

# IPTV between Competition and Regulation in Korea

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## Abstract

*Technological convergence in the fields of telecommunications and broadcasting needs regulatory convergence, which requires as its prerequisite overarching regulatory principles between different regulatory authorities. The integration of separate regulatory regimes for telecommunications, broadcasting and IPTV entails a complicated process of balancing between market principle and public interest.*

*In this context, the current regulatory framework of IPTV seems to be far away from such a balanced perspective in that the new hybrid service is regulated much stricter than traditional telecommunications or broadcasting services. Key issues concerning access to premium network and killer contents have just begun.*

*In order to set up sound competition policy concerning IPTV, the KCC as a relevant sectoral regulator, should focus its interest and resources on the establishment of level playing field between telecommunications and broadcasting companies regardless of technologies or networks. It is the very reason why intermodal competition should be given priority practicing sectoral competition policy.*

## I. Introduction

### 1. Backgrounds

Convergence in the field of telecommunications and broadcasting industry, prompted by rapid technological developments, causes various kinds of newly emerging services that have never been foreseen before. Convergence is prevalent devices and it blends, with respect to technologies, services and devices and it blends, and breaks down boundaries of separate networks and services. Besides traditional voice services, telecommunications companies, namely Telecoms nowadays provide, data and video

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streaming, whereas cable televisions deliver Internet access and voice services. As a result, convergence brings undertakings which had been active in the different markets into the same one and therefore it tends to broaden the boundary of a relevant market defined in traditional terms.

Convergence brings about changes in two respects while it creates new hybrid services and prompts competition amongst the newly emerging markets. As the new services such as VoIP and IPTV generate tremendous data traffic than ever before, the need to enhance the quality of network will be more important. This is the main reason why recently again network-based competition is being given more regulatory concerns.<sup>1)</sup> On the other hand, convergence provides an opportunity for regulatory reform due to its profound pro-competitive potential. It will be the case that the regulatory regime of IPTV, modeled after that of System Operators (hereafter “SOs”), could be doubted in its legality<sup>2)</sup> and the integration of three separate regimes concerning Telecommunications, Broadcasting and IPTV has been debated.<sup>3)</sup>

## 2. *Regulatory Concept of the IPTV Act Confused*

In Korea, it had been fiercely debated how IPTV services are legally to be classified and where regulation of it should be located. After troublesome discussions in academics and legislative procedure,<sup>4)</sup> the Korea Communications Commission (hereafter “the KCC”) decided to go the third way, namely to enact a separate statute tuned exclusively for IPTV services. As a result, the “Internet Multimedia Broadcasting Business Act” (hereafter “the IPTV Act”) was enacted in 2008.

Here, IPTV service is defined as following: “a broadcasting that offers various contents such as data, visual image, audio, electronic transactions

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1) See generally Bong-Eui Lee, *Application of Competition Law in Telecommunications Industry*, TELECOMMUNICATIONS INDUSTRY AND COMPETITION LAW, 58 (2004).

2) Yong-Seop Yum, *Policy Review of the IP-TV in the Digital Convergence*, 1(2) J. L. & ECON. REG. 72 & 74 (2008).

3) Kuhn Hwang, *Law and Regulatory Policy Implementation for Revitalization of IP-TV*, 1(2) J. L. & ECON. REG. 95 (2008).

4) For legislative history of the IPTV Act, see Bong-Eui Lee, *Competition Issues and Policy Implications after IPTV*, in KOREA COMPETITION FORUM I (2005~2007) (2010).

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 I). Mobile IPTV<sup>5)</sup> that utilizes frequency in order to secure terminal communication business is excluded from this definition of IPTV services.

The main problem underlying the Act is found, above all, in ambiguousness of the regulatory objective of top priority and philosophies the KCC pursues. The Act contains various provisions facilitating effective competition on one hand, and provides with much more instruments to the effect of restraining and distorting free and fair competition on the other hand. It can be said that the Act is drifting between competition and regulatory principles because it lacks a guiding principle.

Recently, the KCC began to discuss some options to unify separate regulatory regimes for telecommunications, broadcasting and IPTV, in other words to integrate the Telecommunications Act, Broadcasting Act and IPTV Act or the last two Acts from the outset. The road toward a unified regime for these related markets seems to be far troublesome, which can be derived from conflicting regulatory principles underlying these Acts, namely “public interest” or non-economic goals on one hand, and “competition principle” on the other hand.

## II. Purposes of IPTV Regulations

### 1. Theoretical Approach

Since Telecommunications sector had been liberalized more than a decade ago, competition principle has been spreading widely. During the transition from state monopoly to private competition in Korea, it was

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5) The Show Video service, launched 2009 by KT, prompted the debate concerning regulatory loophole of mobile IPTV in Korea. Against the argument that such a de facto mobile IPTV service is illegal because IPTV services using mobile communications networks are excluded from the coverage of the IPTV Act. The KCC, however, interpreted such services are not qualified as mobile IPTV in legal terms in that the service is unicasting, not multicasting and it doesn't provide so called QoS. The issue is open in further debates.

called for the KCC to intervene into the telecommunications markets aggressively on an *ex ante* basis. This so called asymmetry regulation pursued the formation and establishment of effective competition in the newly opened Telecom markets and to this end the Telecommunications Act focused on the preventive regulation against anti-competitive practices of an ex-monopolist such as KT and SK Telecom. Once effective competition prevails in the recently liberalized markets, such regulation should give way for *ex-post* regulation which is more eligible for market mechanism.

In broadcasting markets, there are many other grounds calling for pervasive regulation. It has been said that broadcasters using terrestrial frequency utilize scarce radio frequency conceived as a public good and have much social influences in its nature upon its recipients. In this sector, however, broadcasting companies equipped with other forms of transmission networks like cable or satellite entered and so called “inter-modal competition” regime rapidly prevailed rather than intra-modal. As for IPTV service, which utilizes neither frequency nor any public telephony networks, competition should be the driving force in any level of service provision. Therefore, the soft-touch regulation is needed in favor of newly emerging convergent services like IPTV.<sup>6)</sup>

In this context, it is evident that not only in telecommunications but also in broadcasting and related markets the common goal of regulations should be to formulate and stimulate competition in the near future.

## 2. *Approach de lege lata*

The IPTV Act has as its goal to protect users’ rights, develop technology and industry, protect public interest of broadcasting, improve culture of citizens and eventually to contribute to the development of national economy and enhancing public welfare (§1). This purpose clause seems to be a mixture of purposes of the Telecommunications Act and the Broadcasting Act. Therefore, conflicts between them may occur, especially

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6) The former President of U.S. FCC, William E. Kennard said, “what we need to remember now is that no one could have predicted these innovations. We cannot regulate against problems that have not yet to materialize in a market that has to develop”(Wall Street Journal, Aug. 24 1999).

when in case of rate regulation the regulatory focus on public interest is likely to hamper free and fair competition on the markets. In addition, there is no guiding principle in these Acts to resolve such conflicts, whether explicit or not.

The 3<sup>rd</sup> Chapter of the IPTV Act, especially Article 12 imposes to the government, not confined to the KCC, the obligation to secure and accelerate fair competition. The Article 12 can be understood as a small purpose clause. For the competition's sake, the Act provides for market share restriction, equal access to electric communication facilities, *ex ante* rate regulation and *ex post* prohibition of some anti-competitive activities. From these, it can be inferred that the IPTV Act has near-SO regulations, partially even stricter than those of the Broadcasting Act. That is the reason why the effectiveness of the competition regulations contained in the Act is widely called into question in Korea.

### III. Competition Effects of IPTV

#### 1. Broadcasting Markets

IPTV has potential to fundamentally change the current broadcasting markets. Its competitive effect is inherent in itself as a major convergent service which tends to integrate separate product markets into a single one. For example, fixed/mobile telephony now competes with VoIP, whereas SOs or satellite broadcasting is put into competition with IPTV.

Specifically, the deployment of IPTV will cause pro-competitive effect with some respects.<sup>7)</sup> First, IPTV will facilitate actual competition in the "multi-channel pay-TV market" which has long been dominated by *de facto* local monopolies of SOs.<sup>8)</sup> Additionally, considering that the Broadcasting Act prohibited the large Telecoms to operate or participate in terrestrial

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7) Lee, *supra* note 4, at 433.

8) The KFTC defined a relevant market concerning mergers between SOs as a multi-channel pay-TV market composed of SO and satellite broadcasting. In most broadcasting regions, however, SO had over 90% market share and therefore the KFTC declared the mergers to seriously lessen competition. KFTC, Decision No. 2004-254, 8. 30. 2004; No. 2006-010, 2. 3. 2006.

broadcasting and general or specialized program providers, namely PP., thereby the market entry by the Telecoms had been blocked for decades. Along with the amendment of the Broadcasting Act in 2009 which aimed at liberalizing such ownership regulation (§8 III), the major Telecoms, namely KT, SKT and LG Dacom (now merged into LG U+) were able to enter the long protected broadcasting market by means of IPTV service.

Secondly, IPTV adds a new powerful platform to transmit media contents to current SOs and satellite Broadcasting, i.e. SkyLife. The increased number of alternative platforms may contribute to decrease of unfair contents transactions between Contents Provider and PP on the one side, and SO and IPTV operators on the other side.<sup>9)</sup> And finally, IPTV gives strong impetus to the dominance of terrestrial public broadcasting, especially. KBS 1, 2 and MBC, mainly based on killer contents of variety and high quality. KT, SKT and now LG U+, the three authorized IPTV operators, are estimated to have financial and technological power enough to create premium contents either via M&A or directly.

## 2. Telecommunications Markets

Telecommunications markets of Korea have been concentrated by three major companies, i.e. SKT, KT and LG U+.<sup>10)</sup> In 2008 and 2009, there were some spectacular changes; KT (fixed telephony, internet access and IPTV) and its subsidiary KTF (mobile) consolidated, SKT acquired Hanaro Telecom, the No. 2 telecom company in fixed lines, and LGT, LG Dacom (fixed telephony and IPTV) and LG Powercom (internet access) merged. Through this process, the 3 Telecoms could cover fixed/mobile services, which enable them to response more efficiently to convergence. The launching and rapid spreading of IPTV since 2008 could entail followings.

First, there will be more package products bundling VoIP, IPTV with traditional telephony and data services on the basis of internet access

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9) In Korea, there have been numerous disputes around transactions between vertically-integrated MSP and independent PP; MSO and satellite TV, SkyLife and now public broadcasting companies(e.g. KBS, MBC, and SBS) and IPTV operators.

10) In mobile telephony market SKT has over 50% share, whereas KT has over 90% share of fixed voice market over years.

provision. This so-called “bundling competition” has become most common in converging markets in Korea, whereas it frustrates the entry of non-vertically-integrated companies and threatens to make it difficult for subscribers to switch to other operators (namely, lock-in effect). Secondly, convergent services like IPTV need enhanced network quality and large investment in order to ensure quality of service, so-called QoS, which is likely to encourage in its effect network-based competition.

### *3. Policy Implications*

As mentioned above, IPTV reveals great potential to form or facilitate competition on the Telecommunications/Broadcasting markets, whereas it threatens to stifle market entry or exacerbates existing constrained competition. The starting point for re-designing current regulatory system is that ex ante regulation should be restrained till competition problems come true. This approach, namely “soft-touch-regulation,” aims to have pro-competitive potential of IPTV realized in full extent and to prevent over-regulation from impairing incentive to innovate. In this context, market dynamics of IPTV should be fully taken into account in the process of regulatory reform.

## **IV. IPTV-Related Issues from the Competition Law Perspective**

### *1. Authorization*

Those who are willing to operate IPTV service, are subject to authorization or approval of the KCC in advance (§4 I). At the time the IPTV Act was enacted, the authorization period was 3 years and it was extended to 5 years since the amendment of the Enforcement Decree in 2010. By reviewing whether to grant the authorization or not, the KCC considers above all the feasibility of public responsibility, public interest, contribution of broadcasting/video industry, and appropriateness of fair competition in the “pay-TV markets,” managerial planning, financial and technological capabilities, etc.

To note here is that the current authorization regime may be utilized for the purpose of protecting existing broadcasting competitors or even non-economic goals. It will be more evident, if the KCC, issuing re-authorization, imposes fairness-oriented conditions on the applying IPTV operators. Furthermore, 5-year authorization seems too short to refund investments and confusing in its ground in that IPTV service does not use frequency as public goods and needs premium network to transmit contents of high quality to end users. One of the main public elements of IPTV argued by some commentators is to be found in a SO-like “program transmitting” which has much influence on the formation of public opinion. This aspect of IPTV, if necessary however, should be, taken into account in a program/contents regulation, not by short-termed authorization.

In this context, the current authorization system should be reformed so that IPTV service can compete fairly with other platforms of broadcasting and authorization should not be used as an instrument of asymmetry regulation protecting other broadcasters in competition.

## *2. Limitation of market share*

Any IPTV service provider cannot exceed 1/3 of the household subscribers on the locally defined pay-TV market comprised of IPTV, SO and satellite broadcasting (§13 I). In this context, the IPTV Act defines the relevant product market as a multi-channel pay-TV service, and the geographic market as individually authorized 77 regions of SOs.

The cap of market share, which is applied only to IPTV service providers, can be found neither in the Telecommunications Act nor in the Broadcasting Act. To SOs, there are similar limits. SO may acquire another SO to be MSO, but any SO can exceed neither 1/3 of total 77 authorized regions nor 1/3 of total SO subscribers. However, it can be understood as limit of SO's size, not market share in the meaning of competition law.

Such regulation to M/S cannot be compatible with free market system, and furthermore it contains other serious problems. First, the above M/S regulation tends to protect indirectly the long-established monopolistic market structure prevailed by the SOs. This can be inferred by the fact that SOs are not subject to any limitation of market share; the result is the extremely high portion of SOs in any regional market. It may be in

contradiction to technological neutrality for the purpose of securing level playing field between inter-modal competitors.

Secondly, if any IPTV service provider infringes this limitation, the FCC may impose corrective measures pursuing to artificially reduce its market share (§13 II). This is also called for question with regard to its feasibility and effectiveness. Market share itself varies every second and is determined depending on many unidentifiable factors except for business endeavors taken by that company. Furthermore, the challenged provider could not comply with the obligation but for refusing offers of new subscribers or excluding existing customers against their will. All these strategies are likely to impair the users' right to choose and to endanger the ultimate goal of the IPTV Act.<sup>11)</sup>

### 3. *Equal Access to Electric Communications Facilities*

IPTV service operator cannot refuse any offer of other IPTV service operators to access and use its own network facilities which are deemed to be essential for that service provision, unless there are any reasonable justifications, such as lack of self-retained facilities or protection of business secrets (§14 I). Here, the essential facilities are defined as those without which other -actual or potential- competitors will deteriorate in their competitiveness and thereby fair competition seems to be de facto impossible. The Notice of the KCC enumerates two among various facilities; backbone and local loop (fixed).

The access regulation like this which is traced back to "essential facilities doctrine" developed by case law in U.S. antitrust pursues conceptually to open related or neighboring markets to potential competitors not having such bottleneck networks. Following such a competition-oriented concept underlying that access obligation, CP, PP or ISPs were anticipated to enter the IPTV market based on their superior capability over contents.

However, this network regulation does not seem to function smoothly to the interest of contents-based competitors. As the current three IPTV service providers in Korea have equipped with their own facilities from the

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11) See HEE-SOO KIM ET AL., UNIFIED PROTECTION OF USER OF CONVERGENT SERVICES 76 (KISDI ed. 2009).

beginning of the business, the open access policy could play a limited role for other potential competitors to enter the market. They have no high-speed internet network of their own and the access obligation above mentioned applies only to the relation between IPTV service operators that have already entered that market.

#### *4. Prior Rate Regulation*

Every IPTV service provider should notify its rate and trade terms of the service to the KCC and as for the rate, it is subject to prior approval of the KCC (§15). The purpose of this obligation is somewhat confusing as it is imposed irrelevant of market dominance of the operator. That is, because the market share of any IPTV service provider is limited to 1/3 of the relevant market, acquiring or strengthening market dominance of individual IPTV operator is blocked from the beginning.

According to this provision, the rate of IPTV service was approved at a higher level than that of an SO. It cannot be questioned that rate competition between intermodal operators, namely IPTV and SO and satellite broadcasting, could not function anyway.

On the other hand, rate competition between bundling packages would be weakened. The recently revised Telecommunications Act exempts the obligation of prior approval of rate, if the operator tries to reduce that rate once approved. In this case, the operator is enough to notify its intent of that rate reduction (§28 II). But if any product package contains IPTV service, then the operator should get a prior approval of the rate of IPTV service anyway.

#### *5. Equal Access to Contents*

Once “the major broadcasting program” is notified by the KCC, it should be offered without any discrimination at a fair and reasonable rate to other IPTV contents providers so that users’ interest and fair trade order shall not be impaired (§20 I). The term “equal” means here to give other IPTV service operators a fair opportunity to compete and to guarantee universal right of citizens to important programs. This can be inferred by the fact that the KCC decides the major programs by considering viewing

rate, national interest and fair competition, etc.

From the competition perspective, the program access rule has enough room for improvements. Now, contents provider which is subject to access obligation is confined to the “IPTV contents providers” notified to or registered by the KCC. In this case, notification or registration is not an obligation; therefore contents providers may avoid access regulation easily by doing nothing. Finally, as the access regulation applies only to IPTV contents providers each other, the goal to protect equal competition in the field of multi-channel pay-TV market as defined above, can hardly be accomplished.

#### *6. Competition Assessment*

The government should give efforts to set up an efficient competition of IPTV business and to form a fair competitive environment (§12 II). For this purpose, a Committee for competition assessment should be formed which not only analyses and assesses competitive situation of the IPTV business, but also counsels and reviews important issues concerning competition policy in this field.

The competition assessment needs feed-back in order to display its own merits; relevant markets are defined, current competitive situation in these markets analyzed, future state foreseen, and finally contemporary regulatory regime refined or reformed. The IPTV Act, however, does not provide for any feedback mechanism whatever results the assessment would be.

In this respect, neutrality and independence of the Committee cannot be over-emphasized. The organization of the Committee seems, however, to lack such elements; the president of the KCC occupies the chair of the Committee, 8 of total 9 members are nominated by the President of the KCC.

## **V. Conclusions**

Technological convergence of telecommunications and broadcasting needs, at the final step, regulatory convergence or unified regulation based

on overarching principles which requires convergence of different regulatory philosophies of network and contents respectively.<sup>12)</sup> The integration of separate regulatory regimes entails a kind of balancing process between market principle and public interest.

Convergence found in the media field will develop further only on the basis of open and equal access to network and contents. To identify which networks and contents should be subject to access obligation needs great caution so that competition mechanism functions well by means of premium networks and killer contents installed or produced purely by private initiative. That is, it should be noted that network- or contents-based competition should not be impaired but facilitated for further developments of IPTV and related businesses.

The way toward unifying the Broadcasting Act and the IPTV Act seems to be right in principal.<sup>13)</sup> In order to set up sound competition policy concerning IPTV, however, the KCC should focus its capability and resource, on the establishment of level playing field between telecommunications and broadcasting companies. Here, the regulatory priority should be given to intermodal competition which plays an important role in promoting technological innovation and consumer welfare. For this purpose, current ex ante regulations contained in the IPTV Act which threatens to distort intermodal competition need to be reviewed fundamentally.<sup>14)</sup>

KEY WORDS: convergence, IPTV, SO, PP, rate regulation, bundling competition, lock-in effect, QoS, equal access, program access, competition assessment

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12) Sang-Shik Lee, *Major Issues in Pay-TV Markets regarding Legislation to Integrate the Broadcasting and Telecommunications Related Acts*, 2(1) J. L. & ECON. REG. (2009).

13) Won-Woo Lee, *Problems and Suggestions of Regulatory System with Regard to Convergence in Korea*, STUDIES ON COMMUNICATIONS LAW IV, 220 (2008).

14) For limiting principles against ex ante regulation, see Bong-Eui Lee, *On the Reform of Retail Regulations in Telecommunications Act*, 1(2) J. L. & ECON. REG., 19 (2008).