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Pandora's Box Shaking Up the Broadcasting Industry

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The year 2005 experienced a shakeup that hit the broadcasting industry, which is also known as Japan's last remaining industry under the "convoy system." This blow was only a precursor of major industrial changes to come.

Scandals involving NHK have caused the broadcaster to suffer a severe loss of trust among the people, and disclosed various sorts of ambiguities that constituted NHK. Now, a clear answer is called for: what is the position of NHK and what is the role of public broadcasting?

The future of the satellite broadcasting industry that was quick to embark on a shift to a digital format is unclear. The continued achievement of profits will require drastic measures including reorganization of the broadcasting industry.

While the current terrestrial analog TV broadcasting is slated to cease in July 2011, the feasibility of such cessation is questionable. To carry this out as scheduled, either the government must support the promotion of terrestrial digital TV receivers in some form or a thorough review of the universal service aspect of terrestrial broadcasting must take place.

Various broadcasting infrastructures for mobile devices including "One-Seg" are now emerging. However, the winner has not yet been determined.

The VOD (video on demand) market has finally taken off. However, a path towards generating profits is still far away, and the situation requires adequate strength and innovative ideas.

Under such an intensely changing environment, using the special characteristics inherent in broadcasting as an excuse and taking no measures for change will cause the entire industry to decline. The broadcasting industry should facilitate efficient business operations and promote investments to develop new businesses.

I Changes in Japan's Last "Convoy System" Industry

For the first time in the history of the television broadcasting industry, 2005 could be summarized as the year when the industry was hit by events that were "beyond the scope of conjecture."

Up to now, television broadcasting has experienced the emergence of color TVs, satellite broadcasting, cable TV and digitization. These milestone events were implemented through repeated discussions within the industry. However, with respect to the events that occurred in 2005, such as the issue of viewers refusing to pay fees for viewing NHK (Japan Broadcasting Corporation; non-commercial public broadcaster) and the acquisition of a large number of shares of commercial broadcasting stations by Livedoor and Rakuten, broadcasters were unable to act on a timely basis although such possibilities had long been pointed out.

In and after 2006, a Pandora's box that will further shake up the broadcasting industry will gradually open. This paper outlines the current status and items to be resolved with respect to the following five issues:

- Clarifying the role of NHK and public broadcasting
- Reorganizing the stagnating satellite broadcasting industry that has ceased to grow
- Feasibility of abolishing terrestrial analog TV broadcasting
- Start of broadcasting for mobile devices
- The launching of the VOD (video on demand) market

II Clarifying the Role of NHK and Public Broadcasting

A number of scandals that occurred at NHK, including the inflation of production costs by a program producer which came to light in 2004, have given rise to the distrust of NHK among people who have regularly paid receiving fees and have frequently viewed NHK programs with confidence.

As of the end of November 2005, the number of households with a receiving contract that refused to pay receiving fees because of such scandals increased to about 1.28 million.

In order to recover its credibility, NHK has taken a variety of measures. In June 2005, NHK announced "commitments" that indicate what reforms it will implement and established the NHK "Commitment" Assessment Committee to guarantee that such commitments are fulfilled from the viewers' perspective. NHK also organized a Roundtable on NHK in the Digital Era whose members include representatives from a variety of fields to examine the role of public broadcasting and an appropriate system of receiving fees in the digital era. After going through these steps, in September 2005, NHK announced the NHK Revival Plan, which includes a wide array of measures to change the current NHK.

While the pace of increase in the number of households refusing to pay receiving fees has been slowing down, it would be difficult for NHK to remain as it was in the past. One of the reasons behind this assumption is a growing trend toward reviewing the receiving fee system. According to survey statistics released by NHK in August 2005, the percentage of respondents who selected the sense of unfairness and/or criticism of the receiving fee system as the reason for refusing to pay or withholding receiving fees was 19 percent in February and March 2005; that rate increased to 33 percent in the period from May to July. Furthermore, the government's Conference on Promoting Regulatory Reforms and Opening of Public Services to the Private Sector has also taken up a review of the receiving fee system as a subject for study.

From the NHK perspective, if the current framework remains, it would be difficult to expect similar increases in revenue from receiving fees as it could in the past. On top of this, it is also difficult to expect increases in the number of households subject to receiving fees in light of the current household penetration rate of TV receivers, which is close to 100 percent, and the saturating trend of the number of households viewing satellite broadcasts. Furthermore, it is also unlikely for people to widely accept new cost increases including receiving fees under circumstances where dissatisfaction with NHK management itself is still high and debates are underway on the most appropriate route for public broadcasting.

The only option left for NHK is to endeavor to increase the rate of receiving contracts and the rate of collected receiving fees within the current framework. However, because the obligation to pay receiving fees is ambiguous in many respects including the fact that no penalty is stipulated for non-payment under the current legal framework, it is considered that the first course of action for NHK is to ask viewers to pay fees based on receiving contracts by obtaining the consent of viewers. In the Revival Plan, NHK said it would consider starting to take civil procedures to collect unpaid receiving fees. However, the reality is that it is difficult for NHK to take such a drastic measure.

Conversely, it is ambiguity that has helped NHK to exist. In addition to ambiguity in terms of the legal grounds for paying receiving fees, the Broadcast Law contains ambiguous definitions for the use of such fees and the business fields of the NHK group. Specifically, the law stipulates that the business fields of NHK shall be a broadcasting service and services incidental to broadcasting. Furthermore, a certain level of discretion has been given to NHK for the expansion of business activities under the concept of the freedom of broadcasting.

Accordingly, NHK could pursue such expansion smoothly, acknowledging the intentions of the Ministry of Internal Affairs and Communications and the Japan Newspaper Publishers and Editors Association. In addition, from the perspective of commercial broadcasters, the most desirable status of NHK is that it is neither too strong nor too weak. Popularization of NHK programs could have a negative impact on the revenues of commercial broadcasters for which audience ratings are vital factors. In contrast, it is also true that the function to conduct research and development activities for broadcasting technology and the role of disseminating and promoting new broadcasting services have been left up to NHK. Considering that the overall industry has benefited from such efforts, a weakened NHK would lead to a weakened broadcasting industry including commercial broadcasters.

In light of an unsympathetic attitude towards NHK among people and the harsh management conditions NHK faces, it is unlikely that such ambiguity would be allowed to remain in the future. The time has come to clarify the role of NHK and public broadcasting. Some people have suggested abolishing the current receiving fee system and making NHK a pay-per-view broadcaster to which fees are paid only by those who want to view NHK programs. Households not paying fees would be unable to view such programs through scrambling.

However, it is difficult to believe that simple scrambling could resolve all the issues involved. If scrambling technology is used to provide pay-per-view programs and if consequently the business scale of NHK shrinks, NHK would be forced to focus on services for those viewers who pay fees. It is highly likely that this would lead to the inability of NHK to maintain its current level of quality with respect to the function of offering broadcasting services at relatively low costs even to remote rural areas, the function of offering programs that should be provided from the standpoint of public welfare even though audience ratings of such programs are low and the function of research and development to enable broadcasting innovations from the long-term perspective. If these functions are to be maintained at their current level, the quality of broadcasting service such as program quality might be compromised.

The way to ensure these functions must be discussed at the government level as well as by the broadcasting industry. Studies designed for making changes to systems and organizational structure without clarifying public functions (the role of public broadcasting) worth continuing should be avoided.

III Reorganizing the Satellite Broadcasting Industry

The broadcasting satellite (BS) digital broadcasting service, which started in 2000, finally acquired a receiver base accounting for about one-fifth of all households in Japan. The number of receivers exceeded 10.15 million units at the end of August 2005, after going through difficulties in acquiring viewers. However, there are no signs of improvement in the revenue of the BS digital broadcasting business. Broadcasters have been withdrawing from BS digital radio and data broadcasting services one after another. There seem to be two major factors behind the reason why actual viewing of BS digital broadcasting is not spreading.

One of the factors is that BS digital broadcasting is an essentially free broadcasting service based on advertising revenues in the same way as terrestrial broadcasting, and that its capital has been provided by terrestrial broadcasting stations. For key commercial stations, the expansion of the BS digital broadcasting advertisement market means a decrease in advertising revenues from their principal terrestrial broadcasting service, unless the overall advertising market would be expanded.

The other factor is a mismatch between demand and supply involving comprehensive programming media. The idea of providing new comprehensive programming media covering all “news, drama and variety programs” in addition to those that have already been provided by NHK and five commercial stations under terrestrial broadcasting service goes against the trends of the times, which include the diversification of individual consumer needs and the emergence of various methods to collect information as represented by the Internet.

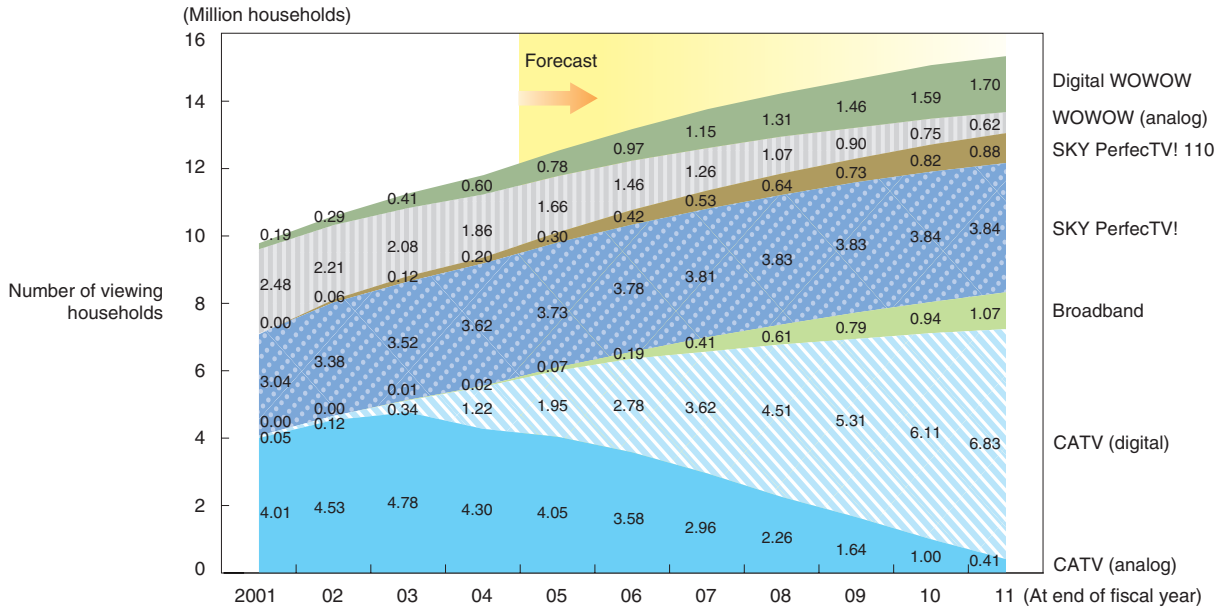
Unless these two issues are resolved, even if the receiving terminals are widely spread, it will not easily lead to actual program viewing, thereby making it difficult to generate profits.

Three services are provided through pay-per-view satellite broadcasting. They are WOWOW using a BS (2.40 million subscribers), SKY PerfecTV! using two communications satellites (CSs) launched into orbits of 124° and 128° east longitude (3.74 million subscribers) and SKY PerfecTV! 110 using a CS at 110° east longitude (290,000 subscribers). (The number of subscribers for all services is as of the end of December 2005.)

The future of these pay-per-view broadcasting services is also extremely harsh (Figure 1). Despite the fact that cable TV operators providing similar multi-channel services on a pay-per-view basis have been smoothly increasing their subscriber base, the growth of all satellite broadcasting services has been slowing down, as seen in the case of WOWOW where the number of registered subscribers decreased for the last three consecutive years.

This sharp contrast is attributable to the fact that pay-per-view satellite broadcasters are unable to provide consumers with newly added value, while major cable TV operators are making focused efforts on providing digital multi-channel services incorporating terrestrial digital broadcasting as a new appealing feature and triple-play services that offer broadcasting, telephone

Figure 1. Pay-Per-View Broadcasting Market Forecast



Note: CATV = cable television.

and broadband (high-speed, large-capacity line) services under a single contract. It is also true that under the current legal framework and business structure, satellite broadcasters face difficulties in narrowing the differences in competitive strength by providing equivalent or more appealing services as compared to cable TVs.

To overcome the anxiety about the future of satellite broadcasting, a business structure must be established to enable the provision of more attractive services by using satellite broadcasting. After relaxing the Principle of Excluding Multiple Ownership of Media, a BS digital broadcasting station should be made a 100-percent subsidiary of a key commercial station. Then, content produced by the key commercial station should be provided by both free terrestrial broadcasting based on advertising revenues and pay-per-view BS digital broadcasting. This idea is worth examining from the standpoint of minimizing the struggle for a single pie of advertising revenues and from the perspective of acquiring new revenue sources by meeting diversified consumer needs.

However, to prevent a resulting oligopoly in the broadcasting industry, measures encouraging the participation of new providers should be implemented at the same time.

IV Abolishment of Analog Broadcasting

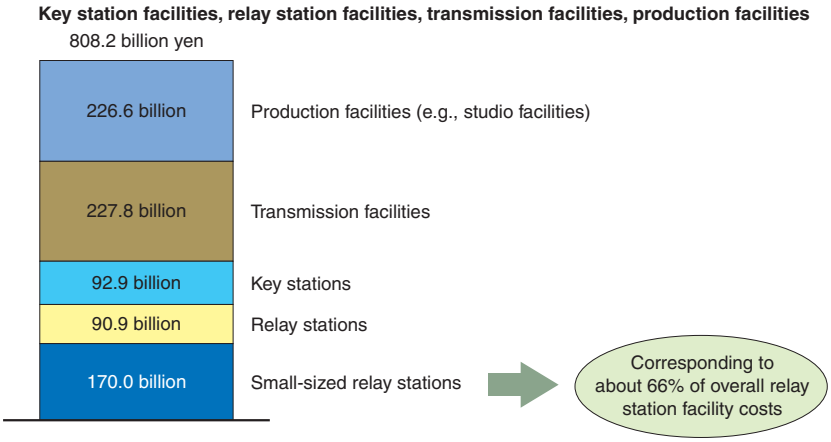
The terrestrial digital TV broadcasting started in 2003 is planned to completely replace terrestrial analog TV broadcasting as the basic means of broadcasting. While the government plans to abolish analog broadcasting by July 2011 after the spread of digital broadcasting, public recognition of such a plan is not very high. In 2005, activities to notify people of the end of analog broadcasting finally began. These activities include putting up posters and stickers on storefronts to attract the attention of analog TV set purchasers. However, completion of terrestrial analog TV broadcasting is considered extremely difficult to accomplish through these measures alone. There are two reasons for such difficulties:

- Several million households might be unable to receive digital broadcast signals because the necessary investments in digital broadcast facilities might not be made in time even if users have purchased digital TV sets.
- As of 2011, about 20 percent of households will be unable to view TV, and it will become impossible to view TV programs on about 50 percent of the TVs in use.

According to an estimate by the National Association of Commercial Broadcasters in Japan, total investments worth 581.6 billion yen are required in order to digitize the facilities of commercial broadcasting stations, including transmission facilities, key stations and relay stations (Figure 2). Terrestrial broadcast signals are transmitted from key stations installed in each prefecture (e.g., Tokyo Tower, Nagoya TV Tower). For areas where broadcast signals from key stations cannot be received, signals are delivered to individual households via relay stations.

While relay stations vary in size, key stations and large relay stations (548 stations in total) are said to cover approximately 90 percent of all households (Table 1). In order to cover the remaining 10 percent, small-sized stations (1,557 stations) must be installed. The investment in installing these small-sized stations

Figure 2. Capital Investment Required for Digitization by Commercial Broadcasters



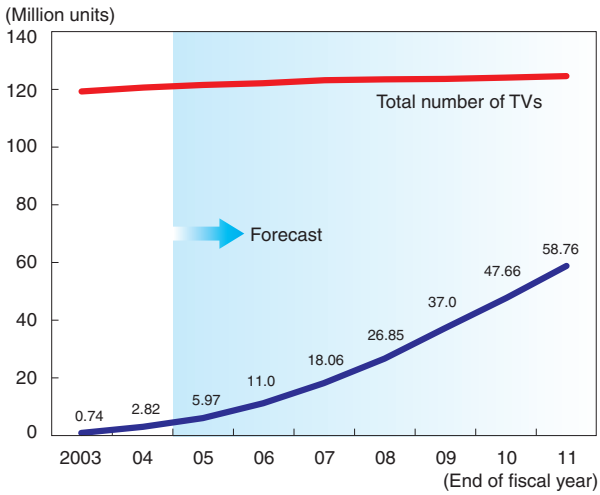
Note: The above figures are for a total of 127 commercial terrestrial TV broadcasters.
Source: Compiled based on a news release (September 2003) of the National Association of Commercial Broadcasters in Japan.

Table 1. Relay Station Development Plans

Year of opening	Key stations, large-sized stations	Small-sized stations	Total
2005	38	0	38
2006	79	0	79
2007	156	292	448
2008	176	372	548
2009	71	367	438
2010	9	314	323
2011	14	115	129
Other	5	97	102
Total	548	1,557	2,105

Notes: (1) Among stations to be opened in 2011 and in the Other row, there may be some stations that will be considered unnecessary depending on the situation of stations previously opened. (2) Prepared by a working group of the National Council for the Promotion of Terrestrial Digital Broadcasting.
Source: Information and Communications Council, "Effective Utilization of Terrestrial Digital Broadcasting and Role of the Government for Its Dissemination," 2nd Interim Report, July 2005.

Figure 3. Forecast of the Spread of Terrestrial Digital Broadcasting Receivers



accounts for about 66 percent of the total investment for the installation of all relay stations. Such an investment presents a major management issue, especially for small-sized commercial broadcasters. Several percentages of households are projected to be left out of such digitization in 2011.

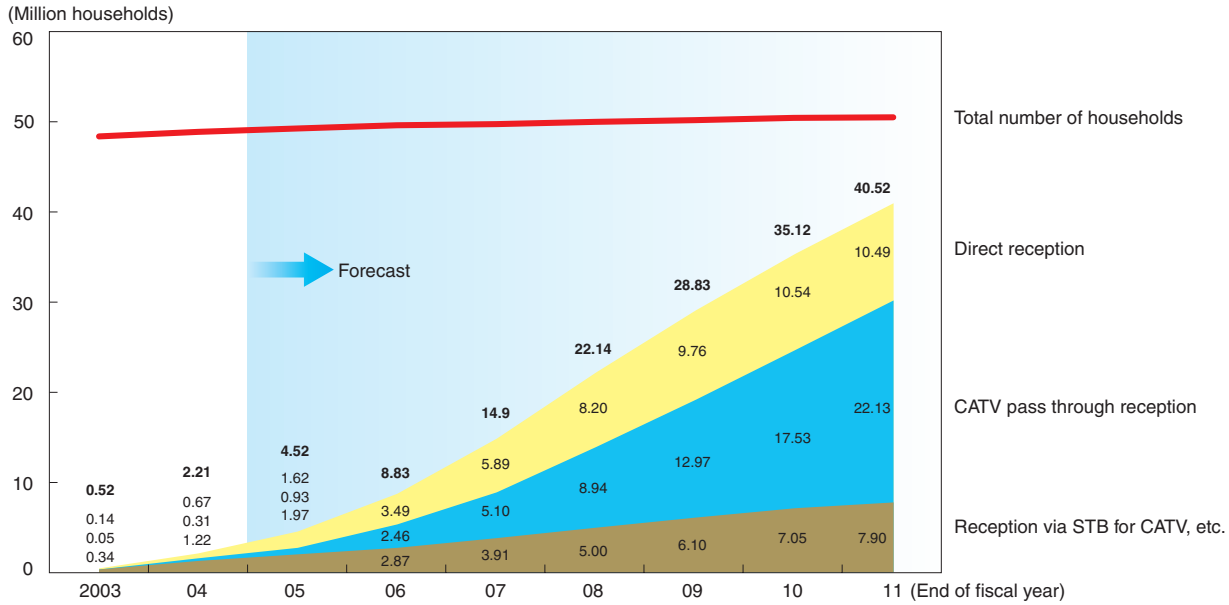
In the second interim report, issued on July 29, 2005, entitled "Effective Utilization of Terrestrial Digital Broadcasting and the Role of the Government for Its Dissemination," the Ministry of Internal Affairs and Communications requested that, during 2005, each broadcaster announce a road map for investment in relay station facilities. The ministry also announced its policy of promoting the retransmission of terrestrial digital broadcasting for areas with poor TV reception, mountainous regions, isolated islands, etc. by using IP multicast (data transmission to multiple parties by means of Internet technology) and CS technology.

To achieve the retransmission by employing IP multicast and CSs, experiments are now under way at NTT and other R&D organizations. Such activities as well as the promotion of alliances of broadcasters, shared use of broadcasting facilities and active cooperation with communications carriers etc. are expected to resolve the situation where some households might not receive terrestrial digital TV broadcasts.

However, another point of the spread of digital TV sets is less than optimistic. According to the forecast of Nomura Research Institute (NRI), if ordinary TV set replacement at the current pace is assumed, the number of terrestrial digital TV sets at the end of fiscal 2011 is projected to amount to 58.76 million units (65.89 million units if the number of digital cable STBs [set top boxes] is included). That number represents about 50 percent of the total number of TV sets currently in use (about 120 million units). The household penetration rate is projected to be 81 percent, which amounts to 40.52 million households (Figures 3 and 4).

Without a doubt, the present shipment of terrestrial digital TV receivers is increasing smoothly. Accelerated

Figure 4. Forecast of the Number of Households Receiving Terrestrial Digital Broadcasting



Notes: (1) Reception via STB for CATVs, etc: Households that subscribe to cable TV digital service and where digital STBs (set top boxes) are installed. (2) Pass through reception: Households receiving broadcast signals via cable TV that do not subscribe to pay-per-view service. (3) Direct reception: Households directly receiving broadcast signals by installing a UHF antenna.

by the successful sales of flat-panel-display TVs, the total shipments reached 6.65 million units as of the end of October 2005. In addition, a total of 1.88 million digital cable STBs were shipped during the same period. As such, the environment to receive terrestrial digital broadcasting at home has been developing steadily.

Nevertheless, according to a survey by the Japan Electronics and Information Technology Industries Association (JEITA), the ratio of terrestrial digital TV sets to all TV sets actually purchased is 51 percent on a shipment basis as of November 2005. This is because, although flat-panel-display TVs are selling well, only 50 percent of all TV sets shipped in May 2005 were flat panels, and cathode-ray tube (CRT) TVs still account for about 40 percent of all TVs sold. Most CRT TVs only support analog broadcasting and are not equipped with devices to receive terrestrial digital broadcasts.

As annual domestic sales of TV sets have been hovering around 8 – 11 million for more than ten years (sales in fiscal 2004 were 8.92 million units according to the survey by JEITA), it is difficult to imagine that TV replacement by consumers will be accelerated to any greater degree. Even if all TVs sold in the coming six years were digital, the total shipment would be 72 million units. Consequently, about 50 million analog TVs will remain. Even if digital cable TV devices were to be connected to these analog TVs, the total shipment of such devices is expected to be only about 6.83 million units.

This means that if we enter the year 2011 without taking measures to stimulate the market and to promote the spread of digital TVs, about 43 million TVs will suddenly become functionless boxes.

Furthermore, the way digital TVs are disseminated should also be considered. Because digital TVs are expensive, at first, most of these TVs will be purchased by relatively wealthy people and aficionados of digital devices. Accordingly, households owning digital TVs will be concentrated in a specific income bracket rather than uniformly distributed among all households.

NRI forecasts the household penetration rate of digital TVs by assuming an intermediate situation between the case in which digital TVs are introduced in an ordinary replacement cycle at each household and the case in which digital TVs are introduced totally at random. This forecast revealed that households owning one or more digital TVs at the end of fiscal 2011 would account for 77 percent of all households, or 38.9 million households. Because the number of households subscribing to digital cable TVs at the end of fiscal 2011 is projected to be 6.83 million, at least 4.50 million households would be unable to view TV.

There will be almost no measures that terrestrial broadcasters and digital TV manufacturers can take as part of their corporate efforts in order to promote purchases of digital TVs, and subscriptions to digital cable TV will take place in accordance with market principles. Even under such circumstances, if the government ceases analog broadcasting by 2011, it must promote the spread of digital broadcasting receivers by providing some support measures. Otherwise, thorough discussions must be made on a universal terrestrial broadcasting service (i.e., providing essential services for living anywhere in the country on an impartial and stable basis).

It is understandable that it is currently difficult to officially announce a review of the policy because such an announcement might impede progress in broadcasting digitization. Nevertheless, it is difficult to believe that

the situation will change for the better by deferring a decision on the issue. The government is hard pressed to make a decision on either of the following issues: explicitly presenting a path towards public benefits and industrial development by ceasing analog broadcasting in 2011 and showing more active incentives, or reviewing the overall picture of terrestrial signal digitization.

V Start of Broadcasting for Mobile Devices

"One-Seg" (one-segment broadcasting), which is terrestrial digital broadcasting for mobile devices, will start on April 1, 2006. This service will enable the viewing of terrestrial digital broadcasting currently viewed at home on mobile phones and car navigation systems even while moving. However, there are many issues to be resolved for One-Seg to be widely accepted by consumers.

The first major issue is the matter of reception areas. Because One-Seg service is broadcast to mobile phones and car navigation systems, it is principally for users going to an office or school, or driving a car for leisure, etc. For use on the way to an office or school, the service must be received at a subway platform or within a moving train. In a car, reception is required on expressways running through mountainous regions and around principal highways.

However, the existing infrastructure of terrestrial broadcasting has so far been developed for the principal purpose of viewing at home. Accordingly, priority has been given to covering households rather than people locations. To put it another way, it was not necessary to supply service to locations where there were no homes. This will also be true after the shifting of analog broadcasting to digital broadcasting. Underground and mountainous areas that must be covered under One-Seg are outside the reception areas covered by broadcasters because these areas have almost no "households."

When using existing car navigation systems to view terrestrial analog broadcasting, users have tolerated poor reception to some extent on the justification that broadcasting for households is being received while moving. However, the main benefit of One-Seg is that service is dedicated for mobile devices. This makes it essential to enable users to view their mobile devices at any time. At the initiative taken by the Ministry of Internal Affairs and Communications, discussions have already started among related broadcasters concerning reception in underground shopping areas and in subways. While service is slated to start in April 2006, verification tests are still being conducted. Required measures, such as those for mountainous roads, have yet to even be started.

The second issue concerns how to spread broadcast signal receivers. This issue is always a problem in making new broadcasting media a success. These days, most consumers carry mobile phones. In addition, portable digital music players as represented by the "iPod" have recently gained high popularity, and many consumers own such players. Under such circumstances, asking each consumer to buy an additional new terminal dedicated to broadcasting and taking up additional space in pockets and bags would encounter high resistance.

To promote the spread of terminals at a faster pace, including the receivers in new models of mobile phones, whose replacement cycle is now said to be about 18 months, and letting customers purchase the receivers according to their own renewal cycles is considered most effective. With respect to this scenario, a comparison between broadcasting services for mobile devices using satellites in Japan and Korea reveals some interesting findings.

In Japan, MobaHO!, a broadcasting service that uses a satellite, started to be offered in October 2004. This service is available only with a dedicated MobaHO! terminal. In Korea, a similar service is provided using the same satellite as that used for MobaHO!. SK Telecom, Korea's leading mobile phone company, has offered mobile phones with a built-in receiver for satellite mobile broadcasting since the beginning of such service. Other mobile telephone companies have been following suit.

While MobaHO! was able to acquire only several thousand subscribers even after one year of service, service in Korea acquired 300,000 subscribers in less than one year. Of course, from the long-term perspective, success cannot be achieved if appealing content is not provided. However, there is no doubt that a receiver built into a mobile phone will stimulate the spread of service initially and will provide a shortcut towards the growth of a subscriber base.

However, at this point, there is little incentive for Japanese mobile phone companies to actively deploy mobile phones offering One-Seg service. This is because neither the government nor the industry has clearly shown a scenario for revenue increases for mobile phone companies. If this situation remains, One-Seg might become a service that is used only by specific users.

In addition to terrestrial digital radio broadcasting, for which trial broadcasting has already been implemented and the commencement of full-scale broadcasting is planned for 2006, a variety of video distribution infrastructures for mobile devices is projected to emerge following the start of One-Seg. Because it would be unrealistic to expect that mobile phones will continue to support all emerging video distribution infrastructures, only one that could successfully work with mobile phone companies to ensure the expansion of revenue on both sides will be able to enjoy widespread use. In this sense, all video distribution infrastructures for mobile devices are still at the same level, which means they all have equal opportunities for success.

VI The Launching of the VOD Service Market

Recently, moves to offer VOD services have become active. Unlike ordinary broadcasting for which program scheduling is fixed, this video distribution service enables viewers to see video content at any time.

In the past, a great deal of expectation had been given to video distribution service as the killer content of broadband access services such as ADSL (asymmetric digital subscriber line) and FTTH (fiber to the home). Because of this, many communications carriers have provided this service, while expecting its popularization. Survey findings also reveal a high interest in such service. However, the number of actual users has been limited due to factors such as that Japan has, in the first place, little tendency to accept pay-per-view broadcasting because Japanese consumers can enjoy high quality content provided through terrestrial broadcasting free of charge, and that VOD is unable to offer excellent content.

A major factor for being unable to offer excellent content—although offering such content constitutes a vital element for VOD—is the need to obtain usage licenses from the owners of the broadcast rights. Unlike cable TV and CS broadcasting, VOD service is classified as interactive transmission. Furthermore, from the standpoint of protecting rights, Hollywood and terrestrial broadcasters often do not consent to providing content. Under these circumstances, while the number of providers that offered VOD service emerged one after another, the number of users did not increase.

Recently, however, the participation of broadcasters in the VOD business has accelerated at long last. This has been partially driven by a sense of crisis that has grown in view of the active participation of communications carriers in the broadcasting business (Table 2). It was NHK that made the first move. NHK started trial VOD service in July 2004 and full-scale distribution in July of the following year. NHK uses six VOD providers to offer its content such as the "NHK Special" and "Project X" programs.

In addition, Nippon Television Network is deploying VOD business in a more focused manner compared to other broadcasters. While others, including NHK, have confined their business to selling their programs to VOD providers, Nippon Television inaugurated a "Dai 2 Nippon TV (2nd Nippon TV)" website and is conducting its customer management by itself. Within less than a week, Dai 2 Nippon TV, which started service in October 2005, acquired 30,000 subscribers, which was the maximum number set for the initial stage. It is now offering additional subscriptions.

Although it is a fee-based VOD service, Dai 2 Nippon TV has also provided a system to award points to members for viewing banner advertisements or advertising video of a sponsor company. Major sponsors have already posted their advertisements on this website. Dai 2 Nippon TV deserves attention as a VOD service that can be provided only by a broadcaster that excels in persuading major sponsors to post advertisements.

While most VOD providers offer service on a fee basis, USEN provides GyaO, which offers all of its video content free of charge, and acquires revenues from advertising. GyaO began service in April 2005 and had 5 million registered users by December. This pace of user acquisition is amazing in view of the fee-based VOD providers who rack their brains for ways to acquire users. The possibility of new business can be seen in free VOD services.

Table 2. VOD Services Offered by Broadcasters

Broadcaster (service name)	Outline of business
NHK	• Trial service from July 2004 to June 2005; full-scale distribution starting in July 2005 • Now provides more than 200 programs such as "NHK Special" and "Project X" to about 100,000 households subscribing to six VOD providers (BB Cable TV, Jupiter Telecommunications (J:COM), KDDI, NEO Index, Plala Networks and NTT Communications)
Fuji Television (Fuji TV On Demand)	• Started distribution of moving pictures in July 2005 for TVs connected to PCs and/or STBs • Distributes programs produced for CS broadcasting
Nippon Television Network (Dai 2 Nippon TV)	• Opened a membership distribution site for PCs in October 2005 • Now principally distributes variety programs produced in the past for terrestrial broadcasting; plans to prepare new programs exclusively for the Internet in the future • Aims at acquiring more than 1 million members within one year and achieving sales amounting to more than 10 billion yen within three years
TBS (TBS BooBo BOX)	• Distributes programs, for which performers' consent was obtained among music programs and dramas used for CS broadcasting, via the Internet to PCs and cable TV STBs • Trial broadcasting of several dozen programs in 2005; full-scale deployment in 2006

Notes: CS = communications satellite, VOD = video on demand.

However, because the costs of procuring content have piled up, GyaO, as a business, is currently suffering a deficit. The factors behind the deficit include the need for large expenditures to procure content to retain users, and the fact that it takes time to obtain the understanding of sponsors about the value of advertising.

With the full-scale participation of broadcasters and the emergence of new business models, the increase of the number of VOD service users has become clear to some extent. The VOD service market will finally take off in 2006. However, the path towards securing profits is still somewhat distant, and it would be difficult for all providers to continue service. In 2010, only those providers that have resources to continue offering good quality content even without generating profits and those that can convince sponsors about the effects of advertising will survive and acquire reasonable profits.

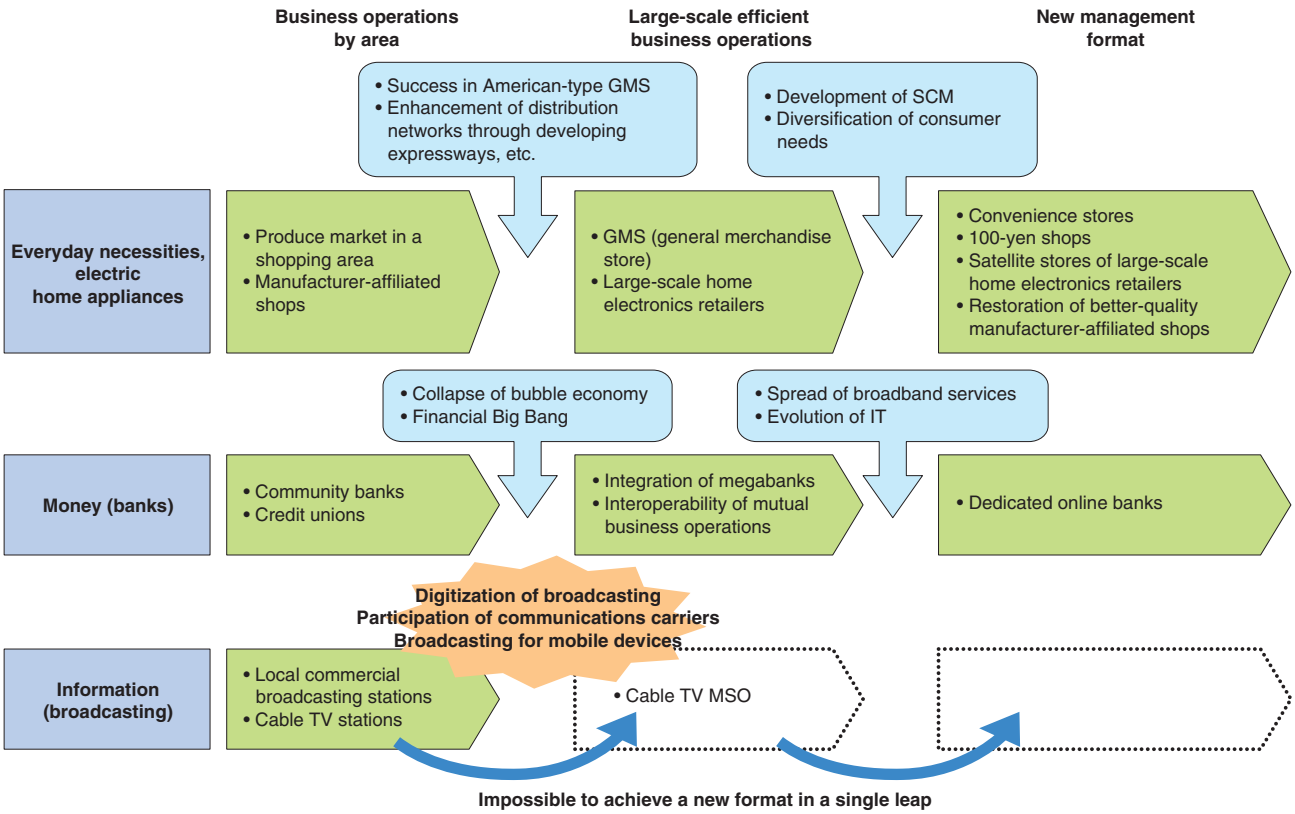
VII Predicting the Future from the History of Industrial Development and the Media

It is extremely difficult to resolve any of the issues mentioned above without reforming the current regulatory framework, common sense and the mindset (a way of looking at things) currently prevailing in the broadcasting industry under such a framework. The broadcasting industry should learn the history of the development of other industries as well as the history of media in a broader sense including the broadcasting industry under such a situation (Figure 5).

Although this is a somewhat rough hypothesis, if the broadcasting industry could fall under the distribution industry in which information is selected and smoothly delivered to consumers, much could be learned from the past development of this industry. Companies providing existing services at lower prices as enabled by deregulation and technological innovations appeared in the industry consisting of distributors covering individual service areas. These companies pursued efficient business operations through the expansion of scale, and promoted alliances among other companies and established nationwide coverage. After expanding in scale and improving efficiency to some extent, companies that achieve such differentiation measures will come to the fore, focusing on smaller cells as service areas and offering one-to-one services in an effort to meet diversified consumer needs.

If the distribution of everyday necessities such as groceries is used as an example, small stores located in a community shopping center once played a central role in distribution. With the expansion of consumer needs during the period of economic growth and the development of transportation technology and infrastructure,

Figure 5. Changes in Management Format of the Distribution Industry



Notes: IT = information technology, MSO = multiple systems operators, SCM = supply chain management.

all-inclusive supermarkets with nationwide coverage such as Daiei started to play the leading role. However, such supermarkets that were once in full flourish have become unable to identify consumer needs effectively in view of the emergence of convenience stores that have achieved improved business efficiency in smaller cells and category killer retail stores that focus on specific fields.

In the financial industry, after deregulation and the collapse of the bubble economy, on the one hand, megabanks pursuing the achievement of overwhelming scale emerged. On the other hand, dedicated online banks and financial service companies specializing in customers in a specific segment have been expanding their businesses.

The history of the development of the broadcasting industry can be described as the history of a battle against a conventional way of thinking and common sense. Broadcasting had always been positioned second as compared to movies and newspapers in the media industry. In the midst of such an environment, the broadcasting industry has increased its presence by improving its ability to produce attractive content and by investing in infrastructure. Because of these efforts, broadcasting has been able to reach a stage known as the king of media and now enjoys high profitability. In contrast, movies and newspapers, which continued to believe that they ranked as the best and thought lightly of others as second-ranked media, have been following a waning path.

Now, the broadcasting industry is also maturing. With the emergence of new media such as the Internet, broadcasters beset with conventional common sense and afraid of dealing with change will face one of the inevitabilities of history and gradually travel on a waning path.

Of course, the special situation inherent in the broadcasting industry must be considered. However, such consideration is not necessarily for the improvement of management efficiency through pursuing the economies of scale and accelerated investments in new business models. Management and others concerned with the broadcasting industry should keep in mind that sticking to the special attributes of broadcasting would likely sacrifice the profitability of individual broadcasters and the overall broadcasting industry in the future.

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