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A STUDY OF THE GOVERNMENT CABLE TV POLICY IN KOREA IN COMPARISON WITH THE GOVERNMENT CABLE TV POLICY IN FRANCE

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ABSTRACT

A STUDY OF THE GOVERNMENT CABLE TV POLICY IN KOREA IN COMPARISON WITH THE GOVERNMENT CABLE TV POLICY IN FRANCE

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This study illustrates the development of Korean cable TV policy by comparing it with policy in a developed country, France. The purpose of this study is to describe and analyze the emerging problems of the cable TV system as they relate to the government cable TV policy in Korea, and recommends ideal ways to improve that policy in the future.

In both countries, the major player in policing cable TV is the government itself. Both the French and Korean governments planned cable TV in its initial stage for developing a telecommunication infrastructure, and has created cable TV policy according to their own preferences, maintaining the interests and values of public broadcasting.

One main recommendation for the future Korean Cable TV system is that government authority should be minimized by a flexible regulatory framework. The government's functions should be limited to creating opportunities for participating cable operators and programming providers.

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1. Introduction

Today the existing information system, in combination with new technological systems like computers and fiber optics has resulted in new media, such as cable television, satellite broadcasting, and videotex, transforming our information system from that is passive and non-interactive to one that is more varied, active and interactive.

Among those new media, cable TV has a unique position in the realm of telecommunications. Though cable TV began as a method of retransmitting broadcast signals to remote areas, it began featuring original programming in the 1970s. Cable TV now has a large transmission capacity and provides two-way communications. Also, it has a high level of affinity with other media, such as communication satellites and personal computers. Cable TV has become an example of a complex medium, combining elements of broadcasting and telecommunications simultaneously since the 1980s (Baldwin and McVoy, 1988).

While the United States regards cable as an expanded entertainment medium needing less regulation than their over-the-air broadcasting system, some European countries, headed by France, have a somewhat different view of cable TV. France considers cable to be a public service that should be carefully controlled, because its potential power may weaken their well-established public broadcasting system; France

hopes cable will become a basic element of the infrastructure of their future wired society (Straubhaar, 1986; Le Duc, 1987). The governments of these countries have often stated their desire to achieve the goal of a wired society but, in practice, the public's real desire for more television programming remains ignored.

Among the Western countries, France is a leading country with an aggressive plan designed to stress telecommunication services through fiber optics rather than increasing programming choices to meet audience demands. Indeed, France has pursued the development of cable TV systems within the framework of its national telecommunications policy. Korea seems to be considering a similar plan for cable TV development, constructing a web of fiber optics throughout the country. Korea has a relatively high penetration of telephones (27.8 per 100 population) as compared to world average penetration. Considering household size in Korea, the average four people per house, 27.8 per 100 population means every household has at least one phone. Korea also has a high penetration of television (98%), but four channels monopolize the broadcast market. The audience demands more diversity of programming, and Korea is now emerging as a fledgling cable communications base.

2. Statement of Purpose and Problem

Cable TV, which offers many channels with own programming and information services, is a relatively unfamiliar medium to most people in Korea, although it has almost a forty-year

history in the world. It emerged with the so called "Integrated Cable Plan" of KTA (Korean Telecommunication Administration) in the early 1980s and its policy has been changed by two laws, and by regulations passed in Congress in 1987 and 1990. But there is still an absence of rationale and standards for policy making in the cable TV industry.

Until 1990, there were 1,796 systems in Korea, and 2,500,000 households subscribed to them (Son, 1991). Most of these systems, however, were small in all respects, including types of company, employees, facilities, programming, and business area, and their major duty was retransmission of over-the-air broadcasting. The main problems of cable TV in Korea could be articulated as three points (Oh, 1988).

First, disorderliness of illegal systems: 58% of the systems are doing business with no permits.

Second, carrying of illegal videotapes: 57% of cable operators broadcast those tapes, which are mostly pornography.

Third, decrepit facilities fall below the technical standard required.

To eradicate illegal acts and irregularities in the cable TV business, government authorities revised laws and regulations relevant to cable TV on July 1, 1987. Nonetheless, these laws and regulations are basically makeshift measures which only allow retransmission of over-the-air broadcasting signals to protect the public broadcasting system, owned by the government and its subsidiary companies. In the technological sector, the cable TV operator must use the cable network provided by KTA, if he

or she can not show a particular reason to do otherwise.

The 1987 Law and Regulations for Cable TV were useless in eliminating illegal systems, which carry imported or local movie programs, and do not improve the cable TV system as it relates to the telecommunication infrastructure.

Recently, a plan was promoted to combine cable TV, which has original programming with interactive services. The government began to operate an experimental system for cable TV within two limited areas in Seoul, and the new laws and regulations of cable TV, which permit original programming and private networks, were passed in December, 1991. The new laws and regulations still lack important details on programming hours, kinds of programming, ownership and operating, and subscription rate, etc. and include too many provisions requiring government permission.

At this point in time, it is very important to evaluate the problems and development of Korean cable TV policy by comparing it with policy in a developed country, such as France, and to draw a desirable picture of Korean cable TV policy. This thesis will contribute to the development of Korean cable TV systems.

The purpose of this study is to describe and analyze the emerging problems of a cable TV system with regards to government cable TV policy in Korea, and to recommend ideal ways to seek improvements of policy in the future.

3. Literature Review and Hypothesis

Since cable TV communication can be viewed as one of many communications processes in society, cable TV policy comes under the general umbrella of communications policies. Also, communications policy is not limited to the boundary of communication itself but inseparably related to the aims and policy directions of an entire society.

Communication policy is embedded in broad economic, legal, technical, social, and political issues. The term "media policy" or "communications policy" is hard to define for the continuing development of various communication technologies (Hollins, 1984; Havick, 1983). Nowadays, communication policy issues are among the most complicated in the government policy-making. For example, Havick indicated policy dilemmas created by technological change in the United States (Havick, 1983, p.11).

> First, it should be clear that communications is not what it was when the 1934 Communications Act was written; communications today are vastly more sophisticated. Second, the future developments of communications are enormous, but it is difficult to predict precisely all of the applications and innovations likely to occur. Third, with such potential for change and expansion, the stakes are substantial. Powerful interests are struggling for a role in the future communications society. Fourth, the government needs to protect the public and the state from the possibility of the erosion of constitutional rights associated with the use of new communications.

Among those communication policy issues, establishing cable TV has complicated problems with other policy goals concerning its network. Cable TV should combine broadcasting and telecommunications which has traditionally been a separate

market because of its use of microwave, satellite transmission and optical fiber in its technological distribution (Hill, 1991, p. 93-117).

Porat explained the policy process from the perspective of technical determinism for developing a general framework to understand changes at the level of markets, institution, law, and politics (Porat, 1978, p. 3-60). The model consists of six aspects, which are (1) technology (2) price (3) institutions (4) policy (5) law and (6) public opinion. Among those six aspects, the most important is a change of technology, which is a fundamental engine of economical, social and political change. Porat described technology as a big wheel that turn other wheels. It follows that price, institutions, policy, law and public opinion are the smaller wheels.

Communication policy has been influenced by advances in technology. But major social forces have also shaped communication issues. Technology itself does not set the social directions and policies in this new media environment.

Dizard points out an awareness of the relationship between technology, economics, and politics (Dizard, 1982). According to him, the factors of communication and information policy are divided into technology, economics, and politics. Technology is only a promoting factor and important at early stages; ultimately the key to policy is the political factor. Success or failure of new media is dominated by the question of whether to use the existing political social practice or establish new policy or strategy. Government is only one of

the major actors in the process, although industry, labor, the financial community, and universities each play critical roles.

When new communication technology challenges to the established national communication structure, then the political system, especially government, takes political initiative and shapes a policy for this new means of communication to avoid an uncertain economic, political, cultural, and technological environment (McQuail and Siune, 1986).

As a result, communications policy is defined and carried out by a centralized bureaucracy in most countries in the world. Furthermore, mostly in the developing countries, technology must be imported in any case. Therefore, in a country like Korea "the big wheel" is not technology but political decisions.

To define how communications policy is made Havick described four general policy processes as theoretical perspectives: economic-regulatory, neo-pluralism, pluralism, and state autonomy (Havick, 1983, p. 1-23).

Economic-regulatory process; it stresses an industry dominance of the regulatory process through which government policy is made, depending upon the economic efficiency of the industry.

Neo-pluralism process; communication issues are narrowly concentrated to benefit certain influential interest groups. Sometimes the relationship between government and the interest groups result in ignoring competitors' benefits.

Pluralism process; in pluralism, many interest groups which represent individual's aims can compete with each other, and then government pays accommodates an overall interests fairly without preference toward one specific interest. but, this pluralism process has problems that several interests groups tend to maintain government policy by cooperating with each other.

State autonomy process; the government can take the authoritative actions according to its own policy preferences. "An autonomous state translates its policy preferences into authoritative actions; it is autonomous to the extent that public policy conforms to the parallelogram (or resultant) of the public officials resource - weighted preferences." (Havick, 1983). This model is the state-centered model rather than the society-centered model.

Similar to Havick's explanation of policy process, Noll suggested four political theories as a conceptual framework for the political and institutional context of policy. These are Atomistic Democratic Theory, Statist Theory, Pluralist Theory, and Institutional Theory (Noll, 1986, p. 43-65).

Atomistic Democratic Theory; this stresses that a policy or judgment by a political institution is determined by the public interest, based on economic efficiency and distributional equity.

Statist Theory; "The statist view of national policy making focuses on the state as decision-making entity that is separable analytically from its constituent parts." the state has play authority over the entire country and its people,

pursuing the national interest.

Pluralist Theory; the starting point for policy issues is the numerous organizations or groups aggregated by individuals who have separate economic interests. The State acts impartially to structure the preferences of these competing interests. Though, on the other hand, policy will work to enhance the powerful group which has already established an advantage.

Institutionalist Theory; policy incentive and policy making is the result of interactions between the political activities of constituents and the political institutions, depending on the degree of legislative autonomy and the nature of the legislative body as a governmental structure.

To two view points: major factors in policy making are economic interests such as media industries (in Economic-regulatory process and Atomistic Democratic Theory), interest groups and organizations, such as local authorities and special committees (in Neo-pluralism and pluralism process and Pluralist Theory), government or state for its own purpose and preference, such as government bureaucracy and executive party leaders (State Autonomy process and Statist Theory), and legislative bodies such as Congress (Institutional Theory). However, the basic assumption of all of those view points is that the final determinations are made by government policy makers, reflecting the political forces giving rise to policy.

The above theories, which are general policy theories, can be applied to communication policy for the integration of research activities and findings, regarding communication as

a social phenomenon. Cable TV policy is also interpreted as one part of communication policy.

In the United States, the economic-regulatory process and atomistic democratic and Institutionalist theories are dominant in the policy making process. Among the few countries with no bureaucracy in charge of all communication policy, the United States is typical example in that it has no PTT tradition of a unifying centralized bureaucracy creating communications policy, and no centralized forum for policy decisions. Communication policy is driven by the competitive environment of the market-place and the adversarial procedures of the institutional system, including Congress, the FCC, and the Supreme Court (Branscomb, 1983, p. 15-56). The legislative branch plays a major role in the process of creating communication policy. Cable TV has been developed by these principles.

In most Western European countries historically, communication policy has been based on pluralism, and the major issue has been whether to create a public monopoly for universal services in the communication medium sector. These countries have pursued a social system, reflecting the interests of every person in every social stratum. Major players in the communication policy process are interest groups and organizations, and the government's function is to hold these interests together and to mediate impartially the preferences of competing interests (Mosco, 1988). Among these countries, France seems to be somewhat different in terms of government function. France has professed pluralism

externally but the major player in internal communication policy making is government rather than interest groups or organizations. Historically, broadcasting systems have been changed with the change of government leaders. Telecommunication sectors have been under government monopoly, even though they are now liberated for competition. A cable TV plan was initiated by the French government, which accepted the Nora and Minc Report: a proposal for developing an information society in France in the end of 1970s (Simon, 1988; Hills, 1991). Therefore, the state autonomy process and statist theory are more appropriate than pluralism theory for describing the French communication policy rather than pluralism theory.

As in most developing countries, in Korea very strong government powers shape communication policy. The State Autonomy Process and Statist theory are dominant in the communication system, so that economic efficiency, pluralism, and the function of legislative bodies have been ignored. Generally, with the strong government monopoly over the broadcasting and telecommunication sectors, the most important function of the media system is to promote national integration and development. As in France, the major player in policing cable TV is government itself. The Korean government planned cable TV in its initial stage for developing a telecommunication infrastructure and has created cable TV policy according to its own preference, keeping the interest of public broadcasting.

In terms of cable TV, there is still an absence of

rational and reference standard for policy making. Most communication policy theories have focused on the broadcasting and telecommunication sectors, not specially on cable TV itself. But Dutton and Blumler's and Negrin's factors, shaping new media and cable TV development, can be used to describe the development of cable TV policy. While Dutton and Blumler are dealing with cable TV as a part of telecommunication infrastructure, Negrine is focussing cable TV as a part of television programming sector.

Dutton and Blumler developed four general types of factors which shape the development of new media, especially focusing on policing cable TV (Dutton et al., 1987; Vedel and Dutton 1990).

(i) Political — Administrative Traditions; the politics of new media are expected to reinforce the prevailing power structure of a political system and traditional values, such as public broadcasting.

(ii) Institutional Arrangements and public processes; legal-institutional factors play a legitimate role in policy process and define the nature of the economic and political system. These factors include national administrative and regulatory arrangements, the role of local authority, the scope of public authorities, communications policy objectives, and the character of old and new actors in the communication regime.

(iii) Environmental Resources and Constraints; a set of market factors, such as the size and wealth of the domestic market, the existing telecommunications infrastructure,

economic realities (cost and returns), and international dependencies on technology.

(iv) Communication Cultures; a set of symbolic factors, the image of new technologies, and policies constrained by national cultural traditions. Cultural tradition here means public values and behavior concerning media, such as hours spent watching television, television programming, and special treatment of the language.

(v) Lessons learned; a country is taught and responds to others' new media experience.

(vi) Idiosyncratic Factors; Many coincidental or idiosyncratic events and affairs contribute to creating the need for a certain new media technology--for example, the Biarritz project in France, the 1984 Summer Olympic Games in the United States, the 1986 Asian Games, and the 1988 Summer Olympics in Korea.

As a new communication technology emerges, these factors mediate and differentiate its implementation in a given country.

In addition, Negrine pointed out three factors concerning the development of cable TV and its influence over public broadcasting systems (Negrine, 1985).

(i) the impact on existing broadcasting organizations; cable TV may erode the existing broadcasting system in public service because its systems are mainly operated by private enterprises for commercial interests. Therefore, cable TV systems cause change in the nature of public broadcasting.

(ii) community and access channels for public interests;

regulators consider TV a medium which may enhance communications on the local level, requiring community type channels. However, economic profitability for this investment is unsure in countries in which cable TV is at a nascent stage.

(iii) the new media's impact on cultures; theoretically, the audience is fragmented into multichannels with cable TV. But for a large share of the audience, a more competitive environment with many imported programs may be harmful to indigenous cultural values, with an audience unaware of its impact.

These factors offer guidelines for examining the role of political, technological, economical, and cultural structures in shaping the performance of cable TV policy. Some of these factors can be assimilated into any of the others though. Accordingly, this study attempts to apply these factors in analyzing cable TV policy in Korea.

Since this study attempts to evaluate how communication policies might evolve and affect the cable TV system in Korea using theoretical perspectives, six main sectors have been generated based on the above analysis of the theoretical literature on policy process and factors for development cable TV, in order to formulate a useful delineation and analysis of cable TV policy in Korea:

(i) attributes of the new media technology

(ii) tradition of communications policy

(iii) politics in the new media environment

(iv) government goals and plans for cable TV policy

(v) the operating body in a cable TV system, and

(vi) programming philosophy at a cultural level.

In the case of Korea, cable TV, which is defined as offering its original programming and information services, is introduced by government, which has the aim of improving the infrastructure of a high information society, and not by a mature of industrial condition. Derived from major theoretical perspectives and the Korean media environment, the hypothesis for this study is as follows:

> Hypothesis: The Korean government distributes initial control over cable TV in its telecommunication policy and extends a philosophy of broadcasting policy to cable TV to protect established interests.

In this hypothesis, the notions of initial control, philosophy of broadcasting policy, and the established interests mean the following:

Initial control: licenses for operating a cable TV system, limitation of ownership in which the Big sixty one companies are not allowed to own cable TV systems, and requirements of technical standards for construction of cable, controlled by government authorities.

A philosophy of broadcasting: it meant not only to protect Korean culture and programming from invasion nu Western countries, especially from the United States, but also to strengthen government power by using the broadcasting medium for public relations.

The established interests: these are divided into two interests. One is the interest of government, which has

displayed a dictatorial control over broadcasting and telecommunication sectors historically. Another is an interest of broadcasting companies, which have enjoyed a monopoly over programming and advertising under the shelter of government.

In case of Korea, the mass media are looked upon not only as an instrument for political control but also as a major tool in implementing development plans. The media play a crucial role in various aspects of the nation-building process historically.

Telecommunication services are monopolized by the government or a company actually owned by the government, and broadcasting systems have been changed with changes in government leaders in order to support their political power; In particular, broadcasting media have been controlled by government censorship to eliminate anti-government programming. The Korean government does not allow imported programming during prime time, and imposes a tough ceiling of fifteen percent (actually about ten percent) on the quota of imported programming. Government control over imported programs has minimized the amount of undesirable alien media influences, and this policy has been fairly successful (Joe, 1988; Moon, 1989).

By forming cable TV, the Korean government falls into a dilemma in its communication policy. The government wishes to develop a telecommunication infrastructure, offering cable TV. But it does not want to proliferate programs on TV. If there are too many programs on TV, it will be hard for the

government to control those programs fully. It also wants to prevent existing broadcasting companies from being harmed by the competition from cable TV companies.

Therefore, the Korean government applies very restrictive rules to the entire cable TV operating system: licenses for franchise, ownership, technical standards, and program hours and content-- promulgating cable TV law and regulations.

The cable TV issue concerns more than the cable TV system alone. To a significant extent, the cable TV policy of the Korean government is tied to the areas of broadcasting and telecommunication, providing a measure of control over future development of the system. If the Korean government keeps this restrictive policy on cable TV, the Korean cable TV will become a nominal medium which only provides local community information and simple productions.

4. Methodology

This study uses both qualitative and quantitative analysis. More emphasis is placed on the qualitative analysis. It also tends to be more toward description, rather than systematic analysis.

Historical and critical investigation is used to trace the development of larger relationships between government and communication policies affecting the Korean Cable TV system, comparing it with the French Cable TV policy as a frame of reference. To generate a frame of reference, this study chose French cable TV policy because of its similarities with Korean cable TV policy.

In the United States, the television and telecommunications markets have developed separately. Cable TV has been developed by industry initiatives; its development has not focused on two way capacity and high technological information services, in consideration of economic efficiency in the market place (Hills, 1991, p. 93-117). There has been no need to worry about the cultural level of programs in relation to national interests, since the United States is the largest programming production country in the world and the only country which can fulfill successfully the programming in 30-40 channel in cable TV system.

In contrary to the United States, French centralized bureaucracy has historically had a role in creating communication policy; executives in several branches of government have dictated the legislative agenda (Noll, 1986, p. 56). In terms of cable TV policy, the French government has played a major role. Mitterand's government planned and developed cable TV policy first. This policy was to emphasize government monopoly over an optical fiber network for cable TV and launch a new commercial channel, Canal Plus. Canal Plus is a pay channel via over-the-air broadcasting and provides diverse entertaining programs. Jacques Chirac's conservative government suspended and then replaced this cable TV policy with a new scheme, ending the government monopoly over the construction and technical operation of cable TV system because of a slow rate of penetration and economic problems (Vedel & Dutton, 1990, p. 501; Tunstall & Palmer, 1990, pp. 165-169).

Korea seems to have followed the same model as the French cable TV system. In Korea, all initiatives and plans for cable TV were planned and developed by government authorities who hoped to construct the telecommunication infrastructure by using fiber optics. The Korean government also launched one private commercial channel for the Seoul area which, as the capital of Korea, has a quarter of the total population, giving up its monopoly over the broadcasting system. The French and Korean governments both chose over-the-air broadcasting rather than cable TV for providing more programs, because it is easier to control an over-the-air broadcasting channel than a multi-channel cable TV.

To sum up, the two governments seems to have the similarities in major aims and objective of developing cable TV system. They both want to develop a telecommunication infrastructure for industrial development parallel to the construction of cable TV network, to maintain their power over the entire communication media system and to prevent their culture from overexposure to imported programs.

The sources of data employed in this research are as follows:

(i) published sources of official data including statistical yearbooks, industrial censuses, annual reports of broadcasting institutions, and sample audience surveys in Korea, France and the U.S.;

(ii) official and unofficial documents such as charters, policy statements, speeches of organization leaders, and government documents;

(iii) scholarly journals, academic dissertations, professional and trade periodicals, and published books.

Using these research methodology described above, this study of five chapters attempts to test stated the hypothesis.

Chapter I. reviews the literature on communication policy, including cable TV policy and outlines factors influencing cable TV policy in Korea. An hypothesis is generated based on the literature review and comparison of other countries' cable policies, including those of the United States and France

Chapter II. offers some information about the unique attributes of cable TV, which result in conflicts during the process of policy making. the historical background of cable TV development is also examined.

Chapter III. explains the French cable TV system in order to provide a frame of reference for analyzing Korean cable TV system. This chapter includes a brief broadcasting history; it describes the present communication system, the government plan for cable TV and telecommunication, operations (including penetration, ownership, systems), and programming. Following the basic assumption that the French cable TV system has not been successful, all these factors are examined.

Chapter IV. analyzes Korean cable TV policy and the cable TV environment. The following are factors in the French cable TV system: (i) a tradition of broadcasting policy for the public interest, (ii) government goals in relation to technologies, (iii) factors of an operating system in the market place (such as penetration, ownership, operating system, advertising, and capital), in relation to Korean cable

TV policy, (iv) cable TV programming and cultural problem.

Chapter V. concludes with suggestion for desirable policies for the development of the Korean cable TV system. The conclusion of this study points out that the Korean government should remove its restrictive control of technical standards and the content of cable TV. As we learned in the case of France, which has shown a relatively low rate of cable TV penetration, multifunction cable TV systems are not likely to survive economically, as long as they remain local media. The policy of this study suggested provides plenty of attractive programs as well as disseminate local culture and information without influence of the government.

Chapter II. Attributes of Cable TV

Cable TV is a developing worldwide trend, which has evolved from a way to improve signal reception in remote areas to a system capable of two-way communications, such as interactive television. Cable TV systems in the near future will utilize an enormously advanced broadband system which can carry a variety of programming channels.

1. Development of Cable TV

In its history, cable TV has gone through considerable changes. As Straubhaar notes, the development of cable TV has been characterized by three phases; first generation, second generation, and third generation (Straubhaar, 1988). Using Straubhaar's classification, this study explains the major technological changes of each generation.

A. First Generation

Though cable TV has grown dramatically in the last three decades, its beginnings were very humble. In the early years of cable TV development, cable was used to improve reception of television signals in remote areas or to transmit television signals to areas which had previously been unable to receive television (Rice, 1983; Shapiro, 1977). The primary technical feature of these systems was the large antenna erected to pick up such broadcast signals and then connect each subscriber with a parallel pair of antenna wires, with

emphasis on retransmission of over-the-air signals.(1)

At the end of this generation, the antenna was joined by microwave equipment that extended the transmission range of the signal. The United States used this satellite microwave transmission to import signals from distant stations. France and some European countries used it to receive neighboring country's programs. At that time, cable TV was regarded as a subsystem of the regular broadcasting system and a common carrier.

B. Second Generation

The second generation of cable TV is a stage in which the cable TV companies produce original programming and transmit beyond the home reception range of broadcast television by using microwave and satellite transmission. Particularly in the United States, the concepts of superstations and pay channels have emerged. The superstations were developed as commercial broadcast stations whose signals are transmitted by microwave link via satellite to cable TV systems, with programming services intended specifically for cable TV. Pay channels were also a key element in selling cable TV in the major urban areas, which did not need cable installation because of the good quality reception of over-the-air broadcasting signals (Hollins, 1984, p. 125).(2)

This generation was characterized by an expansion in diversity of programming and increasing competition with the existing broadcasting system. The United States has already experienced this development and moved toward deregulation of

cable TV, but most other countries are aware that existing broadcasting systems perceive a threat from this new diversification of programming, and seek to regulate or even ban it.

C. Third Generation

The remarkable changes brought about by cable TV in this stage include interactive systems using of fiber optic technology.(3) With improvements brought about by fiber optic technology, today's cable TV systems are capable of offering broadband channels including more than one hundred channels, as well as interactive services such as security alarm systems, home banking and shopping, and various audio-visual data services, in addition to traditional television programming. Systems also have addressability -- the ability to transmit selected programming to specific homes. Most of these services are today technically feasible utilizing fiber optic technology, but many of them are not yet economically feasible (Baldwin, 1988).

In the United States, after the failed QUBE experiment of Coaxial Communications and Warner Cable Inc. in Columbus, Ohio, two-way interactive seemed to have little commercial potential. At present, except for a few systems utilizing fiber optics, most existing systems are still using copper wiring and tree-and-branch structure. Fiber optics has been installed by telecommunications operators on long-distance and high-usage routes (Hills, 1991).

2. Policy Issues

A. Regulation

Relationship with Broadcasting

Cable TV does not use VHF (Very High Frequency) electronic waves, which are limited in the range of usable frequencies, and is connected with wired cable. Though government has always been a partner in the development of broadcasting policy, cable TV undermines the concept of scarcity of channels as a rationale for regulation (McQuail, 1986). However, broadcasters serving areas where the cable system began offering programming from distant stations argued that cable TV would cause the ruin of "free TV" or "public TV." Regulation of cable television is founded upon the threatened economic and cultural impact of cable TV on conventional broadcasting in order to ensure the continued livelihood of broadcast operations. Usually cable TV operators are required to carry the signals from the existing over-the-air broadcasting stations by the so called "must carry" rule.

While some countries which have relatively competitive broadcasting systems move toward cable TV and away from conventional broadcasting systems, others, which have a centralized monopoly system of broadcasting, are concerned that they might lose their power to control the entire broadcasting system.

Public Versus Private Ownership

Cable TV has developed under a regulatory scheme between the local authorities and central government levels. The basis

of local government involvement with cable TV is the control of public right-of-way retained by the municipalities.

Generally there are two options in ownership: the system owned by a private company and the municipally owned system. From the public sector standpoint, municipal ownership seems to result in lower subscriber rates and to offer services more focused on community needs, since the profit motive is not important. The problems in the public system are that the municipalities or local authorities are not able to access large capital, and they have fewer incentives to learn operational and management skills than private companies (NCTA, 1984).

In most of the places where cable TV systems are operating, private ownership dominates over public ownership. Even private cable TV companies have a duty to serve the public within their franchise areas due to the use of public property such as land and utility poles. Local authorities of municipalities also have controlling power over cable TV companies by giving out franchise licenses.

Price Regulation

A new cable system requires a large investment in the early years due to the need to construct virtually the whole network before a revenue can be generated, whether the cable TV operator leases or owns the network. Given certain fixed costs, the viability of the system is dependent upon the penetration of subscribers who will share the cost at this early stage. The operator would want to maximize audience and

would attempt to set subscriber rates so they were within reach of as many potential subscribers as possible. Therefore, until a certain level of penetration where monopoly can be reached, it is recommended that the rate regulation be relaxed in the multi-channel environment.

Concentration of Ownership

There are advantages and disadvantages in MSOs (Wallgren, 1988). Concentration of ownership brings greater savings of operating costs, such as "market research; program evaluation, procurement...and billing," based on a number of subscriber systems (Wallgren, 1988, pp. 79-80; Office of Plans and Policy (OPP); Federal Communication Commission (FCC), 1981). The emergence of a few large, well-financed companies able to invest sizable sums in programming and new network services and to bring lower rates for each programming service it carries seems more likely to give impetus to the cable TV industry than to restrain it, especially at early stages of development.

On the other hand, since concentration of ownership means buying power, with its great number of subscribers, it enhances the possibility of buying programs from program providers at lower prices than any other single operating systems. If the concentration of ownership reaches the excessive level, the MSOs (Multi System Operator) yield a "monopsony" situation (monopoly in buying and demand). Then this excessive concentrated power in buying programs might result in ignoring subscribers' demands and program providers'

benefits by choosing programs only when the negotiation is in favor of the MSO. Since small cable operators usually have to pay more for a program than do the MSOs, excessive concentration of ownership may impede effective competition among cable TV operators.

Therefore, concentration of ownership with a limit, in which the number of cable subscribers nationally served by any single individual or enterprise does not reach a certain excessive limit, may be considered.

Vertical Integration

Common ownership of a cable system and a cable programming service contributes reducing the transaction costs of procuring programming and expanding the choice of programming "by increasing the quantity and quality of programming available to consumers in the short run" (Baldwin & Wirth, 1989, p. 25).

But if the cable system operator were to have an interest in programming service, he or she would have an economic incentive to favor the program service in which he or she had ownership. Ownership of a programming service might possibly help a cable operator eliminate competing program services (Wallgren, 1988). Thus, subscribers' potential programming choices would be reduced, and the benefits of other programming providers would be excluded by this common ownership of a cable system and programming service (Wallgren, 1988). If policy requires the system operators to carry all programs on a non-discriminatory basis without prohibiting

them from owning a certain programming service, there are still problems. The cable operator could artificially pay low rates for program service to other program providers. Therefore those program providers would fall into a disadvantage in terms of profitability. Considering the benefits and drawbacks of common ownership between the system operator and program provider vertically, the policy concerning this common ownership should be developed carefully and appropriately according to condition in the industry.

B. Operating System

Practically speaking, in the market place the cable TV system can be divided into four segments (Hollins, 1984, p. 74):

> 1) The cable provider -- the owner and installer of the physical cable system;
> 2) The cable operator -- the manager of a cable system who puts together a package of cable services to sell to subscribers in that area;
> 3) The program or service provider -- the person who assembles a block of programs into a channel or provides a particular service for sale or through the cable operators;
> 4) The program maker -- who produces individual programs.

The operator usually has a contractual obligation with each program or service provider to receive payment for each subscriber receiving services.

In the United States and some European countries, the cable TV operator owns and installs the cable network in his or her operating area. In the remaining European countries, cable operators are not allowed to own and install cable networks and only the PTT can provide the network. The PTTs even

perform customer relations and collect subscriber fees. Generally, most cable TV systems are operated by franchising. Due to the capital intensivity of the technology, cable TV has been presumed to be a natural monopoly in a designated area (Baldwin & Wirth, 1989). Since franchising authority lies with a local government, a self-governing community body, or a national government, the governing body can control the cable TV system through the franchising process.

In contrast to the United States, and with the exception of Austria, Belgium, Luxembourg and Switzerland, European cable systems have been heavily regulated and dominated by the state for public services, as was the over-the-air broadcasting system. Cable TV systems in these countries were not intended to carry more programming services, but to retransmit national channels. Moreover, the PTTs in Europe have historically had a monopoly over their cable TV network. As a result, the cable TV industry in Europe has not become as competitive as in the United States. Recently some European governments have changed their policies to conform to the policy of their telecommunication infrastructure. Under the PTTs, the national telecommunication carrier, such as the DGT (France) and the Bundepost (Germany) have a central role in providing the infrastructure.

C. Programming

The greatest advantage of cable TV is to permit many more channels to be transmitted than is possible over the air. This increased channel capacity allow for numerous programs.

These programs and services fall into the following categories (Baldwin & McVoy, 1988):

(i) over-the-air and community channels.
(ii) basic satellite networks.
(iii) pay cable channels.
(iv) pay per view

i) Over-the-air Broadcasting; These stations include local affiliates of the national networks and independent stations, and must be delivered on all cable TV systems.

Community channels provide program guides, weather, news, bulletins, local access channels, and local organization programming. Community members are given an opportunity to produce television programming through community access channels. Local organization programming differs from community access in that it is produced by cable employees. Programs include coverage of local government, college and high school sporting events, job placement telephones, political debates, and other community-oriented events -- many of which, properly produced and promoted, can encourage subscribership.

ii) Basic Satellite Networks; These are delivered by satellite on a national basis. Some carry advertising and others do not. These are the categories of channels available via satellite:

* Superstations: A superstation channel offers very diverse programs, including news, motion pictures, sports, etc. It is like a regular local independent broadcast station that retransmits via satellite to cable operators across the

country.

* All-news: All-news stations get their programs from local, national, and international news sources, and offer both in-depth reporting and brief news summaries.

* All-sports: All-sports stations offer all kinds of sports programs and exclusive sports events.

* Educational: These channels offer educational programming, ranging from continuing education for adults to college credit telecourses for students.

Other available satellite-delivered services include high culture, religion, family, all-weather, all-music, public affairs, adult programming, ethnic channels, and more.

iii) Pay Services; Subscribers pay extra for pay channels, and these stations generally feature programming, such as uninterrupted first-run films, conveniently repeated several times each month, plus made-for-cable specials, such as concerts and the like.

iv) Pay-per-view events; These are offered to the subscriber on a single-event basis for a one-time fee. Pay-per-view events to date have included sports events, concerts and the like with championship prize fights proving the most successful.

Cable TV provides dozens of channels, and a single mass audience no longer exists: the audience is segmented into various categories as cable TV expands to fulfill the demands of these specific audiences for diverse types of programming. While a few channels are used for dissemination of public service information about the social, cultural, and political

activities of the community, many cable TV channels provide even more diverse programming.

For example, in the United States, possible channels which a cable TV system might carry are as follows: First, there are over-the-air channels, which include the three national networks (ABC, CBS, and NBC) and the independent local stations, along with community channels including locally originating programs and access channels; Second, there are satellite-delivered services including superstations WTBS, WGN, WOR and WPIX; News channels such as CNN, and CNN Headline News, offering 24 hour local and international news; ESPN and PASS, offering all kinds of sports programs; C-SPAN I and II, which offer coverage of the U.S. House of Representatives and Senate; Lifetime, dedicated to health programming; USA Network, offering a broad range of programming with an emphasis on sports and entertainment; CBN, a service founded on Christian principles and providing family entertainment and information; BET and SIN, ethnic channels; Nickelodeon, a children's channel; MTV, VH-1, and The Nashville Network, channels emphasizing music programming; HSN and QVC, shopping networks; The Learning Channel and The Discovery Channel, education networks; BARC and ACTS, religion channels, and a dozen other special interest programming channels; Third, HBO, Cinemax, Showtime, and The Movie Channel, which are pay services delivered with a schedule consisting of recently released theatrical films and pay-per-view events.

At present, no country except the United States can afford to provide this diverse programming of such diversity for

thirty to forty channels. It is true that the most fundamental barrier to success in the cable TV business is the lack of product, particularly in those countries with an insufficient number of subscriber households, and these countries face many difficulties in the support of original programming. However, the cable TV system in the United States does not support much original programming either. Most cable programs are second run shows from movie theaters, and over-the-air broadcasts. Even in the United States, the ratio of original first-run programming to original programming is very low. Therefore, an excess of imported programming will be unavoidable in countries where the cable TV system is in its early stages. Most governments are concerned that the commercialized focus on entertainment programming and a high ratio of imported programs may create cultural problems. Usually the government policy intervenes to set a certain quota of imported programming. The investment in new productions from the start will be a key to success in the cable TV business (Negrine, 1985; Mcquail & Siune, 1986; Straubhaar, 1988).

Notes

1. The leading opinion is that cable TV was started by Robert J. Tarlton of Landsford, Pennsylvania, a radio sales and service person. He built an antenna at the top of a mountain in 1949 and installed cables to carry the broadcast signals throughout his local community (Baldwin, 1988, p. 5).

2. The first true pay cable channel was HBO (Home Box Office) in 1972. HBO had four basic precepts setting them apart from other channels (Barrington, 1977, p. 122): (1) a monthly fee rather than a per program charge; (2) an "affiliation" arrangement with cable operators rather than channel leasing; (3) a commitment to live sports and "special interest" entertainment, along with feature films; and (4) transmission.

3. The advantages of fiber optics are:

1. Glass fibers are insensitive to electromagnetic interference. Transmission is secure and cannot be jammed.

2. Fiber optics are safe to handle because they do not transport electrical signals, but digital signals.

3. Attenuation is lower than in conventional coaxial cable. Fiber optics can reduce the number of repeaters and amplifiers in a given system area.

4. A fiber optics cable can be less than one-fourth the size of copper wire cable with similar transmitting capacity.

Chapter III. Cable Systems in France

1. Tradition of Communication Policy

A. Tradition of Monopoly

As in most European countries, the French government has played an important role in the development of television and other industries related to the public interest, such as transportation, telephone, and other broadcast communications. The earliest kinds of long distance communication in France were operated and controlled by the state (Emery, 1969, pp. 237-239). In order to obtain wider distribution (to urban and rural areas) and to gain profits through managing such systems, the government needed a monopoly over the systems. From the beginning, the postal system was managed by the government, and was soon joined by the radio and television systems, which were also regarded by the French authorities as government functions (Cayrol, 1991, p. 189). Broadcasting was considered a very powerful medium, as illustrated by McQuail and Siune: "Television was seen as a public service instrument comparable to other welfare institutions. It had an educational and informative function, 'teaching' civil man, giving him the capacity to participate freely and intelligently in a democracy" (McQuail & Siune, 1986, p. 66). For the European viewer, broadcasting is rooted in social control. Among Western European countries, France has experienced controversy over the political control and influence on the broadcasting system, and political coverage

of news. The traditional attitudes and practices of the French government toward the broadcasting system are reviewed in this chapter and the roots of the development of cable TV policies are explored.

Traditionally, French communication policy has been heavily influenced and modified by the ruling government (Palmer and Tunstall, 1990).

B. Brief History of Broadcasting in France

In 1923 the French government extended its monopoly of postal and telegraph services to cover radio communications, but sold permits to private companies which operated alongside the state network (Communication Research Trend, 1987; Browne, 1989). Some of the private stations were owned in part by politicians to further their political power.

Though the private radio stations were well into operations during the Second World War, the Vichy government revoked all private licenses by establishing the Radiodiffusion-Télévision France (RTF), which was under strict political control, after the war (Emery, 1969).(1) Television made its appearance shortly thereafter, and the first regular transmissions began in 1948. This new television system also fit into the monopoly supervised by the public broadcasting administration and watched over by RTF under the Minister of Information (Tarlé, 1979, p. 47).

The era from 1958 to 1974 was characterized by the dominance of the Gaullist party and pervasive government control of broadcasting. The single change in the broadcast

organization created ORTF, the *Office de Radio-Television Française*. The main feature of this council was to examine the quality of broadcasting, and the government retained power of appointment of the director general (Browne, 1989, p. 73). Though the original intention of creating ORTF was to attempt to restrict possible interference of outside power, DeGaulle and Pompidou used ORTF as a tool to further their political power, especially in manipulating election coverage, through their control of the broadcasting system.

In 1974 the ORTF was divided into seven separate organizations by President Giscard d'Estaing. All seven companies are independent, but broadcasters have to abide by conditions set out in a very detailed directive on program content and on the administrative and financial relationships between the companies and the other organizations which have grown out of the ORTF.

French broadcasting had been a public service and had been financed largely by the public's money. Using that rationale, the government retained some control over the broadcasting system. Notably, in France, government control is more extensive and more political than is the case in the rest of Western Europe (Kuhn, 1985 a: Tarle, 1979).

C. Politics in the Present System

When Mitterand was elected President of France in 1981, the Socialists, the opposing side to the previous right wing regime, carried out decentralization of the broadcasting system (Browne, 1989; Communication Research Trend, 1987; Le

Duc, 1987). The Socialist government wanted to create a new broadcasting system unlike the existing broadcasting system, which had been under right-wing control during the preceding 23 years (Bertrand 1985, p. 137). The 1982 audiovisual law states "Communication is free," in article 1 of the statute. The law formed an "independent administrative authority," the HA (*Haute Autorité*; High Authority), which pretended to be free from government influence. The HA was set up to appoint the presidents of the seven public service radio and television companies, to supervise broadcasting, and to award licenses to local operators of radio stations and the cable TV system.

The HA for Audiovisual Communication, which has taken over many of regulatory functions previously performed by the government control, is composed of nine members, of whom three each are chosen by the president, the speaker of the national assembly and the speaker of the senate (Kuhn, 1985a, 1985b; McQuail & Siune, 1986, pp. 27-54).

The state monopoly over TV broadcasting was abandoned and private competition was allowed by local radio stations. Since the government tried to implement its cable TV plan, in which local programming was allowed, it needed to end the government monopoly over the broadcasting system as it related to programming. The government gave up its monopoly over broadcasting, but retained the PTT monopoly in all telecommunications including construction of the cable TV network. While in the provisions for radio service the private ownership and commercial competition were legalized, in the

provisions for television broadcasting, the public service philosophy still remained, except on Canal Plus. Canal Plus was launched as a pay channel via over-the-air broadcasting. Subscribers receive the signals by using a converter and pay a monthly subscription fee. Though Canal Plus is the first commercial channel run by a private company, Havas, over half of the shares in Havas are owned by the French government (Kuhn, 1985a). Moreover, the presidents of major broadcasting companies including Canal Plus were selected based on their support of the government. The Socialist government under Mitterand intended to ensure a political balance in media programming at the start as a political promise, but its solutions did not do this. The ownership of broadcasting companies remained under other forms of government control, either by government stock holding, or by appointment of the president of the broadcasting company (Cayrol, 1991, p. 190). The HA also remained a problem in the way its members were chosen.

In the 1986 election, the Conservative Party commanded an overwhelming majority in the House under the Socialist president Mitterand, and the French broadcasting system was changed again, as expected. Before the 1986 election Jacques Chirac, the Gaullist Party leader, and one of the leading opposition figures to the Socialist government, announced his party's communication policy in May 1984 (*Le Monde*, 16 May 1984, cited in Kuhn, 1985a, pp. 61-62):

- The private sector's role in local television and cable TV services would be encouraged.

- No advertising ceiling would be placed on private local radio broadcasting.
- The power of the Haute Autorité would be limited to control of technical supervision.
- The PTT's monopoly over telecommunication services would be curtailed.

As a result TF1, the biggest broadcasting company in France, was privatized and two other private television channels were authorized. Regarding cable TV, the private sector was allowed to construct a cable TV network instead of having the PTT do it. The Haute Autorité was replaced by the more powerful CNCL (*Commission Nationale de la Communication et des Libertés*; National Council of Communications and Liberties). In 1988, Socialist victory in the legislative body and the presidential election led in turn to a new change of name for this body -- called the CSA (*Conseil Supérieur de l'Audiovisual*; Council Superior of Audiovisual) since January 1989 (Delcros & Chamoux, 1991; Cayrol, 1990). Though every new institution has stressed increased independence for broadcasting over previous regimes, the French broadcasting system has remained under the control of this institution, though its name has changed: RTF, ORTF, HA, CNCL and CSA -- whatever its name, its control over broadcasting has remained strong.

France now has two publicly controlled channels (A2, FR3), a pay channel (Canal Plus), and three commercial network channels (TFI, La cinq and M6) (Pailliart, 1989).

2. Planning in Cable TV Policy

While the broadcasting system was being liberated, the cable TV policy was perceived somewhat dimly. Cable TV policy showed the close relationship between broadcasting and the political system, and increased difficulties in the interface between broadcasting and telecommunications.

A. The Initial Stage

The first experimental cable TV offerings were launched under the Pompidou presidency in 1973 (seven towns were chosen but only one town built a system). However, the cable TV distribution network as a national infrastructure was not initialized until the Giscard presidency in 1976 (Kuhn, 1985b).

The reasons for the failure of cable TV at this time can be explained in terms of political, economical, and technological issues (Vedel & Dutton, 1990; Kuhn, 1985a). First, President Giscard was personally in opposition to a cable TV system which might provide an alternative source of programming. His concern was that cable TV might provide an outlet for political expression which might challenge the existing political order. Second, local newspaper companies, which are only outlets of local advertising, complained about the potential competition for advertising revenue between the regional daily papers and cable TV companies. Moreover, private enterprise was reluctant to invest in the cable TV industry because of the regulations which prohibited the distribution of local or outside programming originated by the

cable operator. Finally, the potential of cable as an interactive medium was not yet developed.

B. Government's Plan

Nevertheless, cable TV came into the spotlight at the end of the 1970s. The potential of cable TV technology was clearly seen given the development of fiber optics technology, which could provide interactive communication. At that time the French government embarked upon an economic plan designed to make France an international leader in information technology following the report of Nora and Minc (Dyson & Humphreys, 1988).

In order to strengthen the French role in telecommunications the report suggested the formation of a Communications Ministry:

> A ministry of communications must be created for coordinating the DGT (*Direction Génerale des Telecommunications*). . . The DGT itself must adapt to an expanding market, and must acquire greater mobility. To do so would require the separation of the postal and telecommunications services, and for the latter, the creation of a national company that would allow it the required degree of flexibility. A more autonomous role will allow these agencies to exercise more control. (Nora & Minc, 1980, p. 8).

Since 1980, under the DGT (*Direction Génerale des Télécommunication*), the telecommunication regulator and operator of the French PTT, the French telecommunications network was expanded and modernized and the cable plan was initiated by the Biarritz project. The Biarritz project,

designed to improve cable TV and interactive services via a fiber optics network in the Biarritz area, was initiated and constructed by the DGT at the end of 1979. The services provided were divided into two categories. First, point-to-point services included videotex, videophone, and high tech telephone services such as call forwarding and automatic dialing facilities. Second, audiovisual services would include access to 15 TV channels (Cayrol, 1986; Gérin, 1986).

In 1982, after Biarritz, the new legislation was adopted. First, there was abolition of the broadcasting monopoly over both television distribution and programming, which helped to establish local channels via cable. Those channels carry programs of local origination and public information. Second, a monopoly of the DGT (a branch of the Ministry of the Post and Telecommunication) over the distribution network and facilities to promote interactive services was legitimized (Gérin, 1986; Hudson, 1990; Palma & Tunstall, 1990).

The socialist government has planned an active cabling scheme through which the country should have a nearly complete optical fiber network by the middle of the 1990s. It would provide for two-way voice, data, and video communication on the same network. The goal of preparing cable TV is first the development of ISDN (integrated services digitalized network) via optical fiber and in a switched star architecture, as opposed to the tree architecture of the early cable networks, in order to facilitate interactive point-to-point communication. Second, the scheme intends the use of cable TV to satisfy audience demand for diversified programming,

especially for local programming. Cable TV was perceived as a medium more controllable than DBS or VCRs (Gérin, 1986; Straubhaar, 1988; Dyson and Humphreys, 1988).

C. Industrial Policy

In 1984, Mission TV-Cable was launched to help in the development and use of programs. The legal structure of commercial operating companies was decided upon by the French Council, a local authority. This was not merely to develop a means of supplying viewers with more television entertainment programming in local communities: not only did the 1982 and 1984 acts establish state supervision over cable TV, they also encouraged state participation in its construction and management. Regarding its mission as a public service, the French PTT has total control over the networks' installation and technical operations. Their policy goals are to extend integrated services throughout the country, to protect the French telecommunication market from invasion by foreign companies, especially those from the United States, and to make France a major international hardware provider (Vedel, 1986; Hills, 1991). It was evident that government needs cable not only to provide more diversity of programs to meet public demand, but also to implement the infrastructure of a wired society. The government would lead in both the cabling of the country and control over the hardware of the telecommunication industry.

In pursuit of this goal, the French government has played a central role in furthering not only the development of

videotex, but also cable TV. While the development of videotex, a centerpiece of telematics, has progressed at a relatively rapid rate through national initiative and direction, the development of cable TV seems to be retarded.

In the videotex system, industrial strategy considerations have been seen as a major influence on the decision to support the introduction of this service. Videotex was considered an attractive medium to stimulate the telecommunication industries because by using a telephone line, videotex technology has kept pace with the development of the telephone system, which has been transformed from one of the most backward in the developed world to one of the most advanced. Unlike in other countries, it was decided from the start to give away the terminals free to users. To encourage widespread use of the videotex terminal (the Minitel), after launching the Videotex system, French telecom developed its own nationwide electronic mail service, and numerous services by private companies have been encouraged. In addition, the French government is actively promoting the sale of videotex technology abroad, and continuing to increase its domestic penetration (Caby, 1991; Mikaelides, 1991).

The benefits of cable TV were emphasized under Mitterand's government with the use of local programming and interactive services without considering the cost of cable construction for new programming sources. The objective of the government plan was to reach 6 million homes by 1992 via fiber optic technology. The cost of installing fiber optic cable in trunk lines was more expensive than installing coaxial cable, and

the French annual capacity for constructing its fiber optic network totaled only 30,000 kilometers in 1984.(2) Considering that cabling 1 million homes a year would consume 300,000 kilometers, the capacity of 30,000 kilometers was insufficient for creating a mass market at that time. Moreover, local governments were reluctant to invest in such an expensive technology for local programming (Bertrand, 1985). Therefore, the Conservative Party does not insist upon widespread installation of two way cable or fiber optics, which was supported by the Socialists, thus reducing funds for cable TV under a conservative government (Browne, 1989, p. 91). They recognized cable TV as not being economically feasible if it utilized the fiber optic technology.

3. Operating System

Taking account of successive shifts of government policy between left and right, the operating system of cable TV in France can be divided into two different historical stages, the public-led system (1981-1985) and a more competitive system (1986-present) (Vedel & Dutton, 1990).

A. Ownership of a Network

France had separate cable systems and networks, and separate entertainment and telecommunications services on such systems and networks. Cable systems and networks are operated under the control of two major parts of the PTT. One is the DGT (Director-General of Telecommunications), whose goal is to establish a fiber optic network for telecommunications,

irrespective of whether that network is also used for entertainment purposes. Another one is TDF (*Télédiffusion de France*) responsible for network headends and the audiovisual sphere (Cayrol, 1986; Bertrand, 1985). In the area of planned networks, public ownership in its most extreme form is the only system to be found in France (McQuail, 1986, p. 60). Since a cable system could not have its own line and headend, the system has to pay rental fees to the DGT and TDF, and the DGT negotiates with local authorities to equip cable systems at the initial stages.

The DGT has encouraged municipalities to adopt a leading role in the development of cable TV (Hills, 1991, p.107). The role of local government was to contribute to the cable plan as a financial partner (Simon 1988, p. 174). The state was to provide the bulk of funds needed for the construction of the fiber optic network, and the municipalities or local governments were to provide 30 percent of the capital cost (Miller, 1989).

The conservative Chirac government, which came to power in 1986, introduced a milestone in cable policy. The new government abandoned the DGT's monopoly over the construction and technical operation of the cable system. According to Provisions modifying French Law #86-1067 in 1986, "communes (French local authorities) or groups of communes may establish or authorize the establishment of radio and television cable networks within their territory, ensuring, in the general interest, the overall coherence of the broadcasting infrastructure" (Article L.34).

At present cable TV networks are subject to the technical control of the CSA. CSA has the power to remove the license of franchise if the technical obligations do not meet its standards (see Figure 1).

	Telecommunication	Broadcasting
government institution	DRG	
Independent institution		CSA

Figure 1. Franchise Control

Local authorities are able to choose a company to install the cable TV network as they wish. It could be either a private company, even if it were a foreign company, or DGT. Under the 1986 law, private companies were allowed to enter the market of cable TV distribution networks, which had been under government monopoly, and this brought possibilities of commercial competition and incentives. But some fifty sites that had signed with France Telecom (a branch of the DGT) prior to 1986 continue to work with France Telecom, paying sixty francs ($11) per new subscriber and franchise fees, currently about 10% of the cable operator's revenue (*Variety*, 1992, p. 69).

B. Ownership of an Operating System

The French Government policy toward operating a cable TV system resulted in a monopoly of government agencies in the

construction and ownership of cable TV networks, paralleling construction of the national telecommunications infrastructure.

A cable system was to be run by a SLEC (Local Society of Commercial Exploitation), a joint public/private venture. It is a mixture of local representatives and private interests headed by a city councillor.

The SLEC structure had been intended to introduce decentralization, while preventing the emergence of either political or economic local monopolies (Dyson & Humphrey, 1988). But in practice the SLEC had no power in operating the cable TV system. It was just a linkage between the central actor (the DGT) that actually owned the national network system and an operator who was actually in charge of operating the network. The SLEC would not have autonomy. Though the local authority had a right to establish and operate the SLEC, the HA was in charge of granting licenses to the SLEC. The president of the SLEC had to be a city councillor and the representative of the SLEC should reserve a seat for a person from the DGT, an administrative body of telecommunications. Therefore, the central government was able to control operating systems through the SLEC (Simon, 1988; Cayrol, 1986). These central government is able to control programming through the SLEC, since the SLEC must conform to a national charges register in the matter of programming (Vedel, 1986).

The government ruled "no entity except the state was entitled to hold stock in more than one SLEC," to prevent huge American style MSOs (Bertrand, 1985).

After 1986, the Conservative government gave up the state monopoly over the cable TV network and no longer required to set an SLEC. It allowed private companies to participate in constructing cable TV networks and operating cable TV systems; these private independent companies operate their own cable TV systems. However, the French government allows only a public company to have one more cable operating system, and allows a private company to have only one cable operating system. Thus, the government showed a preference for public structure in the cable TV system. At present, in addition to private independent companies, there are the "big three" cable operators (MSOs) in the French cable TV market--Waterworks Service Firms, *Compagnie Générale des Eaux* and *Lyonnaise des Eaux* and the state owned financial institution *Caisse des Dépôts* (*Variety*, 1992, p. 67).

C. Franchise of a Cable System

Before 1986, a cable franchise was granted for five years by the HA, which is in charge of granting licenses to SLECs after approving their program plans. The SLEC may chose to manage the entire system on its own, although a private agency or a public/private corporation could also eventually manage other kinds of services (videotex, telealarm, local message) after negotiation with the PTT (Bertrand, 1985; Vedel, 1986). The company chosen by the SLEC was in charge of program services, commercial management and operation, and collection of the subscription fees (Voge, 1987). Even though local authorities financially support 30 percent of total capital of

constructing cable systems, they can not participate in the management of a cable distribution network.

But, after 1986, regulatory authority was given to the CNCL (*Commission Nationale de la Communication et des libertés*; National Council of communications and Liberties) from the *Haute Autorité*, which was responsible for giving licenses to local operators of radio stations and cable systems. The CNCL was not only to allocate the new over-the-air channels -- La 5, M6 and DBS channel -- but also to regulate the cable and satellite markets. The model for CNCL is the FCC (Federal Communications Commission) in the United States (Dyson & Humphreys, 1988, pp. 122-123; Cayrol, 1991, p.190).

A new franchising process was established (Vedel & Dutton, 1990). Now, the CNCL is in charge of licensing cable TV franchises. The local authority chooses a company to build a cable system, and then introduces the candidate operator's proposal to the CNCL. The CNCL investigates technical standards and programming quotas, and finally authorizes the commercial operation of the cable system.

The CNCL was changed into the CSA (Conceil Superieus de l'Audiovisual; Council Superior of Audiovisual) by Law in December 1990. Now, the CSA is in charge of cable TV operations including network and functions just as CNCL was in charge of the franchising process.

The local authorities could now choose the cable TV system operator and distribution network provider. However, these efforts by the conservative government have not made the cable TV system a success in France.

4. Programming

A. The Philosophy of Broadcasting

As is well known, most French ministers of culture have spoken of the need for French broadcasting to have a prominent place in the dissemination of French culture, both past and present (Browne, 1989, p. 101). Broadcasting must take an active part in the diffusion of French culture through the world and has a special responsibility to preserve the quality of the French language.

French broadcasters have set self-imposed limitations on the use of foreign programs and have effectively prevented the invasion of foreign programming. On the other hand, France exports many of its programs to its former colonies for the purpose of encouraging the spread of its language and culture. Indeed, this philosophy of broadcasting was also applied to cable TV programming by imposing regulation such as quota of foreign programming on cable operators.

B. Audience Demand

Until the early 1980s, program production for the public television channels had been managed by SFP (the *Société Française de Production*) which maintained monopoly power as the dominant program provider (Vedel & Dutton, 1991). As McQuail notes, most European countries, including France, seemed to favor broadcasting programs aimed at education information and high culture, rather than entertainment programming, because broadcasting has been a matter of public control. Consequently, state television with such programs

was much criticized because it was boring (McQuail, 1986).

The audience was dissatisfied with traditional public broadcasting offerings and demanded more diversity of entertainment programming. While the audience ignored the public television programming, viewing it for a consistently small amount of time -- only about 130 minutes per day, or 16 hours per week -- the audience's use of pirate radio stations, cinemas and VCRs increased in the early 1980s (Pailliart 1989, p. 160; Vedel & Dutton, 1991; Bertrand, 1985). According to a survey, seventy-three percent of French viewers wanted more diversified programming (*Le Monde*, 22nd March, 1984, p. 22, cited in Bertrand, 1985).

Since 1982, the French government has tried to develop the independent programming industry through offering such financial support as grants and bank loans, but also by encouraging the powerful media groups, such as Hersant, to compete with other powerful broadcasting group in the world market by giving Hersant and others the operating license of new commercial broadcasting channels (Vedel and Blumler, 1990, p.515) (3). These efforts seemed to be made merely to develop production for the newly launched over-the-air broadcasting channels, which were privatized to increase competition in entertainment programming, and not for cable TV. During the five years from 1982 to 1986, three more channels over-the-air broadcasting channels were added. However, the cable plan, which depended on fiber optic technology for construction of the network under the government, was suspended. Cable TV may be defined as merely a retrogressive medium in the environment

of the over-the-air broadcasting channels, if it is not able to offer the attractive programs of its own.

C. Quota of Foreign Programming

The production of movies in France has been more vigorous than in other comparable nations. France was the second largest exporter of films after the United States, and thus has better resisted the penetration of American films (Bertrand, 1985). Even though the increasing number of channels and extra broadcast time to fill those channels on cable TV make the importation of more American films avoidable, cable TV is considered more as a medium with more centralized control over the ratio of foreign versus domestic programming than DBS (Jun, 1986; Gérin, 1986; Straubhaar, 1988).

To protect national culture and to avoid invasion of the market by foreign products, especially those from the United States, France allows only 30% of foreign or peripheral programs on cable TV (McQuail, 1986, p. 63). Moreover, among this 30% of foreign programs, 60% must come from the European community and 50% must come from a French speaking source (Gérin, 1986, p. 253; Dyson & Humphreys, 1988, p. 116; Hills, 1991, p. 111).

D. Channels in Cable TV

Although the monthly average subscription fee, 150 francs ($28), for cable TV is the same as that for the Canal Plus pay TV channel, cable TV provides up to 15 channels. Cable TV

subscribers can receive the domestic channels, some from adjacent countries, plus some of the satellite services, such as TV5 and Super channel. A local TV channel was also added to broadcast some programs airing important local news (Pailliart, 1989). Those channels available via cable were five domestic channels (i.e., TF1, A2, FR3, La Cinq, and M6), two foreign French-speaking channels (Luxembourg and Monte Carlo), a British channel imported by microwave relay, five satellite channels (Italian TV, TV5, Sky channel, CNN, and Canal J), a local channel, such as Paris Premiere, and a split screen channel that showed the programming on various stations until 1988. The most popular among these services were available over-the-air, including the scrambled pay television channel, Canal Plus, and TF1 (Vedel, 1990, p.502). Since 1990, in addition to existing domestic cable channels, three new thematic channels (two classic movie services and a channel of 1960s reruns) have been launched (*Variety*, June 3, 1991). Despite providing many channels at the same price as Canal Plus, cable still need to compete with Canal Plus which has large subscriber basis, almost three million subscribers (The New York Times, Monday, Aug. 12, 1991. p. D8). While other services via cable have to wait at least three years to broadcast first-run movies, Canal Plus is able to run movies which are only one year old. Furthermore, with no obligation to run specific news programs, cultural programs, or children programs, and no minimum quota of programs produced by the French, Canal Plus has succeeded as a special interest channel by concentrating on movies and sports which may be more

exciting to the audience (Dyson and Humphreys, 1988).

TF1, the largest Channel in the public broadcasting system, also was changed to a private company to offer more entertainment programming than it did before 1987. With more relaxed regulatory conditions on advertising, showing of feature films, and French programming than other channels or cable, La Cinq (Channel 5) and M6 (channel 6), two new over-the-air broadcasting channels from a private network, also offer entertainment programs and music programs since 1986, and no news programs. (Cayrol, 1991, p. 192; Dyson and Humphreys, 1988).

In addition to over-the-air broadcasting channels, cable TV competes with videotex service. For example, the interactive information data services which were emphasized in the early stages of cable TV plan can now be offered by Minitel, the videotex terminal. Without a subscription to cable TV, the French people can enjoy diverse programming and information services through videotex services.

5. Evaluation

The number of households in France with a TV set is 20 million (*European Marketing Data and Statistics*, 1991, p. 320). In 1982, about 40% of households were connected to a master antenna, but only 3 to 4 percent of total households with the television set subscribed to cable TV, linked by coaxial cable (Bertrand, 1985, p. 137).

Table 1. Cable TV Penetration in France

	subscriber	%	homes passed	%
1985	3,000 HH	15	20,000 HH	0.10
1987	86,375 HH	18.5	467,000 HH	2.33
1989	485,535 HH	23.2	2,096,700 HH	15

(Pailliart, 1989)

As can be seen above, cable TV, which has carried a local channel and information services since 1982, shows relatively low penetration rates, though the penetration of cable TV per homes passed is steadily increasing. In 1991, however, the cable subscriber rate for all television households was as low as only 2.5% (less than one million households) (*Variety*, June 3, 1991, p. 41).

The problem of the public-led cable TV system in France could be attributed to the following factors: first, there were financial difficulties with installing fiber optics (Bertrand, 1986; Brown, 1989; Miége and Salaun, 1989; Vedel and Blumler, 1990; Delcros and Chamoux, 1990; Hills, 1991, p. 107). Installing fiber optics was more expensive than installing coaxial cable, and the annual capacity of

constructing fiber optic network was so low that it could not meet the needed capacity. Therefore, local authorities were unwilling to take the financial risks involved with unknown technology, because the government forced them to use fiber optic technology for constructing the local cable TV network. Second, the administrative bodies of the government, both the DGT and TDF, were involved with ownership of network and headend facilities of cable TV system: this caused a cost increase for cable operators. More than fifty cities that had signed with the DGT before 1986 continue to work with the DGT and still pay a certain amount of fees for leasing its network and facilities (about 60 francs or $11 per new subscriber). The operators pay the DGT (Miége and Salaun, 1989; Vedel and Blumler, 1990; *Variety*, 1992). Third, since most of cable TV systems are owned by the big three public companies, there were few commercial incentives for marketing cable TV (Bertrand, 1986; *Variety*, 1992). Before 1986, the SLEC and the big three MSOs, which are public, rather than private, operated the French cable system, because the government only allowed public companies to have concentration of ownership horizontally. Since 1986, private companies have been allowed to participate in operating cable TV systems. However, the MSOs still dominate the cable TV industry. An analyst of French television, Siritzky noted that the waterworks company, one of the big three, "were used to having monopolies on drinking water, [but] the TV world isn't like that." One of the fundamental weaknesses in French cable is that neither the operators, programmers, nor French Telecom, which were all

accustomed to monopolies, have a clue as to how to market their products (*Variety*, Jan 6. 1992, p. 69). Finally, cable TV should compete with other media, such as over-the-air pay channels, newly privatized channels, and the videotex system. For example, instead of choosing cable TV, the government chose videotex for interactive services. Furthermore, whereas government policy seems not to be generous to cable TV programming, regulations of broadcasting programming are more relaxed. Such policy allows the broadcasting channels to introduce more entertaining-oriented programs. And though the French government's monopoly no longer exists over the cable TV network, the government still controls the content of cable TV. For example, it imposes 30% quotas of foreign programming and 15% of the locally produced programming (Kuhn, 1985a; Cayrol, 1986; Dyson and Humphreys, 1988; Vedel and Blumler, 1990).

Notes

1. Though the Vichy government lost its power after the war, the centralized structure of media established by the Vichy government was maintained.

2. In the middle of the 1980s, the cost of fiber optics was more expensive than it is now. At present, the cost of fiber optics has dropped--rather quickly--to a reasonable cost.

3. Hersant is the Right-tendency publishing group, headed by Mr. Hersant and Mr. Berlusconi who were very closely linked to politicians of the right (Miége and Salaun, 1989, p. 65).

Chapter IV. Korean Cable TV Policy

1. Tradition of Communication Policy

A. Tradition of Government Control

When examining the Korean media system, we see that as in of other developing countries, it is difficult to insulate the media system from political influence.

According to Dunnett, there are common features of mass media, especially television, in the developing countries (Dunnett, 1990, p. 193)

> First, there must be some sort of government financial support. This may take the form of state finance and control, state subsidies and grants, or a state-granted monopoly. Second, there is a high degree of government control and interference in the supply of television programming. Third, governments in the developing world often have some secondary goals, for example education for the masses, which they wish to achieve through television. Finally, VCRs are widely used to enable customer demand to be satisfied in spite of governments' desire to control what people see.

In developing countries, these financial and political features are also found in other mass media, such as newspapers, magazines, radio broadcasting, and telecommunications.

Based on these common features, Dunnett classified Korea as a developing countries. Korea by these standards is classified as a developing country (Dunnett, 1990). The mass media have been viewed as a means of achieving a political purpose or of enforcing political power. After Korean war, the nation's security and rebuilding have been the most important issues in

the control of mass media in Korea. As the potential military threats from North Korea still exist, the priority of national security has given each successive dictatorship a good excuse to exploit the media system as a propaganda tool. The mass media are also expected to function as a part of the national efforts to achieve modernization of Korea (Han, 1978).

This idiosyncratic value of the mass media in Korea has made it possible for the government to take the central role in planning and implementing the media system, without the benefit of visible public participation, and this applies to new media, such as cable TV, VCR and DBS.

B. Brief History

The evolution of Korean broadcasting before the present system, which has been marked by different political situations, is divided into four stages: 1) the era of Japanese occupation, 2) the era of the U.S. military administration, 3) the first and second Republics, and 4) the third and fourth Republics.

The era of Japanese occupation (1927-1945)

The first radio station in Korea was founded in Seoul on February 16, 1927 by the Japanese who ruled Korea from 1910 through 1945. The station used the call sign JODK. With an output of 1 Kw, it broadcast at a frequency of 690 Khz (Choi, 1979; KBS, 1976). The broadcasting was used by the Japanese, above all, to carry out the colonial process more effectively.

The era of the U.S. military administration (1945-1948)

In 1947, the ITU (International Telecommunication Union) assigned Korean radio stations call signs beginning with HL, enabling them to have their own call signs separate from those intended for Japanese radio stations (The Korean Press Institute, 1986, p. 200). According to Sheo, although the era of U.S. military administration was short, the U.S. management influenced Korean broadcasting in terms of the administrative structure of the broadcasting system (Sheo, 1975). The two administrative bodies, the Ministry of Communication and the Ministry of Information, in the interim government, took charge of technology and the production of broadcasting, respectively. Korea has followed this administrative structure until the present.

The First and Second Republics (1948-1961)

With the establishment of the Republic of Korea in 1948, broadcasting facilities were reorganized into a state-run radio station, the Korean Broadcasting System (KBS), placed under the control of the Office of Public Information. Though during the Korean War the military government imposed strict regulations on all media, four private radio stations were started after the war (MBC, 1970). In 1956, the first television stations in Korea were begun for the purpose of selling television sets by RCA, one of the television manufacturing companies in the United States.

The Third and Fourth Republics (1961-1980)

After the overthrow of the second republic's government by the military coup led by General Park, Park's government not only established a state-owned TV system but also approved commercial TV stations (KBS, 1976). So-called "commercial propaganda," which is found in some developing countries with commercial broadcasting systems, such as Brazil and Mexico, was used for making the public aware of political issues. The Korean government allowed three television stations (one was owned by the government and two were owned by private companies) to compete with each other for entertainment programming. Though the two broadcasting stations were operated on a commercial basis, the government imposed severe censorship on the content (Katz and Wedell, 1977, p. 43).

The media had been seen as an important instrument to consolidate national identity, security, and development, as well as to support Park's dictatorship during its eighteen year regime. Since the end of Park's government, Korean media policy has been continuously transformed by each new political administration, according to designs of both political systems, and the 5th Republic (1980-1986), and the 6th Republic (1986-present).

C. Politics in the Present System

Occasioned by the birth of the Fifth republic, Chun's government, broadcasting entered the age of public management. Private ownership of broadcasting media was completely forbidden by the Basic Press Law and the Press Amalgamation

Plan.(1)

Overall national policy on broadcasting sets three broad guidelines (Richstad and Oh, 1988, pp. 203-204);

1) To help achieve the national goals for a more democratic, more egalitarian, and more affluent nation
2) To help attain a peaceful reunification of the country
3) To further enhance the public nature of broadcasting

Under this policy, all radio and television stations except MBC for commercial television and CBS for radio, were integrated into KBS (*The Korean Press Institution*, 1986, p. 200). KBS was made into a public broadcast corporation, imitating the highly respected BBC in Britain and the NHK of Japan.

KBS subsists on license fees and advertising, and 70% of total MBC stocks is owned by KBS and 30% by a foundation-type organization controlled by the family of a former president of South Korea. MBC, national network, exists on advertising alone. Despite its ownership, MBC is considered competitive with KBS. Furthermore, all advertising for both networks is handled by KOBACO, a government institution (Joe, 1988). To control a quasi-public broadcasting system, the Broadcast Committee was established in 1982. The committee consists of nine members. Three of the committee members are recommended by the speaker of the National Assembly, three are recommended by the chief of the Justice, and the last three members are appointed directly by the President (Joe, 1988; Richstad and Oh, 1988).(2) The Broadcast Committee has so much program power over operations that it can manipulate programming of

the national TV network. The Korean government, like the French government, has always influenced the Broadcast Committee through appointment of its members. In practice, public broadcasting in Korea was a state-controlled monopoly under Chun's administrations.

At the beginning of the Sixth Republic, Roh's government, there was a move toward the liberalization of government and society. It was the first time in the history of Korean presidential elections that a change of president occurred without a coup or dismissal before the president's term expired. Toward the liberalization of the broadcasting system, the government allowed the establishment of private radio stations and local newspaper companies, which were abolished by the Fifth Republic, Chun's government. Moreover, it announced there would be one more over-the-air broadcasting station owned by a private company. The SBS (Seoul Broadcasting Station) was launched in January, 1992 (Chung Ang newspaper, Dec. 28, 1991).

Toward new media development, the government passed the Cable Communication Policy Act of 1987 (the 1987 Cable TV Law) (Moon, 1989, p. 77). However, this act did not tend to encourage the development of cable TV in Korea. Though its aim was to promote ISDN in the future, the act only allowed cable TV to retransmit broadcasting material from the existing four television channels (KBS 1, 2, 3, and MBC) and community information. The government reasoned that the original programming for cable TV should prohibited simply because it was too early for it (Kim, 1987; Lee, 1989). The government

still regarded cable TV as a common carrier. This point of view coincided with the definition of cable TV in its early stages in the United States and France. With construction of the cable TV network, the KTA (Korean Telecommunications Administration) monopoly was established; the 1982 act worked audiovisual law in France. A new Korean cable TV law, which allows original programming for cable TV and lets private companies construct the cable TV network, was passed in the National Assembly in December, 1991.

Unlike French broadcasting, which started with its own market, Korean broadcasting was begun by the colonial power of Japan. In both countries, however, the government control of broadcasting has performed nearly the same functions, via a broadcasting committee manipulating broadcasting for their own advantage. The governments in both France and Korea seemed to have allowed more autonomy in broadcasting since 1982 (France) and 1987 (Korea), but they still have control over new media, including cable TV.

2. Planning in Cable TV Policy

A. The Initial Stage

The first cable in Korea began in 1957 with wired radio broadcasting to promote the spread of radio in rural areas. The government's purpose was to inform peasants of government policies. In 1961 the government passed the cable business management law. By Article 5 in the 1961 law, cable was limited to retransmissing the broadcasting signal of the national station and spreading official government

information. As television penetration increased through the 1960s and 1970s (see Table 2), the government, who actually owned a national broadcasting station, used the cable TV system to improve reception of over-the-air broadcasting signals (Kum, 1989; Hwang, 1989; Lee, 1989).

Table 2. Penetration of TV Sets in Korea

Year	Number of TV sets	Penetration
1963	34,774	0.7%
1970	379,564	6.4%
1975	2,061,700	30.4%
1979	5,696,259	79.5%

(Yearbook of Korean Newspaper and Broadcasting, 1980).

Cable television systems in the 1970s were essentially no different from the radio relay systems of the 1950s in terms of their technology and programming. Throughout the seventies there was very little interest in Korea in the potential application of rapidly advancing fiber optics technology for video delivery. Until the 1980s there was neither a plan for a new cable TV system, which would offer entertainment programming as well as information services with high technology, nor for any experimental cable TV systems.

B. Industrial Policy

In the 1980s, the government had an ambitious plan to promote the telecommunications industry, as did the French. The PTT was divided into two bodies. One is for administration of the traditional postal service in the Ministry of Communication. The other is the KTA (Korean Telecommunication Authority), a wholly-owned government agency that is organized as a separate company.

A scheme for cable TV was formed in 1982 as part of the country's fifth Five Year Economic and Social Development Plan (Datapro, 1991, p. 802). As sole supplier of all telecommunication services in Korea, KTA provides television and radio transmissions, as well as telephone, telex, and telegram services, and marine and mobile telephone communications (The Ministry of Communication, 1988). KTA has done a very good job in increasing the number of telephone lines and improving the digital network by use of fiber optics (see Tables 3 and 4).

In addition to the fifth development plan, which propelled a telecommunication infrastructure in Korea, there were idiosyncratic factors, which Dutton and Blumler have suggested could promote the implementation and development of a new communication technology. When Korea hosted two major world sporting events, the Asian Games in 1986 and the Summer Olympic Games in 1988, the KTA was solely responsible for all telecommunications covering these events (Dutton and Blumler, 1987; Richstad and Oh, 1988).

The government was ready to implement its telecommuni-

Table 2

KOREAN TELECOM STATISTICS								
Calendar year	1982	1983	1984	1985	1986	1987	1988	1989
Telephone switching capacity	4,492,660	5,337,450	6,290,172	7,538,598	8,905,462	10,221,746	11,239,443	13,354,150
Telephone subscribers	4,079,590	4,809,897	5,594,973	6,517,395	7,520,699	8,625,496	10,306,028	11,791,674
Telephone subscribers per 100 population	10.4	12.0	13.8	15.8	18.1	20.5	24.6	27.8
Public pay phones	70,864	88,227	101,478	117,761	138,491	160,165	180,165	212,165
Public pay phones per 1000 population	1.8	2.2	2.5	2.9	3.3	3.8	4.3	5.0
Total telephone sets	5,229,221	6,035,763	6,984,577	7,917,227	9,288,464	12,227,234	12,414,978	14,195,000
Telephone sets per 100 population	13.2	14.9	17.3	19.2	22.3	29.1	29.6	33.0
Long-distance transmission circuits	128,652	158,208	183,830	192,642	201,215	222,181	265,632	356,520
Domestic leased circuits	49,312	56,701	65,722	75,286	87,893	103,008	126,496	169,587
International transmission capacity	1800	1872	2016	2188	3195	3622	4114	5386
International telephone circuit	750	948	1091	1294	1551	1863	2412	3960
Mobile subscribers	-	-	2700	4600	7000	10,200	17,500	39,700

(Telephony, July 23, 1990, P. 30)

Table 4.
The Plan of Digitalizing Network

plan year	1987	sixth 1988	1989	1990	1991	seventh 1996	eighth 2001
% of digital network	72%	74%	79%	83%	89%	100%	100%

(The Ministry of Communication, 1988, p. 454)

cation and cable TV plans by preparing the telecommunication system for these two events. Videotex terminals at major tourist centers allowed the trial of a new videotex service, called "Chollian," for the Asian Games in Seoul in 1986, and was used again at the 1988 Olympic Games (Datapro, 1991, p. 808). For the press center at the Olympics, 18,000 lines of telegraph and telephone terminals, 5230 channels of leased circuits, 197 TV broadcast channels, 3213 audio channels, 4660 mobile radio telephones and 200 voice mail subscriptions were made available. Putting these services into operation and enabling them to function properly became a valuable experience, and resulted in the improvement of Korean telecommunications (Taylor, 1988).

The real purpose of the KTA was to integrate data transmission and cable TV by constructing a nationwide cable network, based on the experience gained from these two major events. Under the KTA plan, the ISDN (Integrated System Digitalized Network) in Korea is going to be available after

the year 2000 (see Figure 2).

Up until the present time, however, those services including videotex and cable TV under this plan are not yet popular with Korean people. Most of those services are either in experimental stages or have small subscribership.

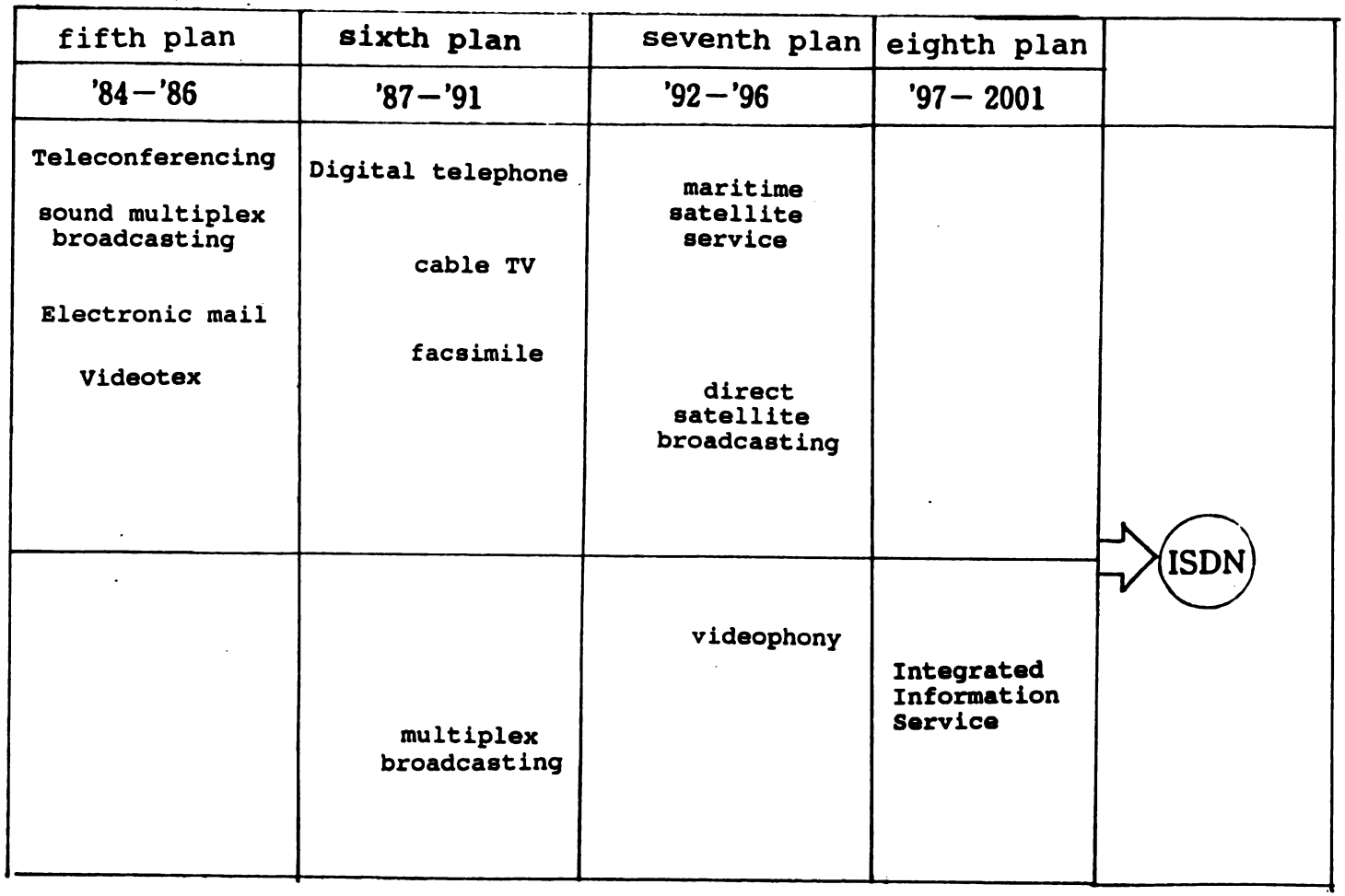
C. Government's Plan

The telecommunication industry is relatively well developed in terms of constructing an advanced infrastructure and initiating new information services.(3) As part of the bigger picture, the plan of an Integrated Information network, the cable TV plan, was initiated (see Figure 3).

Under this plan to develop the basic, pay, and simple interactive services, an experimental system should have by now been completed now, but the start of these services was delayed until the end of 1991.

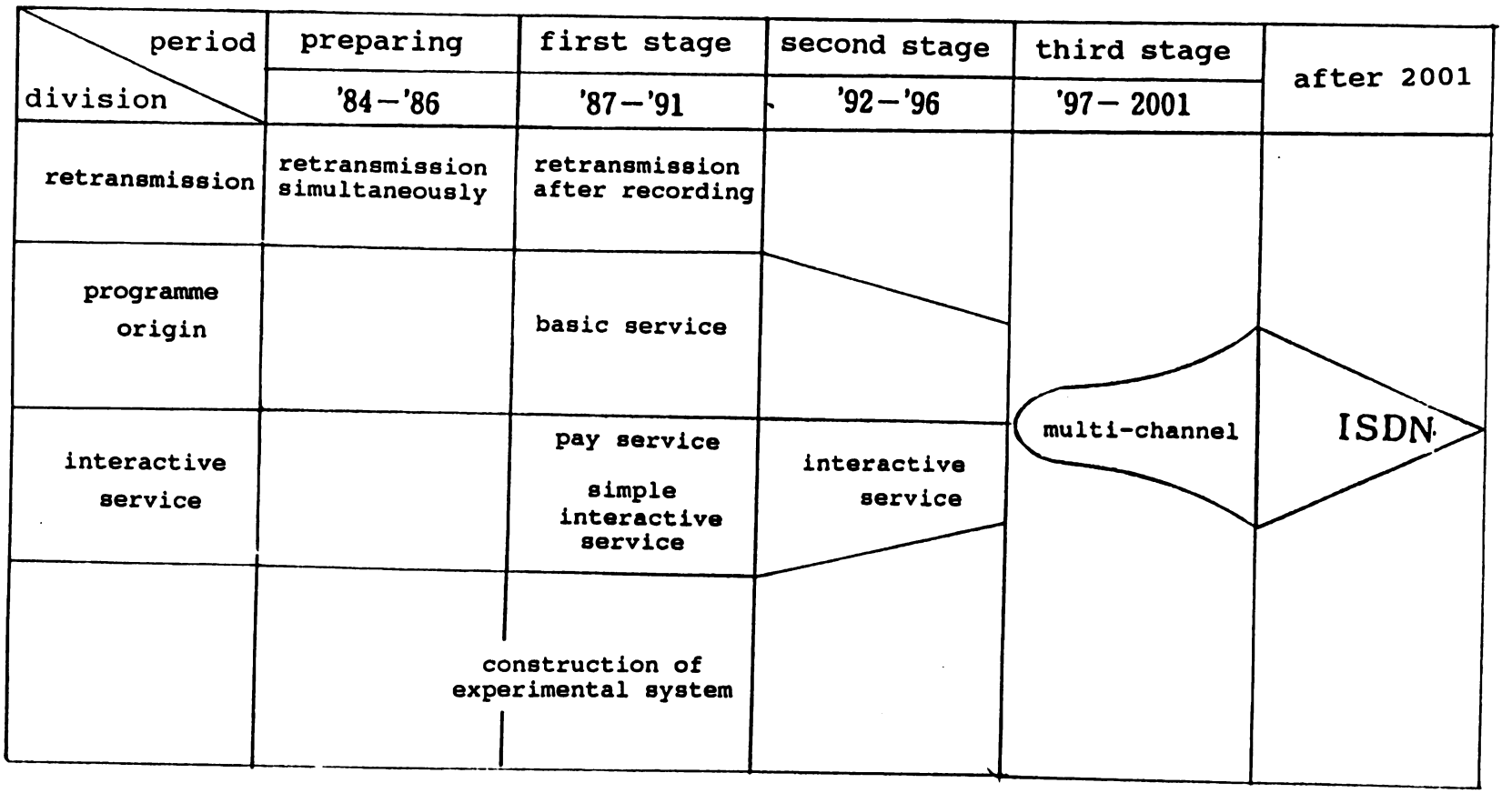
Meanwhile, in the broadcasting area, the spread of low quality video programs via cable TV by illegal operators, and Japanese TV programs via DBS has increased. Illegal videotapes and Japanese TV programs gave rise to concern on the part of government. The immediate reaction of the government was to impose stricter controls, and in 1987 the Cable TV Policy Law was passed by the National Assembly. It stipulated among other things that original programs for the sole use of cable TV be eliminated. The main function of cable TV is limited to retransmission of over-the-air broadcasting and delivery of public information. The law allows the PTT to exert its authority to construct cable

Figure 2 The Perspective and Plan of New Media Services in Korea



(The Ministration of Communication, 1988, p. 458)

Figure 3 The Project Development of Domestic Cable TV



(Kim, 1987, p. 157)

systems, and gives the Ministry of Culture and Information authority to license cable systems. The difference compared with the French plan is that the law governing cable TV quite specifically excluded its particular use for information purposes including interactive services. This law was mainly focused on regulation of illegal cable TV systems. There were no provisions within the cable legislation to use cable channels for interactive services or to increase programming diversity.

In 1989, the government needed a new cable TV policy, since it had to accomplish its plan of an integrated telecommunication network. Under the Broadcasting Committee the Broadcasting Institution Research Committee (BIRC) was established to reorder the broadcasting system as well as to enable cable TV to offer multi-channel and interactive services over the entire media system.

The broad rationale of developing the cable TV system was explained by the BIRC (The Korean Telecom, 1991; The World Newspaper, 12.21.1991, p. 17): First, cable TV will create an increased demand for new electronic hardware equipment and information services; Second, cable TV will increase the manufacturing of high technology devices such as those needed for fiber optics, satellites, computers, etc.; Third, cable TV will render assistance to local development. It will help implement a local autonomous system, not present in the central political system, and to provide local programming; Finally, cable TV will prepare the ground for the subscriber base of a future ISDN.

An experimental cable TV system was launched in July 1991. It is operated by Korean Telecom, a branch of KTA, and is limited to two small areas in Seoul. The system offers ten television channels including the three original channels, three interactive services offering services such as security and fire alarm, automated inspection of utility meters, videotex services, and four existing over-the-air broadcasting channels. The main trunk line from headend to hub system was constructed with fiber optics and the switched-star configuration. The feed line from hub system to subscribers was constructed with coaxial cable, with the tree and branch configuration (Jin, 1991; Korean Telecom, 1991).(4)

Recently, a new cable TV law, which allows original programming and interactive services, was passed in December, 1991. This law became effective in March, 1992. The operating systems of cable TV will be discussed in the next section by comparing the 1987 and 1992 laws.

3. Operating System

A. Ownership of a Cable TV Network

Before 1986 in France, a local company chosen by SLEC had to lease cable lines from DGT and headend facilities from TDF, which is more complex than in Korea. Before the recent 1992 Law was passed (effective after July, 1992) in Korea a private company had to lease cable lines from KTA. The cable TV operator must use the cable line provided by KTA, unless the company can show a particular reason to do otherwise. In the case of constructing its own network for a particular reason

(i.e., constructing institutional network within a building complex), a company must get permission from the National Telecommunication Coordination Committee in advance. Since KTA had a plan to build a nationwide transmission network, it persuaded incumbent system operators to dismantle their own existing networks (Lee, 1989). In terms of headend facilities, Korean cable systems were allowed to have their own facilities.

After the 1992 Law was passed, the incumbent provider of national telecommunication, the KTA, no longer has the exclusive right to run cable TV networks. However, it still retains the exclusive right to nationally link local cable systems and telephone lines. Only the KTA currently may provide the facilities of interactive services to the public on main national trunk lines.

Within a cable TV system from headend to subscriber's drop line, private cable providers are free to compete with each other. But the cable provider must be appointed by the Ministry of Communication, in accordance with the necessary technical specifications. Cable operators should borrow cable lines from cable providers by paying the appropriate rental fees. Since the government does not allow cross ownership and management between cable operators and system operators, cable operators cannot share the stock of cable provider companies and purchase lines from cable operators. Because the Korean government is concerned about the standard of major technology necessary to construct distribution networks, it designates a specific company which able to construct those networks in

accordance with technical specifications (Son, 1991; Won, 1991). The government wants this cable TV network to be combined with the national telecommunication infrastructure in the future.

B. Ownership of an Operating System

The government planned a cable policy which promoted the participation of big companies or conglomerates before 1989. Already in some instances a number of big companies had expressed interest in forming a cable TV company, both to install the system network and to operate services. In fact, several of the biggest enterprises in Korea, such as Samsung, Hyundai, and Lucky-Goldstar were preparing for the cable TV business at that time and they had accumulated operating experience through cable broadcasting in their firms (Moon, 1989, p. 79). But, suddenly in 1991, the government announced a draft bill which precluded the big companies and communication companies from participating in the cable TV business. Though this policy provoked controversy, the completed law only allows public institutions, companies invested by the government or companies smaller than the top sixty-one into the cable TV business.(5)

The government's guidelines in restriction of ownership are as follows (The 1992 Cable TV Law, Article 4).

--Co-ownership among cable TV operator, program provider, and the cable TV network is not allowed except for government invested companies and public institutions.

--Co-ownership of more than one operating system is not

allowed, except for a certain area indicated by the Ministry of Information, to avoid horizontal concentration.

--The big conglomerates called the "Big 61" by the President, will not be allowed to operate a cable TV system with their affiliate companies, owner's relatives, or major stockholders.

--The participation of existing press, magazine, radio, or television companies is precluded.

--Any organization which appears to be of a directly political or religious character, and any individual who would seek to use his or her position in order to favor a particular political or religious cause is precluded from participating.

--In terms of foreign ownership, any person who does not have Korean citizenship or a current address in Korea, and any person who is a representative of a foreign company or institution are excluded from operating a cable TV system. In addition, any donation and sponsorship from foreign governments and companies to cable TV systems is not allowed.

As a result, only middle-sized and small enterprises, companies invested in directly by the government, public institutions, and certain types of local consortiums shared by several interests from small companies to public are allowed to operate cable TV systems.

Among companies there is an interest in building new cable TV networks and responsibility for the installation and

management of services. Though some companies are able to construct or purchase, and manage both a cable TV network and system, this interest was frustrated by the new law. A system operator should lease the network from a network provider and is not supposed to own a network by purchase or construction. Whether a rental fee is appropriate to both the network provider and the system operator is decided by the Ministry of Information. But there are some exceptions (the 1992 Cable TV Law, article 4). Public institutions and companies invested by the government are able to co-own vertically among the installing company of the network, the operating company of the cable TV system, and the company which provides the programming.

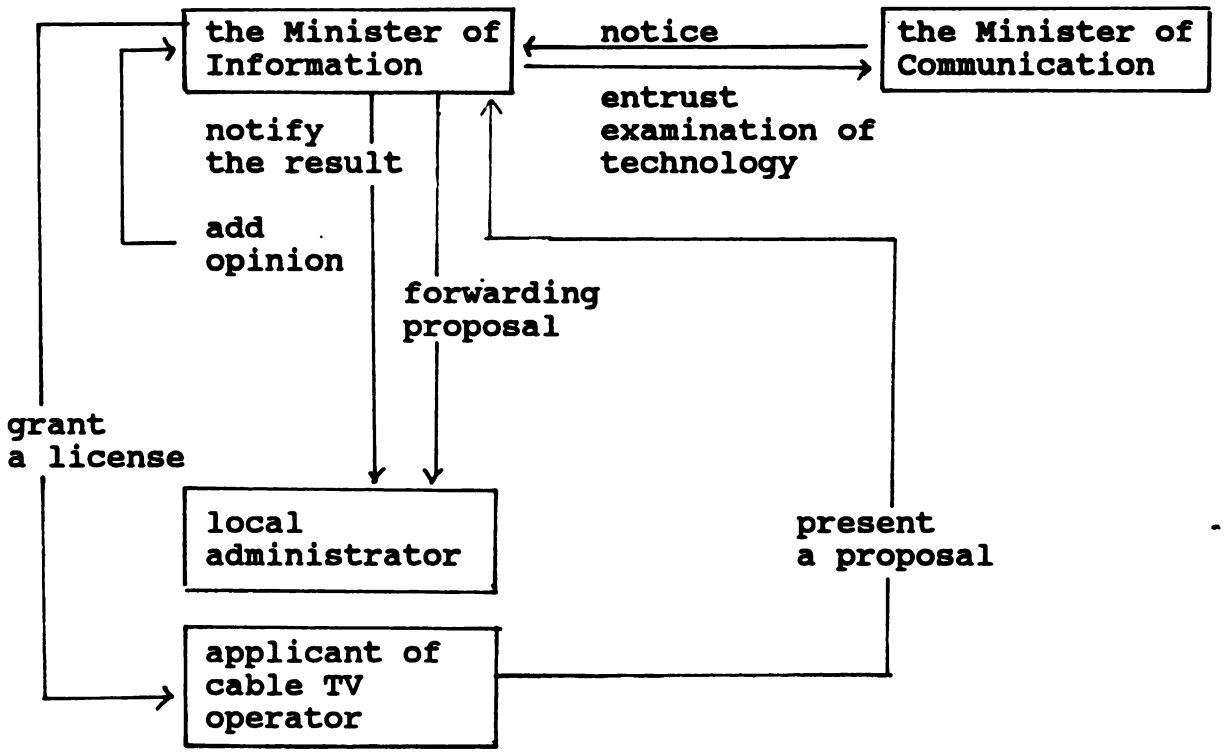
In the case of co-ownership between operating systems horizontally, this prohibition means a company cannot operate in more than a franchise area (the 1992 Cable TV Law, article 4, clause 2). The government intention is likely to prohibit the emergence of MSOs (Multi System Operators). As Wallgren notes, the single ownership might eliminate the efficiency of the economic scale as a result of concentration ownership, especially where there is a small subscriber base per franchise area (Wallgren, 1988). But government intention is likely to preclude any possibility of the emergence of MSOs (Multi System Operators) except when a system operator runs an additional system in the area assigned by the Minister of Information. The area will be a remote area where it is difficult to get normal profits.

C. Process of Franchise

Since the political system in Korea has not been given local government autonomy, the permission to have a cable TV system is granted to a private operator by the Minister of Information, after a local administrator reviews a proposal--not by a local self-governing body as in France. An applicant who wants to operate cable TV should first present a proposal to the Minister of Information. Second, the Minister of Information sends the proposal to local administrators to seek their opinion and sends the proposal to the Minister of Communication to acquire consent. The whole franchise process is shown in Figure 4. The actual power of awarding franchise rights to cable operators is centralized on the Ministry of Information, an administrative body in the government bureaucracy. The Ministry of Information should monitor any subsequent change in the ownership of a cable operating company. The operator has to inform the Ministry of Information of any significant changes of shareholding and annual statements of profit and loss.

The Ministry of Information has authority to collect franchise fees of 10% of the annual gross revenue of each operating system, and to set the franchise period at three years. Also, the Ministry has authority to divide up the whole country into franchise areas. A broad indication of the range of sizes which the Ministry of Information envisages for franchise areas will depend on administrative divisions, the telecommunication infrastructure, and geographic conditions. A tangible plan of the Ministry of Information is to split the

Figure 4. The Process of Franchising



Seoul area into thirty to fifty franchise areas. According to the 1990 census, 2.8 million households are in the Seoul area. If we extract 1.3 million households which own no house and so can not subscribe to the cable TV system, 1.5 million households remain. When 1.5 million households are divided by thirty to fifty franchise areas, there will be thirty thousand to fifty thousand households per one franchise area (Hong, 1991).

The BIRC recommended that a committee be established to manage all the administrative issues of cable TV such as technology, operating, permission, license, discipline, etc. The expected authority of this committee was to award cable TV franchises and licensing of program providers, to determine franchise areas, and to exercise a measure of oversight over the performance of services once systems are in operation--similar to the authority of local governments or authorities in France (BIRC, 1990). However, the authority to decide these things is concentrated in the hands of the Minister of Information under the new law. The members of the committee are appointed by the Minister of Information and its authority is limited only in monitoring the content of programming.

4. Programming

A. Traditional Patterns of Programming

Though television broadcasting in Korea was introduced for the purpose of selling television sets by RCA on May 12, 1956 (KBS, 1976), Korea is one of the most self-reliant nations in the media realm. At the time of the first broadcasting

station, HLKZ-TV, entertainment programs amounted to 30% of total programming, news programs - 10%, cultural programs - 50%, and others - 10% (Choi, 1979, pp. 69-71). KBS, which began to air in December 1961, at first ran foreign films comprising 240 minutes, or 13.6% of its total program running time. In the case of TBC-TV, which began to air in 1965, foreign movies amounted to 22.6% of its total program time; and MBC-TV, which began to air in 1969, had 18.7% foreign programs (MBC, 1970; 1982). In the 1970s the share of foreign programs amounted to about one fifth of total program time, and in the 1980s the introduction of a public broadcasting system helped reduce the share of foreign programming out of total running time to below 10%. The main reason for this is that government control of imported programs has minimized the amount of undesirable alien media influences, and this policy has been fairly successful, imposing a tough ceiling of 15% on the quota of imported programs (Joe, 1988; Moon, 1989).

The introduction of the new cable TV system will upset this quota of imported programs by expanding distribution channels, thus creating a demand for programs that cannot be met by the national production industry without extraordinary additional program development and production expense.

B. Audience Demand

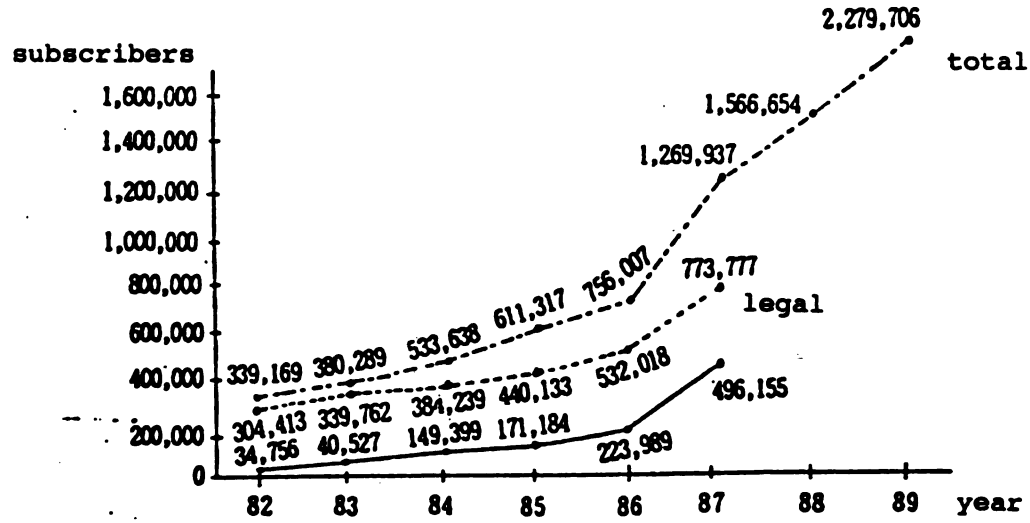
The three television channels (excluding the exclusive educational channel) did not provide enough television program choices for some of the Korean audience. The programming on these three channels is very similar. Though the broadcasting

system of Korea is under the public broadcasting system, the competition for advertising revenue is fierce among the three national networks. They air similar shows simultaneously and air time for locally produced programs has been below 10% of the entire broadcasting time on each channel. There are neither specific characteristics of each of the channels nor unique programming locally produced. Moreover, coverage of news thought to be in favor of the party in power produced a problem. In the middle 1980s, following the leadership of the newspapers, the opposition party, and the consumer association, concern over this problem was expressed by the viewing audience. It was called "the movement of refusal of license fee." Stickers saying "We Are Not Watching KBS" were distributed nationwide and people did not pay their license fees for public broadcasting (Joe, 1986).

Simultaneously, the need for alternative program sources and the government's strict control of access to local broadcasting led to the emergence of illegal private cable stations and popularization of the use of videocassette recorders. Beginning in the late 1970s, several small private cable television stations existed in some densely populated urban areas. They were only able to reach a small number of households, usually no more than one or two hundred (Kim, 1989; Kum, 1989; Hwang, 1989). However, the number of operating companies and the penetration of cable TV had accelerated until 1987, whether the cable TV stations were legal or not (see Figures 5 and 6). The main reason people

Figure 5

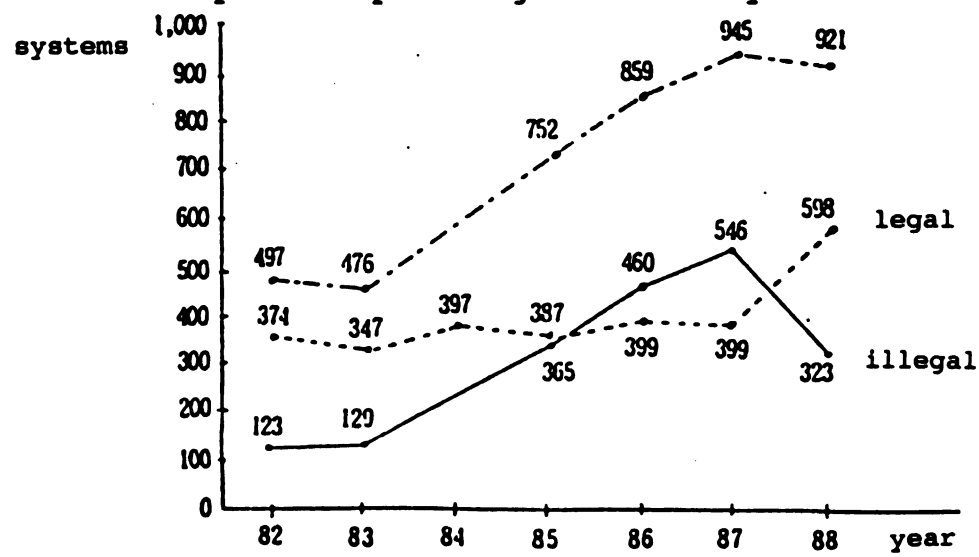
Cable TV Penetration in Korea



(Telecommunication Department Research Institution, 1988, p. 27; The Cable TV Association, 1988, 1989)

Figure 6

Number of Companies Operating Cable TV Systems in Korea



(Telecommunication Development Research Institution, 1988, p. 27; The Cable TV Association, 1989)

subscribe to the illegal cable systems is that the audience is dissatisfied with broadcast programming (Lee, 1989). Most systems carry Hong Kong, American movies, and those material is usually banned on television or in theaters, such as pornographic and extremely violent films, with rapid diffusion of mostly pirated videotapes in the 1980s. From the viewpoint of the Korean culture, the content of these videotapes is very corrupt, lewd, and lascivious and destroys cultural tradition.

Therefore, the government formulated the 1987 cable TV law to eliminate the illegal systems. Unfortunately, the 1987 cable TV law was a makeshift measure which rigidly enforced restrictions to keep strict control over the number of original programs on cable TV. It only allowed cable TV retransmission rights (The 1987 Cable TV Law, Article 14, Clause 2). The total air time of rebroadcast programming on cable TV was limited to two hours per day during pauses in over-the-air broadcasting and does not operate on Saturdays, Sundays and holidays (The 1987 Cable TV Law, Article 17). This was an irrational policy which impedes cable TV's competition with over-the-air TV. After the announcement of the 1987 cable TV law, the illegal systems seemed to decrease in number. Still, some illegal systems are operating, according to the unofficial record. As indicated by Hwang's research about present cable subscribers in Korea, the percentage of the audience with complaints about the fact that cable TV is limited to retransmission of over-the-air broadcasting and is short on original local community programs, is 87.2%. The audience is expecting cable TV to be

a medium which provides original programming, and which will present more local culture and information (Hwang, 1989).

Many Korean scholars have indicated that the crucial problem to be overcome if the full potential of cable TV is to be realized is a lack of available programming. In practice, the sources of programming in Korea are very limited. But there is an alternative programming source, the over-the-air broadcasting channel SBS, which provides mainly entertainment programming. Even though SBS covers only the Seoul metropolitan area, it will eventually cover the entire country (Jun, 1992).

Similarly to the French government, the Korean government is increasing its support of over-the-air broadcasting channels, which would make the broadcasting system even more comparative with cable, since more entertainment programming than before is provided by adding one more over-the-air broadcasting channel, the new SBS channel.

C. Channels on the Experimental Cable TV System

Up to the present time, most cable TV systems are small in most respects, including number of employees, size of facilities, and coverage area, and they do not have interactive capabilities. There are three kinds of cable TV systems (excluding the illegal systems): retransmission cable TV which rebroadcasts over-the-air broadcasting (35%); signal music cable TV which carries legal recorded music and some community information (5%); and institutional cable TV which operates within institutions such as hospitals, schools and

businesses (60%) (The Committee of Broadcasting, 1990). Music cable TV carries recorded music distributed and sold in accordance with the law, and institutional cable TV also carries this recorded music and information.

After July 1992, more diversity of programming services will be allowed. Cable TV system operators will not only be able to carry programs by themselves, but may also purchase programs from any program provider. Under the government plan, an experimental cable broadcasting system now operates, carrying a limited menu including four channels for over-the-air broadcasting, three channels for original cable TV programming, three channels for FM broadcasting, and three with interactive services (see Table 5) (KTA, 1991).

Table 5. List of Cable TV Channels

- Four over-the-air broadcasting channels, KBS1, KBS2, KBS3 (Exclusive educational channels via UHF channels) and MBC.
- A movie and entertainment channel, including foreign movies.
- A children' and sports channel.
- A culture an local information channel.

There is no subscriber fee for households in the experimental area. The impression of cable TV on these families is as follows: First, some of them have a bad impression of cable TV since the content of the illegal

videotapes shown on cable TV has been a big social problem. Second, some feel there is no attractive programming on cable, comparing it with that of existing broadcasting channels (KTA, 1991, Jun, 1992). Programs, almost all old programming material, are shown on a given channel because of its characteristics, such as movies and entertainment, children's shows, sports, and culture--there are no first run programs for cable TV.

Cable TV policy should envisage a more diverse program supply to ensure the success of cable TV deployment. In spite of this fact, there are statutory obligations for cable operators to make particular program services available to their subscribers, and strong restrictions on the range and diversity of the services provided.

D. Quota and Regulation of Programming

Condition of Production Industry

Most programs on the existing broadcasting channels in Korea are produced in-house. The number of major independent production companies which have produced more than one program, whether movie, variety show, or documentary, for the existing broadcasting channels is only eleven, including Cinetel Seoul and Seoul Telecom. In the theatrical movie industry, the number of annual features produced is less than 100 and older movies are not available due to poor upkeep. The Korean film industry is not able to pay its way without a substantial export market (Son, 1991, p. 29; Kim, 1987, p. 192).

Accordingly a substantial amount of imported programming would be required to program all the cable TV channels. An alternative is to increase production in Korea--probably not economically feasible at this time.

Quota of Foreign Programming

The approach to the question of foreign material on cable channels has provoked a sharp divergence of views. The existing production companies had argued there should be general obligations relating to Korean content until the domestic production industry grows sufficiently to meet the demand. As a result, the government has imposed a foreign programming quota of less than 30% of total weekly time of each channel (Ordinance of the 1992 Cable TV Law, Article 26). On the other hand, some scholars and cable TV operators have insisted that there should not be prescribed quotas for foreign material on cable channels. They argue that there is no choice on the grounds both of cost and availability other than to rely on imported programs. In fact, this ceiling on imported programming in Korea is the same as that in France, which has one of the few well-established movie production industries in the world.

Regulation in Programming

Though the government recognizes that the programming sector is key in the growth of cable systems and services, it tends to apply sanctions against particular programs or channels carried over a local cable system. The major

regulations toward program providers and programming are as follows:

- The program provider should be designated by the Minister of Information after the Cable Committee reviews the applications of program providers (Ordinance of the 1992 Cable TV Law, Article 12).
- The program provider designated by the Minister of Information is required to produce certain programming assigned by the Minister of Information within a range of 20% of total monthly broadcasting time which the program provider produces (Ordinance of the 1992 Cable TV Law, Article 14).
- The Cable Authority has authority to censor program material including dramas, children' animated shows, advertising, and foreign programs (except sports and news) before putting them on the air (The 1992 Cable TV Law, Article 38, Clause 4).

The government requires that the Cable Committee to impose on programming providers specific obligations. The government intends that program providers should be subject to the same obligations as those observed by the broadcasting organization. Program providers will be required to ensure public benefits and ethics. The government, therefore, has in mind a limited pilot scheme in which it would grant a small number of licenses to program providers. These program providers would be required to follow guidelines of programming content suggested by the Cable Committee.

Generally the channels and programs to be offered are

determined by individual system operators and by national program providers. But cable TV operators are supposed to carry certain channels which are considered public. These channels include public access channels, local community channels, and over-the-air public broadcasting channels; the guidelines are as follows:

- Cable operators are required to provide more than one public channel which is always available for government use as a public channel (the 1992 Cable TV Law, Article 22, Clause 2).
- Anybody who wants to use this public channel should entrust the program maker designated by the Ministry to make the programs (Ordinance of the 1922 Cable TV Law, Article 24, Clause 2).
- Cable operators are able to operate a local community channel and produce information on the local community, a program guide, and public information (the 1992 Cable TV Law, Article 22, Clause 3).
- Cable operators must carry the over-the-air broadcasting channels indicated by Ordinance of the President, with the exception of public radio broadcasting (the 1992 Cable TV Law, Article 27).

In preparing those kinds of access channels and community channels, the government has the authority to require cable operators to follow the government's guidelines regarding the content of those channels. It is prohibited for anyone who wants to express his or her opinion via an access channel to produce this kind of programming by himself or herself. In the

operation of community channels, commentary and reporting of news are prohibited. The government announced that the range of programming in these channels will be established by ordinance of the prime minister rather than by cable operators.

The government requires cable operators to carry the existing public broadcasting so that subscribers to the cable system are able to receive any of the basic public broadcasting services appropriate for their area. The basic public broadcasting services means two over-the-air broadcasting channels (KBS1 and KBS2) and an educational channel (KBS3) in Korea. Cable operators were not obliged to carry MBC or SBS.

Notes

1. This law and plan was not legally passed in the National Assembly. During a state-of-national-emergency declaration, this law and plan was approved by an emergent legislative council of Chun's government.

2. No matter what recommendation is made by the members, the final decision maker is the president.

3. "Now foreign observers are taking a closer look at the telecommunication market which is expected to reach about US $42.4 billion in revenue in 2001 according to the Data Communications Corporation of Korea (Dacom), 4.5 times greater than the US $9.2 billion recorded in 1986" (Datapro, 1991, p. 801).

4. 5000 households in the Mok Dong area and 5000 households in the Sanggae area are large apartment complexes and subscriptions are free.

5. The term "public company" means there are no individual majority stock holders, as in public broadcasting. But in Korea, public broadcasting is not a public institution, rather it is a government invested company. The government is still the biggest stockholder. Therefore, by public companies I mean those dealing with public affairs, such as the Association of Road Safety of Korea. A government invested company is one in which the majority of stock is held by the government. For example in Korea, the steel companies, electronic companies, water companies, etc., fall into this category.

Chapter V. Conclusion

1. Summary and Conchlusion

In view of the importance of telecommunications as an infrastructure for economic and social development, the ultimate goal of most countries in the world is to construct a nationwide broadband network, such as B-ISDN, which integrates various kinds of programming and information services. In pursuit of this goal, the governments of France and Korea have played central roles in furthering not only the development of information technology, but also cable TV systems in their countries, although Korea is still in its infancy when compared with both the telecommunications and cable TV industries of France.

Technology itself does not set the social directions and policies in this new media environment. As a promoting factor, technology is important at the early stage, but ultimately, the key to policy depends on political factors (Dizard, 1982). In France and Korea, some cable TV policy issues were raised by the introduction of new cable technology, such as fiber optics. Cable TV policy was also shaped by the political initiative of each government.

Among each of the four policy processes outlined by Havick (economic-regulatory, neo-pluralism, pluralism, and state autonomy) and by Noll (atomistic democratic theory, statist theory pluralist theory, and institutional theory), the state autonomy process and statist theory can be appropriately

applied in description of the French and Korean cable TV policy. According to "state autonomy process" theory, an autonomous state translates its policy preferences into authoritative actions. In other words, the government can take the authoritative actions according to its own policy preference. In "statist" theory, a state can exercise authority over the entire country and people in the pursuit of national interests (Havick 1983; Noll, 1986). As the major player in making cable TV policy, according to these theories, is the government itself, so the Korean government planned cable TV in its initial stage, developing a telecommunication infrastructure and has modelled cable TV policy to comply with its own preference of keeping an interest in public broadcasting.

Both governments have traditionally held a centralized monopoly over their broadcasting systems, designed to increase political advantage for the government in power: this tradition has brought strong government influence into the area of cable TV networks and programming. The governments seem to regard cable TV as a subsystem of the broadcast system--controlled by the government--and cable is at the same time seen as a threat to established broadcast values. In both countries, the role of telecommunication services in society has gradually become more important than the role of cable TV, because France and Korea have both invested heavily in the telecommunication sector, and have attempted to satisfy the demand for basic telecommunication services.

Both governments' first, ambitious, goal--to allow cable TV

to carry a diversity of television-type programming as well as interactive information services, by constructing a national web of fiber optics--seems to have been given up. Now the interactive information services are carried by the major telephone trunk line and videotex terminal, the minitel in France and Chollian in Korea, without the installation of fiber optics in either local cable TV system. While the ambitions of the national cable plan have been reduced, the French videotex system has been promoted by giving free terminals to the public and encouraging the participation of service providers.

The cable TV system in France has been conceived basically as an independent local communication medium, even though it carries over-the-air national network programs and some original cable TV programming. The French audience enjoys a diverse choice of television channels via over-the-air broadcasting without subscribing to cable TV. Since the middle of the 1980s, a scrambled pay-TV channel, Canal Plus, a privatized channel, TF1, new terrestrial channels, La Cinq and M6, and two publicly controlled channels, A2 and FR3, have been on the air. But cable TV, used only as an independent local medium, does not appear to be economically feasible, when it competes with broadcasting networks which provide more attractive programming than does cable TV.

To sum up, the French experience in its specific French context demonstrates that the deep involvement of the government in the planning and operation of the system, government preference for public ownership, and competition

from other media, do not create true viability.

In the case of Korea, the history of the broadcasting system seems to be a kind of aquarium--exhibiting all kinds of broadcasting systems, such as state-owned (the 1st and 2nd Republics), co-existence of state-owned and private companies (the 3rd and 4th Republics), public broadcasting whose biggest stockholder was a government agency (the 5th Republic), and a co-existence of public broadcasting and private broadcasting companies (the present 6th Republic), following political changes. Typically the government's tight control over mass media has affected the ownership and programming content of the Korean broadcasting system. The established pattern of the broadcasting policy has been premised upon the need to treat cable TV as an element of a unified system overseen and controlled by the government.

While the telecommunications industry of Korea has progressed at a relatively rapid pace through national initiative and direction, Korean government policy for cable TV is self-contradictory. Korea has adopted a restrictive policy regarding the operation of cable television in enacting the Cable TV Law of 1987. This law crippled the cable TV business by discouraging its development, and it established the KTA's monopoly in constructing the cable TV network. This law confined cable TV to broadcasting existing programming, limiting it to an auxiliary role by restricting the production of original cable TV programming, and it limited the participation of local authorities in having a voice in cable TV content. These restrictions have resulted in the

proliferation of illegal cable system operators and increased complaints from local audiences. Because of these problems, the government set up the 1992 Cable TV Law, which enables cable TV to carry diverse programming, and two experimental cable TV systems are being operated by Korean Telecom. This law will be enacted after July, 1992.

One of the avowed purposes of the government in introducing a new cable TV law is to bring government control into the cable TV system and to make cable TV subject to the regulatory authority of the Ministry of Information. There are also preferences given to public companies, which have several privileges in operating cable TV.

In terms of programming, government policy has not been to eagerly encourage the programming industry. Programming providers are not free to participate in the production industry due to licensing requirements. Each major program is censored before being allowed on cable channels. Moreover, the government is unwilling to invite local communities to contribute to cable TV development, though it perceives cable TV as a medium for local use under the current centralized broadcasting system.

2. Analysis and Recommendation

Following what we learned from the French case, Korean cable TV needs to be developed as follows: first, government authority should be minimized. Second, the regulatory framework should be flexible so that it can adapt as cable TV develops from its nascent to its mature stage. Third, cable

operators and program providers should be free to participate more actively in the cable TV business. The government's function is to create opportunities for operators and providers which will enable cable development in the market place. Finally, the programming content should not be disturbed by any authority. The following recommendations should be implemented for cable TV development in Korea.

Participation of Big Companies

In terms of ownership, present government policy precludes the big companies from participating in the operation of cable TV systems, and vertical integration and concentration of ownerships are prohibited.

If the government does not allow the participation of big companies, it is possible that cable TV systems operated by government companies and public institutions will be the only successful ones in the marketplace. Given the heavy capital investment involved, it seems that middle-sized and small companies would be unable to invest in the most advanced technology. Big companies are willing to make the heavy capital investments to upgrade the systems continuously. As we learned from the French system, public ownership or public consortium bring the strong involvement of government and offer no incentives to operate systems profitably--especially where government has traditionally controlled the overall media system. The Korean government's plan basically offers cable TV services under the overall control of government authority, since the middle-sized and small companies are more

vulnerable to government control than the big companies. If the government is uncomfortable with the possibility that the cable TV business might fall into the hands of big companies, it can require cooperation between big companies, middle-sized, and small companies by limiting share holding of the big companies to less than 30% of total stocks. This would also help the smaller companies.

Vertical Integration

The government basically opposes the involvement of any company in more than one stage of the cable TV business. But if the cable operator is financially able to purchase a cable network, it is advisable to allow vertical integration between cable network and system. By doing so, cable TV operators manage their system rationally without paying additional charges to lease the network. If the reason for the prohibition of vertical integration by the government is that the government wishes to encourage cable network providers to participate in network construction, the construction of cable networks by cable network providers can be stimulated by allowing cable operators to purchase cable networks, in addition to using the leasing arrangement. The cable operators who prefer to lease the cable TV network can also have a contractual relationship with a separate cable TV network provider.

Government policy concerning common ownership of a cable system and a cable program service is that this common ownership is in principle prohibited to all entrants except

public institutions and the companies supported by the government. Under this principle only public institutions and companies supported by the government take advantage of the common ownership possibility. The government's intention seems to have anti-competitive results which discriminate against other programming services and in favor of the programming services owned by the same system operator in a given marketplace. But considering past evidence showing government control of broadcast programming, public institutions and companies supported by the government will favor the government's preference and control in terms of choosing programs, rather than stimulating "quantity and quality of programming." This policy also discriminates against other private companies who want to participate in both the operating system and program. Moreover, this condition of government policy that allows only public institutions and government supported companies to participate in operating systems, essentially, maintains government control of the cable TV industry.

The general advantage of vertical integration is that because the MSO can take advantage of financing costs, can create a market, and can distribute cable programming effectively, it helps create programming to attract additional subscribers to its own cable systems. Therefore, newly created programming is carried as widely as possible by the MSO, which wants to gain revenues from additional subscribers with this new programming (Klein, 1989). Careful investment in Korean cable TV is needed to decide whether to allow

vertical integration. For fair competition, if public institutions and government-supported companies are allowed vertical integration, then vertical integration should be permitted to all entrants into the market place or vertical integration should be prohibited to all entrants.

Concentration of Ownership

By government policy, cable TV operators in Korea only have one franchise area. The government fears excessive power being wielded by the MSO. In fact, the MSO is able to wield its buying power through the negotiation process with program providers, and usually requires volume discounts for purchasing the program. If the size of the MSO reaches a certain monopoly threshold, this monopoly power may be harmful to small operators and program providers. In Korea, where the cable TV business is at a starting point, this situation is not likely to occur. Rather, one system per operator is not economically feasible. According to the present plan, the number of households in a franchise area is about fifty thousand. But in the early stages a system operator may have as low as 20% penetration or 10,000 subscribers. This may not be enough subscribers to support the cost of programming.

Economies of scale in geographical clustering -- which is to subsume large blocks of adjacent cable system under one ownership -- or economies of scale in operating several systems will give some financial benefits, for example, saving operating costs. Therefore, some concentration of ownership is recommended, with provisions which limit the likelihood of

generating monopoly power. For example, a cable TV operator could be allowed to serve several franchise areas until its total subscriber household reaches 10% of total cable TV penetration.

Process of Franchise

The franchise for a system is awarded by the Minister of Information: a proposed system should meet necessary general technical specifications. The Minister of Information asks the opinion of the Minister of Communication as to whether the system is appropriate technically, and the opinion of the local administrator; having decided on a franchise system, he then notifies both the Minister of Communication and the local administrator. In the franchising process, there is no room for the opinion of the local community itself.

The Ministry of Information also has the authority to collect franchise fees, to set the franchise period, to divide the franchise area, and to appoint the members of the Cable Committee. The franchise fees are 10% of the annual gross revenue of an operating system. This franchise fee seems to be relatively high for nascent cable operators. The franchise fees should be reduced to 3% of the annual gross revenue, so that the cable TV industry can price the service attractively to consumers. If the franchise fee is high, cable operators may recover all expenses, including the franchise fee, by setting the price to high.

The franchise period is set at three years, a sudden change from five years in the 1987 Cable TV Law. This period is too

short to encourage investment or to enable programming and other services to establish themselves. The initial franchise period, especially, should be sufficiently long to encourage investment in the system by cable operators.

Since the Minister of Information has a great deal of control over the operating system, the interests of the public and local community could be deliberately or inadvertently circumvented by centralized processing of the franchise. To solve this problem, the 1992 Cable TV Law requires the establishment of the Cable Committee, and emphasizes that this Committee is an independent government body. But even operation of the Committee and appointment of its members are accomplished by the Minister of Information. The Committee has no actual power to promote or oversee the development of cable systems and services; its function is limited to a perfunctory existence, its authority extended only to investigating the programming sector.

Under the current policy, the process of franchising is controlled entirely by the power of a single administrative body. This process may result in difficulties in accounting for each applicant's intentions and in monitoring the performance of operators throughout the franchise period. Therefore the Cable Committee and the local community body should participate in franchise processing.

Quota of Foreign Programming

Cable TV has also been reviewed as a matter for cultural regulation. The government seems to fear that the efficacy of

the well-established quota of imported programming in broadcasting may be harmed by the introduction of cable TV, and therefore imposes strict regulation on cable programming.

The government imposed a 30% quota on foreign programming, ignoring the expanded channel capacity of cable TV. This quota is very strict for a country like Korea, which has so far shown only a small capacity for producing domestic programs.

Cable TV would take time to develop domestic production capacity to fulfill audience demand. Until the capacity develops, cable operators could purchase imported programs at the cheaper rate than domestic programs. Therefore the quota of imported programming should be modified to offer more flexibility. For example, for the first two years up to 80% of programming would be imported, for the next three years 50%, and thereafter 30%. By that time, Korean production capacity would be providing a satisfactory or even more desirable substitute to foreign programming.

Programming Provider

A program provider is not free to participate in the production of a cable TV program unless he or she is appointed by the Minister of Information. Moreover, a certain proportion of programming must be produced by the provider, according to a requirement of the Minister of Information, and the major program material is censored by the Cable Committee before going on the air.

Considering the fact that cable audiences will be small for

many years to come, commercial motivation to produce new programs is not strong in the early stage. Under this condition--a lack of programming--it is appropriate to encourage the participation of anyone who wants to produce cable programming by a *laissez-faire* policy rather than by licensing obligations. In this way, program providers compete with each other, and experience which kinds of programming will succeed and which will fail with the Korean audience. If there are limits on the freedom to gain this experience, then the potential for success is even more doubtful.

The requirement that a provider should produce a certain proportion of the programming should also be excluded. It is possible that the government might use cable TV to its political advantage, as has happened before in the history of broadcasting. There is also some ambiguity in describing program providers. One needs to distinguish between those who actually produce program material (program maker), and those who assemble program packages for the channels (program provider) for distribution to a number of local cable systems.

Traditionally, the content of the Korean media (i.e., broadcasting and newspapers) has been easily influenced by the government. Under the assumption that broadcasting is the medium which reaches almost the total population, censorship was very strict, for the public interest. However, in cable TV, the audience is a relatively small group, compared with the audience of broadcasting. Therefore, a change of traditional censorship may be requested for cable TV as for the newspapers, which are now censored with more generosity by

the government than in broadcasting. It is recommended that Korea start by ensuring generous regulations for program providers and makers to maintain a certain extent of free expression. The pre-censorship by the Cable Committee should be changed into post-censorship to encourage the participation of various program makers.

"Must Carry" Rule

Though the government requires cable operators to carry only two public broadcasting channels (KBS 1 and KBS2) and an educational channel (KBS3), there should be a modification of the so-called "must carry" rule. Except KBS3, there are now four broadcast networks in Korea: three national broadcasting network (KBS1, KBS2, and MBC) and one local network, SBS, which was recently launched and covers only the Seoul area. Every affiliate of the three networks in major cities broadcasts almost the same content with central stations based in Seoul, except for a local news which broadcasts less than thirty minutes per day.

If only two public channels must be carried, the other two networks would be disadvantaged by being kept away from the audience. Therefore, "must carry" for all four channels would give a fair opportunity to both the broadcasting network and audience.

Furthermore, the biggest problem for the new channel, SBS, is not being able to use high frequencies (174 to 216 MHz) such as those used by KBS1, KBS2, and MBC (*Chung Ang* newspaper, Dec. 28, 1991). The low frequency of channel 6,

used by SBS, creates poor reception in most of the Seoul Area, though the government has promised to solve that technical problem. If government policy encourages cable TV to carry SBS, people who complain they are unable to obtain a good quality signal for SBS in the Seoul area will welcome cable TV. If so, in contrast to France, where the cable TV industry is struggling with Canal Plus, in Korea the relationship between cable TV and a new commercial channel emphasizing entertainment programming (like Canal Plus) can be a more cooperative rather than competitive one.

Public Access and Local Community Channels

According to the 1992 Cable TV Law, the government requires the cable system to make available more than one public access channel; the government has priority in using these channels for public purposes and requires a local cable operator to get permission if he or she wants to operate a community channel. The real principle behind these channels is to strengthen the relationship between cable operators and the local public by offering an opportunity for self expression and for broadcasting items of local community interest. Therefore the deep involvement of central government should not be necessary.

The principle of free expression in the community channels should be encouraged. Someone who wants to use the public channel should be able to produce a program by himself or herself without having to entrust the program maker designated by the Minister of Information with creating the

program. In Korea, the government is concerned about an abuse of public access channels by dissidents. Furthermore, from the political standpoint of the government, unconditional free expression may result in a negative influence on the transition to true democracy. If so, a step-by-step approach may be recommended to provide, ultimately, unconditional free expression: from entrusting program production to a program maker designated by the Minister of Information in the first stage, to guaranteeing free expression through productions made personally without the involvement of the Minister of Information.

In a community channel, the contents are controlled by the government. The autonomy of local cable operators should be respected by allowing them editorial control of local news. If local cable operators are allowed to carry diverse content, including local news via local community channels, community channels will contribute to envisaging local culture, especially, under the circumstance of absence of an independent local broadcasting stations.

We can predict that during next ten years the subscriber rate for Korean cable TV will reach around 20% of total TV households. Cable households will be better educated, with higher household income, and subscribers live in both major urban and suburban areas. It will take time to enable the majority of the total population to receive the benefits of cable TV. If the several recommendations suggested in this study are realized, the following benefits would result: first, the development of cable TV would induce the government

to relax the deep involvement in and control over the media system, and it follows would help guarantee freedom of expression across the whole of Korean society. Second, as different programs are developed and specialized for small segments of the audience, and the programming industry is also developed by gaining opportunities to produce more programs for the additional media outlet, cable TV, the Korean audience would enjoy a diversity of programming. Third, cable TV would make up for an absence of independent local broadcasting stations. Therefore, cable TV would contribute to the development of local culture and the expression of local interests. Finally, cable TV would help form the information network of the future by linking the physical distribution system of cable TV in each local area with the national telecommunication infrastructure.

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