



Asia-Pacific Telecommunity

**APT REPORT
ON
THE KOREAN IPTV MARKET AND REGULATION SYSTEM**

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1. Advent and Provision of IPTV in Korea

1) Advent of IPTV

The advent of IPTV was made possible by the convergence of broadcasting and telecommunications. The three factors that contributed to the advent of IPTV were digitalization, i.e., the convergence of broadcasting and telecommunications through broadband networks; DMB (Digital Multimedia Broadcasting), which is provided on portable terminals through broadcasting networks; and the provision of broadcasting services on TVs via high-speed internet networks.

In Korea, laws have been established for the commencement of the IPTV service. When such IPTV laws were being established, conflicting opinions were voiced in regard to the regulation of IPTV - the definitions of broadcasting services and convergence services were blurred by IPTV, and while some believed that IPTV should be regulated in accordance with the broadcasting law, others believed that a new law should be established for the regulation of IPTV. In the end, Internet Multimedia Broadcasting business act (hereinafter referred to as the IPTV Act) was passed by the National Assembly on December 28, 2007 (promulgated January 17, 2008; enforced April 18, 2008). On August 12, 2008, the Enforcement Decree of the IPTV Act was established and promulgated before being enforced on August 26 of the same year. Between August 28 and 29, 2008, IPTV business applications were submitted and, on September 24 of the same year, IPTV business commenced following the issuance of IPTV business permits to KT, Hanaro Telecom (now SK Broadband), and LG Dacom (now LG U+).

2) Provision of the IPTV Service

The provision of the IPTV service in Korea can be examined in terms of pre-IPTV and real-time IPTV.

The VoD-based pre-IPTV was provided first by Hanaro Telecom (now SK Broadband) as Hana TV in July 2006. The other service providers followed suit with Mega TV (KT) in July 2007 and myLGtv (LG Dacom) in December 2007.

Subsequently, KT became the first to provide the IPTV service, including real-time broadcasting, on November 17, 2008 before the others did likewise on January 1, 2009 (LG Dacom) and January 12, 2009 (SK Broadband).

A summary of the reorganization of the three service providers is as follows: ① In June 2009, KT launched Qook brand and integrated the wireline consumer services under the single brand. The brand Mega TV was changed to Qook TV. In December 2010, Qook(for wireline services) and Show(for wireless services) were combined into Olleh. ② Hanaro Telecom was renamed as SK Broadband in September 2008 and its service name was also changed from Hana TV to broad&tv, and then again to Btv in April 2010. ③ In June 2010, LG Dacom merged LG Telecom, LG Dacom and Powercom to found LG U+. Consequently, myLGtv was changed to LG U+ TV.

2. Overview of the Korean IPTV Market and Service Evolution

1) Overview of Subscribers

As of December 20, 2010, there were 3.6 million IPTV subscribers, of whom 600,000 were pre-IPTV subscribers who only used the VoD service, and 3 million were full IPTV subscribers provided with real-time channels (Korea Digital Media Industry Association, December 20, 2010). While the number of pre-IPTV subscribers has decreased by 6% since December 2009, the number of real-time IPTV subscribers has increased by 72%. The number of real-time IPTV subscribers has been increasing continuously since surpassing the number of pre-IPTV subscribers in October 2009. By service provider, the number of real-time IPTV subscribers exceeded the number of pre-IPTV subscribers in September 2009 (KT), January 2010 (SK

Broadband), and April 2009 (LG U+). An analysis of IPTV market shares attributed 57% to KT, 26% to SK Broadband and 17% to LG U+; when considering real-time IPTV subscribers only, 56% was attributed to KT while 24% and 20% were attributed to SK Broadband and LG U+, respectively.

IPTV subscribers account for 21% of all high-speed internet subscribers. As IPTV is based on the high-speed internet, the IPTV market is expected to expand.

2) Market Outlook and Performance

It is expected that the number of Korean IPTV subscribers will increase continuously to reach a total of 6.4 million by 2013, of whom 4.4 million will likely be real-time IPTV subscribers (2010 IPTV Market Trends: with a Focus on Qook TV, Nasmedia). Also, according to an outlook presented by ETRI based on the number of real-time IPTV subscribers in 2009, the number of IPTV subscribers will reach somewhere between 4.9 million (realistic figure) and 6.5 million (ideal figure) in 2013.

<Outlook on Korean IPTV Subscribers: 2009-2014>

(Unit: 1 household)	2009	2010	2011	2012	2013	2014	CAGR (2010-14)
Ideal	1,741,455 ¹⁾	2,833,274	4,159,567	5,460,709	6,494,824	7,187,662	26.2%
Realistic		2,517,803	3,378,652	4,199,656	4,877,310	5,373,034	20.9%

Source: Economic Analysis Research Team, Technology Strategy Research Division, ETRI, 2010.

1) Actual figure at the end of 2009

In Korea, the number of IPTV subscribers reached one million in the shortest period of time (9 months) in comparison to France (2.5 years) and Hong Kong (5 years). IPTV is also the pay-TV service that acquired 3 million subscribers in the shortest period of time in Korea. While IPTV (real-time) acquired 3 million subscribers in one year and eleven months, analogue cable TV and digital cable TV took six years and five years and three months, respectively.

<Key New Media Subscribers Acquisition Time>

	Launched	One million	Time	Two million	Time	Three million	Time
IPTV (real-time)	Jan. 2009	Oct. 2009	9 months	Apr. 2010	1 year 5 months	Dec. 2010	1 year 11 months

Cable TV (analogue)	Mar. 1995	Jul. 1999	4 years 4 months	May 2000	5 years 2 months	Mar. 2001	6 years
Cable TV (digital)	Feb. 2005	Feb. 2008	3 years	Feb. 2009	4 years	May 2010	5 years 3 months
Satellite TV	Mar. 2002	Nov. 2003	1 year 9 months	Feb. 2007	5 years	2.83 million as of Oct. 2010	
Satellite DMB	May 2005	Dec. 2006	1 year 8 months	Jun. 2009	4 years 1 month	1.91 million as of late 2010	

Source: Korea Digital Media industry Association, December 20, 2010

3) Evolution of IPTV Service

The IPTV service is expected to evolve in three directions in the future.

First, the IPTV service will become open, - an open IPTV platform will be provided through open IPTV strategies. Web and mobile services including a TV app store and SNS will be incorporated into IPTV to take it to another level. Provision of an open API is expected to encourage user participation in content and application development and enable the profits to be shared. Accordingly, KT commenced an open IPTV service in February 2010 and SK Broadband announced its plan for B Store, a TV app store.

Second, the IPTV service will become interactive - IPTV users will have a new experience through the provision of an interactive service that allows their input while viewing real-time channels. A variety of interactive services differentiated from conventional TV will provide viewers with a new experience (multi-ending, multi-angle, video phone, widgets, open CUG, etc.). To that end, the Korea Communications Commission has been supporting the production of interactive contents since 2009 to promote interactive services, and the interactive contents thus produced are being broadcast on IPTV and cable TV.

Lastly, N-Screen technology will be incorporated into the IPTV service - OSMU-based N-Screen contents that can be used on terminals other than IPTV terminals, such as smartphones and PCs, are expected to be developed. IPTV service providers are working to provide the N-Screen service in conjunction with the cloud service they are already providing. In February 2011, KT commenced the Olleh TV U-Cloud channel service, which enables multimedia data to be used on smartphones, iPads and IPTVs. In January 2011, SKT entered into a partnership with Samsung and commenced Hoppin, an N-Screen service that gives users access to 3,500 contents (paid and free of charge) on smartphones, PCs, tablet PCs and TVs through its Galaxy S Hoppin terminal. In November 2010, LG U+ released U+ TV Smart 7, an IPTV with an enhanced smart TV function that allows users to access U+ TV contents (videos, photos, music, documents, etc) on smartphones, PCs and IPTVs.

3. Overview of Korea's IPTV Laws

1) Outline

IPTV in Korea is regulated in accordance with the IPTV Act and the Enforcement Decree of the IPTV Act. After being passed on December 28, 2007, the IPTV Act served as the legal basis for the commencement of the

IPTV service. At this juncture, the IPTV Act is both an expiring law and a special law that takes precedence, in terms of its application, over other broadcasting laws.

Although there have been disputes regarding the nature of the IPTV service as it is provided in an IP format through a communications network, unlike the conventional broadcasting service, the establishment of the IPTV Act rendered IPTV a recognized area of broadcasting. The IPTV Act defines "Internet multimedia broadcasting" is a broadcasting that offers various contents such as data, visual image, audio, electronic transaction including real time broadcasting programs to users through a television monitor securing a certain quality of service in a two-way communication internet protocol type by using broadband integrated information communication network.

2) Key Points of the IPTV Act

The key points of the IPTV Act can be examined from ten aspects including service provider categorization, business scopes, and business periods.

① From the aspects of business and service provider categorization, the IPTV Act categorizes IPTV business into Internet multimedia broadcasting offering business and Internet multimedia broadcasting contents business. ② From the aspect of business scope, IPTV business activities can take the whole nation unless exceptions are made at the request from small and medium company owner or as approved by the Korea Communications Commission. ③ From the aspect of permitted business periods and restrictions on business activities, IPTV service business is permitted to operate for five years at a time, and IPTV content business is permitted based on reports, registrations and approvals. IPTV content businesses eligible for approval include reporting, general formation and home shopping channels. ④ From the aspect of multiple-business operation, IPTV service provider cannot manage a broadcasting channel using business exceeding 1/5 of each total business unit for television broadcasting channel usage business and radio broadcasting channel usage business and data broadcasting channel usage business. ⑤ From the aspect of efficient competition system and fair competition environment, regulations are in place to avoid the dominating force of other business not to transfer into the internet multi-media broadcasting offering business, installation and organization of competition evaluating committee and to prevent illegal activities by IPTV businesses. ⑥ From the aspect of limitation of market share, IPTV service provider cannot exceed 1/3 of the household on rates including the internet multimedia broadcasting, general cable broadcasting, satellite Broadcasting for each broadcasting region stated by the Korea Communications Commission. ⑦ From the aspect of provision of equal access to telecommunications facilities, here is an access or request of usage for the electric communication facility needed in offering service from the IPTV service provider, you cannot decline this without a rational and adequate reason such as lack of own facility and protection of sales confidential facts. Also, without a rational and adequate reason, the IPTV service provider cannot stop or limit the usage of own facility which is used by other the IPTV service provider. Moreover, the IPTV service provider should not offer its own facility at a disadvantaged terms to the other IPTV service provider. ⑧ From the aspect of provision of equal access of contents, when the broadcasting program offered by the IPTV contents provider (reported and registered and approved by article 18 paragraph 2 of IPTV Act) is notified by the Broadcasting and the Communication Committee according to the presidential rule standard, it should be offered without discrimination at a fair and rational price to the IPTV service provider. When the major broadcasting programs are notified, the Broadcasting and the Communication Committee should hear out the views of Minister of Culture, Sports and Tourism and broadcasting operator and TV watchers. ⑨ From the aspect of regulation of terms and rate, terms of use must be reported and costs of use must be approved by the Korea Communications Commission (which must also be notified of the evidence of the fee including the admission fee, basic fee, using rate, additional service fee and other fees). ⑩ From the aspect of adherence to real time broadcasting program laws, the cable TV business regulations stipulated in the broadcasting laws must be applied to any censorship of real-time broadcasting program contents, formation of program, channel formation/operation, advertising and re-transfer.

4. IPTV Policy Issues in Korea

1) Approval of Business

The main issue concerning the approval of business permits is the absence of a basis for mobile IPTV service provision.

A look at the existing legal system related to the basis for mobile IPTV service provision shows that while mobile IPTV overcomes the limits of the fixed IPTV service and functions as a catalyst of IPTV service evolution, there is no legal basis for mobile IPTV service provision. The definition of a broadband integrated information communication network used for the provision of the IPTV service as given in Paragraph 1 of Article 2 of the IPTV Act excludes the electric communication line facility that is used in services that utilizes frequency in order to secure terminal communication business. As such, IPTV that uses a mobile communications network was excluded from the definition of IPTV at the time of the establishment of the IPTV Act. This is because the technology required for the mobile IPTV service was not available at the time and also because a definite boundary between DMB and mobile IPTV was required.

There are two issues related to the absence of a basis for mobile IPTV service provision. The first issue is that the sources of the services that can be provided are rendered exclusive by technological development, leading to an increased likelihood that the development of the related industries and the convergent industry as a whole will be impeded. Mobile IPTV also requires a change in policies and the legal system, and a time lag is expected between the market and the mobile IPTV policies created. The second issue is that the imposition of a time limit on the commencement of the nationwide service has a negative effect when considering the requirements of mobile IPTV service provision, such as platforms and network contents. More specifically, measures to minimize the quality variables of mobile networks are required, and when the time required for facility investments to be made in order to commence the nationwide service is taken into consideration, the imposition of a time limit on the commencement of the nationwide service is likely to cause service inadequacies that could undermine the entire IPTV industry. (Article 6 of the IPTV Act and Article 5 of the Enforcement Decree of the IPTV Act stipulate that businesses granted an IPTV business permit must commence nationwide service within 3 years.)

The following improvements must be made to address the issue of the absence of a basis for mobile IPTV service provision. First, the exclusion of mobile IPTV from the definition of IPTV (Article 2 of the IPTV Act) must be reversed to enable the provision of new services made available with the evolution of IPTV technology, such as mobile IPTV and IPTV 2.0. Second, approved IPTV service providers seeking to provide mobile IPTV services must be provided with a simple permit-acquisition process that requires only the submission of a business plan and a facility plan. Third, the time limit on the commencement of a nationwide service must be set reasonably based on the actual time required for facility investments to be made to enable such a service. Fourth, to accommodate the combination of mobile IPTV platforms and networks, mobile IPTV service providers must be allowed to refuse the provision of mobile IPTV service on its own. Lastly, IPTV contents providers seeking to provide contents on mobile IPTV should not be subject to additional administrative procedures.

2) Fair Competition

The two main issues concerning fair competition are excessive fee regulation and regional market share restriction.

First, the legal system behind the excessive fee regulation forces The IPTV service provider should set the rate and using terms of the service report to the Korean Communications Commission (Paragraph 1 of Article 15 of the IPTV Act). Also, IPTV service providers can be charged a fine of up to 2% of their sales amount if prohibited activities, such as the demand for extra fees in addition to what is stipulated in the user contract and unjustified user discrimination, take place (Paragraph 2 of Article 17 of the IPTV Act).

There are four issues related to excessive fee regulation. The first issue is that IPTV service fee regulation is excessive in comparison with other laws such as the Telecommunications Business Act. While the Telecommunications Business Act stipulates that a fee approval only needs to be obtained by common carriers with the potential to take advantage of their market dominance (Paragraph 2 of Article 19 of the Enforcement Regulations of Telecommunications Business Act), the IPTV Act stipulates that a fee approval must be

obtained by all service providers including those without market dominance. The second issue is that even though the same fee approval requirements are imposed on providers of both purchasable and free services, there is an issue of regulatory fairness because the modus operandi of purchasable and free service providers differ. While IPTV users are charged a fee exactly as stipulated in the terms of use, fees that are approved and imposed on cable TV users can be reduced freely by the service provider. More specifically, cable TV service providers have leeway in fee setting, which is utilized to maintain market dominance by the lowering of fees (through group contracts, etc), whereas IPTV service providers face a tremendous challenge in flexibly adapting to market changes as any change in the approved fee must be approved before being imposed on users. The third issue is fee regulation based on the number of channels, which can lead to such side effects as a decrease in channel quality. Because broadcast service fees are inherently determined based on the cost, quality and popularity of the channels rather than on the number of channels, fee-setting based on the number of channels tends to lead to an increased number of low-cost and low-quality channels that are not popular. Lastly, mandatory fee approval does not allow service providers to freely engage in fee competition and users are unlikely to experience fee reductions. In the long run, the release of product packages is obstructed and users are left with a limited choice as consumers since a wide variety of products cannot be offered.

The following two improvements must be made to address the issue of excessive fee regulation. The first improvement consists in granting IPTV service providers the freedom to set fees within a range that is not detrimental to sound market development. However, appropriate guidelines must be established to prevent fee-setting that is disadvantageous to users and to prevent service providers from taking advantage of their market dominance. The other improvement consists in abolishing mandatory fee change approval or in reducing the range of service providers that must obtain fee change approval to include only those with the potential to take advantage of market dominance. Another benefit to be reaped from abolishing mandatory fee approval by service providers unlikely to take advantage of market dominance is a reduction of the heavy regulatory costs that arise as changes in every fee, even small ones, must be processed for approval.

The second main issue in respect of fair competition is regional market share restriction. The current legal system prohibits IPTV service provider that exceeds 1/3 of the household on rates including the internet multimedia broadcasting, general cable broadcasting, satellite broadcasting for each broadcasting region stated by the Korea Communications Commission (Paragraph 1 of Article 13 of the IPTV Act). While it is not illegal for a single IPTV service provider to maintain a customer base that exceeds one-third of Korea's entire purchasable broadcast service subscribing population, a customer base that exceeds one-third of the purchasable broadcast service subscribing population of a region must be cut back.

There are three issues related to regional market share restriction. The first issue is that regional market share restriction brings about user discrimination. As the maximum number of subscribers a single IPTV service provider can acquire is approximately five million, an IPTV service provider with more than five million high-speed internet subscribers is unable to provide all of its high-speed internet subscribers with a high-speed internet/IPTV package. The second issue is that the regional market share restriction¹ imposed on IPTV service providers is unfair when considering the mitigated market share restriction imposed on cable TV service providers. Unlike IPTV service providers, market share restriction on cable TV service providers is applied on a national scale, allowing them to acquire a 100% market share in a single region. In this respect, IPTV service providers face a limit in terms of market expansion. The last issue is that regional market share restriction also

¹ An amendment of the Broadcasting Act Enforcement Decree in December 2008 changed market share restriction on cable TV service providers from being sales-oriented to subscriber-oriented (less than one-third of all subscribers) and the number of broadcasting regions in which a cable TV service provider can provide service was changed from one-fifth to one-third of all regions in Korea. Accordingly, cable TV service providers have become able to service a maximum of 25 regions and more than 4.5 million subscribers and the purchasable broadcast service market is being reorganized to become centered around large MSOs as exemplified in the case of the M&A of Qrix by T-Broad in February 2009.

poses an obstacle to organizational reform aimed at sound market development and M&As for enhanced business efficiency. If an IPTV service provider seeks to merge with a regional cable TV service provider, such an M&A is unlikely to come to fruition, despite being perfectly legal, due to the regional market share restriction. On the other hand, a cable TV service provider can merge with another cable TV service provider even if its regional market share exceeds the one-third mark. There is also no restriction on the M&A of major carriers by cable TV service providers.

Thus IPTV market share restriction must be changed so as to enable its application nationally instead of regionally in order to restrict IPTV service providers to a customer base equal to one-third of the entire purchasable broadcast service subscribing population of Korea as opposed to individual regions.

3) Content Demand/Supply

The two main issues as regards content demand/supply are equal access to contents and terrestrial retransmission.

The first issue concerns the fact that the clause on equal access to contents stipulated in the IPTV Act forces IPTV PPs to provide IPTV service providers with key broadcast programs at a reasonable price and indiscriminately. "Equal access to contents" refers to the indiscriminate provision by a PP of broadcast contents to purchasable broadcast service providers seeking such broadcast contents at a fair price.

There are three issues related to equal access to contents. First, unfair trading of contents can hinder the promotion of IPTV. Non-provision of contents to IPTV service providers by PPs² makes it difficult to form competitive channel packages, while excessive pricing places a financial burden on IPTV service providers. Second, no sufficient guidelines are in place to determine what programs should be provided to which IPTV service providers mandatorily. While the Broadcasting Act stipulates "programs featuring events of national interest" as contents to which equal access must be provided, the IPTV Act sets a much broader range by stipulating "key broadcast programs" as contents to which equal access must be provided. Also, while the selection of mandatorily provided programs is performed in accordance with the subordinate laws, the absence of directly applicable guidelines renders the objective selection of "key broadcast programs" difficult. Lastly, the clause on equal access to contents found in the IPTV Act cannot be applied to a PP that does not register as an IPTV service provider in order to avoid being subject to the clause. What this means is that the issue of unfair trade in the purchasable broadcast service market cannot be solved by granting the right of equal access to contents only to service providers in the IPTV market.

The following five improvements must be made to address the issue of equal access to contents. First, contents to which equal access is to be granted must be clearly specified - not as individual programs but as channels.³ This is the optimum measure to pursue given that IPTV service providers cannot directly operate the channels they use and do not have the right to make changes in the content and organization of real-time broadcast programs. Second, in addition to granting the right of equal access to channel contents produced by MSP affiliates, a uniform pricing system must be applied to such contents. Such a uniform pricing system will set a single fixed price for each content irrespective of the media it is broadcast through. Third, the registration/approval system applied to IPTV contents providers must be improved to allow PPs that are already registered or approved in accordance with the Broadcasting Act to provide contents to IPTV service providers without having to go through additional procedures. Fourth, suspension of content access must be applied when necessary as an administrative punishment when IPTV contents providers fail to adhere to the Korea

² In 2008, when IPTV commercialization was being actively discussed, On Media clarified its stance on the non-provision of contents to IPTV service providers (ET News, April 2, 2008), and the cable TV industry reviewed divesting PPs engaging in the IPTV business of their channel use rights or imposing various disadvantages on them, such as the allocation of user-unfriendly channels (Hankook Ilbo, April 9, 2008).

³ At a forum held at the New Broadcasting Telecommunication Center on April 29, 2009, Chief of the Convergence Policy Division No-ik Park stated that as a channel is defined as a unit of real-time broadcast programs provided by internet multimedia broadcasting offering operators in Paragraph 3 of Article 21 of the IPTV Act, it would only be consistent to handle key programs in units of channels.

Communications Commission's regulations. Lastly, entering a clause on equal access to contents in the Broadcasting Act could be considered, as the equal-content-access system stipulated by the IPTV Act has certain weaknesses (i.e., there is a limit to the legal force that can be applied to provide equal access to contents in reality), including the issue of fairness as it is only applied to IPTV businesses.

The second main issue with regard to content demand/supply is terrestrial retransmission. The mandatory duty of retransmission is imposed on KBS1 and EBS with no compensation. Purchasable broadcast service providers (SO, SkyLife and IPTV), with the exception of satellite DMB service providers, have a "must-carry" duty (Paragraphs 1 to 4 of Article 78 of the Broadcasting Act, Paragraph 2 of Article 78 of the Broadcasting Act, and Paragraph 4 of Article 21 of the IPTV Act), and their exemption from simultaneous relay broadcasting right makes re-transmission negotiation and compensation unnecessary. Also, there is no legal basis for re-transmission by KBS2, MBC and SBS, and decisions to execute re-transmissions are made through negotiation between service providers.

There are three issues related to terrestrial re-transmission. First, discussions on terrestrial re-transmission based on the interests of service providers have resulted in the consumers - that's to say, the viewers - from being completely neglected in such discussions. Terrestrial re-transmission discussions only really take place to serve the interests of service providers as they are limited to addressing the issue of terrestrial broadcasting access by broadcasters with a focus on broadcasting regions (re-transmission outside of set regions) and compensation for contents. Second, re-transmission policies fail to address digital broadcasting re-transmission, to define the subject and range of mandatory re-transmission, and to mediate terrestrial re-transmission disputes. The public channels for mandatory re-transmission were KBS1, KBS2, MBC and EBS in 1996 when the cable TV service commenced. Subsequently, their number was reduced following the exclusion of MBC in 2000 (Broadcasting Act) and KBS2 in 2002 (Korea Communications Commission), while re-transmission regulations are now applied ambiguously to public channels, religious channels, news channels and 24-hour news channels. Lastly, the existing law has limitations in terms of its ability to solve the gradually worsening issue of terrestrial re-transmission. The lack of regulations on re-transmission by terrestrial broadcasters other than KBS1 and EBS is causing compensation disputes between purchasable broadcast service providers and terrestrial broadcasters to lead to lawsuits.

The following three improvements must be made to address the issue of terrestrial retransmission. First, a universal right to view must be established to protect the rights and interests of the viewers. Viewers must be guaranteed the right to view terrestrial broadcast programs by inserting a pertinent clause into the Broadcasting Act, and broadcasters must be assessed on how well they accommodate the viewer's universal right to view. Second, terrestrial broadcasters with a national network must be set universal broadcast service providers to guarantee broadcasting diversity and the viewer's right to view. Overseas, various measures have been implemented to guarantee access to terrestrial broadcasting so as to ensure the diversity of and publicity for broadcasting. For example, the EU regulates the re-transmission of terrestrial broadcasting through the Universal Service Directive, whereas the US allows terrestrial broadcasters to choose from the two options of must-carry or re-transmission consent to maintain a universal service and ensure the re-transmission of terrestrial broadcasting. Lastly, the successful implementation of a functional terrestrial re-transmission system must be guaranteed by establishing guidelines on re-transmission and compensation, and by settling disputes related to mandatory re-transmission through mediation by the Broadcast Dispute Conciliation Committee. In Europe, copyright laws, broadcasting laws and terrestrial broadcasting regulations stipulate that no compensation for retransmission can be claimed (Scheuer & Schweda, 2008). If compensation is in order, the standards to be applied to the calculation of compensation must be clearly specified (Ofcom, 2009). In Japan, if a cable TV service provider and a terrestrial broadcaster cannot come to an agreement over re-transmission, the Minister of Internal Affairs and Communications can exact a semi-coerced re-transmission agreement from them.

4) Promotion of New Services

The two main issues concerning the promotion of new services are direct channel operation and synchronized data broadcasting.

While the system of direct channel operation allows cable TV, satellite TV and DMB service providers regulated by the Broadcasting Act to engage in direct channel operation, the current IPTV Act prohibits

direction channel operation by IPTV service provider. "Directly operated channels" refers to broadcasting channels directly operated by purchasable broadcast service providers. Of the purchasable broadcast service providers, satellite broadcast service providers (including satellite DMB service providers) can directly operate 10% of their total TV and radio broadcasting channels (one if there are fewer than ten TV/radio broadcasting channels) and 30% of their total data broadcasting channels (one if there are fewer than three data broadcasting channels). Cable TV service providers can have three directly operated channels and, if the total number of a cable TV service provider is over 100, the same regulation as is applied to satellite broadcast service providers can be applied. In short, broadcast service providers can directly operate 10% of their total number of channels. However, DMB service providers cannot directly operate more than three channels, including any channels leased to special affiliates. (Up to four channels are allowed if a data broadcasting channel is included.)

There are two issues related to direct channel operation. The first issue concerns the unfairness of prohibiting direct channel operation by IPTV service providers when it is permitted to all other purchasable broadcast service providers. Permitting purchasable broadcast service providers to operate channels without a registration procedure can be construed as recognition of the need for direct channel operation by purchasable broadcast service providers. Thus, it would only be fair to recognize that IPTV service providers have the same need. The other issue related to direct channel operation concerns the fact that the application of different laws in the purchasable broadcast service market - a single market - according to technological categorization runs counter to the global trend towards comprehensive and simplified regulation. This issue leads to further segmented regulation rather than simplified regulation.

The following three improvements must be made to address the issue of direct channel operation. First, regulation must remain technologically neutral. That is to say that rather than encouraging a single technology, technological progress must be pursued through technological competition achieved by the coexistence of diverse technologies. The difference between IPTV and cable TV is the difference in the technology used to provide contents on the purchasable broadcast service market. Comprehensive regulation must take place so that more efficient technology can be created through technological competition. Second, a clear definition and an operational scheme for direct channel operation must be established. The current Broadcasting Act only regulates direct channel operation without giving a clear definition of direct channel operation. Lastly, direct channel operation by IPTV service providers must be permitted. The Korea Communications Commission sought a revision of the IPTV Act to include a clause on registration and approval for direct channel application in 2009; the revision is on hold temporarily.

The second main issue pertaining to the promotion of new services concerns synchronized data broadcasting. Synchronized data broadcasting is a service that provides supplementary information on TV programs (featured figures, filming locations, etc) as a synchronized content (supplementary data broadcasting). A prime example of synchronized data broadcasting is T-Commerce. The Broadcasting Act and the Enforcement Decree of Broadcasting Act regulate synchronized data broadcasting based on the Supplementary Data Broadcasting Guidelines, which were established in 2004. The Korea Communications Commission passed the Bill on TV E-Commerce System Improvement through Supplementary Data Broadcasting (2010-32-078) on June 1, 2010 to permit synchronized TV e-commerce activities through TV programs. In other words, synchronized TV e-commerce activities through supplementary data broadcasting by non-home shopping broadcasters are permitted.

There are two issues related to synchronized data broadcasting. The first issue is that the basis of data broadcasting regulation, the Supplementary Data Broadcasting Guidelines, has no legal effectiveness. First of all, the validity of the process by which the guidelines were established can be called into question as no collection of opinions or public hearing took place and only procedural activities in data broadcasting policy formation took place. Second, the Broadcasting Act and the Enforcement Decree of Broadcasting Act do not empower the Supplementary Data Broadcasting Guidelines as the absolute standards by which regulation should take place. Third, certain particulars of the Supplementary Data Broadcasting Guidelines that are not supported by the Broadcasting Act and the Enforcement Decree of Broadcasting Act are forced upon service providers. Lastly, the Supplementary Data Broadcasting Guidelines comprise clauses that gravely restrict the freedom of service providers, for instance, the prohibition of data broadcast advertisements on initial screens, and thus constitute a violation of service providers' property rights. The second issue related to synchronized data broadcasting is that while IPTV service providers are seeking synchronized data broadcasting for business model diversification, the Korea Communications Commission is citing policy insufficiency as the reason for

its delay in the issuing of business permits.

The following three improvements must be made to address the issue of synchronized data broadcasting. First, synchronized data broadcasting policies that are supportive of the digitalization of IPTV and cable TV must be formed. Currently, the legal force that regulates data broadcasting is dispersed throughout the Telecommunications Business Act, the IPTV ACT, and the Broadcasting Act and thus lacks consistency. In addition, there is ongoing debate about the legal binding power of the Supplementary Data Broadcasting Guidelines, which are still in effect. Second, new service provider approval regulations must be improved to establish a sound method of service provider selection that is conducive to the promotion of competition. The number of IPTV service providers (currently restricted to ten) must be increased to increase the number of platform service providers that are able to perform digital (data) broadcasting. The selected service providers must be those that are able to contribute to industrial advancement, while approval standards must be consolidated to enable optimum selection. Lastly, regulations on advertisement and program organization must be improved for the promotion of diverse business model development. While the conventional display advertisement model faces limits in terms of growth, target advertisement based on content and user characteristics and demands is expected to function as a new growth engine.

5) Media Market Competition Policies

The main issue as regards media market competition policies is the asymmetric regulation of IPTV and cable TV.

While IPTV is regulated by the IPTV Act and the Enforcement Decree of the IPTV Act, cable TV is regulated by the Broadcasting Act and the Enforcement Decree of Broadcasting Act.

There are two issues related to the asymmetric regulation of IPTV and cable TV. First, asymmetric regulation is applied to various matters including fee approval, direct channel operation, and market share restriction. Notably, while the Broadcasting Act does not stipulate any prohibited activities, the IPTV Act stipulates twenty-two prohibited activities in seven categories. The other issue is that the application of different laws in the purchasable broadcast service market - a single market - according to technological categorization runs counter to the global trend of comprehensive and simplified regulation.

To address the issue of the asymmetric regulation of IPTV and cable TV, the elements of asymmetric regulation must be rectified in the short term and a comprehensive bill applicable to the entire purchasable broadcast service industry must be prepared in the long term. In other words, the legal system must be modified according to the principle of "one service, one regulation" so as to guide the purchasable broadcast service industry in a single and more effective direction.

<Appendix>

<Key Points of the IPTV Act>

Classification		Details
Definition of IPTV business		<ul style="list-style-type: none"> ■ "Internet multimedia broadcasting" is a broadcasting that offers various contents such as data, visual image, audio, electronic transaction including real time broadcasting programs to users through a television monitor securing a certain quality of service in a two-way communication internet protocol type by using broadband integrated information communication network(regardless of self-owned or leased, it excludes the electric communication line facility that is used in services that utilizes frequency in order to secure terminal communication business.(Definition, paragraph 1 of Article 2 of the IPTV Act) ■ Business categorization: IPTV service provider, IPTV contents provider (Paragraph 5 of Article 2 of the IPTV Act)
New IPTV businesses	IPTV service business	<ul style="list-style-type: none"> ■ Permit and permitted business period: Article 4 (Approval of IPTV service provider, etc) and Article 5 (approval term etc) <ul style="list-style-type: none"> - Businesses seeking to provide IPTV service must obtain a permit from the Korea Communications Commission (permit effective period is 5 years) ■ Multiple business management and share-holding restricted: Article 8 (Prohibition of combining business etc) and Article 9 (Limitation of stock ownership of foreigners etc) of the IPTV Act <ul style="list-style-type: none"> - Holding of shares that comprise more than 49% of total issued stock by a newspaper or news broadcasting corporation prohibited - Holding of shares that comprise more than 49% of total issued stock by a foreigner prohibited - Holding of shares by a large enterprise with an asset value of over 10 trillion won prohibited ■ Businesses issued an IPTV business permit must commence nationwide service within 3 years after the issue of the permit: Paragraph 2 of Article 6 (Business scope) of the IPTV Act and Paragraph 5 (Starting time of national service) of the Enforcement Decree of the IPTV Act ■ Businesses issued an IPTV business permit must provide 70 channels: Article 20 (Following the Enforcement Decree of Broadcasting Act) of the Enforcement Decree of the IPTV Act and Article 53 (Structure and Use of Channels) of the Enforcement Decree of Broadcasting Act
	IPTV content business	<ul style="list-style-type: none"> ■ Content providers (PP) must report and register with the Korea Communications Commission and obtain an approval: Article 18 (Supplying contents etc.) of the IPTV Act
Fair competition	Promotion of fair competition	<ul style="list-style-type: none"> ■ Formation of an assessment committee to assess competition in the IPTV industry to monitor market dominance and form competition policies: Article 12 (Acceleration of fair competition) of the IPTV Act
	Market share restriction	<ul style="list-style-type: none"> ■ Maintenance of a customer base in access of one-third (scheduled to be changed to one-fifth in 1 year) of the total purchasable broadcast service subscribing population in a region by an IPTV service provider prohibited ■ Market share restriction applied to cable broadcasting regions: Article 13 (limitation of market share etc.) of the IPTV Act
	Equal access to telecommunications facilities	<ul style="list-style-type: none"> ■ When there is an access or request of usage for the electric communication facility needed in offering service from the IPTV service providers, they cannot decline this.: Article 14 (Equal offering of electric communication facility) ■ Applicable facilities: Circuit facilities (digital subscriber networks, etc) and infrastructures (electric pole, pipelines, communications equipment, etc): Article 12 (Equal offering of electric communication facility) of the Enforcement Decree of the IPTV Act
	Reporting of terms of use	<ul style="list-style-type: none"> ■ Terms of use must be notified and fees (evidence of calculation of admission fee, basic fee, using rate, additional service fee and other fees must be submitted) must be approved: Article 15 (reporting Article of usage etc.) of the IPTV Act
Contents	Prohibited activities	<ul style="list-style-type: none"> ■ Prohibited activities: Article 17 (Prohibition) of the IPTV Act and Article 15 (Type and standard of prohibition) of the Enforcement Decree of the IPTV Act <ul style="list-style-type: none"> - Refusal to provide service; service provision or fee claim in deviation from terms of use; wrongful use of user information; unjustified user discrimination; wrongful use of the supplier relationship with IPTV contents providers; disturbance of business activities by other broadcast service providers; rejection, suspension or restriction of access to essential telecommunications facilities
	Equal access to contents	<ul style="list-style-type: none"> ■ Major broadcasting program offered by the IPTV contents provider should be offered without discrimination at a fair and rational price to the IPTV service provider so that citizens can watch it and should not hinder the benefits of TV watchers and fair transaction orders.: Article 20 (Equal access of contents) of the IPTV Act ■ Selection of key broadcast programs: Announced by the Korea Communications Commission based on viewing rate (viewer market share), publicity and fair competition (Article 19 (Equal Access to Contents) of the Enforcement Decree of the IPTV Act
	Direct channel operation prohibition	<ul style="list-style-type: none"> ■ The IPTV service provider cannot operate the channel directly: Article 21 (Composition and operation of broadcasting program) of the IPTV Act