CASE STUDY

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Opening up the Philippine Telecommunications Industry to Competition

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Course on Competition Law and Policy
Singapore May 2000

Executive Summary

This case study presents the experience of the Philippine telecommunications industry in opening up the market to competition after more than sixty-five years of allowing a private monopoly, PLDT (Philippine Long Distance and Telephone Company) to develop and control the industry. It assesses the current state of competition and evaluates how existing regulation of the industry has fared.

Prior to the liberalization of the industry, the telecommunications sector was in a dismal state as indicated by the long waiting time to own a telephone which at worst took more than ten years. There was a huge telephone backlog and underinvestment in the sector. Service was generally not available and where it was, the quality of service was unreliable.

Since 1987, the Philippines has implemented a series of policy reforms aimed at deregulating the industry. Competition was delayed as PLDT strongly opposed the entry of new players and engaged in legal battles against them. The reform process was slow and accelerated only with the issuance of more substantial policy changes in 1993. These reforms defined the administrative and regulatory framework governing the liberalization of the industry. The NTC (National Telecommunications Commission) was designated as the government agency responsible for regulating the industry and ensuring that carriers do not engage in unfair trade practices. The reforms also mandated the compulsory interconnection of authorized public telecommunications carriers and designed the SAS (Service Area Scheme) which required IGF (international gateway facility) operators and CMTS (cellular mobile telephone service) licensees to provide local exchange carrier service in unserved or underserved areas in return for the authorizations granted. Gateway and cellular operators must install 300,000 and 400,000 telephone lines, respectively within three years while a telecommunications operator with both cellular and gateway franchises must install 700,000 telephone lines.

The SAS divided the country into eleven service areas, each with a mix of urban and less profitable rural markets and assigned these areas to the nine new multi-carrier telecommunications firms. The scheme allowed two new carriers to compete against PLDT and other small carriers within their exclusive service territories or areas of operation but excluded PLDT from the scheme as it was not obligated to fulfill the same service requirement. As the nine new carriers are allowed to operate only within their assigned areas, their ability to take advantage of scale economies important in any network industry has been severely constrained. With a national franchise, PLDT is allowed to operate all over the country.

Under the regulatory framework, NTC is mandated to set rates and tariffs which are fair and reasonable and which provide for the economic viability of telecommunications entities and a fair return on their investments considering the prevailing cost of capital in the domestic and international markets. However, the price-setting process is not clearly spelled out and the rules are vague on what constitutes “fair and reasonable” rates.

While NTC determines the end-user rates, access charge/revenue sharing arrangements are negotiated between interconnecting carriers. The agreement between the parties is submitted to NTC and the latter only intervenes when the parties fail to reach an agreement. It must be noted that the problem of information asymmetry has constrained the NTC from intervening. It is difficult for NTC to build a counterproposal when it does not have full access to the regulated firms' data.

The most serious problem currently facing the industry is the failure of the regulatory framework to achieve smooth interconnection between the incumbent PLDT and the new entrants. Interconnection or access policy plays a critical role in fostering competition and reducing market dominance in the telecommunications industry. Opportunities for competition can be realized only if smooth interconnection among various telecommunications services is possible. The existing weaknesses in the interconnection rules and the inability of NTC to regulate access tolls have inhibited true competition. These have also allowed the incumbent whose network is the most extensive to exercise monopoly power over access to its network. New industry players and smaller firms complained that it was difficult for them to negotiate favorable interconnection deals with PLDT as, being the incumbent operator, it has a stronger bargaining position. They have also complained that PLDT has been charging them unreasonably higher interconnection fees. Other complaints include insufficient interconnection, unequal access settlements or revenue sharing arrangements, and the use of interconnection as leverage in other commercial negotiations.

Faced with consumer complaints over the large number of failed connections, PLDT and the other players have been clashing over responsibility for poor connections. Amidst these conflicts, NTC has taken a largely "hands-off" attitude.

More worrisome is the government-backed PLDT-Smart-Piltel merger. Smart is the country's largest provider of cellular phone services while Piltel is PLDT's subsidiary operating cellular mobile telephone service. Smart and Piltel have a combined share of 68.5 percent of the total number of CMTS subscribers while PLDT and Smart together account for 63.8% of the total number of installed lines. Industry players believe that the merger could create an industry giant with combined telephone and cellular phone subscribers of 4,583,740 which account for about 66.3 percent of the country's total subscribers. While the existing legislation has defined the provisions on anti-competitive behavior, its implementing rules and regulations is mute on mergers and vertical integration.

The interconnection problem has serious adverse effects such as unnecessary long delays in competition, with the accompanying losses to telephone subscribers. Interconnection is essential to foster effective competition and to reap its benefits. What measures must be taken to address the interconnection issue and create effective competition in the market? Given the weak regulatory institution, is there a chance for achieving effective competition in the sector? These issues currently confront NTC with a real challenge and it remains to be seen how it will respond to these and how NTC's institutional structure and overall regulatory framework and procedures can be improved to efficiently regulate the telecommunications industry.

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I. Introduction

Telecommunications play an important role in determining the competitiveness of an economy in a competitive global economy. Countries fully know that access to an advanced telecommunications services at reasonable prices is essential to their economic and industrial development. Historically, the provision of telecommunications services has been a prime example of natural monopoly owing to the high cost of fixed investment in building a telecommunications network. The traditional assumption was that the market could not efficiently support more than one firm and that allowing firms to pursue profit-maximizing strategies in a market that was not structurally competitive would not maximize consumer welfare. Economic regulation was seen as the best policy to correct this market failure and serve public interest. State-run telecommunications organizations (which maintained monopoly control of access to the network) thus, became the norm**.**

The rapid technological change of the last three decades, however, has challenged the traditional notions of natural monopolies. Breakthroughs in microelectronics, computers, digital microwave, and satellite relay have considerably reduced costs and expanded the range of networks and the types of services offered in telecommunications. As the traditional market structure that was suitable for voice telephony was no longer appropriate for new network services known as "value added services"[2], many countries decided to liberalize. The 1980s witnessed the introduction of competition, deregulation on long distance services, and privatization in the UK, USA, and Japan. And soon, many countries followed suit by privatizing their state-owned telecommunications providers.

In the Philippines, the government allowed a private monopoly, the Philippine Long Distance and Telephone Company (PLDT), to provide telecommunications services in the country for almost sixty-five years. PLDT dominated the industry and controlled domestic and overseas toll services. For more than half a century, the Philippine telecommunications industry was a regulated monopoly which was subject to significant regulatory barriers to entry. A congressional franchise and a Certificate of Public Convenience and Necessity (CPCN) or a Provisional Authority (PA) issued by the regulator, the National Telecommunications Office (NTC), is required prior to entry into telecommunications services and facilities.

Prior to its liberalization, the telecommunications sector was in a dismal state as indicated by the pathetic wait to own a telephone which at worst took more than ten years and the huge telephone backlog. Service was generally not available and where it was, the quality of service was unreliable. The failure of a private monopoly, PLDT, to develop the telecommunications industry has been attributed to the misguided policy and the weak and corrupt regulatory structure of the government that was incapable of disciplining PLDT effectively (Serafica, 1998 and Gavino, 1992).

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[2] These include data banks, electronic mail, and electronic data interchange.

Amidst the wave of deregulation and liberalization that swept the world economy, the Philippines implemented a series of policy reforms beginning in 1987. The Aquino administration identified the telecommunications sector as one of the most serious constraints to a strategy of private sector-led growth. Given its limited funds, the government recognized that liberalization and deregulation were necessary to fast track the development of telecommunications infrastructure. A series of policy reforms were implemented to deregulate the industry and to define the role of the government as creating a business environment in which the private sector could compete profitably.

Subsequently, the NTC granted Certificates of Convenience and Necessity to two international record carriers, Eastern Telecommunications Philippines, Inc (ETPI) and Philippine Global Communications (Philcom) which were expected to provide competition to PLDT in the provision of international telephone traffic. However, competition was delayed as PLDT strongly opposed the entry of the new players and instigated legal proceedings against them. Suits and countersuits on the validity of their franchises were filed and lasted for more than two years. PLDT questioned Philcom's financial capability to operate a gateway and raised the high cost of interconnecting the new gateway with PLDT's facilities. It also argued that competition would lead to the loss of cross-subsidy from international services which was essential to achieve the goal of maximum service coverage in the local network. During public hearings conducted at the NTC, PLDT resisted ETPI's application for another gateway. Since NTC decided in favor of ETPI, PLDT also questioned NTC's decision in court.

The reform process was slow and accelerated only with the issuance of more substantial policy changes in 1993. These reforms were aimed at increasing private sector investment in the telecommunications sector and fostering competition between the heavily protected monopoly, PLDT, and companies that were willing to invest in the sector. Two landmark legislations opened up the sector to new players. The enactment of Executive Order 59 mandated the compulsory interconnection of authorized public telecommunications carriers while Executive Order 109 required international gateway facility (IGF) operators and cellular mobile telephone service (CMTS) licensees to provide local exchange carrier service in unserved or underserved areas in return for the authorizations granted them to operate the highly profitable cellular phone and international gateway operations.

The telecommunications sector has undoubtedly benefited from the liberalization of the industry. The entry of nine new firms (all of which are joint ventures with foreign companies) in a market previously controlled by a private monopoly allowed FDI flows to the sector to increase dramatically from US$0.89 million in 1990 to US$292.3 million in 1997. The range of available telecommunications services became diversified. Customers benefited from the introduction of digital switching as well as the availability of services such as call forwarding, call barring, call hold, and call waiting. Customers have also experienced price reductions in international calls as well as mobile telephone and paging services. Moreover, teledensity (telephone mainlines per 100 inhabitants) increased from 0.95 in 1984 to 8.07 in 1997. In terms of the absolute growth in mainlines, the country posted an impressive cumulative annual growth rate as it rose from 3.2 percent prior to liberalization to 18.2 percent after liberalization. As a result of greater telephone penetration, the long waiting time to own a telephone has ceased.

While the liberalization and subsequent entry of new firms has addressed most of the problems of the industry, competition issues that may erode the potential benefits that could be derived from a competitive environment are now becoming more evident. Interconnection and terms of access to networks along with vertical integration are the key emerging issues in the Philippine telecommunications industry. As they are critical to fostering competition and reducing market dominance in the industry, there is clearly a need to properly address these issues in order to sustain the regulatory reforms and create and maintain a competitive marketplace.

The telecommunications industry encompasses a large number of activities. In this discussion, we adopt a narrow definition of the industry by focusing on the provision of basic telephone services. This case study aims to assess the current state of competition in the Philippine telephone services, a sector which used to be dominated by a private monopoly. It describes the behavior of the incumbent PLDT and the government regulator NSC to the changing environment. It then identifies policy issues that must be resolved and suggests measures to improve competition and regulation in the telephone services sector.

II. Factual and Legal Context

A. Overview/Relevant Facts

1. Industry Definition

The Philippine telecommunications industry is composed of the following operations:

- Telephone services (voice)
  - Local exchange service: local communications service among individual subscribers within a contiguous geographic area
  - Domestic long distance service: inter-provincial telecommunications service connecting local exchanges or subscribers within the country
  - International service: communications between subscribers in two countries; an international switching center or gateway is the point of entry and exit of international communications
  - Cellular mobile telephone service: public radio telephone service which by means of mobile, portable, or fixed terminal equipment gives two-way access to the public switched telephone network and other mobile telephone stations
- Record services (telex, telegraph, facsimile, electronic mail, and data communications services)
- Radio paging services
- Trunked repeater radio system
- Carriers' carrier services (satellite)

In analyzing the industry, it is important to understand the different components of the telecommunications network. The telecommunications network is a system of interconnected facilities designed to carry voice, data, image, and other traffic units between a variety of users

and locations. The network is composed of three physical components: terminals or subscribers' equipment, switching systems, and outside plant.

Box 1: Components of A Telecommunications Network

Telephone station: refers to the location of a customer's telephone.
Telephone exchange or central office: a local switching center where each telephone station through a subscriber line is connected. The center connects an appropriate pair of subscribers' lines for each telephone call.
Junctions or trunks: lines that interconnect the switching centers allowing connections between customers attached to different centers.
Trunk or toll circuits: long-distance circuits linking different towns and cities.
Tandem exchange or tandem office: a switching center which has trunks to all other switching centers and serves solely to make connections between them.
Trunk exchanges or toll offices: switching centers that link together trunk or toll circuits.
Toll network: link together trunk exchanges.
Gateway: connects the national network to the international network that links the countries of the world.

Source: Kessides, I..N., "Regulatory Policies and Reform in Telecommunications"

Terminals or subscribers' equipment: telephones, fax and telex machines, television sets, computing equipment.

Switching systems: provide a connection between two subscribers' lines. Before, exchanges were manually operated. This was replaced by automatic electromechanical switching technology and beginning in the mid-1970s, it was replaced by digital electronic switching systems that have higher speeds. Instead of requesting a number from the operator, the subscriber directly dials the number on the telephone.

Outside plant: comprises all physical components of the network that are located between terminal stations and switching centers and between switching centers. Originally, open-wire lines on poles were used to link the components of the network. These were replaced by cables and for long-distance transmission, coaxial cables were replaced by optical fibers, radio, and microwave transmission.

The national public switched telephone network consists of a hierarchy of networks, each with its own switching center. Telecommunications networks have a very natural vertical structure. Subscribers are linked to linked to local exchanges, which in turn are linked by trunk to local tandem exchanges. Local tandem exchanges are linked by toll circuits to regional and then to national tandem exchanges. The network allows a connection to be made between any pair of telephones in the country.

2. Regulatory and Administrative Framework

DOTC and NTC

The telecommunications industry operates under close government regulation. Two government agencies – the Department of Transportation and Communications (DOTC) and the National Telecommunications Office (NTC) oversee the industry. The Department of Transportation and Communications (DOTC) is the primary government office responsible for formulating telecommunications policy in the country. The DOTC is the policy, planning, programming, coordinating, implementing, regulating, and administrative entity of the executive branch of the government.

Box 2: Powers and Functions of the Department and the Regulator

Department of Transportation and Communications

- Formulate and recommend national policies and guidelines for the preparation and implementation of integrated and comprehensive communications systems at the national, regional, and local levels
- Establish and administer comprehensive and integrated programs for communications
- Assess, review and provide direction to communications research and development programs of the government
- Administer and enforce all laws, rules and regulations in the telecommunications sector.

National Telecommunications Office

- Grant CPCN/PA to install, operate, and maintain telecommunications, broadcast and CATV services
- Grant licenses to install, operate, and maintain radio stations
- Establish, prescribe and regulate areas of operation of particular operators of public service communications
- Determine and prescribe charges or rates pertinent to the operation of such public utility and services with some exception
- Allocate/sub-allocate and assign the use of radio frequencies
- Monitor the operation of all telecommunication and broadcast activities
- Enforce applicable domestic and international laws, rules and regulations, prosecute violations thereof and impose appropriate penalties/sanctions.

Source: NTC

The National Telecommunications Office (NTC) is a quasi-judicial body which acts as the regulatory arm of the telecommunications industry. Aside from its quasi-judicial function, it is vested with powers to regulate, supervise, and control all telecommunications services. The

NTC regulates the operations of telecommunications operators including operating facilities, services provided, and rates charged. In procuring telecommunications equipment, buyers are required to secure a permit to purchase and a permit to import from the NTC. While acting as an independent regulatory agency, the NTC remains under the administrative supervision of the Department of Transportation and Communications. However, in terms of its quasi-judicial functions, its decisions are appealable only to the Supreme Court.

As a cabinet level agency, NTC belongs to executive regulatory agencies whose heads are appointed by and whose terms are co-terminus with that of the President. As an executive branch of the government, the President has control over NTC's rule-making power.

It is unfortunate that in the Philippines, the regulatory practice has shown that despite the independence granted to regulatory agencies (like the NTC) by the enabling laws that created them, their credibility has been questioned due to decisions that allegedly indicate biases towards a particular player. In handling controversies, these agencies usually adopt a hands-off policy and leave the final decision to the President. This set-up has made the President a powerful interventionist element in resolving conflicts and has compromised these agencies' purpose of objectivity in defending public interest (De Vera, 1997). Another practice in the country which puts the regulatory agencies' credibility into question is the hiring of regulatory officials by the regulated industries, with the industry practitioners becoming regulatory officials.

The introduction of liberalization and deregulation of the telecommunications industry has changed the operating environment of the NTC. Prior to these policy changes, NTC was only concerned with the regulation of PLDT. After the implementation of these reforms, NTC is confronting never-before-encountered issues and transactions that test its capacity to efficiently regulate.

RA 7925

The Public Telecommunications Policy Act (Republic Act 7925) enacted in 1995 lays down the administrative and regulatory framework designed for the development of the Philippine telecommunications industry. This Act sets the powers and responsibilities of the government regulator NTC. It states that "A healthy competitive environment shall be fostered, one in which telecommunications carriers are free to make business decisions and to interact with one another in providing telecommunications services, with the end in view of encouraging their financial viability while maintaining affordable rates".

RA 7925 further states that the NTC is responsible for "fostering fair and efficient market conduct through, but not limited to the protection of telecommunications entities from unfair trade practices of other carriers". It is also tasked with "promoting consumers welfare" by facilitating access to telecommunications services and protecting them against misuse of a telecommunications entity's monopoly or quasi-monopolistic powers".

RA 7925 also lays down the policies and regulations governing the operations of telecommunications carriers which include rules on franchise, pricing/rates and access charge/revenue determination, market entry, and interconnection:

Market entry

Except for radio paging and value added services, entry in the telecommunications industry is regulated by the NTC. In radio paging, NTC regulates only the norms on radio frequency while in value added services, a franchise is no longer required and firms are allowed to offer their services competitively, provided that a firm does not put up its own network. Entry into the industry requires two separate permits: (1) a congressional franchise which is issued for a maximum period of fifty years and (2) a Certificate of Public Convenience and Necessity (CPCN) or a Provisional Authority (PA) which is issued by the National Telecommunications Office (NTC). The latter requires carriers to prove their technical and financial capabilities to operate as well as to demonstrate the presence of sufficient demand for their services.

Pricing

Prior to 1995, the NTC set rates based on a 12 percent rate of return ceiling imposed on telecommunications carriers. This was estimated based on the net book value of property, plant and equipment plus working capital equivalent to two months average operating expenses. Rate setting was also guided by the policy objective to maintain affordability of basic telephone service particularly for residential areas. This resulted in the cross-subsidization from international long distance service (which was set above cost) to local service (which was priced below cost).

RA 7925 abolished the 12 percent ceiling and replaced it with an ambiguous pricing rule. The Act states that "the NTC shall establish rates and tariffs which are fair and reasonable and which provide for the economic viability of telecommunications entities and a fair return on their investments considering the prevailing cost of capital in the domestic and international markets. RA 7925 is vague on what constitutes "fair and reasonable" rates. In contrast, Chile's price-setting rules and process are spelled out quite specifically. The procedure involves estimating demand for each service, zone, and firm bundle, the incremental cost based on a benchmark efficient firm and a fair return for the firm. The level of detail in the law is evident as it even stipulates the type of regression to be used in estimating a fair rate of return to the efficient firm. The resulting prices are supposed to ensure that firms earn a fair rate of return on revalued assets (Guasch and Spiller).

In the absence of a clearly drawn approach on price regulation, telecommunications firms have been petitioning for rate rebalancing and metering. PLDT's proposal to meter local calls has been suspended indefinitely by the NTC. The latter also suspended action on other pending applications for metering.

Interconnection and Access charge/revenue determination

RA 7925 states that the NTC shall "mandate a fair and reasonable interconnection of facilities of authorized public network operators and other providers of telecommunications

services through appropriate modalities of interconnection and at a reasonable and fair level of charges".

While the NTC determines the end-user rates, access charge/revenue sharing arrangements are negotiated between interconnecting carriers. The agreement between the parties is submitted to the NTC and the latter only intervenes when the parties fail to reach an agreement.

In approving interconnection rates, the NTC takes the following into consideration:

- Costs of the facilities needed to complete the interconnection
- The need to provide cross-subsidy to local exchange carriers to enable them to fulfill the primary national objective of increasing telephone density in the country
- Assure a rate of return on the total local exchange network investment that is at parity with those earned by other segments of the telecommunications industry.

B. Competition Legislations

The Philippines does not have a comprehensive competition policy: currently, there is no central agency created towards the implementation of fair trade laws. There are many existing laws prohibiting unfair or restrictive practices. These are embodied in several legislations which prohibit the following:

- Any conspiracy or combination in the form of trust that affects free competition in the market
- Monopoly in the trade of any commodity
- Collusion in price fixing
- Certain mergers or acquisitions
- Interlocking directorates.

The basic legislations include:

Philippine Constitution: regulates or prohibits monopolies when the public interest so requires (monopolies not prohibited per se), prohibits combinations in restraint of trade or unfair competition (without exception); the Constitution does not provide imposable sanctions for violations of these prohibitions

Republic Act 3247 (An Act to Prohibit Monopolies and Combinations in Restraint of Trade): prohibits unfair trade practices, monopolies and combinations in restraint of trade.

Article 186 of the Revised Penal Code: describes the acts punishable, such as monopolies and combinations in restraint of trade, and the penalties imposable, such as imprisonment or fines.

Philippine Corporation Code (Batas Pambansa 68): provides rules and procedures to approve all combinations, mergers, and consolidations. The danger of anti-competitive mergers or acquisitions that substantially lessen competition is not currently a major regulatory issue and the overall view is that the efficiency or synergy advantages of mergers more than compensate for their competitive risks.

Other special laws and statutes dealing with competition:

- RA 165 (Patent Law, 1947)
- RA 166 (Trademark Law, 1947)
- PD 49 (Copyright Law, 1972)
- RA 386 (Civil Code of the Philippines, 1949): stipulates the collection of damages arising from unfair competition.
- RA 7581 (The Price Act, 1991): protects the consumers by stipulating price manipulation (hoarding, profiteering, and cartels) as illegal acts.
- RA 7394 (The Consumer Act of the Philippines, 1932): imposes penalties for such behavior as deceptive, unfair and unconscionable sales practices in both goods and credit transactions.

These laws, however, have been proven inadequate or ineffective to stave off the ill effects of anti-competitive structures and behavior in the market. These laws have been hardly used or implemented as may be seen in the lack of cases litigated in court. For instance, only two cases have been decided by the Supreme Court on violations of Article 186 of the Revised Penal Code (Barriers to Entry Study, 1992).

The late 1990s witnessed the introduction of two legislative bills on competition. Senate Bill 150 (Fair Trade Act of 1997) consolidates all anti-trust laws and creates a Fair Trade Commission as an executive body that will enforce the law and regulate competition in the economy; while Senate Bill 1792 (Philippine Anti-trust Act of 1999) penalizes combinations or conspiracies in restraint of trade and all forms of artificial machinations that will injure, destroy or prevent free market competition.

III. Competition Analysis

A. Overall Performance of the Industry

After the liberalization and deregulation in 1993, nine new firms entered the market. With the introduction of competition and the entry of foreign investment, the number of CMTS subscribers and paging services subscribers more than doubled between the years 1995 and 1997. The same goes for trunk radio service subscribers (see Table 1).

In terms of the absolute growth in mainlines, the country posted an impressive cumulative annual growth rate (CAGR), especially when one compares this with other ASEAN countries. Table 2 shows that the Philippines' CAGR rose from 3.2 percent prior to liberalization (calculated for the period 1984 to 1990) to 18.2 percent after liberalization (i.e., for the period

1990-1995). As a result of greater telephone penetration, the long waiting time to own a telephone which took over a decade prior to liberalization, has ceased.

Table 1: Number of Telecommunications Services Companies, 1992-98

Telecommunications Sub-sector	1992	1993	1994	1995	1996	1997	1998
Local Exchange Carrier Service	45	49	60	67	74	76	76
Cellular Mobile Telephone Service	2	5	5	5	5	5	5
Paging Service	6	6	10	11	14	15	15
Public Trunk Repeater Service	7	8	8	10	10	10	10
International Gateway Facility	3	5	9	9	9	11	11
Satellite Service	3	3	3	3	3	3	3
International Record Carrier	4	4	5	5	5	5	5
Domestic Record Carrier	6	6	6	6	6	6	6
Very Small Aperture Terminal	4	4	3	3	3	4	4
Public Coastal Station	13	13	13	12	12	12	12
Radiotelephone	4	6	6	5	5	5	5
Value-added service	-	-	-	1	27	47	70

Source: 1997 and 1998 NTC Annual Reports

It is also evident from Table 3 (below) that opening the sector to competition and foreign investment has boosted the contribution of the telecommunications industry to the economy. Value added and revenues from the telecommunications sector improved substantially. Value added as percentage of GDP increased from 1 percent in 1988 to 1.6 percent in 1994 while revenues as percentage of GDP rose from 1.4 percent in 1988 to 2.1 percent in 1994. These increases could be attributed mainly to the growth in the telephone sub-sector as well as in other telecommunications services which include cellular mobile telephone and paging services. The contribution of the telegraph sub-sector remained unchanged.

Table 2: Comparison of Selected ASEAN Countries' Cumulative Annual Growth Rates

Country	Mainlines 1984 (in 000s)	Mainlines 1990 (in 000s)	Mainlines 1995 (in 000s)	CAGR (%) 1984-90	CAGR (%) 1990-95
Philippines	505	610	1410	3.2	18.2
Thailand	519	1325	3482	16.9	21.3
Malaysia	849	1588	3332	11.0	16.0
Indonesia	536	1066	3290	12.1	25.3

Source: Ure and Vivorakij,1998

Table 3 : Opening Up The Telecommunications Industry To Competition and Foreign Investment : Summary Of Benefits

	Before	After
Foreign Direct Investment	1973-89: US$ 17.6 million	1973-98: US$460.5million
Total Value Added As % of GDP	1988: P8.3 billion 1.0	1994: P26.4 billion 1.6
Revenue/Sales As % of GDP	1988: P11.3 billion 1.4	1994: P34.9 billion 2.1
Telephone Density	1984: 0.95	1997: 8.07
Fixed Telephones Lines	1984:505000	1998: 6548114
Mobile Telephone Subscribers		1997: 1559421
Paging Subscribers		1997: 704138

B. Telecom Services In Rural Areas

Telephone density in the country is about 9.6 for every 100 persons, an improvement from the 1997 figure of 8.07. The distribution of telephones across regions as shown in Table 4 reveals a highly uneven distribution. Most telephone lines are concentrated in Metro Manila or NCR, the center of economic and political power in the country. Metro Manila had a high telephone density of 28.62 in 1997 while the rest of the country had a telephone density ranging from 0.89 (Region II) to 7.29 (Region VII). The table also shows that coming far second after Metro Manila is Region VII followed by Regions IV, XI and I.

The Telecommunications Office (TELOF) and the Municipal Telephone Project Office (MTPO) are operating arms of the government providing limited telephone and telegraph services in rural areas. The TELOF provides the following services to the general public particularly in areas where the private sector has not ventured: telegraphic transfer, telegraph messages, and telephone lines/units. The MTPO implements the government's municipal

telephone program established to implement a nationwide plan and install telephones in every unserved municipality.

Table 4: Telephone Distribution By Region, 1997

Region	Installed Lines	Population	Telephone Density
CAR	64814	1309811	4.95
I	242742	3931261	6.17
II	23630	2640554	0.89
III	427199	7218913	5.92
IV	734047	10463047	7.02
V	133363	4488068	2.97
VI	258204	5983675	4.32
VII	380290	5214527	7.29
VIII	89182	3511714	2.54
IX	44457	2930263	1.52
X	115943	4139703	2.80
XI	339941	5331644	6.38
XII	67468	2473078	2.73
ARMM	45319	2087362	2.17
NCR	2808957	9814977	28.62
Total	5775556	71538597	8.07

While increasingly open markets and competition in the telecommunications industry can lead to economic gains, there is no assurance that outlying rural regions can be linked to the network. The current policy of cross-subsidization in which the cost of providing telephone lines in rural areas is subsidized by profits on heavy routes and on long-distance calls may no longer be suitable in the light of declining cost of long distance traffic. There is a need for the government together with the private sector to design programs to help less-favored regions in order to achieve universal access.

C. Major Industry Players

The telecommunications sector has indeed benefited from the entry of new players due to a liberalized environment. While the number of players has increased, this is no guarantee that effective competition would result. A careful examination of the current state of competition in the Philippine telecommunications sector would reveal that the entry of new players does not imply that the incumbent PLDT will no longer be able to exercise its market power.

There are currently ten vertically integrated multi-service firms in the telecommunications industry providing local exchange carrier, international gateway facility, cellular mobile telephone and value added services. These telecommunications firms are controlled by family-owned conglomerates like the Cojuangcos and Yuchengcos, Ayalas,

Lopezes, Gokongweis, Santiagos, Delgados, Enriles, and the Benedicto-Africa-Nieto Group, the wealthiest families controlling other important economic sectors in the Philippines. All these firms have foreign partners (see Table 5). Through their affiliation with these firms, foreign companies in Asia like Thailand's Telecom Asia and Shinawatra, Hongkong's First Pacific, Australia's Telia, Singapore Telecom, Japan's NTT and South Korea's Retelcom have been making their presence felt alongside with European and American companies like Cable and Wireless, Deutsche Telekom, Millicom, AIG and Comsat. Alongside with its policy on deregulation and liberalization, the government has been supporting mergers and alliances in the industry as it expects these moves to eventually lead to the emergence of a "triopoly" of major players.

Philippine Long Distance and Telephone Company (PLDT): provides local exchange carrier, international gateway facility, and value added services. PLDT is the largest local exchange carrier in the country in terms of facilities, area coverage, number of connections, and revenues. As of end 1999, PLDT controls almost 60 percent of total subscribed lines and 39 percent of total installed lines. PLDT also owns and operates the most extensive nationwide transmission network, the Public Switch Telephone Network (or PSTN which provides the backbone for all telephone lines in the country) and two international gateways. As the sole operator of the most extensive toll network, local exchange operators must interconnect with its facilities in order to provide long distance services.

Pilipino Telephone Corporation (Piltel): a subsidiary of PLDT, it operates local exchange systems in several assigned areas and holds a franchise to operate a nationwide cellular mobile telephone service.

Smart Communications: provides local exchange carrier, international gateway facility, cellular mobile telephone and value added services. Smart is the recognized leader in the cellular mobile telephone market in the country. Smart's foreign affiliate, Hong Kong's First Pacific which controls 40 percent of Smart Communications, acquired a 17.2 percent stake at PLDT in 1998. This action paved the way for the eventual merger of PLDT, Piltel, and Smart.

Globe Telecom (GMCR): a full-service telecommunications company which provides local exchange carrier, international gateway facility, cellular mobile telephone and value added services. While Smart is the industry leader in the mobile market, Globe is considered to be the leader in digital technology in the country which is largely due to the popularity of its text messaging.

Digital Telecom Philippines (Digitel): provides local exchange carrier and international gateway facility services. Digitel is emerging as the dominant operator in Luzon. Globe is currently holding preliminary merger talks with Digitel.

Bayan Telecommunications (Bayantel): provides local exchange carrier, international gateway facility, and value added services. Bayantel had merger negotiations with Globe in 1998, but these negotiations failed. The latter recently announced that it would revive its merger talks with Bayantel.

Isla Communications (Islacom): a provider of local exchange carrier, international gateway facility, and cellular mobile telephone services. Globe has recently acquired Islacom.

Philippine Global Communications (Philcom): provides local exchange carrier and international gateway facility services.

Phil. Telegraph and Telephone Corporation/Capwire (PT&T): provides local exchange carrier, international gateway facility and value added services.

Eastern Telecommunications Philippines Inc/Telecommunications Technologies Philippines, Inc. (ETPI): provides local exchange carrier and international gateway facility services.

Table 5: Domestic and Foreign Investors in the Telecommunications Sector

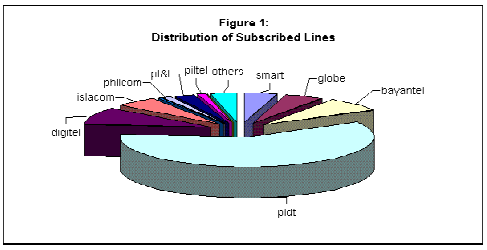
Wireline and Wireless Voice Company	Filipino Owners	Foreign Partner	Foreign Equity
PLDT	Cojuangco/ Yuchengco	First Pacific (Hongkong)	17.20
Bayantel/International Communications Corporation (ICC)	Lopez	Nynex(US), Telecom Asia (Thailand)	32.24
Digitel	Gokongwei	Telia (Australia)	15.00
Eastern	Benedicto-Africa-Nieto (BAN) Group	Cable & Wireless (UK)	40.00
Extelcom	Benpres(a Lopez firm)	Millicom (US)	40.00
Globe GMCR	Ayala	Singapore Telecom	37.00
Islacom	Delgado	Deutsche Telekom, Shinawatra (Thailand)	30.00
PT&T/Capitol Wireless, Inc. (Capwire)	Santiago	Retelcom (South Korea)	20.00
Piltel	PLDT subsidiary	AIG (US)	-
Smart	Metro Pacific	First Pacific (Hongkong), NTT (Japan)	40.00
Philcom	Enrile	Comsat (US)	16.80

Sources: Business World Report 1994, Ure and Vivorakij,1998 and Lamberte, 1996

D. Industry Structure

Local exchange services

Telephone services in the country are provided by both the government and the private sectors. There are, currently, 74 private and four government telephone operators including the TELOF, the government's nationwide telecommunications carrier.



As of December 1999, a total of 6,745,597 lines have been installed in the country out of which about 42 percent have been subscribed. PLDT is the dominant carrier with a total percentage share of about 39 percent of the total number of installed lines and almost 60 percent of total subscribed lines. Far second in terms of installed lines are Smart Communications and Globe Telecom with shares of about 13 percent and 12 percent, respectively. Digitel follows with a share of 9 percent (see Table 6). In terms of subscribed lines, PLDT remains the dominant firm as its share continues to be unmatched even by all competitors combined.

Cellular Mobile Telephone System

There are, currently, five CMTS companies in the country: Express Telecommunications (Extelcom), Piltel(Mobiline), Smart, Isla Communications(Islacom), and GMCR (Globe Handyphone). In 1989, the government granted Piltel and Extelcom franchises to operate cellular mobile telephone systems. Smartcom, Islacom, and Globe entered the market in 1993.

Owing to the shortage of fixed telephone lines, the demand for cellular telephones swelled as a result of a growing population and economic growth. In 1991, there were only 34,600 cellular mobile telephone subscribers. This increased to 493,862 subscribers in 1995. In 1997, there were 1,343,620 subscribers which increased to 1,733,652 in 1999.

The cellular mobile telephone market is dominated by Smart with its share of 46 percent of the market (see Table 7). This is followed by Piltel with a share of 23 percent and by Extelcom and Globe with roughly equal shares of about 13 percent each.

Table 6: Major Carriers and Number of Installed Lines by Carrier, 1999

Major Carriers	Number of Installed Lines	% Share	Number of Subscribed Lines	% Share
PLDT	2623797	38.8	1701607	59.7
Digital Telecom Philippines	623675	9.2	269600	9.5
Globe Telecom (GMCR)	783175	11.6	144671	5.1
Bayan Telecommunications	460415	6.8	211032	7.4
Isla Communications	488531	7.2	161077	5.7
Philippine Global Communications	64620	1.0	38539	1.4
Pilipino Telephone Corporation	403841	6.0	31906	1.1
Phil. Telegraph and Telephone Corporation	132800	2.0	66431	2.3
Smart Communications	866954	12.8	116992	4.1
Eastern Telecommunications Philippines Inc/TTPI	70064	1.0	11170	0.4
Other Operators	236725	3.5	97063	3.4
Total	6548114	100.0	2859088	100.0

Operator	Number of Subscribers	% Share
Smart	791026	45.6
Piltel	397064	22.9
Globe	220000	12.7
Extelcom	225000	13.0
Islacom	100562	5.8
Total	1733652	100.0

Table 7: Cellular Mobile Telephone System Subscribers by Company
Source: NTC

NTC's Regulatory Scheme

Beginning in 1993, local exchange service in the country has been provided through the service area scheme implemented by the NTC. The scheme divided the country into eleven service areas, each with a mix of urban and less profitable rural markets and assigned these areas to cellular and gateway carriers (refer to Table 8). The scheme required gateway and cellular franchise holders to provide local exchange lines in return for the authorizations granted them to operate in the highly profitable cellular and international gateway operations. Gateway and cellular operators must install 300,000 and 400,000 telephone lines, respectively within three years. A telecommunications operator with both cellular and gateway franchises must install 700,000 telephone lines.

The nine telephone firms currently operating under this scheme are: Globe Telecom, Islacom, Smart, Digitel, International Communications Corporation-Bayantel, Philippine Global Communications/ Major Telecoms (Philcom), Piltel, PT&T/Capitol Wireless, and ETPI. The scheme allowed two new carriers to compete against PLDT and other small carriers but excluded PLDT from the scheme as it was not obligated to fulfill the same service requirement. As these carriers began their rollout programs in 1996, PLDT responded by launching its Zero Backlog Program under which it continued to install lines.

Table 8: Service Area Scheme

Region	Smart	Digitel	ETPI	PT&T/ Capwir	Globe GMCR	ICC-BayanTel	Islacom	Piltel	Philcom	PLDT
NCR A			√							√
NCR B						√				√
NCR C					√					√
NCR D	√									√
CAR A	√	√						*		√
CAR B		√	√							√
I	√	√								√
II		√	√							√
III	√	√						*		√
IVA		√		√				*		√
IVB		√			√			*		√
V		√				√		*		√
VI							√			√

VII							√			√
VIII							√			√
IX								√	√	√
X								√	√	√
XI								√	√	√
XII					√					√
CARA-GA								√	√	√
ARMMA					√					√
ARMMB									√	√

Source: NTC and Serafica, 2000
Note: * refers to selected areas in the region .

The SAS has long been criticized as it seemed to discourage the expansion of infrastructure and competition in the industry. The scheme ran counter to competition policy and what it did was to level the playing field for PLDT as new entrants were obligated to practice cross-subsidization between the less lucrative areas with the very profitable ones (Lamberte, 1996). Newcomers in the industry and consumer groups lobbied for the abolition of the service area scheme. They argued that it limited the smaller carriers' growth capacity and their ability to compete with the dominant PLDT.

The SAS was designed to accelerate the provision of telecommunications services in areas that were previously exclusive franchise of PLDT and other smaller carriers, while preventing "cream-skimming" or concentrating telephone investments in lucrative areas. The SAS was drafted with the best of intentions. Unfortunately, good intentions do not necessarily make good policy. True enough, the SAS was responsible for rapid expansion in network as reflected in the increase in teledensity from 1.21 in 1993 to 9.38 percent in 1998 and other benefits such as network digitalization, reduced waiting time for service connection, and fewer faults per line. However, the SAS could not represent a permanent or optimal regulatory framework. The main problem with SAS was its imposition of geographical divisions which ignored the economies of scale important in any network industry and resulted in the wasteful duplication of networks (Abrenica, J. and E. de Dios, March 2000).

Table 9: Status of Service Area Scheme

Telecommu-nications Carrier	Total Lines Required Under SAS	Total Lines Committed Under Revised Rollout Plans	Cumulative Lines Installed as of December 1999	Performance Rating
Digitel	300000	337932	623675	207.9
Globe Telecom	700000	705205	783175	111.9

ICC/ Bayantel	300000	341410	460415	153.5
Islacom	700000	701330	488531	69.8
Major/ Philcom	300000	305706	64620	21.5
Piltel	400000	417858	403841	101.0
PT&T/ Capwire	300000	300000	132800	44.3
Smart	700000	700310	866954	123.9
ETPI	300000	300497	70064	23.4
Sub-total	4000000	4110248	3894075	97.4
PLDT	-	1254372	2623797	
Others	-	-	236725	
Total	4000000	5364620	6754597	

Source: NTC

To date, four out of the nine SAS carriers failed in fulfilling their roll-out targets (see Table 9 above). Based on the 1999 performance of the SAS participants, main telephone lines installed reached 3,894,075 lines. Combined with PLDT's and others' installed lines, a total of 6,754,597 lines have been installed, of which only 42 percent have been subscribed. The NTC warned the lagging telephone firms that penalties would be imposed and their assigned areas would also be opened up to other carriers.

E. Competition Issues

The liberalization of the telecommunications sector has indeed been beneficial to the country. Philippine experience shows that while liberalization may be a precondition for the growth of a free market, it does not, by itself, guarantee effective competition. It is only by creating a policy environment that encourages competition that we can maximize the benefits from liberalization. Without effective competition laws and regulation, incumbents and network operators can deny new entrants access at fair terms and conditions which can result in market foreclosures, bottlenecks, and rents in key monopoly essentials facilities. Regulation is important in ensuring that access charges promote an efficient structure of production, use, and consumption; allow network operators to make a sufficient return; and promote efficiency on the part of the network operators, while avoiding unnecessary construction of duplicate networks (Guasch and Spiller).

After the initial euphoria over the gains experienced after opening the industry to new players, key issues such as interconnection and vertical integration are now becoming more evident. These issues are critical to fostering competition and reducing market dominance. Thus, there is a need to settle these issues in order to sustain the initial regulatory reforms and create and maintain a competitive marketplace that would ensure significant benefits in terms of new market opportunities, more level playing field, greater choice and lower prices in the telecommunications sector.

It must be noted that the regulatory reform process becomes more complex as the telecommunications industry is subject to significant technological and market-based changes (Janow, 1998). Uncertainties increase as new and advanced technologies emerge such that policies that may work today may no longer be appropriate in the future. It is necessary to continually adjust the regulatory system to take into consideration domestic or international policy changes. Liberalization, deregulation, and the whole regulatory reform process require an institutional structure that is technically competent in handling the complex issues that emerge in the telecommunications industry.

1) Interconnection

Interconnection is necessary in order to enable subscribers of different telecommunications firms to communicate with one another. Thus, interconnection or access policy plays a critical role in fostering competition and reducing market dominance in the telecommunications industry. Opportunities for competition can be realized only if smooth interconnection among various telecommunications services is possible.

Philippine experience has shown that the combination of a weak regulatory authority, vague interconnection rules, and a large, dominant carrier capable of exercising monopoly power over access to networks have resulted in difficult and slow interconnection. The failure to implement smooth interconnection has serious adverse consequences such as unnecessary lengthy delays in competition associated with welfare losses to telephone subscribers and a high cost imposed to entrants. Executive Order 59, issued in February 1993, obliged the compulsory interconnections of all public telecommunications carriers. Republic Act 7925 provided some interconnection guidelines, however, the rules were not explicitly spelled out and failed to sufficiently address the industry's interconnection problems. Hence, these weaknesses in the legislations inhibited true competition.

Interconnection contracts are negotiated on a bilateral basis. Interconnection negotiations are determined by the bargaining strengths of the telecommunications carriers. The regulatory body, NTC, does not regulate the price of interconnection and mediates only when parties are unable to come up with an agreement. The NTC views interconnection contracts as voluntary transactions and intervenes only when a dispute is submitted to it for arbitration.

Box 3: A Tale of Telephone Woes in Two Cities

1: Cagayan De Oro

In Cagayan de Oro City, a highly urbanized area, there are currently four landline operators: Misortel (oldest operating telephone company in Cagayan de Oro and owned by the provincial government), Cruztelco (a private operator), National Telephone Program (or NTP, a government program offering landlines in the area), and Philcom. Direct interconnection is only possible between Misortel and NTP. For the other two remaining telephone operators, interconnection with the other carriers is possible by means of a long distance call in which long distance rates are charged, thus making calls more expensive to subscribers.

Saddled with the interconnection problem and seeing no immediate response from the service providers, subscribers mostly those engaged in business, have subscribed to at least two carriers, typically Misortel and Philcom. This way, they can make unlimited calls without incurring long distance charges. Others have acquired cellular phones which allow them to call other subscribers of different service operators.

2: Bulacan

In the office of the mayor of Meycauayan in Bulacan (Meycauayan is a town which is roughly 20 kilometers away from Metro Manila) there are two existing telephone lines provided by Digitel and Racitelcom (a private telephone operator). These two telephones are separated by a divider, but to be able to speak to someone on the other side of the divider, one must dial the Bulacan area code and pay PhP 4 per minute charge as this is considered a long distance call.

Sources: Serafica, 2000 and Manila Standard, September 23, 1999 issue

NTC's ability to intervene has been undermined by the problem of information asymmetry in the telecommunications industry. NTC does not have the necessary information from the telecommunications companies. Thus, it becomes difficult for it to make credible counterproposals when it does not have full access to the regulated firms' data. Operating within this set-up, NTC failed to aggressively enforce and speed up interconnection.

PLDT, the dominant carrier, provides not only local telephone service but domestic and international long distance services as well. It is the principal supplier of long distance telephone service in the country as it owns and operates an extensive nationwide backbone transmission network which is necessary for the processing of long distance telephone calls. Smaller telecommunications companies must go through PLDT's network to allow them to process these calls. As such, PLDT has been able to wield monopoly power over access to its network and has dictated the pace of interconnection in the industry. New industry players and smaller firms complained that it was difficult for them to negotiate favorable interconnection deals with PLDT as, being the incumbent operator, it has a stronger bargaining position. They have also

complained that PLDT has been charging them unreasonably higher fees. Other complaints include insufficient interconnection, unequal access settlements or revenue sharing arrangements, and the use of interconnection as leverage in other commercial negotiations (Serafica, 2000). Incumbent operators in other parts of the country behave in the same manner and refuse to cooperate (see Box 3 – Cagayan De Oro case). For consumers or subscribers, the impact of the interconnection problem has been manifested through unsuccessful call attempts and irrational calling charges.

Faced with consumer complaints over the large number of failed connections, PLDT and the other players have been clashing over responsibility for poor connections. The new carriers are accusing PLDT of deliberately dragging its foot on interconnection as a strategic means of restricting market share of the entrants in an industry characterized by network economies. On the other hand, PLDT maintains that the interconnection issue is primarily a technical and financial issue, citing the additional investments it must make to complete connectivity. Amidst these conflicts, NTC has taken a largely "hands-off" attitude (Abrenica and De Dios).

2) Mergers and Acquisitions

It is important to distinguish between welfare enhancing mergers and welfare diminishing mergers. In the former, mergers between firms can be an effective way of developing competitive advantage, optimizing the benefits of complementary strengths and taking advantage of economies of scale and scope. Mergers can also work as an important discipline upon poorly performing management. Merger activity can thus improve efficiency to the benefit of consumers and the community in general. On the other hand, mergers can result in a decline in the number of players in an industry, at least in the short run. In some cases, particularly where there are significant barriers to entry, mergers can lead to increased industry concentration and increased market power which may run counter to community interest .

To ensure that mergers and acquisitions do not create or enhance market power which can damage emerging competition, it is necessary to design safeguards that would ensure market contestability and regulate anti-competitive business conduct or practices. The Philippines, however, does not have an explicit policy on mergers and acquisitions which would enable this. While RA 7925 has spelled out the provisions on anti-competitive behavior, its implementing rules and regulations is silent on mergers and vertical integration.

In November 1998, First Pacific acquired a 17.2 percent stake at PLDT in a US$749 million deal. The PLDT-First Pacific deal is expected to bolster PLDT's control of the industry and set the stage for the merger of their cellular phone companies. Finance Asia described the PLDT takeover as a strategic acquisition made for commercial rather than political reasons that would allow First Pacific to consolidate its position in the Philippine telecommunications industry by synthesizing the operations of PLDT and Smart. During the same month, First Pacific announced its plan to merge Smart Communications, the country's largest cellular phone operator, with PLDT's Piltel (Manila Times, 14 November 1998 issue).

Smart and Piltel have a combined share of 68.5 percent of the total number of CMTS subscribers while PLDT and Smart together account for 63.8% of the total number of installed

lines. Industry players believe that the merger could create an industry giant with combined telephone and cellular phone subscribers of 4,583,740 which accounts for about 66.3 percent of the country's total subscribers in a country of 73 million people where the telephone market is far from saturated.

During the same year, Bayantel and Globe telecom held merger talks in order to secure their position in the industry. The merger was expected to lower their operating costs and help increase services for areas in which they do not overlap. The negotiations, however, failed. Globe recently announced that it is not closing its doors to the possibility of acquiring other telecommunications companies and may revive its merger negotiations with Bayantel. Early this year, Globe easily acquired Islacom in a US$ 2.3 billion deal. Currently, it is engaged in preliminary talks with Digitel.

The reconcentration taking place in the industry has been encouraged by the government as well as by government financial institutions. Concerns have been raised that this might pose a danger to competition as this encourages strategic behavior.

CASE STUDY

Opening up the Philippine Telecommunications Industry to Competition (II)

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Course on Competition Law and Policy
Singapore May 2000

Conclusions and Policy Recommendations

The opening up of the telecommunications sector has provided significant benefits to the economy. The liberalization of the sector allowed the entry of new players resulting in rapid growth of the network, increase in foreign investment, access to technology and opportunities for companies to improve efficiency, and the emergence of new services. Our experience has shown that liberalization alone is not sufficient to foster effective competition. To achieve effective competition in the telecommunications sector, the interconnection between the incumbent and the new entrants must be guaranteed. If effective competition has to emerge, regulatory reforms have to be accompanied by clear rules on interconnection and terms of access that would lead to the creation of competitive market and industry structures. This could be achieved through carefully designed competition laws and regulation that could be efficiently implemented.

Our experience has shown that the combination of a weak regulatory authority, vague interconnection or access rules and pricing, and a large, dominant carrier capable of exercising monopoly power over access to its network has prevented true competition from taking place. As PLDT has the most extensive network, it was able to influence not only the speed and the terms and conditions for interconnection but the terms and conditions for revenue-sharing arrangements as well. This resulted in the slow progress of interconnection, difficulties of new entrants in getting interconnection and problems in drawing up satisfactory revenue sharing arrangements with PLDT.

Due to the slow pace of interconnection, consumers have been complaining over the large number of failed connections. Swamped with these complaints, PLDT and the other players have been fighting over responsibility for poor connections. The new carriers are accusing PLDT of deliberately dragging its foot on interconnection as a strategic means of restricting market share. On the other hand, PLDT maintains that the interconnection issue is primarily a technical and financial issue for it. Amidst these conflicts, NTC has taken a largely "hands-off" attitude.

Aside from the interconnection problem, another important issue is the reconcentration taking place in the industry. The government-backed PLDT-First Pacific merger is expected to bolster PLDT's control of the industry. Note that First Pacific's cellular phone company Smart is the leader in the cellular phone market. The PLDT-Smart merger can create an industry giant with combined telephone and cellular phone subscribers of 4,583,740 which account for about 66.3 percent of the country's total subscribers. With the merger of the dominant firms in the fixed and mobile markets, the dangers of the return to monopoly abuse and reduction in competition have been raised.

Another lesson that could be drawn from our experience is that there still remains much work to be done with respect to establishing an effective regulatory institution and adequate regulatory laws towards the goal of ensuring competition in the telecommunications industry. Effective regulation is a complex activity that requires a learning process. Given our lack of regulatory tradition, limited administrative capabilities, lack of independence, and the information asymmetry problem in the industry, effective regulation remains a considerable challenge.

This brings us to a more fundamental question: Is it possible to achieve effective competition in an environment characterized by the presence of a large influential telecommunications firm, weak institution and fragile regulatory system which is prone to corruption and political pressure? In designing policy recommendations for the industry, we have to bear in mind that the regulatory environment in which telecommunications firms operate lacks institutional strength and credibility. Given this limitation, what should be done to achieve the goal of effective competition in the telecommunications industry?

It is important to note that the strong institutional foundations on which successful developed countries' competition and regulation system rests is absent and cannot be readily constructed in the Philippines. Despite its feeble institutional foundation, the country has continued to liberalize many sectors of the economy and enacted regulatory laws, though inadequate, to accompany its liberalization policy. While mistakes have been made along the way and are still expected to be made in the future, these should not discourage the country from adopting liberalization and competition policies. Given its complexities, the goal of operating an effective regulatory system, on which effective competition rests, is difficult although, through a gradual learning process this may not be impossible to achieve. The country has a strong network of professional associations from which competition policy experts could be tapped to perform complex regulatory assessments. This represents a strength that the country can take advantage of. There are also some sectors in civil society (NGOs, media, academia, and consumer groups) that advocate more competition and level playing field in various industries. These sectors can exert more pressure both on the government so that it becomes more transparent and accountable in its regulatory functions and on the firms so that they become more socially responsible and curb their anti-competitive practices.

With liberalization, NTC has been overwhelmed with regulatory issues and transactions that the introduction of competition entailed, consumer complaints, and interconnection disputes between the new carriers and the incumbent. All these tested its capacity to efficiently regulate. The NTC has obviously no or very little conceptual and practical experience on competition policy and effective regulation of the telecommunications industry. Therefore, it must be strengthened to become technically equipped to manage and effectively handle competition and regulation. To cope with its administrative weaknesses and improve its enforcement authority, NTC must invest in institution building activities such as training a small group of capable professionals with law or economics background. An extensive training on competition, regulatory practices and gathering necessary information is important in order to develop the human capital to do its job well. This core group could then train the commission's staff. There may also be a need to exempt the commission from civil service salary standards to make it more attractive to competent professionals and retain well-qualified staff. Finally, a reorganization and restructuring of the commission may be necessary in order to improve the NTC and ensure that it suits the new regulatory process that it must administer.

To build its credibility and establish its independence, there is a need to remove the appointment of the NTC commissioner from the political process. While this does not guarantee that the executive branch of the government will not interfere in its decisions,

this is one important step to lessen political interference and establish its autonomy. Furthermore, the funding of the NTC should be internally generated instead of the current budget allocations coming from the government. This way, NTC becomes detached from political interference. NTC officials should preferably come from the academia or from groups known to have no political agenda. They should not come from the group of telecommunications executives. In the same manner, telecommunications regulators should not be allowed by the government to be employed in the telecommunications industry. The current ban preventing government regulators from being employed in their subject industries should be strictly enforced. These changes are necessary in order to reduce the vulnerability of the system to influence and to avoid capture by special interest groups.

The regulatory framework and processes must be made as transparent as possible. This could be achieved by clearly specifying the rules, opening up the process, and explaining decisions. NTC should publish its decisions and deliberations, improve public access to its service, and strengthen the procedures for hearing complaints. The regulatory system must also be designed to overcome informational disadvantages which may require sophisticated administrative capabilities.

Revisions are needed in order to address the vagueness of some of the laws that NTC enforces and establish clear and efficient pricing, terms of access and interconnection. By now, it should be recognized that the SAS failed in providing interconnection between the incumbent and the new players. The geographical divisions that SAS imposed ignored the economies of scale characterizing the industry and led to the wasteful duplication of networks. SAS also maintained a large number of the advantages enjoyed by the incumbent. The high access charge limited the capability of new players to compete against PLDT.

As interconnection and terms of access to the network are key to opening the market, NTC should focus its regulation on the local exchange and on access to it. Furthermore, the power of the incumbent network operator to fight off the new players is significant and needs to be controlled to ensure access and protect consumers. Given a weak regulator which is incapable of restraining the incumbent, one alternative is to grant national franchises which will allow the consolidation of carriers that can pose a serious challenge to the incumbent. Franchises substitute competition for price regulation at the bidding stage. The advantage of franchises over regulation is that they impose no informational requirements on the government agency. Through a competitive franchise bidding process, efficient pricing is elicited and monopoly rents are dissipated (Guasch and Spiller). This is not something new: in the late 1990s, the operation of water and sewerage services in Metro Manila was concessioned through franchise bidding to the private sector. We could learn from the experience of the water sector and draw lessons which could be applied in the telecommunications industry.

The current wave of mergers taking place in the industry should be a source of concern. In particular, the PLDT-First Pacific deal has paved the way for the merger of two big carriers. Measures should be taken to prevent merging firms from acquiring substantial market power to deter entry and damage emerging competition.

References:

Abrenica, Ma. Joy V., Technological Convergence and Competition: The Telecommunications Industry, paper presented at the IDE-UPSE Symposium-Workshop on Studies in Governance and Regulation, 16 December 1998.

_____ and E.S. De Dios, "Information Asymmetry and the Design of the Regulatory Regime: Interconnection Issues, draft paper, March 2000.

Alonzo, Ruperto P. and W. San Pedro, The Philippine Telecommunications Industry PIDS Development Research News, Vol. XIV No. 4, July-Aug 1996.

Barriers To Entry Study Volume I, paper prepared by SGV Consulting for US Agency for International Development, April 1992.

Business Profiles 1997-98: Top 7000 Corporations

De Vera, M., "Reinventing Regulation:Antitrust Law and the Fair Trade Commission" in Economic Policy Papers No.8, 1997.

Guasch, J.L. and P. Spiller, Managing the Regulatory Process: Design, Concepts, Issues, and the Latin America and Caribbean Story, October 1998.

Janow, Merit E., Policy Approaches to Economic Deregulation and Regulatory Reform in Business, Markets and Government in the Asia Pacific, edited by Rong-I Wu and Yun-Peng Chu, 1998, New York and London

Kessides, I., Chapter 12: Regulatory Policies and Reform in Telecommunications

Lamberte, Mario L. Trade in Services, 1996.

Serafica, Ramonette B., Was PLDT a Natural Monopoly? Telecommunications Policy, Vol. 22, No. 4/5, pp. 359-370, 1998.

_____, Beyond 2000: An Assessment of Infrastructure Policies, PIDS Discussion Paper No. 98-07, May 1998.

_____, "Competition in Philippine Telecommunications: A Survey of the Critical Issues", draft report, February 2000.

Matsushita, Mitsuo, The System of Competition, paper prepared for APEC Partners For Progress-Seminar on Competition Policy, Bangkok, Thailand, March 19, 1997.

National Competition Policy, Report by the Independent Committee of Inquiry for the Heads of Australian Governments (Hilmer Report), Australia, August 1993 .

The Philippines: An Opening for Sustained Growth, World Bank document, April 1, 1993.

Ure, John and Araya Vivorakij, Telecommunications and Privatization in Asia in Business, Markets and Government in the Asia Pacific, edited by Rong-I Wu and Yun-Peng Chu, 1998, New York and London

1997 NTC Annual Report