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Satellite Broadcasting In The Philippines: Policies And Potentials

by

Teresa H Stuart
SATELLITE BROADCASTING IN THE PHILIPPINES:

POLICIES AND POTENTIALS¹

This paper reviews the current situation of the satellite communications sector in the Philippines with particular focus on the roles of selected government organisations. These organisations are currently shaping the general policy guidelines that bear upon a domestic satellite policy and the developments in the satellite communications sector.

Government Responsibilities

The roles played by various government organisations with regard to satellite policy have generally been established by a combination of legislation, presidential directives and precedent.

1. The Department of Transportation and Communications (DOTC)

The DOTC is charged with the development of overall policy in the telecommunications sector. Such policies should promote the orderly development of the nation’s telecommunications sector such as to benefit the Filipino people and contribute to the economic development of the country. The Department, through Department Circular 87-188, set out the following basic guidance for its own actions which may be pertinent to the development of a satellite communications policy.

- Telecommunications will be developed in an orderly fashion, subject to competitive and regulated entry into the market;
- There should be at least one integrated and reliable nationwide telecommunications transmission facility with the capacity to provide voice, record and date services to all

¹ Prepared by Dr. Teresa H. Stuart, Associate Professor, Institute of Development Communication, University of the Philippines Los Banos for the AMIC Seminar-Workshop on The Impact of Satellite Broadcasting in Asia, AMIC, Singapore, 1-3 February 1993.
major cities and towns;

- Advanced, cost-efficient technologies should be used and the Government shall encourage and support applied research and development of such technologies;
- Such technology should conform with accepted CCIR and CCITT recommendations;
- The radio frequency spectrum should be managed in an orderly and rational way;
- The Department shall continue to operate telecommunications facilities in unserved areas, but will encourage private enterprise to provide service in these areas;
- Connection of Customer Premises Equipment (CPE) to the public telecommunications network may be allowed subject to Government guidelines designed to assure the public interest, network integrity, and safety; and
- A domestic manufacturing sector shall be encouraged.

Within these guidelines and standard practices, the DOTC sets policy and plans courses of action.

2. The National Telecommunications Commission (NTC)

The National Telecommunications Commission (NTC) is a quasi-judicial body which acts as the regulatory arm. The DOTC provides the overall policy guidance to the NTC. The NTC uses such guidance to direct its actions in granting Certificates of Public Convenience and Necessity (CPCNs) to carriers that provide various telecommunications services, and in regulating their operations. It also regulates radio and television broadcasters.

In granting CPCNs to either carriers or broadcasters, the NTC refers to franchises granted to such organizations by the national legislature over the years. The wording of such franchises may leave the NTC with room for interpretation if a liberal view is taken, as it has in recent times. Such leeway for interpretation can be an important tool
for NTC, given the time that may have elapsed since the grant or last amendment of many franchises and the rapidity with which new telecommunications services have been introduced in recent years.

In granting CPCNs and otherwise regulating the operations of telecommunications carriers, the NTC may:

- prescribe geographic areas of operations
- determine rates and charges
- grant permits for the use of radio frequencies and suballocate frequencies allocated at the international level by the International Telecommunications Union and its sub-organs; and
- register radio transmitters and receivers.

In general it sees to it that the public interest is satisfied. In so doing, it coordinates with other government agencies as appropriate with the objective of improving communications services throughout the country.

3. The Municipal Telephone Projects Office (MTPO)

The MTPO, created in 1990, aims to establish by 1993 at least one public calling office (PCO) in every municipality that has no access to the national public switched telecommunications network (PSTN). In meeting its objective of extending a minimum level of telecommunications to all municipalities, the MTPO identified five PCO locations and six rural exchange areas requiring satellite links to Manila. Satellite links are expected to be needed in the future to interconnect an additional 15 public calling offices and five rural exchanges.

Broad Policy Framework

In 1990, the DOTC issued the National Telecommunication Development Plan (NTDP), which set out the Department’s overall policies for the sector and established a comprehensive set of service-oriented targets through the year 2010. The Document affirms the Government’s intention to establish an environment to
"enable the private sector to confidently pursue the expansion and improvement of basic infrastructure and services that are efficient and that respond to market needs."

The policy for development set out in the NTDP is as follows:

"The importance of an efficient telecommunications network as a foundation for economic recovery and growth is well recognized, as is the critical need to accelerate the development of telecommunications infrastructure and facilities in the Philippines. Therefore, the Government's primary goal for the telecommunications sector is growth to the maximum extent warranted by demand and by resource constraints, particularly foreign exchange availability" (DOTC, 1991).

Very little was discussed in the NTDP on the possible role of satellite communications in the development of the national network. However, it does state that "where appropriate, the Government will promote the use of satellite technology as a means of improving and broadening the availability of telecommunications broadcasting, education, public information and other services essential to economic and social development" (DOTC, 1991).

Since October 1989, the NTC has taken the policy initiative with regard to satellite communications, since no specific guidance has been given by DOTC. It has granted provisional authorities to the following five carriers to provide either Very Small Aperture Terminal (VSAT) services or to provide carrier's carrier type services.

1. Liberty Broadcasting Network Inc. (LBNI)

The first to receive a provisional authority to begin constructing a network was LBNI, a business radio service carrier. Liberty was granted a provisional authority on October 27, 1989, to provide service through an initial network of 300 "micro
earth stations" working with one or more hub stations operated by Liberty. Proposed service include point-to-multipoint domestic and international data transmission, digitalized sound messages, store and forward facsimile services, and dedicated lease channel services at speeds of 1200 and 2400 baud. Provisional authority was granted for a term of 18 months for domestic services only.

2. **Clavecilla Radio Systems Corporations (CRS)**

Clavecilla was granted provisional authority on September 11, 1990, to provide domestic services through a network of VSATs operating through a central hub station. The initial network would be designed to carry data, video and simultaneous voice data (SVD) services. Clavecilla was given 12 months to install the network and the provisional authority was given a term of 12 months.

3. **International Communications Corporations (ICC)**

ICC was given provisional authority on December 20, 1990 to construct an initial network of 200 small or VSAT earth stations. Proposed services were full duplex, point-to-point and point-to-multipoint data communications. ICC was given 360 days to construct the network and to begin commercial operations, although the provisional authority was given a term of 18 months.

4. **Capitol Wireless Inc. (CapWire)**

On March 27, 1991, NTC gave provisional authority to CapWire, an international record carrier. It was authorized to construct an initial satellite earth station network of 20 earth stations, primarily in the central and southern portions of the country. Proposed services included "toll quality" voice telephone communications and data communications links to other carriers. A hub station should be located in the Metro Manila area to facilitate interconnection with the national network. The provisional authority covered only domestic
rates, and the basic outlines of their services. An effort will be made to limit duplication of facilities where practical;

- The new entrants will be required to meet deadlines for implementation of their networks, implying that if they do not, their provisional authorities will be revoked. However, extensions may be granted for valid reasons after due notice and hearing to complete business arrangements and deploy their networks. Extension has already been granted to Liberty;

- Two types of satellite services are foreseen:
  - VSAT-type services provided by LBNI, CRS, ICC and PLDT direct to telecommunications users; and
  - carriers’ carrier services provided by DOMSAT and CapWire to long distance carriers and interconnecting carriers.

**Market Segmentation**

Applications for satellite services from several satellite carriers and Government’s consequent actions on these applications have implied, but not clearly stated, that two classes of satellite carrier will exist--those offering retail services to telecommunications end users, and those offering carriers’ carrier services, supplying interconnections for terrestrial-based carriers, such as local and long distance telephone companies. It has not been determined whether this segmentation of the market is an appropriate or even practical long term approach.

DOMSAT has traditionally operated as a carriers’carrier limited both by its franchise, and its provisional authority. Capitol Wireless’ provisional authority contemplates that it would be similarly restricted to the provision of carriers’carrier services. The provisional authorities granted to LBNI, CRS, ICC, and PLDT refer only generally to services using micro earth stations or VSATs. This implies that they will
communications services, though authority to also provide regional services had been requested.

5. Philippine Long Distance Telephone Company (PLDT)

On February 24, 1992, PLDT obtained provisional authority from the NTC to establish two hub stations in Sampaloc, Manila and Cebu and install 620 VSAT terminals nationwide. According to PLDT’s application, the integration of VSATs to PLDT’s existing systems will upgrade and enhance their efficiency, capabilities, service area coverage and restore flexibility. Furthermore, the integration of VSATs into its network will allow the provision of toll services to areas particularly in the rural communities. PLDT’s provisional authority was given a term of 18 months.

In granting provisional authorities to the above-mentioned companies the NTC consistently cited the country’s need for improved communications capacity, both along its trunk routes and in remote areas, in overriding objections from oppositors. Hopes that satellite communications would significantly contribute to the extension of telecommunications services and relieve existing difficulties with the primarily terrestrial network are expressed in all of the orders granting provisional authorities.

By approving the five applications, the NTC essentially established or implied certain parameters of a national satellite policy. Obvious elements from NTC’s actions are:

- The previous monopoly of DOMSAT is ended;
- The private sector will be relied upon to exploit satellite communications for the national good;
- New entrants will be permitted, using liberal interpretation of their franchises;
- The new entrants will be regulated as to their
only provide service directly to telecommunications users and not to carriers, though this is not specifically stated. However, with the possible exception in the case of DOMSAT, all provisional authorities granted to existing satellite carriers are open to liberal interpretation.

Not surprisingly, a review of the situation appears to point to a possible early breakdown of the presumed dichotomy between the market targeted by the carriers' carriers, DOMSAT and CapWire, and the retail service providers. CapWire, in fact, is already a retail provider of international record services and its sister company, Philippine Telephone & Telegraph (PT&T), is a provider of retail domestic record services. CapWire therefore, even under a segmented market, can indirectly serve the domestic retail market through PT&T. DOMSAT management also would like to see the company broaden its marketing options.

In a recent study on the Philippine satellite industry for the DOTC, it was observed that the VSAT operators acknowledged contacts or talks with a variety of domestic and international carriers for the provision of satellite links. It is difficult to predict whether any of these contacts or talks will result in actual contracts or formal agreements. However, that such contacts have taken place is expected given the current status of CapWire's and DOMSAT's satellite operations.

Market Entry

NTC's actions have created the potential for vibrant and useful competition in the satellite sector. Given current economic realities, the question on whether the government must continue to approve entry of additional satellite carriers has often been raised. On the other hand, should it be determined that entry be limited, the criteria and the restrictions to be imposed must be defined.

There are currently six authorized carriers in the Philippines. In an ideal situation in which there are sufficient funds and foreign currency reserves, a
completely open market situation would be preferable to encourage competition. In this situation, private firms would be allowed to decide for themselves whether or not they wished to enter a particular market. This does not mean that there would not be a role for a government regulatory body, which at least would need to review the technical, financial and character qualifications of planned entrants.

As expected, however, many of the carriers would also like some degree of protection against further entry in order that they can gain foothold in establishing their businesses.

Both government and the private sector are undoubtedly handicapped by a lack of firm information about the size of the potential market. In a country largely unserved or underserved by telecommunications services, it is difficult to project the direction of demand and what sort of services will be demanded.

In addition to the question on whether there are reasons for restricting entry into the market or the individual market segment (retail or wholesale) listed in DOTC’s policy questionnaire, the following issues were raised:

- Should additional broadcasters be permitted to obtain space segment capacity directly from providers of such capacity, such as PALAPA? This assumes that broadcasters would also always have the option of obtaining services from satellite carriers.

- Should the broadcasters be permitted to offer services other than distribution of their network signals to affiliates? What types of other services, if any, should they be permitted to provide?

- If a domestic carrier seeks INTELSAT space segment capacity in order to provide domestic services, what should be the role of Philippine Communications Satellite (PHILCOMSAT)? Should
Philip Communications Satellite (PHILCOMSAT) be permitted to become directly involved in domestic satellite communications as a "whole" or "retail" carrier? Or should it be permitted only to survey INTELSAT space segment to a duly authorized satellite carrier or broadcaster?

- Should large corporate users, other than television networks, be permitted to obtain space segment capacity directly and operate their own earth station networks? If yes, on what basis should such large users be judged competent to self-provide such services?

**Satellite Television Services**

Satellite television services are provided via a commercial satellite system or a Direct Broadcast Satellite (DBS). The basic component of such a service on land is the satellite earth station. This station may be capable of transmission and reception. This can be utilized for one-way point to multi-point satellite TV service or simply as a Television Receive Only (TVRO) Station. A TVRO enables anyone in the country to receive signals from a satellite within view of the Philippines, of whatever type and wherever they originate.

The size of the antenna depends on the quality of signal desired and the type of satellite it is beamed to. Antennas working with DBS are relatively smaller than those working with the other satellites. Bigger antennas are used when broadcast qualities is desired. Programs received from the INTELSAT and ASIASAT satellites are foreign in origin, while those received from PALAPA satellites are a mix of foreign and domestic programs.

The TVRO terminals may be classified as Commercial (C-TVRO) or Non-Commercial (NC-TVRO). To avoid ambiguity, it is important to define what elements constitute "non-commercial" (NC) use. First, ownership or possession is by individual only. Second, the actual viewing privilege is limited to one’s immediate family and household. Third, the actual viewing is done only within the residence of either the owner or the
registered individual owning that unit. This definition disallows any commercial gain from the TVRO. Provided that the signal received is not passed on beyond the premises where the terminal is situated, government agencies, instrumentalities or offices, provided no fees are charged or collected from the public, and foreign government entities, and UN agencies, may be included in this category. A TVRO is commercial, if it is not otherwise qualifying as a non-commercial TVRO station.

At least several dozens of TVRO terminals are believed to be in operation in the Metro Manila area. There may be as many as 400 in operation countrywide. They appear primarily pointed at INTELSAT, PALAPA and ASIASAT satellites carrying programming for international transmission of TV programs. The same programs find their way into cable television systems and local TV broadcasts.

In some cases, TV transmission from DBS of Japan find their way into Japanese establishments and residences in the country either via a C-TVRO or NC-TVRO. Other planned satellites systems will come into view of the Philippines in the future. The short and long time commercial and cultural effects of such transmission may be difficult to quantify but could nonetheless be significant and have to be studied.

Several Metro Manila TV stations, ABS-CBN Ch-2, PTV Ch-4 and GMA Ch-7, use the PALAPA Satellite to effect a nationwide TV service. Some program materials from INTELSAT intended for other countries are received by broadcasters for subsequent transmission over their networks or via satellite for retransmission over their uplinks. Taping program materials of this type for the purpose of selling, leasing or rebroadcasting may occur in some instances. Hotels, condominiums and office buildings operate their own TVROS to enhance their business. Programs are wired into guests' rooms, residents' units and offices. This service needs to be defined and classified.

There are concerns arising from the fact that television programs of foreign origin could be received,
which may be offensive to Philippine culture. TVROs could also be used to receive programs that could incite people to do illegal things, which could be threats to national security.

The use of special equipment to utilize the television signal audio subcarrier for audio programs, news items and other services, such as facsimile in addition to the normal TV sound, could become a commercial practice. Thus, the TVRO becomes a receive-only (RO) terminal for various services. It becomes necessary to seal these probable loopholes in the regulations.

In developing a regulatory framework for TVROs, it should be kept in mind that while there might be only dozens of TVROs active in the country today, hundreds more could be erected in the next few years to satisfy the interest of sectors of the population for more international information, as they happen, and a variety of entertainment programs.

A TVRO policy, which begins to clarify the rights and responsibilities of the various parties involved, will make it easier to resolve policy questions that will develop in the future as new services become available from different sources.

INTELSAT's attitude is that unauthorized reception of television programming carried on one of its satellites, even if not encrypted, is a violation of the INTELSAT Operating Agreement, to which the Philippines is a signatory. INTELSAT holds that it should be notified if access is desired and that applicable charges be paid. In addition, the TVROs would be expected to meet certain minimum INTELSAT technical standards. It is likely that agreement will have to be reached with both the original lessees of the INTELSAT transponders who would have paid for certain rights from the originators of the programming.

There is increasing recognition and concern in the difficulty of regulating satellite TV series specially regarding the unauthorized reception or "pirating" of
satellite television programming.

The Philippines' obligation under various international conventions, to which it is a signatory is being reviewed since some of its provisions governing reciprocal protection of broadcasters may apply in this case.

Roles of the Government in the Development of the Satellite Communications Sector

The Government can play many roles in the satellite communications industry:

1. As a policy maker, it provides a stable business environment that encourages the private sector to exploit the advantages of satellite communications for the benefit of the nation.

2. As a regulator, it regulates the satellite communications industry using several broad policy guidance whenever appropriate, to guide its actions in granting Provisional Authorities (PAs) or Certificate of Public Convenience and Necessity (CPCNs) to carriers to provide satellite services. One of the main concerns of the regulator is to promote and to maintain effective competition among private entities for the best interest of the public.

3. As a communicator, it seeks to communicate its policies and concerns and, in turn, listen to the concerns of the industry. Some of the most important information that the DOTC could communicate to the private sector would be its continued interest in the development of the satellite industry.

4. As a facilitator, it could assure the availability of satellite capacity to meet the immediate and future needs of the country. It could also facilitate private sector’s access to ODA funds and encourage them to participate in and to undertake developmental and priority projects of the Government.
5. As a **promoter** of innovative use of satellite services it could seek to promote its use in agriculture, education, social services and other program areas to aid in the development of the country.

6. As **user**, the Government could do much to encourage the telecommunications industry in general and the satellite industry in particular by examining its own telecommunications needs more systematically. If practical from a financial viewpoint, the Government, with the leadership of DOTC, could seek to develop packages of communications requirements that could be opened for bid to the telecommunications industry.

7. It can be an **initiator**, an **investor** and/or an **owner** of satellite facilities to provide the satellite infrastructure particularly in the unserved areas.

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**REFERENCES**


Department of Transportation and Communications, Manila, Philippines. 1992.

Glossary of Acronyms

DOTC - Department of Transportation and Communications
CPE - Costumer Premises Equipment
NTC - National Telecommunications Commission
CPCN - Certificate of Public Convenience and Necessity
ITU - International Telecommunications Union
MTPO - Municipal Telephone Projects Office
PCO - Public Calling Office
NTDP - National Telecommunications Development Plan
LBNI - Liberty Broadcasting Network Inc.
CRS - Clavecilla Radio Systems Corporation
ICC - International Communications Corporation
Cap Wire - Capitol Wireless Inc.
VSAT - Very Small Aperture Terminal
PLDT - Philippine Long Distance Telephone Company
DOMSAT - Domestic Satellite Philippine Corporation
PETEF - Philippine Electronic and Telecommunications Federation
PHILCOMSAT - Philippine Communications Satellite Corporation
DBS - Direct Broadcast Satellite
TVRO - Television Receive Only