and authorised to provide virtually every type of telecommunications service.

The Mabuhay Philippines Satellite Corporation successfully launched Agila II, the country's first communications satellite last year. This satellite features the largest transponder capacity among those operating in the region and now makes possible the provision of a broad range of telecommunications services throughout the Asia-Pacific.

Similarly, efforts to upgrade its services were also put into place. About 80% of the company's lines are now digital. It also continues to expand and modernise its network. PLDT aims to install 2.1 million lines for a total of 3.7 million lines and to have fully digitised network by the year 2002 with the capacity to provide not only enhanced and value-added services but also multi-media and broadband services.

To achieve its present position in the industry, the company had to initiate several other adjustments. These include its manpower reduction program; "Project Nova" which aimed to improve timeliness and quality of service and to reduce cost; process reengineering to reduce line troubles and response times in solving them; and the computerisation of various systems. It also adopted an integrated network planning process to improve functional coordination and ensure greater rigour in the review and evaluation of capital projects.

PLDT employment levels have decreased substantially in recent years. Between 1994 and the first half of 1998, employee numbers fell from 18,868 to 15,316. During this same period, the number of lines installed per employee rose from 65 to 111. This increase in productivity is likely due to improved technology and worker skills.

Financially, PLDT remains one of the largest companies in the Philippines with revenues of more than Php 35 billion and net income amounting to Php 7.6 billion in 1997. By the first half of this year, the Company reported a 58.9 percent rise in net income to Php 4.84 billion from the Php 3.05 billion in the same period last year.

SMART

In 1996, SMART formally announced that it had overtaken the long-established market leader PILTEL (Pilipino Telephone, Inc.). By end 1997, the company registered a total of 623,075 subscribers, representing 46 percent of the market. This was double the 1996 reported level of 308,457, making the company well in reach of achieving its goal of having 1 million subscribers by the turn of the century. PILTEL had been in the industry since 1991 while SMART only begun its operations in 1994.

SMART's feat affirms the benefits of competition. The company saw a unique opportunity to satisfy the growing demands for cellular telecommunications services. With much persistence, focus and marketing push, it was able to create a brand image that appealed to all segments of the Filipino population. It can be credited for raising the level of competition in the industry and for spurring the use of more sophisticated pricing and marketing tools.

The company was formally established in January 1991. It started servicing the public by providing cellular services in 1994. It is among 4 full-service companies operating in the country today. It holds licenses for local exchange carrier (LEC) operations, an international gateway facility (IGF), a nationwide cellular mobile telephone system (CMTS), and a paging network.

As part of its objective of attracting foreign investments and expertise, the company formed strategic alliances with Nippon Telegraph and Telephone Corp. (NTT) and Hong Kong-based First Pacific Co. Ltd. (First Pacific) in 1995. NTT, which previously held a monopoly of Japan's long distance and international telecommunications market, is one of the world largest telecommunications companies. First Pacific is a highly diversified international firm engaged in telecommunications, banking, real estate, marketing, distribution and packaging. The firm operates cellular systems and paging networks in Hong Kong. Metro Pacific Corporation (Metro Pacific), the local affiliate of First Pacific, also own interest in SMART.

Through these alliances, SMART became sufficiently capitalised to carry on its network build-up. In addition, the alliances provided the firm with technology, skills and expertise needed to operate a cellular network and compete effectively in the market.

SMART's success came largely through its ability to quickly penetrate the cellular market. Combining an aggressive low-cost high-coverage marketing strategy targeting the lower-income segment, it quickly became the second biggest cellular company with 120,378 subscribers in 1995.

SMART focused its strategy on price and on creating a unique brand identity. The "Price Buster" campaign that was launched in August 1994 was a success. The campaign sought to provide the market with the most affordable and flexible cellular rate program. It initially offered 10 "consumer-friendly" airtime plans and an equipment instalment sale scheme for a variety of cellular units.

Today, the company has simplified this program. It is more accessible to consumers. The company also introduced pre-paid card services through its "Bill Crusher" program. At the same time, it has consistently kept a strong advertising and marketing presence. Aside from having the largest number of subscribers, it now also boasts of having the widest cellular coverage in the country. With its extensive network of dealers, distributors and one-stop shop telecenters nationwide, it is expected to continue its dominance of the cellular market. By having its own nationwide cellular transmission network, SMART is also able to offer free NLD rates even for long distance Smart-to-Smart calls anywhere in the country. The only other cellular operator who offers this kind of service is PILTEL.

Among the challenges that the company faces today is the prospect of overcapacity or saturation of its spectrum in the long-run. Given the limited spectrum allocated to the company and the number of subscribers that can be accommodated using new technology, SMART has sought the approval of NTC for additional frequencies. It has similarly indicated its intention to migrate to a digital standard.

Future challenges

Performance of the telecommunications industry in the Philippines has improved considerably in the past few years. However, the industry remains at a very precarious stage of development. Much of its recent success and expansion has come as a result of government policies.

From a macroeconomic point of view, the recent financial crisis will have a significant impact on the industry. Equipment is imported. Its prices are tied to fluctuations in the currency. For example, unit prices for cellphones have increased because of the depreciation. Rates are also being adjusted.

The industry also faces other challenges, including:

- higher debt servicing cost for carriers with foreign loans;
- a decline in international and national call traffic (a decline in demand); and
- increased competitive efforts to encourage subscribers to swap carriers.

Still, the largest challenges come in the area of policy development, in particularin the areas of: interconnection; convergance; foreign ownership; and competition.

Interconnection refers to the physical linking of networks to make it possible for subscribers of one carrier to access or call subscribers of another network. Given the number of additional operators in the industry, it is critical not only to ensure the success of the liberalisation effort but also to promote universal access and spread the social benefits of telecommunications throughout the country. Potential difficulties relate to the advantage of the incumbent PLDT. There is debate about whether PLDT is charging prices which are too high for access to its network.

A second important policy area is convergence. Without a convergence policy, the full benefits and products of the multimedia revolution could remain largely inaccessible to the public. A draft convergence bill is currently being circulated for comments by certain legislators and government officials. Its scope remains under discussion.

Third is the matter of foreign ownership. Relaxing the rules on foreign ownership would facilitate the entry of foreign capital, technology and skills.

Fourth, clear and workable competition policy must be drafted to ensure the industry's continued viability. For instance, with EO 109 and the Service Area Scheme ending as new firms fully comply with its requirements, the hard part comes when they finally settle down, size up the competition and operate in a highly segmented industry.

Finally, institutional strengthening is an area of concern in the telecommunications industry. Regulating monopolies is vastly different from regulating the highly competitive and dynamic environment of the industry today. A thorough study of the benefits and cost of new regulation is required.

Much of the recent success and expansion of the telecommunications industry has come as a result of government policies.