

## Chapter 8

### Korean practices and challenging issues in regulatory impact analysis

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*This chapter looks at the different practices and experience of Korea in designing and implementing regulatory impact assessments (RIA). It provides a comprehensive account of the history and evolution of its adoption and implementation and focuses on the different methodological issues and challenges in managing and undertaking RIA. First, if a target or budget is adopted, it should focus on net (value) impact on business, though the impact on the wider economy and society should not be neglected. Second, while reviews of the stock are helpful, estimating the size of the stock is fraught with conceptual and practical difficulties. Third, RIAs should be integrated with the policy development process and not considered as an “add-on”. Fourth, RIAs should also inform decision-making and scrutiny by Parliament and not just be a process for the Executive. Finally, there is plenty of scope to improve benefit modelling and to consider alternatives to CBA.*

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## Introduction

Korea introduced the use of Regulatory Impact Analysis (RIA) two decades ago as a key apparatus to regulatory reform initiatives. However, its implementation was considered unsatisfactory for a considerable period of time due to the lack of appreciation and capacity among implementing line ministries. However, noticing RIA's significant role in enhancing regulatory quality, the Korean government has consistently attempted to increase the effectiveness of RIA, including through amendments in the law to secure the legal basis for a mandatory RIA, the introduction of a review process, and the creation of an electronic documentation system. In fact, Korea was ranked above the OECD average in its implementation of RIA in (OECD, 2015) as shown in Figure 8.1 of the previous chapter. Nevertheless, despite the recent progress made, challenges in the practice and implementation of RIA still remain.

The purpose of this chapter can be summarized in three points:

- Introduce Korean practice regarding RIA for those who are not familiar with it.
- Introduce the contents of a RIA in Korea in detail.
- Share the challenges that Korea faces in conducting RIA. It is expected to serve as a reference of a country case that provides insights to countries confronting similar challenges and those wanting to institutionalize RIA more systematically.

This chapter aims to present Korea's practices in conducting RIA, including the opportunities and challenges in its implementation. In doing so, the chapter provides an overview of the recent developments in the institutional setting and the recent reforms in the RIA process. Moreover, it aims to discuss emerging issues in the implementation of RIA, identify the challenges, and draw policy implications.

## Regulatory impact analysis system in Korea

RIA was established in August 1998 through the enactment of the Framework Act on Administrative Regulations, which introduced RIA as a key apparatus to regulatory reform initiatives. All new or strengthened regulations required a RIA. This included a statement of the need for government intervention, a review of regulatory alternatives, a Cost-Benefit Analysis (CBA), and a review of the adequacy and effectiveness of regulatory measures. Ministries are mandated to complete the information required, which are then submitted to the presidential Regulatory Reform Committee (RRC) for review.

Unfortunately, during the initial rollout of RIA, the performance of operations to enhance regulatory quality was deemed unsatisfactory for a considerable period of time. Line ministries complained about the lack of available raw data, as well as in-house human resources and time. Consequently, RIAs were poorly conducted and the review process became a mere formality.

To enhance the quality of RIAs, the Framework Act on Administrative Regulations was amended twice in June 2006 and June 2008. The first amendment adopted the disclosure principle so that all RIA reports are publicly disclosed, and the second added the assessment of restrictiveness of competition to RIA. Moreover, the guideline on RIA was revised in August 2013 to recommend the additional assessment of the impact on small and medium-sized enterprises (SMEs). Current law states the mandate, disclosure, and governance of RIA as follows:

### Box 8.1. **The Framework Act on Administrative Regulations and the Enforcement Decree of the Act on RIA**

**(Article 7, Clause 1 of the Framework Act on Administrative Regulations)** When the head of a central administrative agency intends to establish a new regulation or reinforce existing regulations (including the extension of the effective period of regulations), he/she shall conduct a RIA taking account of the following matters comprehensively, and prepare a RIA report:

1. Necessity of establishing a new regulation or reinforcing existing regulations;
2. Feasibility of the objectives of regulations;
3. Existence of alternative means to a regulation, or possible overlapping of existing regulations;
4. Comparative analysis on costs and benefit which are to be borne by or enjoyed by the citizens and groups subject to regulation following the implementation of regulations;
5. Effects arising from the implementation of regulations on small and medium-sized enterprises under Article 2 of the Framework Act on Small and Medium Enterprises;
6. Whether competition-restricting factors are included;
7. Objectivity and clarity of regulations;
8. Administrative organization, human resources, and required budget following the establishment or reinforcement of regulations;
9. Whether documents required for relevant civil affairs, procedures for handling thereof, and other similar matters are appropriate.

**(Article 7, Clause 2 of the Framework Act on Administrative Regulations)** The head of a central administrative agency shall issue a general public announcement concerning the RIA report under paragraph (1) during the pre-announcement period of legislations, supplement the RIA report after reviewing the submitted opinions, and notify the persons who have submitted their opinions of the results of handling the submitted opinions.

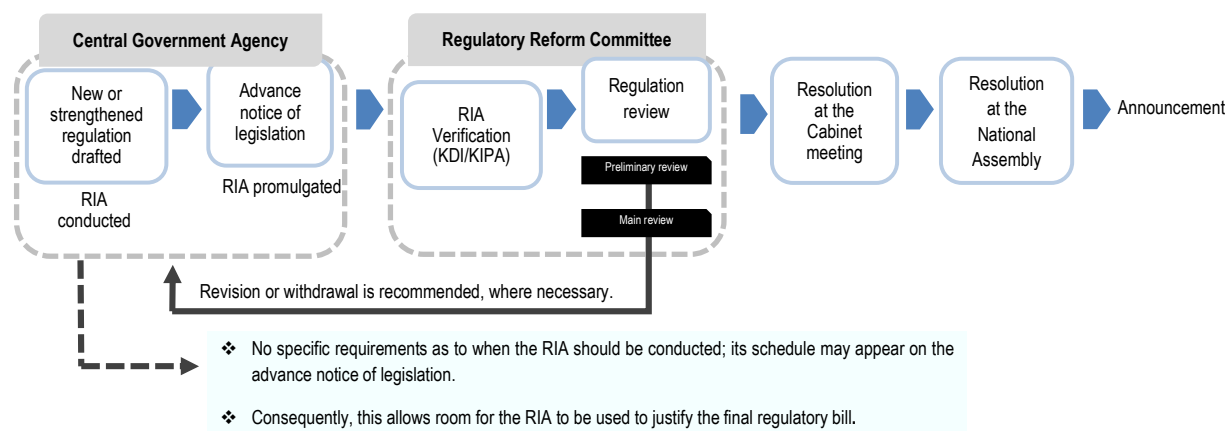
(Article 7, Clause 4 of the Framework Act on Administrative Regulations and Article 6, Clause 4 of the Enforcement Decree of the Framework Act on Administrative Regulations) The Regulatory Reform Committee shall give central administrative agencies a guideline on the preparation and publication of RIAs.

In May 2015, the Korean government, in particular the Prime Minister's Office (PMO), devised a new way to improve and strengthen the quality of RIA with the support of the Centers for Regulatory Studies at government-funded independent think tanks, namely the Korean Development Institute (KDI) and Korea Institute of Public Administration (KIPA). Both Centers are responsible for reviewing the draft RIAs on selected major regulations to scrutinize the contents and give advice on correcting errors and raising the rigour of analyses. The Center at KDI covers "economic" regulations while that at KIPA deals with "social" ones. The division of labour is determined by the expertise of each institution. The type (economic/social) of each regulation is determined by the managing line ministries, not by the objective or characteristics of the RIA.

As mentioned, RIAs are conducted on all new and strengthened regulations drafted by the ministries at the central government level. During the drafting stage, an advance notice of the RIA is circulated in order to gather opinions from relevant stakeholders. Once this is completed, the RIA is submitted to the RPC and some are verified by KDI or

KIPA depending on its category as discussed above. The review process of the RPC consists of preliminary and main reviews. When necessary, revision or withdrawal is recommended at this stage. Once reviewed, the regulation bill should pass the resolutions at the Cabinet meeting and the National Assembly in order. The whole process is illustrated in Figure 8.1.

Figure 8.1. The RIA system in Korea

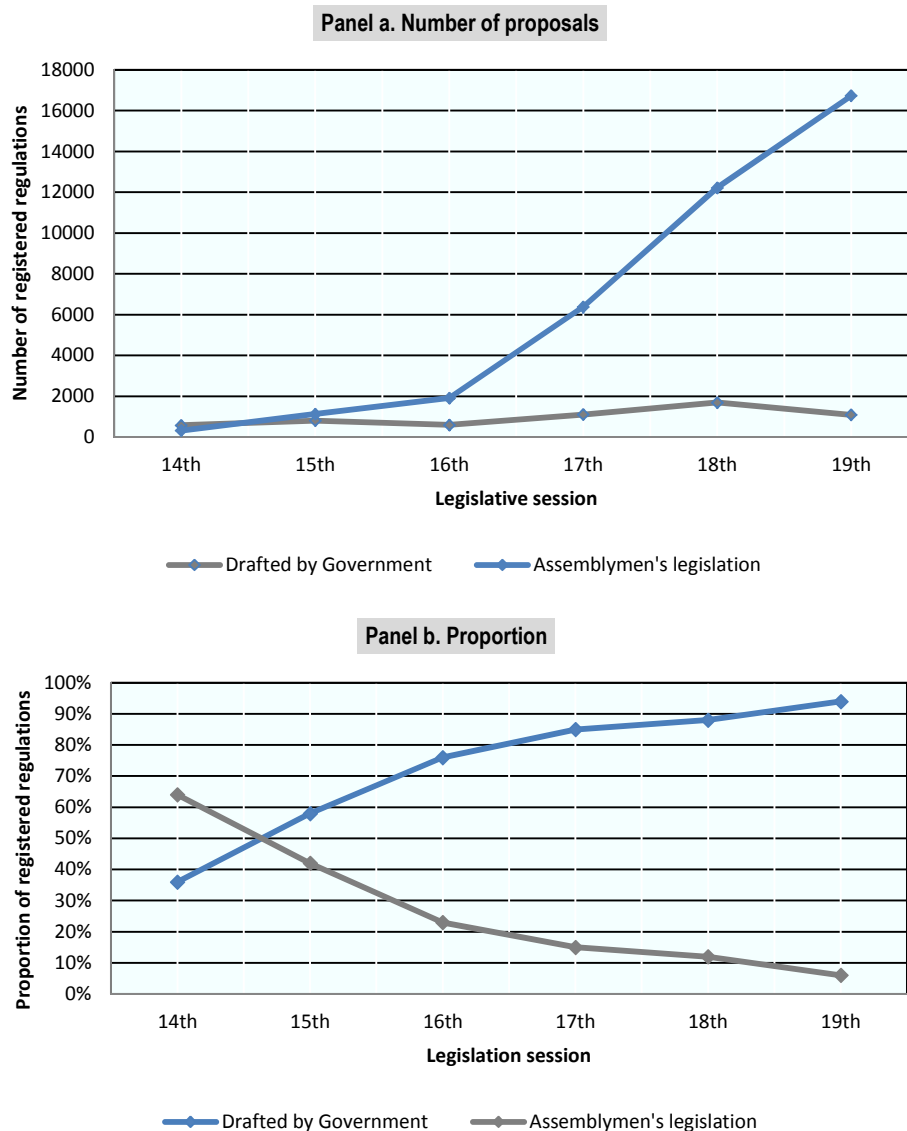


The drawback in the aforementioned process is the fact that there are no specific requirements as to when the RIA should be conducted; even if its schedule may appear on the advance notice of legislation. Consequently, this allows room for the RIA to be used merely to justify the final regulatory bill.

To facilitate the use of RIA, the PMO developed the “e-RIA” system, a fully computerised tool to help improve the quality of RIAs. The system intends to ease the burden of calculations and minimises the chances of making errors and/or leaving the blanks that have to be filled in.

As mentioned, RIAs are conducted on all new and strengthened regulations drafted by the ministries at the central government level. Consequently, the frequently argued weakness of its practice in Korea is that there is no RIA conducted on the repeal or easing of regulations by government as well as the introduction of new legislations originated from the National Assembly. It may be possible to easily introduce RIA for repeals made in the legislation through social consensus. However, this may not be easily stretched to its institutionalisation of RIA in the National Assembly. Even so, most of the recent bills are in the form of assemblymen’s legislation, as shown in Figure 8.2. It implies that most regulations in Korea are set without any formal *ex ante* evaluation or structured justification for choosing the best alternative.

Figure 8.2. Proposal of bills in recent Korean National Assemblies



Source: National Assembly bill information system.

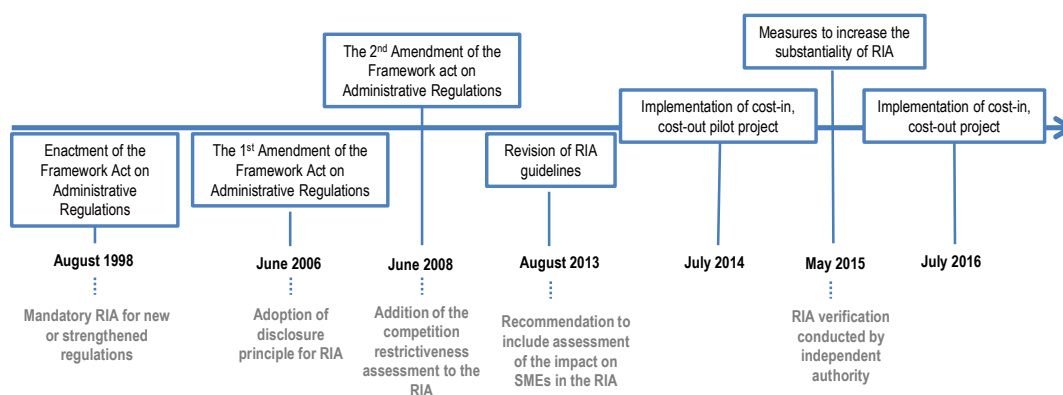
The “Cost-In Cost-Out (CICO)” system is a unique system in the practice of *ex ante* analysis on the impact of changes in regulations in Korea. It intends to at least maintain (and ultimately reduce) the total amount of cost burden on stakeholders—mainly firms—by all regulations managed by a line ministry. Therefore, it requires calculating the change of burden on stakeholders as a consequence of the revisions in regulations including introduction, strengthening, repeal, and easing. For any changes in regulation subject to the CICO system, line ministries submit a report of regulatory cost analysis similar to RIA. The difference between benefit-cost (net benefit) estimations in regulatory cost analysis and RIA is the coverage. The former sums up the cost to stakeholders only, while the latter includes all cost burdens in view of national economy as compared in Table 8.1. The system was initiated in July 2014 as a pilot project and was formally implemented in the country in July 2016.

Table 8.1. Calculation of net benefit in RIA and CICO systems

	Benefit		Cost	
	Direct	Indirect	Direct	Indirect
Regulatees	A	B	W	X
Others (general public and government)	C	D	Y	Z
	RIA system: $(A+B+C+D) - (W+X+Y+Z)$			
	CICO system: $A-W$			

The history of the Korean RIA system as stated above is summarised in Figure 8.3.

Figure 8.3. History of the RIA system in Korea



## Contents of RIA in Korea

In this section, we introduce what constitutes a RIA in Korea. There are two versions of RIA: standard and short forms. They are separated by the magnitude of the ripple effects and issues. The standard form of RIA should be written when the effect of a regulation is large (annual regulatory direct cost and number of regulatees are greater than or equal to 1 billion KRW and 100 000, respectively) or when related issues or stakeholder confrontation are severe. On the other hand, regulations subject to short form include: those with low level of net cost; those setting a minor or detailed standard as a result of the delegation of the higher-level law; those related to incidental procedure of the beneficial administrative act; and administrative orders and sanctions.

As will be described in more detail below, the standard form of RIA requires CBAs by alternative. Exceptionally, if quantitative CBA is not feasible, it can be absolved. In contrast, the short form exempts from the estimation of indirect cost and benefit incurred to regulated corporates and micro enterprises (areas *B* and *X* in Table 8.1.) as well as the CBA for non-regulated private sector when the impact is insignificant. At least two regulatory alternatives should be surmised in the standard form while only one regulatory alternative can be dealt with in the short form. The administrative orders and sanctions are exempted from the CBAs by alternative because the regulatory cost accounts for the compliance costs only.

Table 8.2. Contents of RIA in Korea

Category	Detail
Overview	Overview of regulation
Contents	Comparisons between old and new provisions
Need for regulation	<ul style="list-style-type: none"> <li>A. Current status &amp; issues</li> <li>B. Need for government intervention</li> <li>C. Objectives of introducing regulation &amp; desired outcomes</li> </ul>
Discovery & review of an alternative	<ul style="list-style-type: none"> <li>A. Considered alternatives <ul style="list-style-type: none"> <li>1) existing regulation</li> <li>2) non-regulatory alternative</li> <li>3) alternative to regulation #1</li> <li>4) alternative to regulation #2</li> </ul> </li> <li>B. Analyses of the alternatives <ul style="list-style-type: none"> <li>1) application of negative-list approach</li> <li>2) inference with autonomy and creativity of private sector</li> <li>3) case studies from other countries</li> <li>4) similar cases in other legislations</li> <li>5) review of the grounds for delegation</li> <li>6) stakeholder engagement</li> <li>7) difficulties in achieving the regulatory objective with existing regulation</li> <li>8) conclusion</li> </ul> </li> </ul>
Cost-benefit analysis	<ul style="list-style-type: none"> <li>A. Comparative analysis of alternatives <ul style="list-style-type: none"> <li>1) table of comparing analysis results for alternatives #1 and #2</li> <li>2) results of CBA for each activity for alternatives #1 and #2 <ul style="list-style-type: none"> <li>(i) regulated corporates &amp; micro enterprises</li> <li>(ii) regulated general public</li> <li>(iii) non-regulated corporates &amp; micro enterprises</li> <li>(iv) non-regulated general public</li> <li>(v) government</li> </ul> </li> <li>(vi) total cost, net cost to businesses, and equivalent annual net cost <ul style="list-style-type: none"> <li>3) Regulatory alternative #1</li> <li>4) Regulatory alternative #2</li> </ul> </li> </ul> </li> <li>B. Cost-benefit analysis by activity of each alternative</li> </ul>
Conclusion	<ul style="list-style-type: none"> <li>A. Enforcement resources and capabilities by alternative <ul style="list-style-type: none"> <li>1) administrative and financial enforceability</li> <li>2) technical enforceability</li> <li>3) enforceability of the local government, etc.</li> </ul> </li> <li>B. Need for RIA by sector <ul style="list-style-type: none"> <li>1) SMEs RIA</li> <li>2) competition impact assessment</li> <li>3) technology impact assessment</li> </ul> </li> <li>C. Choice of regulatory alternative and the rationale</li> <li>D. Desired outcomes of the preferred alternative</li> <li>E. Stakeholder opinions on the preferred alternative and actions taken</li> </ul>

Let us explore the case of standard form more in detail. As shown in Table 8.2, the main body of a Korean RIA consists of introducing the necessity of governmental intervention along with objectives and expected effects, identifying and reviewing alternatives, and CBAs for considered alternatives. In the appendix, an example of a RIA is enclosed.

The overview part of the RIA is in the form of a summary table. It starts with the title of the regulation, the department in-charge, and the personal information of the author. It is then followed by the related act and public notification. The regulated party and stakeholder(s) are also summarised in a sub-table. The duration of the regulation is also included, which is automatically set at 10 years unless otherwise specified. The author subsequently specifies the classification indicating whether the regulation is new or reinforced and summarises the contents of the newly introduced (or reinforced) regulation. A comparison table of the current and revised provisions is included by placing the articles alongside each other. This method makes it easier for the reviewers to see the changes made at a glance. The regulatory structure and legislative hierarchy are also cited in the overview.

The next part focuses on justifying the need for regulation. This first requires a description of the socio-economic background or process in which the problem is to be solved – either through the establishment or reinforcement of a regulation, e.g. the occurrence of accidents or disasters. In doing so, the authors would need to provide credible data, in the form of examples and statistics that can effectively and sufficiently demonstrate the severity or urgency the problem. In order to further justify the need for government intervention, the authors are also requested to explicitly explain why it is difficult to solve the problem by leaving it to the market or to the private sector. If new regulations need to be created that did not exist, it should also be clearly explained. Finally, a description of the goals of the regulatory adoption and the expected future situation is also provided.

The subsequent part refers to the identification and review of a variety of alternative regulations to solve the problems presented. More specifically, this includes existing regulation(s), and non-regulatory and regulatory alternatives. Existing regulation is the case when no action is taken. In the case of a new regulation, this describes the situation without regulation; whereas, in the case of reinforced regulations, it describes the current regulations or the relevant regulations that exist to achieve the same policy objectives. Non-regulatory alternatives include economic incentives such as tax cuts and low interest loans, subsidies, and social movements such as campaigns and public advertisements. Alternatives to regulation are different regulatory measures considered by the regulator. In general, the first alternative to the regulation is the preferred alternative that the regulating authority attempts to introduce. On the other hand, the second alternative to regulation is a different approach than the first alternative, which is often a less (or more) restrictive alternative.

When analyzing the alternatives, a comprehensive scrutiny is called for. First, to fully utilize the autonomy and creativity of private sector and to minimize distortions from government intervention, one should compare and contrast the alternatives based on four criteria: 1) self-regulation; 2) market-style incentives rather than command-control; 3) negative-list approach rather than positive-list approach; and 4) performance-based regulation rather than input-based regulation. Second, to check if the regulation meets the global standard, case studies from other countries are requested. Third, before selecting a preferred alternative, the validity and appropriateness should be compared and evaluated by collecting opinions from the regulated entities, stakeholders, and experts and engaging them in the review of the different alternatives. Fourth, the alternatives should clearly state the difficulties in achieving the policy objectives if the existing regulations and non-regulatory alternatives are chosen.



Rigorous CBAs are also required for each alternative: the existing regulations and alternatives to the first and second regulation. As a general rule, the period of the relevant regulations should be set at the period of analysis but the default is set to 10 years. The social discount rate is set to 5.5% in real term. The groups affected by the regulation, and thus those should be considered in CBA include regulated corporates and micro enterprises, regulated general public, non-regulated corporates and micro enterprises, non-regulated general public, and the government.

The direct cost incurred to regulated corporates and micro enterprises (area *W* in Table 8.1.) includes 1) administrative burden such as reporting cost, authorisation fee, and documenting cost; 2) labour costs for additional labour input and new employment; 3) education and training cost including the opportunity cost, i.e. decrease in corporate profits due to the inability of the workforce for education and training that has not been done before; 4) external service fee; 5) purchasing and disposal costs for equipment and raw materials; 6) operation and management cost; and 7) reduced profits arising from delays in operations. On the other hand, the direct benefit to regulated corporates and micro enterprise (area *A* in Table 8.1.) are grants directly provided by the government or agencies, financial benefit by decreased uncertainty, and newly created added value.

The indirect cost incurred to regulated corporates and micro enterprises (area *X* in Table 8.1.) is composed of the decreased profit due to decrease in demand, increase in production cost, and changes in production, supply and sales methods. The indirect benefit to them (area *B* in Table 8.1.) is the increased profit via raised awareness and credibility in the market and enhanced quality of product and service, to name a few.

The cost incurred to regulated general public includes administrative burden, increase in household expenditure, and the opportunity cost arising from not being able to work or do business, among others. In contrast, the benefit to them consists of the decrease in household expenditure, improved safety and environment, and enhanced health and wellness.

The non-regulated corporates and micro enterprises refer to those that supply raw materials necessary for the production of goods and/or services of regulated companies, purchase goods and/or services from regulated companies, or are engaged in industries related to the regulation. The costs to them consist of the decrease in demand and increase in production cost. The benefits refer to those gained through the introduction or reinforcement of regulation. For example, a new regulation aimed at monopolistic suppliers of raw materials will induce the decrease in production cost of non-regulated firms that purchase raw materials.

Similarly, the costs to the non-regulated general public consist of the increase in household expenditure and decrease in employment, safety, environment, health, and wellness. The examples of non-regulated general public include consumers of regulated products and drivers of regulated logistics companies.

Finally, the cost to the government accounts for the additional monetary inputs needed for the enforcement and oversight of the regulation. The enforcement cost includes the announcement cost, education and training cost, developing and operating cost of system, and surveillance and supervision cost to name a few. Moreover, the increase in subsidy and decrease in government revenue such as administrative fees are also included.

Once the CBAs are done for each alternative, the overall conclusion follows. The part starts with checking if the resources and capabilities are sufficiently secured by alternative. First, in the part of administrative and financial enforceability, one has to check if it is possible to enforce the regulation by current administrative manpower and budget, and if the authority has a budget ready or a detailed budget plan available when it needs to expand the workforce and budget. Second, in terms of technical enforceability, the possibility to enforce the regulation with generally spread technology has to be confirmed. Third, in case that the enforcement of regulation is delegated to a local government or entrusted to related agencies and organisations, one also needs to state clearly whether the necessary manpower and budget can be secured and/or they are taking supportive measures.

Then, the RIAs by sector analyse impacts specific to SMEs, market competition, and technical standards. First, the RIA identifies the SME-related regulations, surveys the status of market by company size and the ratio of regulatory burden to sales, lists the opinions of the regulated companies, and examines the differentiation method by company size such as timing and method of enforcement. Second, the competition impact assessment examines the degree of burden that the regulation places on market participants such as charge amount and limitation to market entry and sales activities, discrimination between incumbents and entrants, influence to consumer welfare, and existence of other similar or overlapped laws and regulations. Third, the technology impact assessment deals with the comparison to (1) other technical standards according to national standards or other legislations; (2) similar tests, inspections, and certification systems that are already in operation; (3) international standards (e.g. ISO, IEC, and ITU); and (4) equivalences and differences to foreign regulations from the technical point of view.

The conclusion ends with the statement of choice of regulatory alternative and the rationale, expected or desired outcomes of the preferred alternative. It also includes stakeholder opinions and actions taken if there is any.

## Methodological issues

### *Coverage*

We have discussed in the aforementioned several issues regarding the uncovered area – that no RIA is conducted on the repeal or easing of regulations drafted by the government as well as on assemblymen’s legislation. At the same time, however, line ministries are endowed with insufficient manpower and budget to implement RIA even if RIA is mandated to all of new and strengthened regulations and bills. A thorough RIA requires enormous resources. This therefore calls for a strategy to discern certain regulations in need of RIA and to distribute available resources based on these needs.

More specifically, we know that RIA is required for all types of regulations issued by central government agencies, e.g. legislation, decrees, and ordinances. Consequently, administrative power is being wasted and therefore creates a weaker RIA system. Other than a RIA on primary law, a separate RIA should be conducted on subordinate law or single regulation that deals with entrustment and other details. To underscore this issue, from May to October 2015, only one quantified CBA was conducted in 230 RIAs sent to KDI for the request of verification.

A remedy to this issue may include adopting the “principle of proportionality”. OECD recommends the principle of proportionality for the decision on the scope and subject of the RIA. Diversifying the type of RIA into two may help apply the principle to full and expedited RIAs. Important regulations expected to cause large social and economic impacts should be subjected to a full RIA so that sufficient manpower and budget could be injected. On the other hand, an expedited RIA would be enough for those with relatively less spillover effects.

The type of RIA used would depend on a number of conditions: the magnitude of the impact in monetary terms, affected number of companies or people, and so on. For example, regulation whose regulatory compliance cost exceeds 10 million USD per year or which causes impacts on over 1 million people per year. In the United States, a full RIA is conducted on economically significant regulations whose impact is estimated over 1 billion USD per year.

To implement the approach, development of a review procedure to determine whether to apply a RIA or not should be introduced. A good example is the threshold test: a system determines whether to conduct a full RIA at the phase of drafting a regulatory bill. Canada’s Triage System can be a useful benchmark to consider. In this system, a triage statement is formulated at the initial phase of drafting a regulatory bill, and is used to determine whether a full or expedited RIA should be applied.

One might further think of narrowing down the coverage of regulations or bills that require a RIA, so that some are exempted from it. Applying it this way, however, should take into account the risk of deteriorated regulatory quality for exempted regulations.

### ***Adoption of CBA-based regulation with positive net benefit***

The key purpose of RIA is to enhance the efficiency of the regulation through a CBA. Several OECD countries have pursued the principle of accepting regulations whose net benefit turns out positive. However, it is difficult to entrench the principle of CBA-based regulation, since some of the outcomes are not easy to monetize or quantify.

The CBA contains all three types of analysis items: 1) monetisable; 2) quantifiable but not monetisable; and 3) not quantifiable nor monetisable. Certainly, most benefits are neither monetisable nor quantifiable. Given this, what makes it possible to adopt the principle of CBA-based regulation with positive net benefit? Should it be allowed to adopt regulations whose net benefit is found negative in quantitative analysis, taking potential qualitative benefits into account? Is this going to hinder the effectiveness of quantitative analysis?

In Korea, most of the RIAs conducted on regulations that are not subject to the CICO system only provide a simple qualitative analysis. Even in the case when the regulation is subject to the CICO system, the focus is mainly on quantifying the direct benefit and cost to be borne by the regulated entities. Indirect benefit and cost for the regulated entities and the benefit and cost for government and the third party are analysed mostly in a qualitative way. Current RIA simply displays a list of outcomes from quantitative and qualitative analyses without being based on the Cost-Effectiveness Analysis (CEA) and/or Break-Even Analysis (BEA), making it difficult to adopt regulations that have positive net benefit.

The CEA helps select preferred alternatives, assuming that various measures under consideration can produce similar benefits in size. This method still leaves us the question as to how to ensure the adoption of regulation that has positive net benefit. In the BEA, a

qualitative judgment is made regarding the scope of benefit that can justify the quantitatively estimated cost of preferred alternatives selected through the CEA.

### *Integration of various socio-economic effects*

Regulations could result in various socio-economic effects. Unfortunately, many regulatory items are non-market goods, meaning the only possible method is a qualitative analysis, e.g. distribution (by region, social class, and company size), employment, competition, market openness, innovation, environment, and sustainable growth. Valuing non-market goods adopts a revealed or stated preference analysis. The former relies on data collected from past activities of businesses or people, while the latter adopts survey methodology to elicit preferences of stakeholders. If this is the case, what type of information should be offered to policy decision makers so that the efficiency of their decision making process will be enhanced?

Other than the analysis of general socio-economic effects, separate analyses are required to examine the impact on competition, technology compatibility and innovation, and SMEs introduced in 2005, 2009, and 2013 respectively. These analyses however do not go beyond simply seeking opinions on the impact of each regulatory alternative from ministries involved and there is no current recognition of the need to integrate several diverse qualitative and quantitative analysis items and policy goals. This implies that the RIA does not serve to provide information to policy decision makers, but simply as a tool to justify the already determined policies.

To overcome these challenges, one option is to adopt a Multi-Criteria Analysis (MCA) when drafting RIAs. The MCA draws out integrated outcomes for each alternative by giving weights and scores to various qualitative and quantitative analysis items. The advantages of the approach include: promoting robust consultation, encouraging consistency and rigor in the analysis, and providing better information to political decision-makers. However, integrated analysis through an MCA is exposed to various potential problems.

First, MCA may be exposed to possible manipulation. The regulatory authority may distort the analysis result by adding weight or score. To address this, each analysis item should have a setting of its own scope of weight beforehand.

Second, the issue of “quantification aversion” exists. That is, the regulatory authority may neglect efforts for quantitative analysis. Restraining measures are necessary so that higher weight can be given to quantitative analysis.

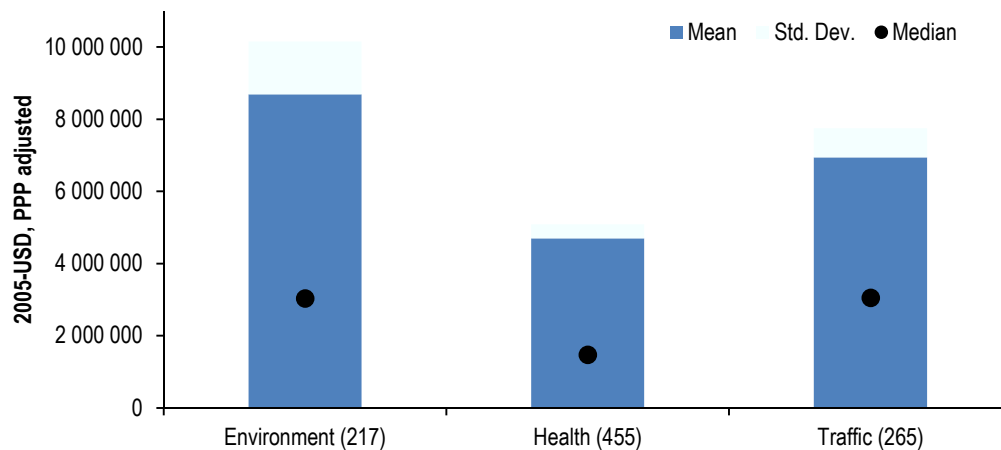
Third, the information may be inefficiently provided, which is a fundamental problem. In the context of providing information as to whether to adopt regulation or not, it is necessary to integrate various social and economic effects. Thus, it is important to clearly and carefully predetermine who is in charge of managing weight and score between regulatory authority and policy decision-makers.

### *Value of life*

Estimating the (per-unit) value of a benefit or cost item is essential when conducting CBAs. Some items can be measured easily and accurately, e.g. average wage of a specific sector, average cost of additional equipment to meet the quality standard, and fare of a transportation mean. However, the values of many items are either difficult to monetize or face controversies in the method of valuation.

A representative example is the value of life. It is a direct benefit gained from safety regulations that attempt to decrease casualties. In health economics, it is expressed as the value of statistical life (VSL). The benefit estimation methods vary, and so do their results. The methodology includes the contingent valuation method (CVM) and human capital approach (HCA). The former is a stated preference approach to estimate the willingness to pay (WTP) according to changes in mortality risks. The latter estimates the present value of the future earning of a person—who avoided accident—over an expected lifetime. Figure 8.4 shows the results from a meta-analysis comparing different approaches to estimate the VSL.

Figure 8.4. Value of life by sector



Source: OECD (2012), “The Value of Statistical Life: A Meta-Analysis”, [env/epoc/wpnep\(2010\)9/final](http://env.epoc/wpnep(2010)9/final), OECD.

In Korea, the Office for Government Policy Coordination released “Guidelines for the Preparation of Regulatory Impact Statement” in 2013 and recommended to reflect the VSL as a benefit item. In the medical sector, the VSL is estimated as the benefit earned from the decrease in the cost for emergency death since 2012. The costs for emergency death consist of wage loss as well as the pain, grief and suffering resulting from accident (PGS cost). On the other hand, in traffic sector, the VSL is the benefit earned from the decrease in traffic accident death. The cost of traffic accident death includes the production loss (wage loss), insurance administration cost, funeral expenses, medical expenses, traffic police costs, and PGS cost.

The main concerns for its implementation are twofold: how to accept the estimates of the VSL given the different methodologies and is the methodology adequate in estimating the VSL? First, the difference among sectors and methods is somewhat unavoidable since they focus and emphasize on their own perspectives. Second, it needs to be argued deeper whether the CVM can provide the accurate ratio of mortality risk resulting from the adoption of a regulation and that the HCA can embrace social values such as individual’s leisure activities and the diversity of values in each sector.

### *Social discount rate*

One of the key parameters used in the CBA is the social discount rate (SDR). Discounted benefits and cost values are determined by the social discount rate and, as a result, the Benefit-Cost Ratio and Net Present Value.

A few perspectives to the magnitude of the SDR exist. First, those who advocate high value of the SDR argue that people strongly prefer that the benefit occurs today in contrast to future benefits, especially when the budget is tight. Applying a higher SDR is interpreted as valuing immediate benefits more as opposed to future benefits.

Second, supporters of a low SDR claim that CBAs in general cannot measure all impacts. For example, estimating the overall regulatory cost and benefit to the general public, including all ripple effects, is almost impossible. However, acknowledging all ripple effects as benefit is controversial. Even though some potentially significant impacts are not monetized, it is argued that they should be considered in a way other than adjusting the SDR.

Third, those who pay attention to the behavioural aspects of CBAs conclude that both high and low values of the SDR are acceptable. When conducting CBAs, analysts tend to over- and under-estimate the benefit and cost, respectively (Flyvbjerg, 2009; Flyvbjerg, Holm, and Buhl, 2002). Taking into account this fact, some argue that a higher SDR is needed. On the other hand, others advocate lowering the level of the SDR since a high SDR often leads to the over-estimation of the benefit.

Korea's RIA borrows the SDR applied to the economic feasibility appraisal of public investment projects, namely the preliminary feasibility study (PFS). After studying the basic interest rate, social rate of time preference (SRTP), financial discount rate and others to estimate an appropriate social discount rate, the PFS uses the SRTP for estimation as it can calculate an appropriate rate with a relatively small number of parameters, and the value estimated as such can be considered the lowest limit of the social discount rate (KDI, 2008: p.62). The SRTP can be calculated as:

$$SRTP = \rho + \mu \cdot g$$

where  $\rho$  refers to a discount rate of future consumption under the assumption that per-capita consumption does not change,  $g$  is an annual rate of per-capita consumption increase, and  $\mu$  is the elasticity of marginal utility of consumption. Finally, the term  $\mu \cdot g$  is to reflect the diminishing effect of marginal utility due to consumption change. The estimated values of parameters  $\rho$ ,  $\mu$ , and  $g$  are 1.5%, 1, and 4%, respectively. Consequently, the real SDR in PFS is set at 5.5%.

The rate is judged to be relatively high for Korea given its recent economic conditions. To compare the estimated value with international practices, Table 8.3 displays the SDRs in selected countries.

The countries use different approaches in calculating the social discount rate. First, the social rate of time preference (SRTP) approach, as discussed above, is used in countries including Korea, France, Italy, Spain, and the United Kingdom and institutions in the U.S. Second, the marginal social opportunity cost (MSOC) approach reflects the rate of return from private investment crowded out by those of public investment. Developing economies that have adopted this approach include India, Pakistan and the Philippines. Third, the weighted average (WA) approach considers the sources of funding, both domestic and overseas, and takes the weighted average of two funding

sources. In practice, the SDR using the WA approach is considered unrealistically high, and thus use of the approach is limited. Fourth, the approach using the capital asset pricing model (CAPM) applies the cost of “systematic risk” to public investment, considering them hypothetically as private investment. For discussions on the theory and practice of choosing the SDR for CBA, refer to Zhuang et al. (2007).

Table 8.3. **Social discount rates used in cost-benefit analysis**

Country	Social Discount Rate	Theoretical Background
OECD Countries		
Australia	Varies by state/type e.g. 7% (NSW), 4%, 7%, or market rate of return (VIC)	MSOC or CAPM
Canada	10% (1998) → 8% (2007)	MSOC
France	8% (1985) → 4% (2005)	SRTP
Germany	4% (1999) → 3% (2004)	Federal refinancing rate
Italy	5%	SRTP
<b>Korea</b>	<b>7.5% (1999) → 6.5% (2004) → 5.5% (2008)</b>	<b>SRTP</b>
New Zealand	8% (base), 5% (construction), 7% (SOC), 9% (technology)	CAPM (SRTP)
Norway	7% (1978) → 3.5% (1998) → 4% (2005)	risk-free rate + premium (CAPM)
Spain	6% (transportation), 5% (environment), 4% (water management)	SRTP
U.K.	8% (1967) → 10% (1969) → 5% (1978) → 6% (1989) → 3.5% (2003)	MSOC (until 1980s) → SRTP
U.S. (Office of Management & Budget)	Before 1992: 10% After 1992: 7%	Mostly MSOC
U.S. (Congressional Budget Office & General Accounting Office)	“the interest rate for marketable Treasury debt with maturity comparable to the program being evaluated”	SRTP
U.S. (Environmental Protection Agency)	2010: 3% (when all costs & benefits are incurred by consumption flow)	SRTP, MSOC
Non-OECD Countries		
China	8% (short- & mid-term) and <8% (long term)	WA
India	12%	MSOC
Pakistan	12%	MSOC
Philippines	15%	MSOC

Source: adopted and augmented from KDI (2015), p. 33, Table III-4.

As discussed above, the RIA merely borrows the SDR from a different area, namely project appraisals. Even though the methodology estimates the SDR rigorously, issues remain to be resolved. First, due to its origin, no explicit consideration was given to the characteristics of regulations, e.g. the effective period of regulation, characteristics varied by sector, and reversibility of the regulatory policy. A common annual discount rate has been used with limited consideration of characteristics such as sector type and length of term (long/short). As mentioned, in practice, the time period for an analysis is set as 10 years, unless otherwise noted. In the particular case of long-term regulations, one may think of whether different SDR values should be applied in the context of term structure.

Second, the methodological improvement is consistently required. In Korea's case, the SRTP approach is used, but several applicable methodologies in the estimation of parameters exist including those that appear in Table 8.3.

### ***Risk and uncertainty***

Lastly, the issue of treating risk and uncertainty appropriately in the RIA emerges. The main question may be if the risk threshold can substitute the CBA as an alternative method of analysis. More specific questions related to this issue include:

- What criteria in the “needs review” stage serve to determine whether the concerned regulation contains unacceptable risks or not?
- If found true (meaning it has unacceptable risks), is it still necessary to conduct the CBA and compare the sizes of cost and benefit arising from tackling the risks?
- When variables show high uncertainty, a sensitivity analysis is recommended. What are the criteria and implementation methods of the sensitivity analysis?

The concept of unacceptable risks has not been firmly settled in Korea yet, hence not considered in the regulatory CBAs. Meanwhile, regulations involving public safety and security are not going to be subject to the CICO system, which implies that the Korean public is aware of the concept of unacceptable risks. Oftentimes, the assessment of uncertainty in RIAs has been substituted with qualitative analyses.

In principle, the analysis should not consider anything other than objective risks, but there is little mechanism that can verify that. The risk neutrality assumption has been used, but no explicit expressions are available as to whether to adopt precautionary principle or not, and what are its standards.

### **Policy implications and conclusion**

So far, we have seen the background, process of institutionalisation, and current system of RIA in Korea. We also introduced the contents of RIA in detail and provided a reference to a real RIA case (see appendix). Finally, we discussed the methodological issues that the Korean practice in RIA has encountered and/or is currently facing.

From a policy making point of view, the experience in Korea draws attention to the following considerations. First, when institutionalising RIA, an adequate coverage needs to be secured. Of course, it does not necessarily need to mandate RIA to all or most changes in regulation, given the cost and time needed to conduct RIA. However, RIAs on major, important, and controversial regulations are almost absolutely necessary. While setting the coverage of compulsory RIA depends on the political, socio-economic, and cultural context in each country, a critical and universal criterion for deciding on the scope and subject of the RIA is the principle of proportionality.

Second, not only should the overall impacts to the national economy be explored when changes to regulations are made; but, it should also consider the asymmetric impacts to specific sectors and stakeholders. Korea's RIA adopts additional assessments on disproportionate impacts on SMEs and micro businesses, competition, and technological feasibility. To integrate various perspectives including efficiency, distribution, and technology, one might consider adopting the MCA.



Third, the methodologies and values of benefit and cost items and parameters used when conducting CBA in RIA have to be consistently elaborated and updated to elicit more accurate and reliable results. Depending on the cases, it requires to choose a preferred methodology (e.g. VSL), collect and manage related data (e.g. average wage of a specific profession), and determine for policy purposes (e.g. SDR).

Finally, RIA is the *ex ante* evaluation of the change in regulations from the perspective of its background, necessity, cost effectiveness, and consequences among others. It is supposed to serve mainly at the stage of designing new regulation and checking existing regulation. However, the forward-looking perspective is substantially requested while conducting RIA. More specifically, it needs to clarify the ways and indicators in relation to how we monitor regulations that have been introduced and enforced, and how to evaluate when sunset clause expires. In view of the policy cycle, a well-designed monitoring and evaluation roadmap in RIA can make it possible to identify policy issues for government actions easier and clearer when the regulation is being enforced and at the end of the effective period of the regulation.

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*Annex 8.A*

**Example of RIA in Korea**

**Regulatory Impact Assessment**

**FRAMEWORK ACT ON BROADCASTING COMMUNICATIONS DEVELOPMENT**

< Table of Contents >

1. Collection Rates for Broadcasting Communications Development Fund

<b>Ministry of Science, ICT and Future Planning</b>
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**Overview of Regulation**

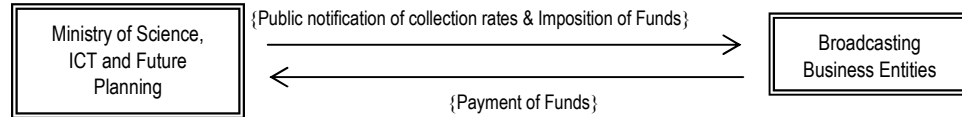
1. Title of Regulation	Collection Rates for Broadcasting Communications Development Fund				
2. Department in Charge and Personal Information of Author	Department in Charge	Ministry of Science, ICT and Future Planning	Name	□□□, □□□	
3. Related Act, Public Notification, etc.	Division in Charge	ICT Policy Division	Author	Title	Deputy Director
	Director General	000, 000		Tel.	##-####-####
	Director	xxx, xxx		email	aaa@aaa.aaa
4. Regulated Party and Stakeholder(s)	Article 25 of the <i>Framework Act on Broadcasting Communications Development</i> and Article 12 of the <i>Enforcement Decree</i> under the same law  <i>Details on Calculating and Imposing Broadcasting Communications Development Fund (Public Notification)</i>				
	Classification		Number or Size of the Regulated	Engagement Method	Details of Feedback
	Regulated Party	CATV Broadcasting Service Provider	92 Operators	Advance Notice of Proposed Administrative Plan	Revision to lower current collection rate from 1.02328 to 1.02023
		IPTV Broadcasting Service Provider	3 Operators		Revision to raise current collection rate of 0.5% to 1.0%
5. Duration of Regulation	Expires on 31 December 2016 (Expected to be amended to 31 December 2017)				
6. Classification (New or Reinforced)	Reinforced Regulation				
7. Summary of the Newly Introduced (Reinforced) Regulation	<ul style="list-style-type: none"> <li>○ Previous Regulation <ul style="list-style-type: none"> <li>– The collection rates for CATV broadcasting service provider are applied through a 3-step progressive stage system, in which under 10 billion KRW are charged 1.0%, 10 to 20 billion KRW are charged 2.3%, above 20 billion KRW are charged 2.8%</li> <li>– Collection rate of 0.5% is applied to an IPTV Broadcasting Service Provider</li> </ul> </li> <li>○ Summary of Newly Introduced (Reinforced) Regulation <ul style="list-style-type: none"> <li>– The collection rates for CATV broadcasting service provider are applied through a 3-step progressive stage system, in which under 10 billion KRW are charged 1.0%, 10 to 20 billion KRW are charged 2.0%, above 20 billion KRW are charged 2.3%</li> <li>– Collection rate of 1.0% is applied to an IPTV Broadcasting Service Provider</li> </ul> </li> </ul>				

8.Regulatory Structure and Legislative Hierarchy

Article 25 of *the Framework Act on Broadcasting Communications Development* (Creation of Fund)

Article 12 of *Enforcement Decree of the Framework Act on Broadcasting Communications Development* (Collection of Charges)

*Details on Calculating and Imposing Broadcasting Communications Development Fund* (Public Notification from Ministry of Science, ICT and Future Planning)



\* The responsibility of collecting the funds is delegated to Korea Communications Agency (KCA)

#### Details of the Newly Introduced (or Reinforced) Regulation

- Previous Regulation
  - The collection rates for CATV broadcasting service provider are applied through a 3-step progressive stage system, in which under 10 billion KRW are charged 1.0%, 10 to 20 billion KRW are charged 2.3%, above 20 billion KRW are charged 2.8%
  - Collection rate of 0.5% is applied to an IPTV Broadcasting Service Provider
- Details of the Newly Established (or Reinforced) Regulation
  - The collection rates for CATV broadcasting service provider are applied through a 3-step progressive stage system, in which under 10 billion KRW are charged 1.0%, 10 to 20 billion KRW are charged 2.0%, above 20 billion KRW are charged 2.3%
  - Collection rate of 1.0% is applied to an IPTV Broadcasting Service Provider

### Comparison of the Provisions

Current Provision				Revised Provision			
<Supplementary Table>				<Supplementary Table>			
Criteria for Fee Imposition & Collection Rates (Related to Article 2)				Criteria for Fee Imposition & Collection Rates (Related to Article 2)			
Classification	Criteria for Fee Imposition	Collection Rates		Classification	Criteria for Fee Imposition	Collection Rates	
<u>CATV Broadcasting Service Provider</u>	<u>Sales Revenue from Broadcasting Services</u>	Sales less than 10 billion KRW	1.0/100	<u>CATV Broadcasting Service Provider</u>	<u>Sales Revenue from Broadcasting Services</u>	Sales less than 10 billion KRW	1.0/100
		<u>Sales exceeding 10 billion KRW and below 20 billion KRW</u>	<u>2.3/100</u>			<u>Sales exceeding 10 billion KRW and below 20 billion KRW</u>	<u>2.0/100</u>
		<u>Sales exceeding 20 billion KRW</u>	<u>2.8/100</u>			<u>Sales exceeding 20 billion KRW</u>	<u>2.3/100</u>
Satellite Broadcasting Service Provider	Sales Revenue from Broadcasting Services	General Satellite Broadcasting Service Provider	1.33/100	Satellite Broadcasting Service Provider	Sales Revenue from Broadcasting Services	General Satellite Broadcasting Service Provider	1.33/100
<u>Internet Multimedia Broadcasting Service Provider</u>	<u>Sales Revenue from Broadcasting Services</u>	<u>IPTV Broadcasting Service Provider</u>	<u>0.5/100</u>	<u>Internet Multimedia Broadcasting Service Provider</u>	<u>Sales Revenue from Broadcasting Services</u>	<u>IPTV Broadcasting Service Provider</u>	<u>1.0/100</u>
Home Shopping Network Broadcasting Service Provider	Operating Profits Related to Broadcasting Business	1. Television Program Provider (Including service operators who also provide data programs among other services )	13/100	Home Shopping Network Broadcasting Service Provider	Operating Profits Related to Broadcasting Business	1. Television Program Provider (Including service operators who also provide data programs among other services )	13/100
		2. Data program providers excluding the operators that fall under the first category	10/100			2. Data program providers excluding the operators that fall under the first category	10/100

Note: The charges to CATV broadcasting service providers are collected in the amount calculated by multiplying the sales revenue from broadcasting services by a determined collection rate.

Note: The charges to CATV broadcasting service providers are collected in the amount calculated by multiplying the sales revenue from broadcasting services by a determined collection rate.

## 1. The Need for Regulation

### A. Current Status and Issues

- **(Outline of the System)** The development fund is a statutory fee levied on the broadcasting business entities that have been granted permission and approval, with the purpose of supporting and promoting broadcasting communication. All broadcasting business entities are charged with differential rates responsive to their specific conditions to promote development in the broadcasting industry.
  - In accordance with Article 25 of the Framework Act on Broadcasting Communications Development, differential rates may be applied for broadcasting communications service providers in light of public nature, profitability, and the financial condition of the provider.

\* The Ministry of Science, ICT and Future Planning installs and develops the funds and delegates the detailed responsibilities like imposition, collection, and operation to Korea Communications Agency (KCA).

- **(Current Status)** Starting with the home shopping network broadcasting service providers in 2001, the funds to the broadcasting business entities have been imposed to the CATV broadcasting service providers in 2003, to the satellite broadcasting service providers in 2008, and to the IPTV broadcasting service providers in 2015.
  - In the case of satellite broadcasting service providers, the minimum collection rate of 1% was applied considering their financial status in 2008, which was raised to 1.33% since 2013.
  - In the case of the CATV broadcasting service providers (SO), the initial fixed rate system was revised to a 5-step progressive stage system in 2005 and to a 3-step progressive stage system in 2015.
  - For the IPTV broadcasting service providers, the collection rate of 0% was applied from when it was approved in 2008 until 2014, which was raised to 0.5% for the first time in 2015.
    - \* Exemption for a total of six years—three years due to the statutory exemption upon its business approval in 2008 and three years due to the policy exemption (0%).
  - For the home shopping network broadcasting service provider, 12% of their operating profit was charged from 2007 to 2010, and the collection rate has been adjusted to 13% since 2011.
- **Current Status on Collection of Broadcasting Communications Development Fund**

Broadcasting Business Entities	Classifications	Criteria for Fee Imposition	Collection Rate (%)	Note
Satellite Broadcasting Service Provider	General Satellite		1.33	Maintaining the 2013 collection rate
CATV Broadcasting Service Provider	SO	Sales Revenue from Broadcasting Services	1~2.8	-Maintaining the 2015 collection rate -Differential rates for each sales revenue intervals
Internet Multimedia Broadcasting Service Provider	IPTV		0.5	-Maintaining the 2015 collection rate
Home Shopping Network Broadcasting Service Provider	TV	Operating Profit	13	-Maintaining the 2011 collection rate
	Data		10	-Maintaining the 2009 collection rate

- **(Problems)** In order to enhance the equity among the broadcasting business entities, there is the need to adjust the collection rate of the development fund by holistically considering various factors like the business conditions of each business entity.

- As SO service subscribers shifted to other paid broadcasting services like IPTV and satellite broadcasting services, the broadcasting business sales revenue declined while the operating profit also declined due to rising contents supply costs.
- Meanwhile, IPTV broadcasting service providers currently bear the collection rate of 0.5%, and its relatively lower contributions to development fund despite the rapid growth of its competitiveness due to surges in its sales and subscribers has caused a dispute over fairness.

## B. The Need for Government Intervention

- Broadcasting service providers are required to contribute to the development fund as they are granted certain limited benefits including approvals from the government that allows the providers to sustain business with vested rights.
- In accordance with Article 25 of the Framework Act on Broadcasting Communications Development, government intervention is needed to apply differential rates to each broadcasting communications service provider consistent with its public nature, profitability, and the financial condition.

## C. Objectives of Introducing Regulation and Desired Outcomes

### Objectives of Introducing Regulation

- The development fund is a statutory fee levied on the broadcasting business entities that have been granted permission and approval, with the purpose of supporting and promoting broadcasting communication.
  - Differential rates are applied for broadcasting communications service providers in light of public nature, profitability, and the financial condition of the provider.
 

\* Article 25, Section 5 of the Framework Act on Broadcasting Communications Development: “...may apply differential rates for broadcasting communications service provider in light of the public nature and profitability of broadcasting communications and financial conditions of each broadcasting communications service provider...”
- In order to enhance the equity among the broadcasting business entities, there is the need to adjust the collection rate of the development fund by holistically considering various factors like the business conditions of each business entity.
  - Article 12, Section 1 of Enforcement Decree of the Framework Act on Broadcasting Communications Development: “...comprehensive consideration shall be given to the public nature of broadcasting operation, the status of competition in the broadcasting market, the scale of profit and financial condition of the relevant business entity, etc...”

### Desired Outcomes

- Enhanced regulatory equity among the broadcasting business entities in competitive relationship with one another by imposing a reasonable collection rate through a comprehensive consideration towards various factors including competition situation in the sector.



## 2. Discovery and Review of an Alternative

### A. Considered Alternatives

#### Existing Regulation: Collection Rates for Broadcasting Communications Development Fund

- Maintaining the sectional collection rates for the CATV broadcasting service providers as the 3-step progressive stage system is now (1.0/2.3/2.8).
- Maintaining the collection rates for the IPTV broadcasting service providers as the current rate of 0.5%.

#### Non-Regulatory Alternative: Not Applicable

- It is not appropriate to replace the current regulation to a non-regulatory alternative, since the funds are collected to support the development of the broadcasting communications and the law ensures that the collection rates are reasonably calculated through a comprehensive consideration towards the financial condition of the service providers.

#### Alternative to Regulation #1: Collection Rates for Broadcasting Communications Development Fund

- Lower the collection rates for the CATV broadcasting service providers in the 3-step progressive stage system from 1.0/2.3/2.8 to 1.0/2.0/2.3, given their gradually worsening market situation due to factors like the competition with the IPTV services and the difficulties in introducing a new product bundled with mobile.
- Raise the collection rates of the IPTV broadcasting service providers from 0.5% to 1.0%, given their continuously increasing competitiveness from the increase in number of subscribers by 15.8% and the surge in its turnover by 27.4% compared to the previous year.

### B. Analysis of the Alternatives

#### Application of Negative-list Approach

- N/A

#### Interference with Autonomy and Creativity of Private Sector

- N/A

#### Case Studies from Other Countries

- In some countries like Canada, for the purpose of creating a development fund to support the productions of contents and regional as well as national programs, the collection rates are set around 1% to 5% for the contributions from the broadcasting service providers who are also the beneficiaries of the fund.
  - **(Canada)** 5% of the turnovers from the broadcasting services is collected from the cable and satellite broadcasting service providers towards Canada Media Funds to support programme productions, etc.

- **(Germany)** In the case of movie development fund, a collection rate of 1.8% to 3% is charged to the movie screening service providers that earn sales revenue of 75 000 euros and above.
- \* Source: Study on Improvement Measures for Collection System of Broadcasting Communications Development Fund (KISDI, 2011).

### Similar Cases in Other Legislations

- In accordance with the Framework Act on the Management of Charges, there are a total of 94 charges installed domestically.
  - Under each of its respective legislation, each charge specifically and clearly prescribes matters such as persons imposing and collecting charges, purpose of creating charges, requirement for imposition, standards for calculation, methods of calculation, rate of imposition, etc.
  - In the case of “the charges to a casino operator” stipulated in Article 30 of Tourism Promotion Act, the amount of payment is set at a certain rate specified within 10/100 of its turnover to the Tourism Promotion and Development Fund
  - In the case of the “Motion Picture Development Fund” stipulated in Article 23 of Promotion of the Motion Pictures and Video Products Act, 3% of the entrance fee of the movie theater is collected as a contribution from the management of movie theater.

Source: 2015 Comprehensive Reports for the Charges (The Ministry of Strategy and Finance, 2015)

- There also exists the cases in which the charges are imposed on the domestic paid broadcasting service providers (CATV and satellite broadcasting service providers) after 7 years of business licensing on average and also collection of the funds even in the state of operating profit deficit.\*
- \* In the case of the 4th SO, the charges were collected even though most of the operators were in the deficit for two years after the launch of the businesses. The national public broadcaster of KBS (2006 to 2008, 2011 to 2012) and an educational network of EBS (2006 to 2008, 2012) were also imposed of the charges while in the deficit state.

### Review of the Grounds for Delegation

- Article 25 of the Framework Act on Broadcasting Communications Development stipulates the grounds for delegating the creation and collection rate of fund in the forms of public notification.

Legislations related to collection of charges	Main contents
<b>Framework Act on Broadcasting Communications Development</b> Article 25, (Creation of Fund) Section 3 & Section 4	<b>&lt;Delegating the details regarding determination of collection rates through public notification&gt;</b> <ul style="list-style-type: none"> <li>• A charge shall be collected from each CATV broadcasting service provider and each satellite broadcasting service provider and each Internet multimedia broadcasting service provider, in the amount calculated by multiplying the sales revenue from broadcasting services for the previous year by a collection rate determined and publicly notified by the Minister of Science, ICT and Future Planning.</li> </ul>

Article 2,5 (Creation of Fund) Section 5

- A charge shall be collected from each service provider using a broadcasting channel for specialized content such as introduction and sales of products, in the amount calculated by multiplying the operating profit at the closing of accounts for the previous year by a collection rate determined and publicly notified by the Minister of Science, ICT and Future Planning.

**<Differential Calculation of Collection Rate and Considerations>**

- The charge may be applied differential rates for broadcasting communications service provider in light of the public nature and profitability of broadcasting communications and financial conditions of each broadcasting communications service provider.

**Enforcement Decree of the Framework Act on Broadcasting Communications Development**

Article 12, (Collection of Charges) Section 1

**<Considerations in Collection Rate Determination>**

- In determining the collection rates for charges, comprehensive consideration shall be given to the public nature of broadcasting operation, the status of competition in the broadcasting market, the scale of profit and financial condition of the relevant business entity, etc.

## Stakeholder Engagement

- Meeting with the Research Task Force Team on the Statutory Charges for Broadcasting Communications Service Providers in June 2016.

### Meeting summary

- The collection rates of IPTV broadcasting service providers need to be raised.
    - Considering the strengthened competitiveness of IPTV broadcasting service providers given the increases in its sales and subscribers, there is the need to increase the collection rate to ensure the fairness of the effects from the same regulation within the same market.
  - The collection rates for CATV broadcasting service providers need to be lowered in response to their worsening market situation.
    - There is the need to reduce the collection rates for CATV broadcasting service providers given the continuous decrease in its number of subscribers (down by 2.6% on average for the past 3 years) and the fact that a relatively higher collection rate is imposed on these providers compared to other competitors in the market.
  - In the case of the home shopping network broadcasting service providers, the collection rates need to be maintained since the decline in their operation profits are due to a temporary reduction in sales.
    - Considering the fact that the collection rates were not adjusted for the home shopping network broadcasting service providers when their businesses thrived, it is not logical to accept their demands to lower the collection rates in this temporary sales downturn.
  - The collection rates for satellite broadcasting service providers need to be maintained since the increase in its number of subscribers is similar to the previous year.
- Collecting opinions from the CATV broadcasting service providers represented by Korea Cable TV Industry, the IPTV broadcasting service providers represented by Korea IPTV Broadcasting Association, the satellite TV broadcasting service providers represented by KT Skylife, and the TV home shopping network broadcasting service providers represented by Korea TV HomeShopping Association via written statements.

Category	Meeting summary
<p style="text-align: center;"><b>CATV Broadcasting Service Providers</b></p>	<p><input type="checkbox"/> <b>Lower the Current Collection Rate (1.99%)</b></p> <ul style="list-style-type: none"> <li>○ There is the need to apply the same specifics of the regulation among the competitors that offer the same service (SO, IPTV, and satellite service providers).</li> <li>○ Thus, the collection rate for the CATV broadcasting service providers needs to be lowered given the continuously reducing sales revenue due to competition and worsening business conditions for SO caused by the increased retransmission fee.</li> </ul>
<p style="text-align: center;"><b>IPTV Broadcasting Service Providers</b></p>	<p><input type="checkbox"/> <b>Maintain the Current Collection Rate (0.5%)</b></p> <ul style="list-style-type: none"> <li>○ The burden of the service providers is increased by 27% when the collection rate is kept at 0.5%.</li> <li>○ IPTV broadcasting service providers have continued to contribute to the development of the broadcasting and communications industry through UHD investment, digital conversion, set-top box advancement, etc.</li> <li>○ Excessive increase in the charge may discourage the investors from further investments and developments.</li> </ul>
<p style="text-align: center;"><b>Satellite TV Broadcasting Service Providers</b></p>	<p><input type="checkbox"/> <b>Lower the Current Collection Rate (1.33%)</b></p> <ul style="list-style-type: none"> <li>○ The increasing trend in the number of subscribers slowed down due to the intensified competition in the paid broadcasting services market.</li> <li>○ Sales revenue from broadcasting services declined due to the lowered prices of broadcasting products and a decrease in the number of net subscribers.</li> <li>○ Contributed to the development of broadcasting industry by leading the UHD broadcasting services and supporting the activation of the contents business, and to the welfare of viewers by eliminating the irregularities and improving the digital reception environment.</li> </ul>
<p style="text-align: center;"><b>TV Home Shopping Network Broadcasting Service Providers</b></p>	<p><input type="checkbox"/> <b>Lower the Current Collection Rate (13%)</b></p> <ul style="list-style-type: none"> <li>○ Sales revenue from TV home shopping network broadcasting services has been gradually declining and the competition in the industry has been intensified due to an increase in the number of service providers</li> <li>○ On the other hand, the commissions to the paid broadcasting service providers have continuously increased.</li> <li>○ Operating profits fell sharply due to the domestic economic slowdown and in the aftermath of the MERS, and profit structure continues to deteriorate.</li> </ul>

### Difficulties in Achieving the Regulatory Objective with Existing Regulation

- The collection rates should be adjusted in consideration of the financial status of the broadcasting service providers, to the extent specified by law
  - If the existing collection rates are maintained, there would be a difficulty in collecting the appropriate amount of contribution adjusted to the financial condition of the paid TV broadcasting service providers and securing the regulatory equality among the service providers. Thus, it would be difficult to achieve the regulatory objective with the existing regulations alone.

## Conclusion

- This development fund is a statutory contribution to be collected from a broadcasting communications service provider that has been granted permission and approval to support the promotion of broadcasting communications industry.
- Hence, it is necessary to enhance the equity in the amount of the charges among the service providers by adjusting the collection rates of CATV and IPTV broadcasting service providers in consideration of various factors including the business condition of each respective service provider.

### 3. Cost-Benefit Analysis by Regulatory Alternatives

#### A. Comparative Analysis of Alternatives

Price Base Year	Present Value Base Year	Appraisal Period (Year)	Discount Rate (%)	Unit
2016	2016	1	5.5	1 million KRW Current Value

#### Maintaining Current Regulation: Collection Rates for Broadcasting Communications Development Fund

Stakeholders	Costs	Benefits	Net Costs
Regulated Corporates & Micro Enterprises	52 000		52 000
Regulated General Public			
Non-Regulated Corporates and Micro Enterprises			
Non-Regulated General Public			
The Government			
Total	52 000		52 000
Net Costs to Businesses	52 000	Equivalent Annual Net Cost (EANC)	52 000

#### Regulatory Alternative #1: Collection Rates for Broadcasting Communications Development Fund

Stakeholders	Costs		Benefits		Net Costs	
	Total (Including Current Reg.)	Variation (Alt.#1 – Current)	Total	Variation	Total	Variation
Regulated Corporates & Micro Enterprises	55 500	3 500			55 500	3 500
Regulated General Public						
Non-Regulated Corporates and Micro Enterprises						
Non-Regulated General Public						
The Government						
Total	55 500	3 500			55 500	3 500
Net Costs to Businesses	55 500		Equivalent Annual Net Cost (EANC)		55 500	3 500

## B. Cost-Benefit Analysis by Activity of Each Alternative

### Maintaining Current Regulation: Collection Rates for Broadcasting Communications Development Fund

Regulated Corporates & Micro Enterprises:

Direct Costs: 52 000 million KRW

Task Subject Description	Amount of Charges According to Collection Rate by Broadcasting Service Provider Amount of Charges Imposed on CATV and IPTV Broadcasting Service Providers
Subcategory	CATV Broadcasting Service Providers
Title of Activity	Collection Rates of Broadcasting Service Providers (1.0%/2.3%/2.8%)
Cost Item	Others
Cost	43 600 000 000 KRW
Characteristics of Activity Cost	Repetitive/Annually Equivalent
Calculation Formula	Collected Amount of Charges [43 600 000 000]
Explanation for Provided Figure	<p><input type="checkbox"/> Broadcasting service sales revenues in the previous year: 2 554.4 billion KRW (Combined sales revenues from 92 SO service providers)</p> <ul style="list-style-type: none"> <li>○ Differentiated collection rates through a progressive stage system: 1.0% for sales less than 10 billion KRW; 2.3% for sales exceeding 10 billion KRW and below 20 billion KRW; 2.8% for sales exceeding 20 billion KRW <ul style="list-style-type: none"> <li><input type="checkbox"/> Sales revenues from 15 service providers with sales less than 10 billion KRW (98 655 451 401 KRW) x Average collection rate (1.00%)** – Abatement of charges for two service providers (36 624 794 KRW)* = 949 929 656 KRW</li> <li><input type="checkbox"/> Sales revenues from 30 service providers with sales exceeding 10 billion KRW and below 20 billion KRW (463 752 724 442 KRW) x Average collection rate (1.44%) – Abatement of charges for three service providers (134 393 870 KRW)* = 6 562 918 730 KRW</li> <li><input type="checkbox"/> Sales revenues from 47 service providers with sales exceeding 20 billion KRW (1 693 031 151 160 KRW) x Average collection rate (2.13%) = 36 133 489 180 KRW</li> </ul> </li> </ul> <p>→ ①+②+③ = 43 646 337 565 KRW</p> <p>* Abatements due to the deficit pursuant to Article 13 of the Enforcement Decree of the Framework Act on Broadcasting Communications Development. ** Collection rates are indicated as an average collection rate since the sales revenues from broadcasting service are summed up with the amount calculated by multiplying the sales revenues by the collection rate from each interval.</p>

Subcategory	IPTV Broadcasting Service Providers
Title of Activity	Collection Rates of Broadcasting Service Providers (0.5%)
Cost Item	Others
Cost	8 400 000 000 KRW
Characteristics of Activity Cost	Repetitive/Annually Equivalent
Calculation Formula	Collected Amount of Charges [8 400 000 000 KRW]
Explanation for Provided Figure	<p><input type="checkbox"/> Broadcasting service sales revenues in the previous year: 1 908.8 billion KRW (Combined sales revenues from 3 IPTV service providers)</p> <p><input type="checkbox"/> Collection Rate: 0.5%</p> <ul style="list-style-type: none"> <li>○ Sales revenues generated by the IPTV broadcasting service providers in the previous year (1 908.8 billion KRW) x Collection rate 0.5% – Abatement of charges for one service provider (1 144 million KRW) = 8 400 million KRW</li> </ul> <p>* Abatements due to the deficit pursuant to Article 13 of the Enforcement Decree of the Framework Act on Broadcasting Communications Development.</p>

Indirect Benefits: N/A

(Quantitative) Subject	
Amount	
Calculation Formula	
Explanation for Provided Figure	
(Qualitative) Subject	○ Pursuant to Article 26 of the Framework Act on Broadcasting Communications Development, it is utilized to support the development fund for promotion of broadcasting communications.
Analysis	By adjusting the collection rates by taking the competition situation and financial status of each paid TV broadcasting service provider into account, it enhances the equity of the burden among the service providers from the same market and utilizes the development funds to support the businesses for promotion of broadcasting communications.
Explanation for Provided Figure	
Qualitative Analysis	

### Regulatory Alternative #1: Collection Rates for Broadcasting Communications Development Fund

Regulated Corporates & Micro Enterprises:

Direct Costs: 55 500 million KRW

Task Subject	Amount of Charges According to Collection Rate by Broadcasting Service Provider
Description	Amount of Charges Imposed on CATV and IPTV Broadcasting Service Providers
Subcategory	CATV Broadcasting Service Providers
Title of Activity	Collection Rates of Broadcasting Service Providers (1.0%/2.0%/2.3%)
Cost Item	Others
Cost	38,600,000,000 KRW
Characteristics of Activity Cost	Repetitive/Annually Equivalent
Calculation Formula	Collected Amount of Charges Compared to Current Regulation [38,600,000,000]
Explanation for Provided Figure	<p><input type="checkbox"/> Broadcasting service sales revenues in the previous year: 2,255.4 billion KRW (Combined sales revenues from 92 SO service providers)</p> <p>○ Differentiated collection rates through a progressive stage system: 1.0% for sales less than 10 billion KRW; 2.0% for sales exceeding 10 billion KRW and below 20 billion KRW; 2.3% for sales exceeding 20 billion KRW</p> <p><input type="checkbox"/> Sales revenues from 15 service providers with sales less than 10 billion KRW (98,655,451,401 KRW) x Average collection rate (1.00%)** – Abatement of charges for two service providers (36,624,794 KRW)* = 949,929,656 KRW</p> <p><input type="checkbox"/> Sales revenues from 30 service providers with sales exceeding 10 billion KRW and below 20 billion KRW (463,752,724,442 KRW) x Average collection rate (1.35%) – Abatement of charges for three service providers (92,675,539 KRW)* = 6,182,378,791 KRW</p> <p><input type="checkbox"/> Sales revenues from 47 service providers with sales exceeding 20 billion KRW (1,693,031,151,160 KRW) x Average collection rate (1.86%) = 31,419,716,270 KRW</p> <p>→ ①+②+③ = 38 552 024 717 KRW</p> <p>* Abatements due to the deficit pursuant to Article 13 of the Enforcement Decree of the Framework Act on Broadcasting Communications Development.</p> <p>** Collection rates are indicated as an average collection rate since the sales revenues from broadcasting service are summed up with the amount calculated by multiplying the sales revenues by the collection rate from each interval.</p>

Subcategory	IPTV Broadcasting Service Providers
Title of Activity	Collection Rates of Broadcasting Service Providers (1.0%)
Cost Item	Others
Cost	16,900,000,000 KRW
Characteristics of Activity Cost	Repetitive/Annually Equivalent
Calculation Formula	Collected Amount of Charges Compared to Current Regulation [16,900,000,000 KRW]
Explanation for Provided Figure	<input type="checkbox"/> Broadcasting service sales revenues in the previous year: 1,908.8 billion KRW (Combined sales revenues from 3 IPTV service providers) <input type="checkbox"/> Collection Rate: 1.0% <ul style="list-style-type: none"> <li>○ Sales revenues generated by the IPTV broadcasting service providers in the previous year (1,908.8 billion KRW) x Collection rate 1.0% – Abatement of charges for one service provider (2,188 million KRW) = 16,900 million KRW</li> </ul> <p style="text-align: center;">* Abatements due to the deficit pursuant to Article 13 of the Enforcement Decree of the Framework Act on Broadcasting Communications Development.</p>

Direct Benefits: N/A

(Quantitative) Subject	
Amount	
Calculation Formula	
Explanation for Provided Figure	

Indirect Benefits: N/A

(Quantitative) Subject	
Amount	
Calculation Formula	
Explanation for Provided Figure	
(Qualitative) Subject	○ Pursuant to Article 26 of the Framework Act on Broadcasting Communications Development, it is utilized to support the development fund for promotion of broadcasting communications.
Analysis	By adjusting the collection rates by taking the competition situation and financial status of each paid TV broadcasting service provider into account, it enhances the equity of the burden among the service providers from the same market and utilizes the development funds to support the businesses for promotion of broadcasting communications.
Explanation for Provided Figure	
Qualitative Analysis	

#### 4. Overall Conclusion on Regulatory Alternative Analysis

##### A. Enforcement Resources and Capabilities by Alternative

###### Administrative and Financial Enforceability

- No additional administrative burdens from changing the collection rates for the broadcasting service providers.



- Therefore, any increases in budget and personnel are unnecessary.

### **Technical Enforceability**

It is possible to effectively enforce technical execution of the regulation as the calculation standards and the collection rates of the development funds for the paid-TV broadcasting service providers are explicitly stated.

### **Enforceability of the Local Governments, etc.**

- N/A

## **B. Need for Regulatory Impact Assessment by Sector**

### **SMEs Regulatory Impact Analysis**

- Pursuant to Article 13 of the Enforcement Decree of the Framework Act on Broadcasting Communications Development, exemption (Section 1, Item 2) and reduction (Section 1, Item 3) of charges can be made for a business entity whose deficit under the statement of financial position for the previous year amounts to at least the total amount of capital.
- A written comment was received from the Korea Cable TV Industry (KCTA) regarding the revision of the collection rates in June 2016.

### **Competition Impact Assessment**

- Statutory exemption for three years from the initial year of the CATV broadcasting communications service
- Statutory exemption on the payment of development funds for three years for the IPTV broadcasting service providers from the initial year of the service
- Adjustment on the collection rates through a comprehensive consideration of the financial situation of the broadcasting company, the size of sales revenue, etc.

### **Technology Impact Assessment**

- N/A

## **C. Choice of Regulatory Alternative and the Rationale**

- The development fund is a statutory fee levied on the broadcasting business entities that have been granted permission and approval, with the purpose of supporting and promoting broadcasting communication. All broadcasting business entities are charged with differential rates responsive to their specific conditions to promote development in the broadcasting industry.
  - In accordance with Article 25 of the Framework Act on Broadcasting Communications Development, differential rates may be applied for broadcasting communications service providers in light of public nature, profitability, and the financial condition of the provider.
- The charges on the CATV broadcasting service providers need to be partially eased, given their gradually deteriorating market situation and the fact that these service providers bear higher burdens than others.

- Collection rates need to be lowered from the current average of 1.99% to a new rate of 1.73%, given that the mid- to long-term market growth outlook for the CATV broadcasting service providers is expected to decline by 2.5% while their collection rate is still relatively higher than other service providers at the average rate of 1.99% in 2015.

\* Collection rates of IPTV and satellite broadcasting service providers in 2015 were 0.5% and 1.33, respectively.

- The charges on the IPTV broadcasting service providers need to be raised, given certain factors including the regulatory objective of the development fund, their high growth rate, and the fairness in regulatory enforcement.
  - Such decision holistically takes various factors into account, such as their rapidly growing number of subscribers and sales compared to other service providers like SO and satellite and their business situation in which the operation deficit is drastically shrinking.

### Growth Rates for IPTV Subscribers and IPTV Business Sales Revenue

(Unit: 10,000 receivers, 100 million KRW, %)

Category	2010	2011	2012	2013	2014	2015	Compared to 2014	CAGR* for Past 3 Years
Number of Subscribers	309	457	631	874	1 063	1 231	15.8%	18.7%
Sales Revenue from Broadcasting Services	3 196	5 274	8 324	11 272	14 984	19 088	27.4%	30.1%

\* indicates a compound annual growth rate (CAGR)

- In the cast of the CATV broadcasting service providers, the number of subscribers decreased by an annual average of 1.1% over the past three years, while their broadcasting business sales revenue have fallen by an annual average of 2.6%.

#### D. Desired Outcomes of the Preferred Alternative

- Enhanced regulatory equity among the broadcasting business entities in competitive relationship with one another by imposing a reasonable collection rate through a comprehensive consideration towards various factors including competition situation in the sector.

#### E. Stakeholder Opinions on the Preferred Alternative and Actions Taken



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