

Can Sector Specific Regulations Survive with Convergence between Broadcasting and Telecommunications?

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Abstract

Regulation systems have been changing continuously since the liberalization of the telecommunications market. The ongoing global convergence between the telecommunications and broadcasting industries has prompted debates in many countries regarding the regulation of these specific industries. These debates are concerned with overcoming the limitations of previous regulatory systems, accepting changes in the market, and setting up the regulatory system that can design the development and stability of industry. Currently, these markets in Korea are subject to both specific regulatory policy and general competitive policy simultaneously. However, these separated regulatory policies seem to have limitations in accepting convergent services. This paper discusses whether Sector Specific Regulation (SSR) is necessary for fair competition in the converged industry between telecommunications and broadcasting. Domestic and international cases are analyzed from the literature survey in terms of structure, conduct and performance regarding merger, unfair trade, and abuses of dominant positions. The result of this analysis suggests that synthetic regulation keeping balance between SSR and general competition regulation, despite deregulation trends, can revitalize competition in these industries. Moreover, the SSR of reduced type is necessary to emphasize the noneconomic, social and cultural objects like pluralism. The role of SSR is required especially because competition law cannot work neutrally on the telecommunications and broadcasting sectors under the convergence environment. Namely, SSR plays a complementary role, instead of a substitute, for competition law, and has a unique role in the convergence environment.

Keywords: Sector specific regulations, Competition law, Convergence, Broadcasting, Telecommunications

1. Introduction

Numerous debates occur globally regarding the effects of regulatory intervention on development and fair competition in the telecommunications and broadcasting market. Korea has separate coexisting SSRs such as telecommunications law, broadcasting law, and competition laws. In the new convergence environment, these regulatory authorities reflect the characteristics of the industry before convergence, resulting in different opinions between specific organizations and general organizations. Sector-specific authorities approached the convergence environment by extending the regulatory policies that were grounded on the specific use of telecommunication networks and broadcasting's previous role relating public opinion due to industrial characteristics. In contrast, a general regulatory organization has the purpose of making a fair trade environment that is grounded on the industrial generality, and intervenes in industry overall, not excepting this industry. Conflicts between sector-specific authorities intent on keeping efficient competition policy and competitive authorities intent setting up an environment without "competitor" protection but including "competition" protection exists. This paper first examines the representative regulation types of telecommunications and broadcasting, and then analyzes cases between SSR and general competition law by using industrial organizational structure. This paper examines the role of SSR in the convergence environment, and suggests some implications about the regulatory system in the convergence market in Korea.

2. Relations between SSR and general competition law

We can divide regulatory agencies in the world wide markets of telecommunications and broadcasting into three types: SSR, General Competition Law, and Synthetic Regulation that is a mixture of the two. The main difference between SSR and Competition Law is that one is a case of ex ante regulation, and the other is an example of an ex post regulation. In the case of competition law as ex post regulation, a competition

authority imposes a regulation after a business engaged in certain conduct. SSR is a case of ex ante regulation, wherein, regulations prohibit conduct in advance. SSR is required for price regulation, action regulation, or the complexity of regulation in specific industry; competition law prevents the detrimental effects of monopolies, and improves economic efficiency. The general characteristics of these three regulatory types are follows:

- **SSR**

SSR intervenes in specific industry and more special authority manage the regulation because of high technical and special characteristics, and operate that efficiently, hence social welfare can be improved after all. Examples include the Federal Communications Commission (FCC) in the US, and the Ministry of Internal Affairs and Communications in Japan. However, the FCC assigns penalties relating to obscenity on the grounds that citizens should be free from viewing certain contents. Operators claim that this is an infringement upon their Freedom of Speech. This indicates a perceived difference between what is in the public's interest and a free market [1].

- **General Competition Law**

General competition law is based on the notion that all players in the market should be able to compete on the same level playing field. Currently, the global perspective, like that of the European Union, toward competition law is the law as an ultimate aim for much more active competition. Generally, industries in a given country are prevented from wielding excessive market power, or engaging in unfair trade conduct through competition law. However, Daniel Berhin et al. (2005) [2] insist that a market that is regulated only through competition law tends to form market-driven monopolies or oligopolies in the long-term, even if this type of regulation also revitalizes market competition and increases customers interest in the short-term.

- **Synthetic Regulation: SSR + Competition Law**

Adopted by a majority of nations, synthetic regulation has developed as a way of intervening simultaneously, either by introducing competition law as a complementary tool in a market that is only utilizing SSR, or by installing sector-specific organizations for specific regulation in a market that is applying only general competition law. Many see SSR as an important complementary tool not a substitute to competition law, and would prove effective in covering the problems in market power that competition law alone fails to address adequately [3]. Synthetic regulation should resolve problems like overlapping regulation, because both previous regulation and new ones intervene at the same time.

3. Conflicting cases of general competition law vs. SSR in telecommunications and broadcasting

This paper examines several conflicting cases of general competition law vs. SSR in telecommunications and broadcasting using industrial organizational structure such as market structure, market conduct, and market performance.

3.1 Side of structural regulation

- **Case of reducing the entry barriers in the US**

In the United States, the FCC had controlled any new entry into the telecommunications market based on SSR. Before the enactment of the Telecommunications Act of 1996, entry of this type worked that Incumbent Local Exchange Carrier (ILEC) took priority substantially, making it difficult for new players to enter the market. The Department of Justice (DOJ) then enacted a revised Act concerning content such as interconnection, resale, network unbundling, and so on. As a result, the number of new players increased.

Incumbents that installed infrastructure - such as cables, wires, and switches - could use these resources according to the SSR as they were before the revision, which allowed incumbents to maintain a monopoly in the market. After revision, entry regulations should not act as barriers to competition in Local Exchange Markets. Removal of legal barriers to entry into local markets, regulatory jurisdiction changed into State and Local Law.

It should not be misunderstood that reducing regulation will automatically bring about active competition. Because the telecommunications market is an industry with large fixed costs, early players had to make large investments in order to create an infrastructure. If use between new players' service and incumbents' service is limited, consumers wouldn't want to select these kind of limited services. New players have to achieve a much larger investment within a short time in order to install the same infrastructure. Thus, authorities introduced interconnection regulation, which makes it possible for interoperability between the network of the

ILEC and the network of the CLEC (Competitive Local Exchange Carrier), to reduce the burden on new players entering the telecommunications market possessing these industrial characteristics. Finally, calls among customers subscribing to different players' service are possible. Consequently, the CLEC does not necessarily have to install an overlapped network with ILEC, then lots of CLECs can enter the market with greatly reduced initial fixed costs. Further, unbundling, which is when an ILEC lends obligatory services and facility holdings to CLECs who want resale, plays a role of making investments into entry easy.

As a result, the competition situations in local call markets change drastically. Previously, CLECs are limited to targeting business customers, and CLECs possess about 1,000 numbering codes. However, after the revision, in the end of 1999 the number of codes increased by about 8000, and territory increased from about 20% to 80% [4].

However system of the unbundling is allocated the cost based on the TELRIC (Total Elements Long Run Incremental Costs) decided by FCC for paying for providing circuits. The court has a decision in the against TELRIC in a lawsuit between Iowa Utilities Board vs. FCC in 1998, but has a decision in the approval for TELRIC in a lawsuit between Verizon vs. FCC in 2001. With these decisions, there was a problem about criteria of assessment of TELRIC is higher than that of the real market. This case shows consequently that FCC takes care of the incumbents' incentive via entry regulation and then new player cannot enter the market, with reducing SSR to revitalize competition the difficulties of new players to enter into market are reduced and then competition also become revitalize after being introduced interconnection, resale, and unbundling.

- Case of merger in the US

The DOJ induced competition in the telecommunications market as a result of the AT&T divestiture in 1984 to prevent the monopoly of AT&T. Later, however, the FCC gave its consent to the recombination of these firms, effectively reintroducing the monopoly, or creating an oligopoly, depending on the area.

AT&T influenced on all kinds of relevant telecommunications industry in the previous US telecommunications market under State Public Utility Commissions. In 1984, the DOJ divided AT&T into seven regional Bell operating companies to induce a fair competition market. The US then had nine large local exchange carriers, along with the two previous large ILECs. The FCC would later consent to several mergers between incumbent firms that had been previously been divided, leaving only four large local exchange carriers by 2001. In 2006, a merger between SBC communications and Bell South was given consent under conditions to provide services such as broadband installation and free service support, in an effort to provide a social benefit. This left only three large carriers remaining in 2007.

These recombinations led to debate on an overlapping regulation problem regarding the FCC's jurisdiction over merger regulation, and acting against the decision of the DOJ. Especially, recent result of the merger of AT&T, AT&T is renamed after merger between SBC and Bell south, and this brings market to form monopoly or oligopoly result, contrast to the intention to induce competition from previous AT&T's monopoly. Shelanski (2002)[4] insists that SSR is, therefore, no longer needed in order to ensure competition in the telecommunication market. SSR for market structure should also be substituted with competition law totally to resolve the inconsistency analysis, or cost to remain overlapped regulation. There is also the debate over whether providing social benefits through mergers is more important than the revitalization of the market competition.

- Digital TV merger case in Spain

In Spain, there is only one satellite digital TV platform as a result of the approval of the merger between two digital pay-TV operators in 2002 Canal Satélite Digital (CSD), based on PRISA, the most powerful multimedia group in Spain, and Vía Digital, based on Telefónica, the most powerful telecommunication operator. The end result of this merger is that PRISA group has 80% of total pay-TV subscribers, a strengthening of the already dominant position of the incumbent cable operator. It also enjoyed a dominant position in related markets, such as content. Also, as a result of vertical structural links, telecommunication operator, Telefónica group, provides fixed telephony, broadband Internet access service, new multimedia services, and a pay-TV service based on ADSL (Asymmetrical Digital Subscriber Line). This could seriously damage competition coming from other broadband Internet access providers. The opinions on this merger from the European Commission, the Spanish Competition Authority, and the Spanish Regulator follow. The European Commission considers the market to be a dichotomy between free and pay-TV, on account of the differences in financing structures, multichannel offer of pay-TV, business value chain, etc. The Spanish Competition Authority also separated the market in the same way the European Commission did, and it explored whether there were efficiency gains to compensate for the anticompetitive effects. Overall, it considered that the merger would contribute to the development of pay-TV services and that benefits would be passed into consumers, not only through prices but also through better quality content. The Spanish

Regulatory Authority considered the uncertainty that surrounds market developments in this area, and the consolidation trend occurring in other European countries, and decided that the merger would be more beneficial to consumers under the imposition of appropriate conditions. Mónica Ariño (2004) [5] has counter-arguments against this dichotomy for market definition. Firstly, all analogue systems will be converted into digital in the near future, and the appropriate equipment will also be needed for the reception of Free To Air (FTA) services. Secondly, he considers that products can be offered to be substitutable from a demand side perspective. Although it might be true that some premium movies will not be available in FTA, there are still many other movies available. Thirdly, he considers that there is competition for the acquisition of rights between FTA and pay-TV operators that takes place at the wholesale level.

With these refutations, he insists that FTA and pay-TV should be considered one market. Although the application of competition law can make a free market which has an even greater effect on the evolution of the media sector, media's noneconomic concerns such as plurality and diversity for the open democratic society may not be assured by a simple free market approach. Therefore, SSR's role is required continuously with this concern.

- Merger case in Europe

In 1998, the Community had not dealt with convergence between telecommunications and broadcasting in the course of the renewal of the EC telecommunications regulatory framework, therefore, new services could not be applied to within the existing regulatory framework. At that time, there were three areas of content that dealt with convergence by EC Competition law. Firstly, in the case of cable TV operators on the telecommunications market, possible safeguards included accounting separation or outright legal separation. Secondly, in the case of telecommunications operators holding exclusive rights on the cable TV market, it required a threefold accounting separation between the cable TV network operations, the telecommunications network operations, and the provision of telecommunications services. Thirdly, in the case of telecommunications operators active in the broadcasting sector, when telecommunication operators should have been able to offer newly converged services and even broadcasting over broadband telecommunications networks, EC Competition Law did not address the issue of the necessity for activity limitations of the telecommunications operators, and left the issue to the Member States. Under these backgrounds, the Commission arrived at negative decisions regarding the following three transactions in consolidation in the broadcasting sector from November 1994 to September 1995.

- The Media Service Gesellschaft (MSG) case: Two large German media groups with Deutch Telekom (DT), which held a legal monopoly over cable TV networks in Germany, announced a joint venture project. MSG would offer digital pay-TV services, and supply them with the necessary infrastructure to deliver it to the customer. The Commission decided that MSG in the relevant market was incompatible with the common market because it would have strengthened their dominant position.

- The Nordic Satellite Distribution (NSD) case: NSD joint venture was formed between the Norwegian telecommunication operator and Swedish company active throughout Scandinavia in cable TV and satellite broadcasting of free-TV and pay-TV. NSD would provide space segment capacity to the Nordic market, and distribute satellite TV channels to the Nordic area. The Commissions objected that, in the case of the market for the provision of space segment capacity to broadcasters, it is difficult to compete with satellites that are located in other places because broadcasters should use the programming through only satellites used by NSD. Furthermore, with respect of the market for Direct to Home (DTH) pay-TV distribution and cable TV network market, the Commission made a negative decision due to the same reasons cited in MSG's case.

- The Holland Media Group (HMG) case: HMG joint broadcasters RTL and Veronica and large independent program producer Endemol would provide services relating to radio and TV in Holland. Related markets are closely connected because broadcasting share is a key factor in the advertising market, which in turn generates revenue to purchase independent programs. The Commission had objected on the grounds that this transaction would have led to or strengthened a dominant position.

The Commission defines the relevant markets according to the position in the value chain, and defines markets according to short term rather than long term considerations for each case. However, Pierre Larouche (1998) [6] indicates that these decisions intrinsically include uncertainty that cable TV markets divide from the satellite and terrestrial markets by technology, in the cases of MSD and NSD. Furthermore, the Commission imposed more conditions and obligations in the cases of telecommunications compared with the case of broadcasting. Pierre Larouche (1998) [6] indicates that these bring different results by treating the dominant operator's location in the telecommunications sector more moderately.

These cases show, as the specific framework develops under a convergence environment, that competition law could not exist as the sole general framework that can be applied neutrally to prevent an irrevocable loss. EC competition law in convergence is applied to reduce the dominant power as much as possible, and the

reason is based on the possibility that the incumbent telecommunications operator and dominant broadcasting operator might remain their dominant power for some time. Although competition law plays a positive role in the convergent environment by providing a common denominator to get over the conceptual barriers between separated regulatory worlds, this has limitations of noneconomic parts and privacy or security issues. In other words, the necessity of a suitable regulatory framework for convergence is not reduced by applying competition law.

3.2 Side of conduct regulation

- Amendment of the telecommunication Act in Korea, 2007.11.13.

The Ministry of the Information and Communication (MIC) as specific regulatory in Korea, agreed with the Fair Trade Commission (FTC) in eliminating retail pricing regulation instead of imposing a wholesale regulation obligation in November 2007 [7]. Namely, telecommunication operators such as KT, SKT can design their pricing system for subscribers freely, thanks to the elimination of the “price approval system”, a retail pricing regulation, that existed at the time. Furthermore, the wholesale regulation was determined to induce accelerative competition by revitalizing resale and general firms. Finance, automobile, and other firms can now take part in the telecommunications market as Mobile Virtual Network Operators (MVNO).

There are debates between two regulatory authorities on this. In the first, the FTC insists that if two regulations - wholesale regulations like the market obligation of the resale imposed on the dominant market operators, and the retail regulation like pricing rules - apply to the market at the same time, this would violate the liberal competition and price decision that is at the core of the free market. According to the theory of Joseph A. Schumpeter, the FTC insists that price liberalization and elimination of the entry regulation in the telecommunications market is designed to absorb dynamic benefits of the competition. On the other side, MIC insists that it is highly possible that price liberalization in the telecommunications market would induce a monopoly by allowing market dominant operators to make later operators withdraw by undercutting the price, etc. This would establish a monopoly market that would hurt consumers in the long run.

There are some future prospects: the division of wired and wireless operator is going to disappear by the obligation of wholesale regulation, and competition of price and service differentiation will arise due to the elimination of price approval system. However, the opinion also exists that there will be MVNO limitation on price competition because the market is already saturated, and the price competition is also started by discount rules within network.

Consequently, some opinions exist that the efficient competition policy of MIC as specific regulatory is changed to protect later operators, thus hurting consumers. However, a specific regulatory gets rid of price regulation corresponding to a substantive function of regulation, so this is evaluated positively in a principle meaning of making up the competition environment.

3.3 Side of performance regulation

- Market performance depending on services

Kerf et al. (2005) analyze how different attempts at balancing between SSR and competition law to create more competitive markets affect some services in five countries [8]. The United Nations mainly depends on SSR, New Zealand depended on Antitrust Law by 2001, and Australia, Chile, and the United Kingdom are dominated by synthetic regulation. Analyzed services are based on data in 2001, and results are as follows:

- Fixed local services: the market share of new entrants is low, and this is due to a price cap rather than balancing between SSR and competition law. Namely, a low price cap as act as a barrier for new entrants, so market share of new entrants is high in the case of relatively high prices such as the UK and Chile.

- Long Distance Services: Chile, the UK, and the US are very competitive structures in these services, with the market share of incumbents falling to less than 50 % in Chile after 1995, and the share of AT&T decreasing 38% by 2000 in the US. Furthermore, international services are more competitive now that the market revenue shares of incumbents are less than 50% in all five countries. The reason is that specific authorities in Australia, Chile, the UK, and the US apply the pricing rules for long distance interconnection. By contrast, competition in the long distance services of New Zealand is problematic due to the absence of interconnection rules and specific authorities. Finally, from these situations, markets in the countries with SSR are more competitive in long and international service markets.

- Mobile services: these services are actively competitive in four countries except New Zealand. Four operators compete with one operator in Australia, four operators compete with one another in the UK, some operators compete in Chile, and at least 5 operators exist in most large city areas in the US. By contrast, only two operators exist in New Zealand, and prices were also high at the end of 2001, and the penetration rate of

mobile services is low. Thus, low performance in the mobile services of New Zealand is due to the absence of the specific rules and regulators for interconnection between wired and wireless, and from differences in regulation framework from the others.

- Internet Services: The United States and Australia are most competitive for dial-up Internet access; market share of the ISPs affiliated with incumbents is low. The UK, Chile, and New Zealand are less competitive; the number of ISPs is small, and ISPs affiliated with incumbents is still largely dominant. The US does not impose price controls on ISPs for interconnection services; by contrast, the UK imposes an unmetered or flat price on ISPs. Both countries intend to have active competition among ISPs by using pricing rules of interconnection. Australia protects mergers for competition among ISPs. The case of Internet services applies SSR and competition law to interconnection pricing rules and mergers with different methods simultaneously.
- Universal services targets: As a frontier that uses the competitive mechanism to allocate the subsidiary cost of the universal services, Chile supports the allocation to the operators who request the lowest government cost. Australia and the United States also introduce the competition to induce to provide the services, but in the case of New Zealand and the UK, governments designate incumbents as service providers. Chile among these is lowest for the subsidiary cost of the universal service.

The foregoing discussion shows that the balancing between competition law and SSR is important for the competition in the services, except the fixed local services. The results show SSR's role for interconnection rules in the long distance services, the role of specific rules for interconnection between wired and wireless services in the mobile services, pricing rules of the interconnection for incumbents for competition between ISPs in the Internet services, and the SSR and competition law role for mergers.

4. Conclusion

After the liberalization of the telecommunication the regulatory systems also changed following a trend toward ultimate deregulation. This paper analyzed cases that suggest that regulation in the convergent environment between telecommunications and broadcasting should take the form of the synthetic type, like SSR acting with competition law, in contrast with the global trend of deregulation. Within the current digital convergence paradigm, SSR's role in revitalizing competition in this specific market is described in <Table 1>. In other words, for much more active competition, the reduction of SSR is required in entry, merger, and retail pricing. As in the case of the media merger, SSR is required to achieve noneconomic objectives pluralism of media with clarity its role as a complementary not substantive for general competition law. A proper, specific regulatory framework is required especially in the convergent environment between broadcasting and telecommunications because competition law alone is not neutral. Furthermore, analysis of the market's performance by different services gives priority to synthetic regulation balancing between SSR and competition law.

< Table 1 > The implications of the cases

The classification of industrial organizational structure		The implications of the cases SSR vs. general competition law
Structure regulation	Entry regulation	<ul style="list-style-type: none"> • Case of reducing the entry barriers in the US → reducing SSR for active competition in entry - Reducing SSR make new players enter the market actively. -However, there exists debates that specific regulatory give incumbents incentives(TELRIC)
	Merger regulation	<ul style="list-style-type: none"> • Case of merger in the US → need to reduce role of SSR in convergent part -DOJ and FCC control merger regulation together, then approval of FCC induces low competition as overlapped regulation -conflictive situation about social benefits vs. competition revitalization
		<ul style="list-style-type: none"> • Digital TV merger case in Spain → Synthetic regulation need to apply case of media mergers -Merger applied by competition law has profits from price and improved quality contents. -SSR beyond competition law is required to sure achievement of noneconomic goals such as diversity, pluralism. • Merger case in Europe → specific regulation framework need for suitable convergent environment

		-EC competition law is not neutral in the similar cases between broadcasting and telecommunications. -competition law as ex post regulation exists the possibility of irrevocable results due to exception of characteristics of specific industry
Conduct regulation	Pricing regulation	<ul style="list-style-type: none"> • Amendment of the telecommunication Act in Korea, 2007.11.13. → the elimination of SSR in the retail pricing rules - specific regulatory eliminates “price approval system”, which can be core of SSR, to revitalize competition -However, the effect of the price competition is uncertain due to saturation of the
Performance regulation	Market performance regulation	<ul style="list-style-type: none"> • Market performance depending on services → synthetic regulation shows a priority -application of SSR and competition law at the same time has priority in competition side and consumer side

Korea has lots of debate concerning the rearrangement of the regulatory framework in the convergent market. This paper suggests synthetic regulation working together between SSR and competition law is suitable for the competition revitalization, and balancing between the two is also important. However, to reduce the detrimental effect of the overlapped regulation, which is indicated as the problem of the synthetic regulation, the scope of the SSR and the competition law should define clearly. This paper is limited in the number of the cases examining the contradictory cases between SSR and the competition law in the specific broadcasting and telecommunications market due to a limited research period, it is especially weak in broadcasting cases. We can say that this is because each different framework of most countries rarely conflicts unlike Korea, which has separated regulation between telecommunications and broadcasting.

5. References

- [1] MinGyu Sung, "US FCC obscenity broadcasting regulation denunciation and media culture: healthy culture or controlled culture?" Korean Broadcasting Institute, 2006.
- [2] Daniel Berhin, Fre´de´ric Godart, Maya Jolle`s and Paul Nihoul, "Sector-specific regulation in European Electronic Communications - meant to disappear?", Emerald Group Publishing Limited, info, vol. 7 no. 1., 2005, pp.4-19
- [3] Alexandre de Streel, "The Integration of Competition Law Principles in the New European Regulatory Framework for Electronic Communications", World Competition 26(3), Kluwer Law International, 2003, pp.489-514
- [4] Howard A. Shelanski, "From Sector Specific Regulation to Antitrust Law for U.S. Telecommunications:The Prospects for Transition", Elsevier Science Ltd, March 20, 2002.
- [5] Mónica Ariño, "Digital War and Peace: Regulation and Competition in European Digital Broadcasting", European Public Law, Volume 10, Issue 1, 2004, pp135~160
- [6] Pierre Larouche, "EC competition law and the convergence of the telecommunications and broadcasting sectors", Telecommunications Policy, Vol. 22, No. 3, 1998, pp.219-242
- [7] Ministry of Information & Communication in Korea, "newsletter", November 13, 2007.
- [8] Michel Kerf, Isabel Neto and Domien Geradin, "Regulation and Competition: How Antitrust and Sector Regulation Affect Telecom Competition", World Bank, July 1, 2005.