



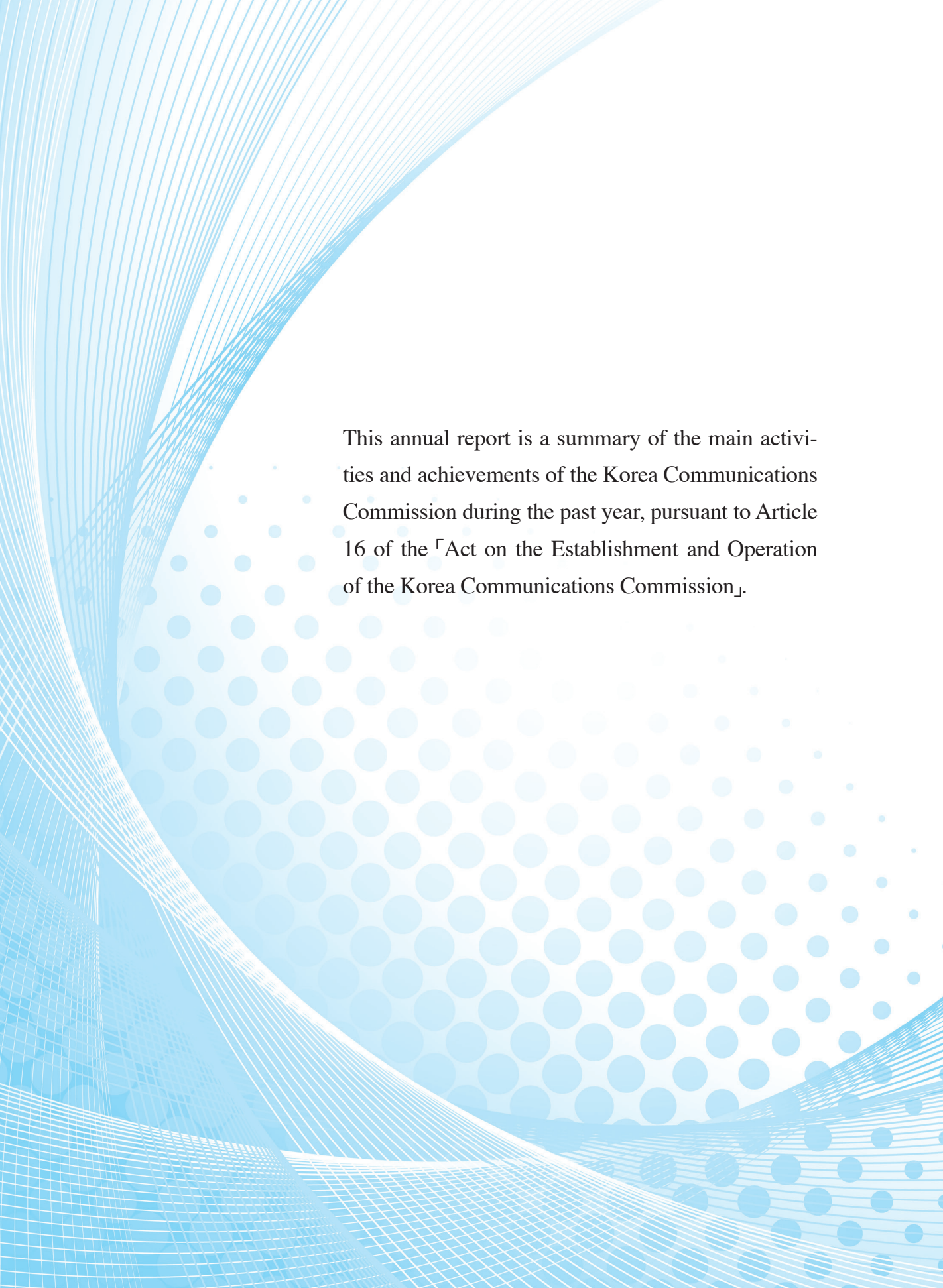
2012

**KOREA COMMUNICATIONS
COMMISSION**

ANNUAL REPORT



**KOREA
COMMUNICATIONS
COMMISSION**

The background features a light blue and white abstract design. On the left side, there are several thick, wavy, curved lines that sweep across the page. The lower portion of the page is filled with a pattern of small, light blue circles of varying sizes, creating a textured, dotted effect. The overall aesthetic is clean, modern, and tech-oriented.

This annual report is a summary of the main activities and achievements of the Korea Communications Commission during the past year, pursuant to Article 16 of the 「Act on the Establishment and Operation of the Korea Communications Commission」.

Message from the Chairman



2012 was a significant year, in which the Korea Communications Commission (KCC) launched by opening the era of broadcasting and telecommunications convergence showed concrete results of its major policies.

Starting with Ulsan, the digital switchover of terrestrial broadcasting, aimed at high quality viewing experience, was successfully completed all across the country. The enactment of the so-called media representative bill brought more competition to the broadcasting and telecommunications market. Moreover, the removal of the restrictions on terrestrial TV broadcasting times helped further vitalize the broadcasting market.

In addition, KCC laid the firm foundation to build a broadcasting and telecommunications powerhouse that brings happiness for all people, through conducting a HD 3DTV trial for the first time in the world and launching the mobile phone blacklist system. The promotion of MVNO phone services and the launch of the Preparatory Secretariat for the successful hosting of the 2014 ITU Plenipotentiary Conference are also important achievements to that end.

This annual report outlines KCC's efforts to realize its vision of creating a "Smart Korea enjoyed by all its Citizens" as well as the outcome of our key policies of 2012.

With the government reorganization, KCC now puts the achievements of the past five years behind and has been newly born as an agency devising major broadcasting policies and ex-post regulator for the broadcasting and telecommunications sector.

KCC will continue its endeavor to ensure public nature and impartiality in broadcasting as well as to drastically ease unnecessary regulations to help realize the creative economy in close collaboration with the Ministry of Science, ICT and Future Planning (MSIP).

Moreover, KCC will spare no effort to balance public and industrial values in broadcasting, and make sure unfair acts that undermine the interests of users and those between operators are strictly regulated. By doing so, we will do our utmost to bring happiness to the people with the benefits of broadcasting and telecommunications services.

Thank you for your continuing interest and encouragement.

May 2013

Kyung-Jae Lee

Chairman

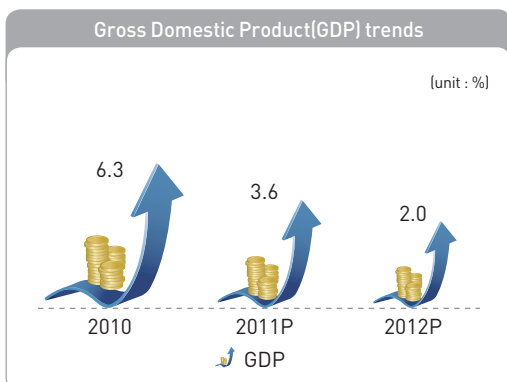
Korea Communications Commission



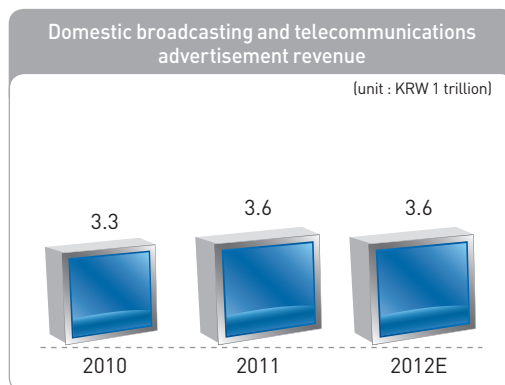
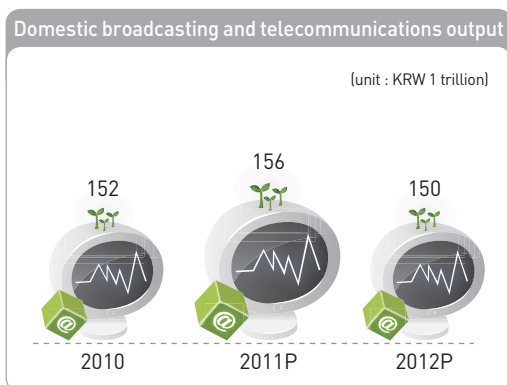
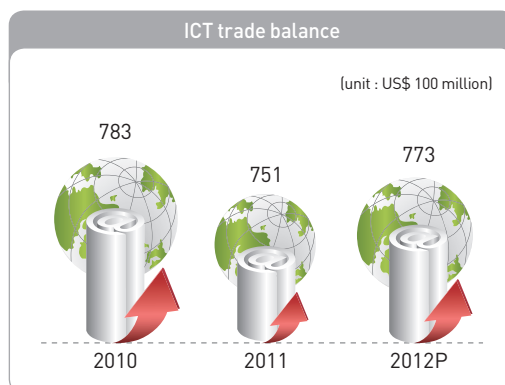
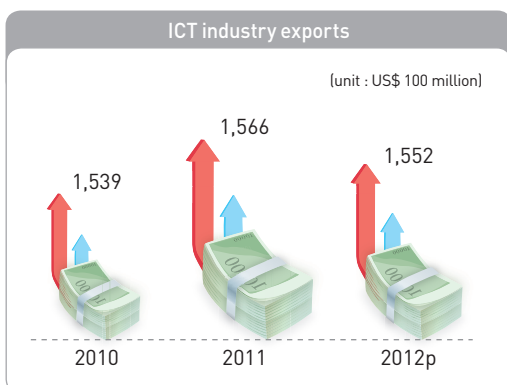
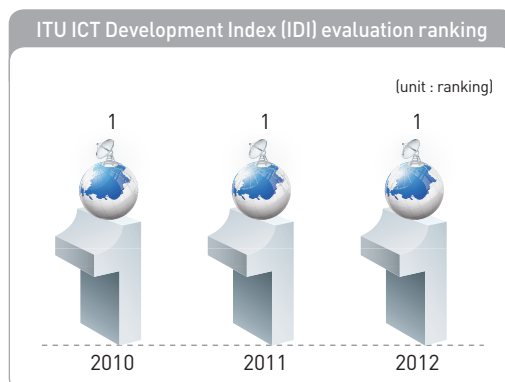
Broadcasting and Telecommunications Policy Accomplishments in Graphs

■ The broadcasting and telecommunications industry is making continuous contributions to the growth of the national economy.

- Despite difficulties growing the economy amid global economic downturn, the broadcasting and telecommunications industry contributed to the national economic growth in 2012 leading the ICT trade surplus.



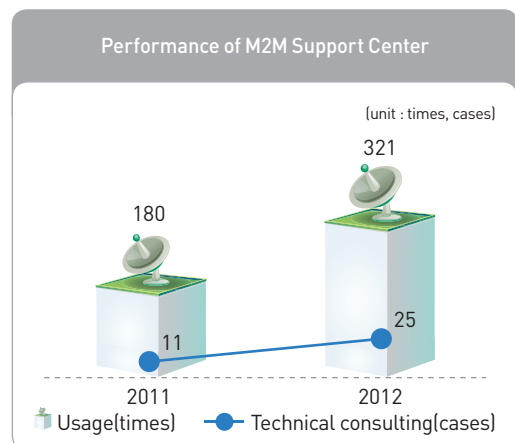
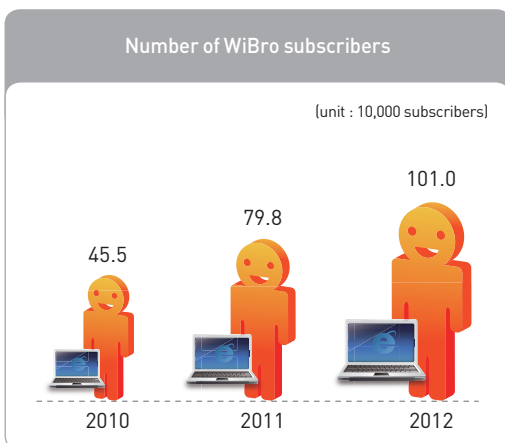
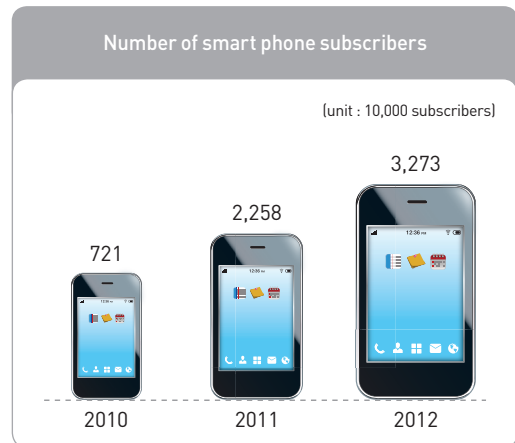
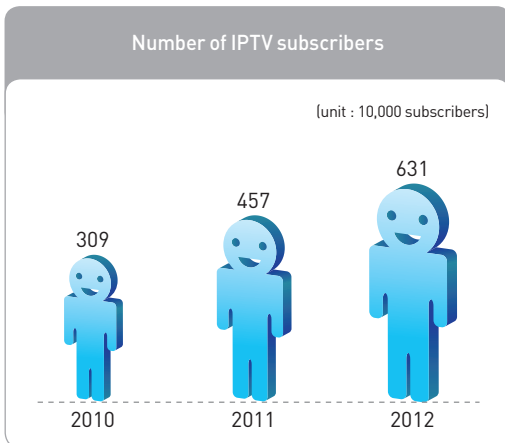
Note : P(Preliminary) : Tentative value (estimated value derived from currently accumulated data and key variables due to the lack of time to collect full data)



Note : E(Estimate) : Estimated value (parameters are estimated by using samples)

■ The development of next-generation broadcasting and telecommunications convergence technology and the increasing adoption of such services have helped lay the foundation for a vitalized market.

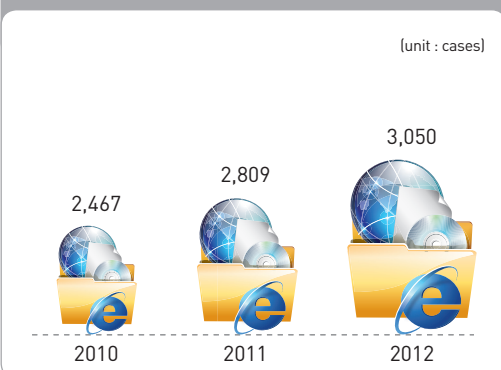
- IPTV made a successful landing in the pay TV market by securing 6.31 million subscribers in 2012, and the smart phone market continued its growth by increasing its subscriber base to 32.73 million marking a 45% increase from 2011.
- The number of WiBro subscribers increased 26.6% from the previous year to reach 1.01 million and the M2M Convergence Support Center expanded its work, all of which helped lay the foundation for a vitalized broadcasting and telecommunications market.



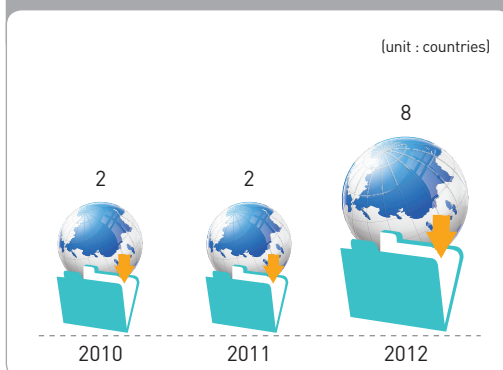
■ KCC strengthened the base for overseas advancement of local ICT companies and upgraded Korea's status as a global leader in broadcasting and telecommunications.

- 3,050 pieces of information about overseas broadcasting and telecommunications market trends were provided in 2012 through the broadcasting and telecommunications overseas advancement system, and the number is increasing every year. The Commission increased the number of broadcasting equipment recipient countries from 2 to 8, thereby enhancing Korea's status as a global leader in broadcasting and telecommunications.
- In order to cope with the changes in the broadcasting and telecommunications market, the Commission selected 10 strategic items for overseas advancement and obtained market information on 54 countries to provide necessary information for domestic broadcasting and telecommunications companies, aiming to enter the global market.

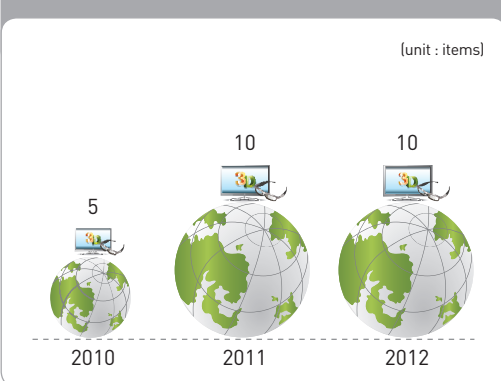
Market trend information provided by the broadcasting and telecommunications overseas advancement system



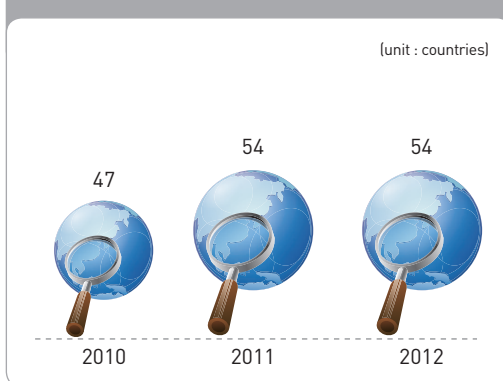
Broadcasting equipment support for developing countries



Strategic items for overseas expansion

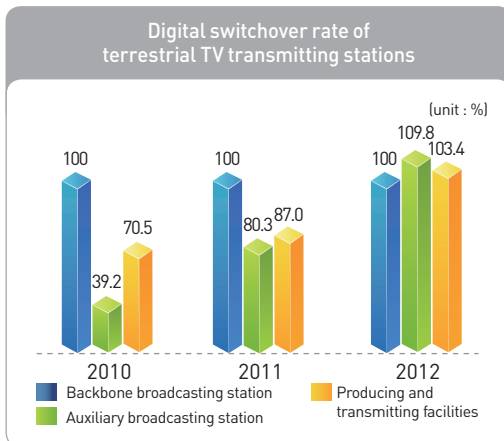


Countries whose market information is provided

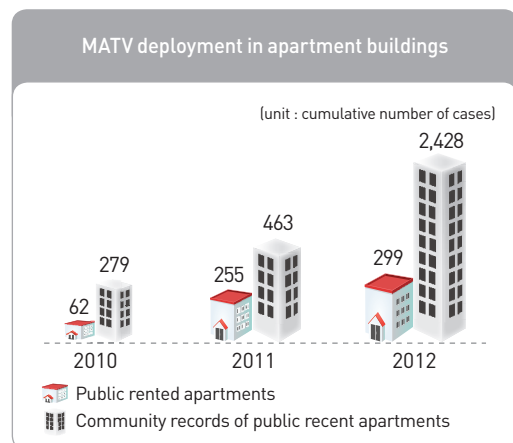
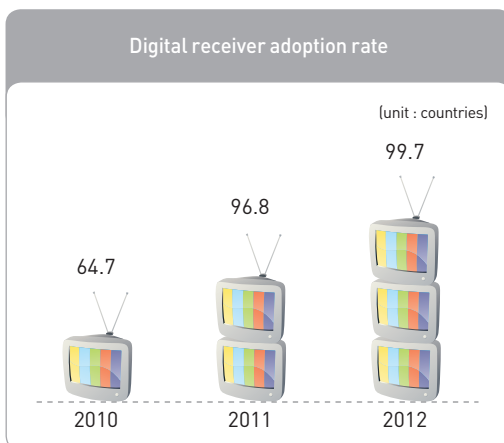
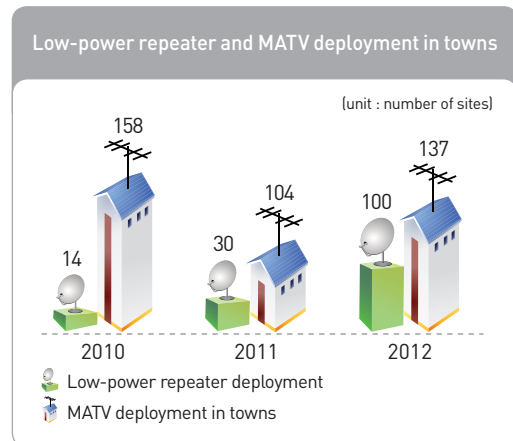


■ To enable the public to enjoy high quality digital broadcasting, the digital transition of terrestrial TV was successfully completed.

- Transmitting stations for terrestrial TV have been switched to digital ones of higher quality than analogue, and low-power repeaters, etc. have been deployed to minimize poor reception.
- The adoption rate of the digital receivers increased to 99.7% as of the end of December 2012, and Master Antenna TV (MATV) for apartment buildings have been upgraded to digital ones to prevent any inconveniences that may be caused by digital switchover.

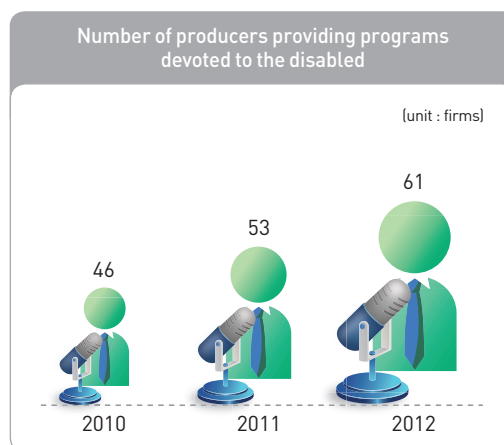
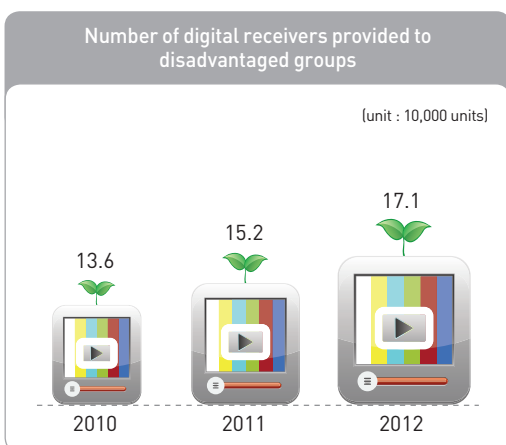
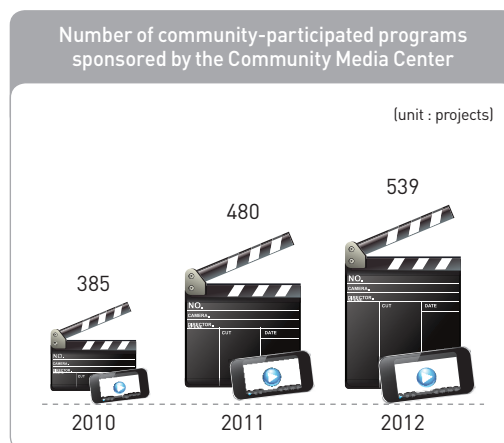
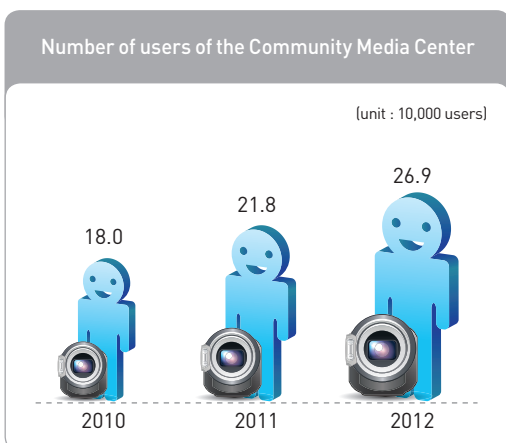


Note : Switchover rate against analogue stations



■ Access to broadcasting among the disadvantaged groups has been increased, thereby contributing to the welfare of Korean viewers as a whole.

- The number of users of the Community Media Center rose steadily to reach some 269,000 people in 2012, and the number of community-participated programs produced under the Community Media Center grew by 59 from 2011 to reach 539.
- The number of digital receivers supplied to disadvantaged groups, meanwhile, reached a cumulative total of 171,000 in 2012. The number of producers providing programs devoted to people with disability increased to 61 from 53.

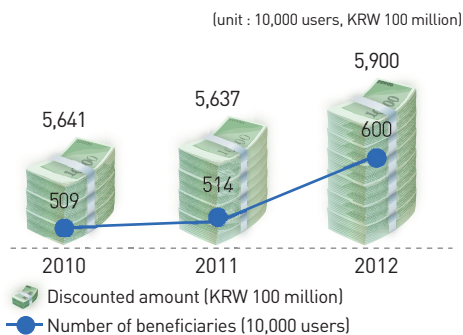


Note : in cumulative number

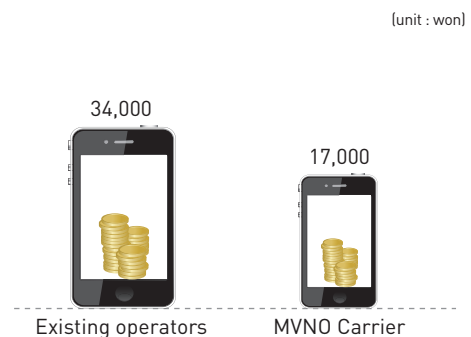
■ KCC reduced telecommunications tariffs and improved the telecommunications usage environment to help stabilize the finances of low-income households.

- The number of low-income users benefiting from the telecommunications tariff discount program reached 6 million people rising by 860,000 from a year earlier. The arrival of MVNO phones, whose monthly plans are 50% cheaper than KRW34,000, the minimum monthly fee charged to incumbent smart phone users, contributed to stabilizing the finances of low-income families.
- The volume of e-mail spam was reduced by average 0.79 per person a day compared to one year earlier. Spam mail on mobile phones also decreased year-on-year through our efforts to create a sound telecommunications environment.

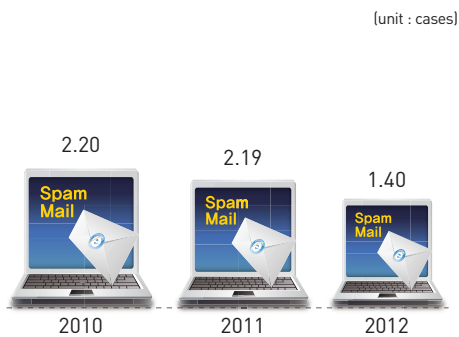
Telecommunications tariff discount program for low-income families



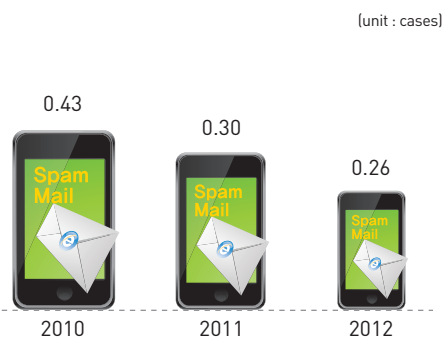
Reduction of minimum monthly fee for smart phones



Volume of e-mail spam (daily average per person)



Volume of spam mail on mobile phones (daily average per person)

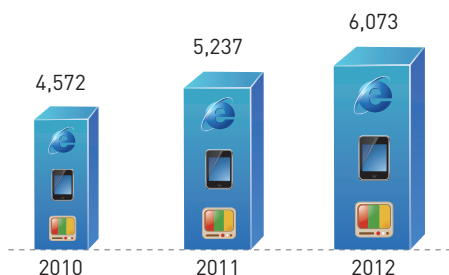


■ Broadcasting and telecommunications networks have been upgraded including by increasing the adoption of the Broadband Convergence Networks (BcN) and enhancing the quality of Internet connection.

- The number of BcN subscribers increased to 60.73 million households/people (fixed: 16.85 million, wireless: 43.88 million) as a result of our continuous efforts to advance the broadcasting and telecommunications infrastructure.
- The number of internet users is steadily increasing every year, reaching 38.12 million as of the end of 2012, and the broadcasting and telecommunications networks have been upgraded by expanding the Giga Internet Pilot Service.

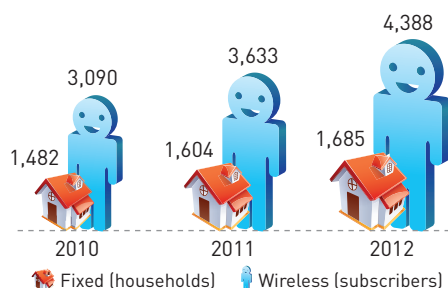
Number of BcN subscribers

(unit : 10,000 households / 10,000 subscribers)



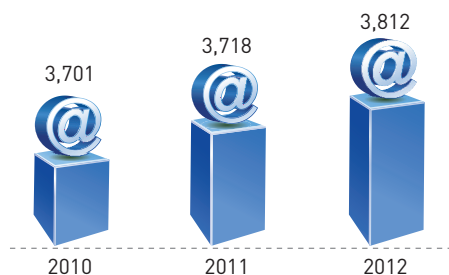
Fixed/wireless BcN subscribers

(unit : 10,000 households / 10,000 subscribers)



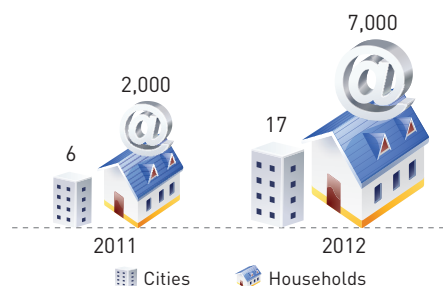
Number of Internet users

(unit : 10,000 subscribers)



Expansion of Giga Internet Pilot Service

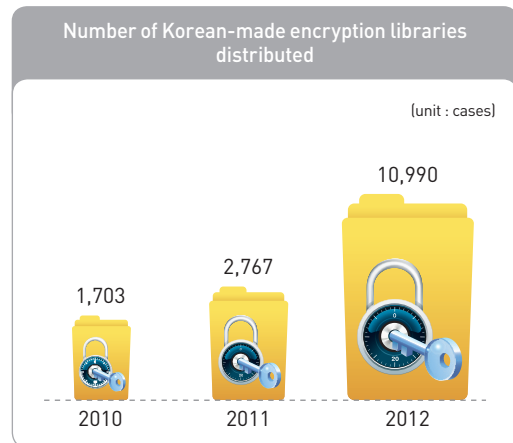
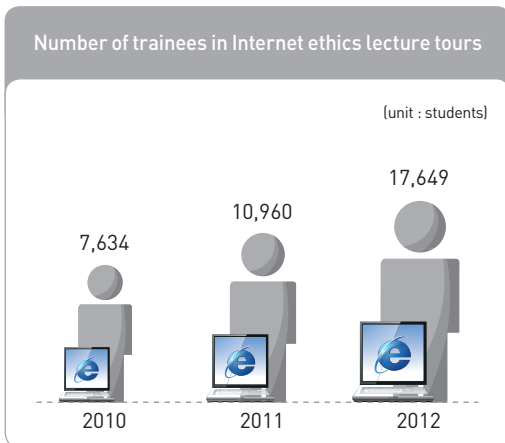
(unit : cities, households)



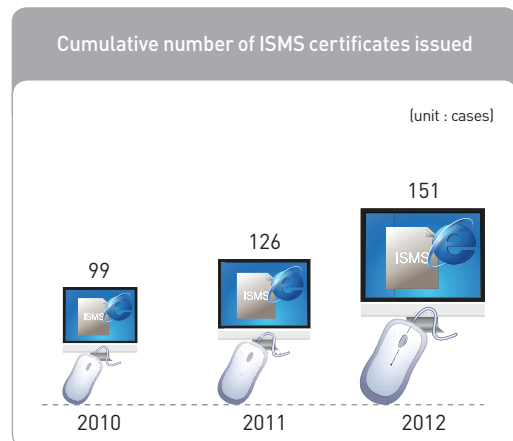
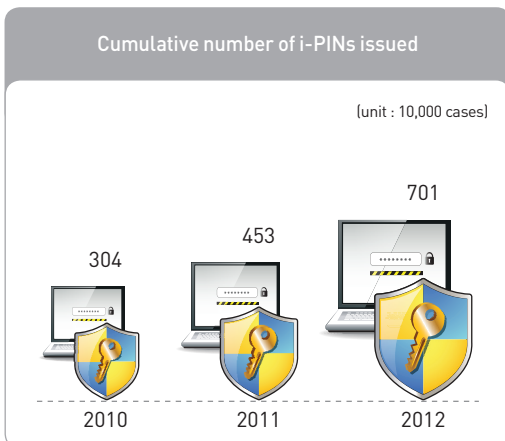
Source : Korea Internet & Security Agency (KISA)

■ Active efforts were made to create a sound Internet environment for the future society.

- To create a better Internet usage environment, Internet ethics lecture tours were steadily increased. A safe Internet environment has been created by expanding and distributing Korean-made encryption libraries.
- The number of i-PINs issued increased 54.8% from a year earlier to 7.01 million by the end of 2012. The Information Security Management System (ISMS) certificates for companies were issued to 151 firms, contributing to creating a sound Internet environment of the future society.



Note : sum of SEED, HIGHT, encryption libraries for smart phones



Source : Korea Internet & Security Agency (KISA)

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I

The Broadcasting and Telecommunications Policy Environment

1. Global Economic Status and the Broadcasting and Telecommunications Market
2. The Broadcasting and Telecommunications Policy Environment of Korea

I

The Broadcasting and Telecommunications Policy Environment

1. Global Economic Status and the Broadcasting and Telecommunications Market

The global broadcasting and telecommunications market in 2012 appears to have grown 3% resulting from the increased demand for content-based open platforms, along with the continued growth of smart devices. The global economic downturn in developed nations and the fiscal crisis of the states of Europe finds the increasing need for making provisions for sustainable growth in this uncertain global environment. The recent global broadcasting and telecommunications market, by inducing the growth in mobile including smart phones and tablet PCs, is changing the structure of the global economy. Smart equipments and SNS (Social Network Service), Internet of Things, Cloud Computing, and Big Data continues to change the ICT paradigm while contributing to the improvement of production in all sectors of society, including telecommunications, finance, and manufacturing. Having experienced difficulties in economic growth due to the decrease in global trade in line with the European financial crisis

and the slowed growth trend of emerging economies, this annual report is designed to examine the changes in the world's economic trends and the changing environment of broadcasting and telecommunications market in 2012.

A. Global Macroeconomic Trends

In 2012, the global economy experienced a continued slowdown in growth as the recession in the Euro Zone had persisted and the economic growth of emerging markets appeared to be in a continued slowdown mode. As a result, a low economic growth rate of 3.1% was recorded. Specifically, the Europe's debt crisis-related anxiety factors such as Spain's credit rating downgrade, and possibility of Greece leaving the Euro Zone were enlarged and impacted the slow-down negatively. In addition, concerns on the recession of the major countries, and uncertainty in policies including the international oil unrest and major elections were continuously issued. The OECD (Organization for Economic Cooperation and Development) predicted in May 2012 that global economic growth would

[Table I-1] World's Economic Growth Forecast

(unit : %)

Classification	IMF		OECD		World Bank		The Asian Development Bank		World	
	2012	2013	2012	2013	2012	2013	2012	2013	2012	2013
World	3.3	3.6	3.4	4.2	2.5	3.0	-	-	3.1	3.6
Euro Zone	△0.4	0.2	△0.1	0.9	△0.3	0.7	△0.6	0.5	△0.4	0.6
U.S.A	2.2	2.1	2.4	2.6	2.1	2.4	1.9	2.1	2.2	2.3
Japan	2.2	1.2	2.0	1.5	2.4	1.5	2.3	1.6	2.2	1.5
China	7.8	8.2	8.2	9.3	8.2	8.6	7.7	8.1	8.0	8.6

Note : Institution Release Date: IMF(October 2012), OECD(May 2012), World Bank(June 2012), The Asian Development Bank (October 2012)

Source : Economic outlook of the world's major research institutions, Korea Economic Institute, November 2012, Korea Association for ICT Promotion (data modified)

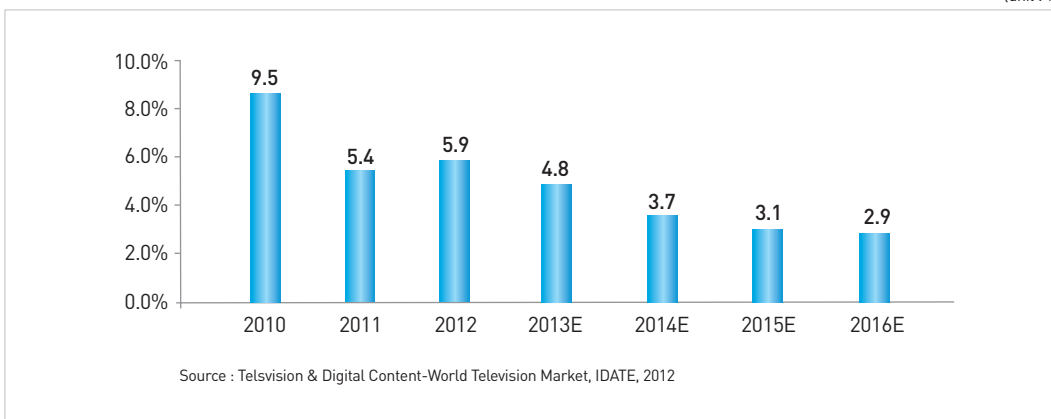
reach 3.4% in 2012. However, IMF (International Monetary Fund), by the data published in October 2012, estimated a slightly lower global economic growth rate at 3.3% while that of other major institutions estimated an even lower rate, at an average of 3.1%.

Global economic growth in 2013 is expected to reach the 3.0 ~ 4.2% level; 4.2% as the optimistic outlook and 3.0% as the pessimistic outlook, and 3.6% on average (see Table I-1). The reason for the pessimistic view of the world economy is due to difficulties in having an economic stimulus, despite efforts such as an extension of timeline for the sound fiscal consolidation in the Euro Zone. In other words, the impact of a deep recession in the Euro Zone that in turn, could result in a severe recession in the global economy is highly reflected in this analysis. The reason for the optimistic view, on the other hand, is affected by the United States mitigating the

burden of the private debt situation and also, is influenced by the housing market recovery, facility investment, increased exports and employment improvement. For Korea, the Bank of Korea (published in January 2013) identified an economic growth rate of 2.0% for 2012, which was 1.1% lower than global economic growth (3.1%). However, the Korea's economic growth in 2013 is forecasted to reach a slightly higher rate at 2.8% as the domestic economy is expected to improve on exports in an increasing rate and the global economy gradually continues to recover along with the assumption the overall trade volume would increase subsequent to this. The domestic economy in 2013, in spite of dangers in structural descent, is expected to have cyclical upturns and with improved contribution to the growth of domestic demand and exports simultaneously, is expected to perform better than 2012.

[Figure I-1] World TV Sales Growth

(unit : %)



B. Trends in the World Broadcasting Market

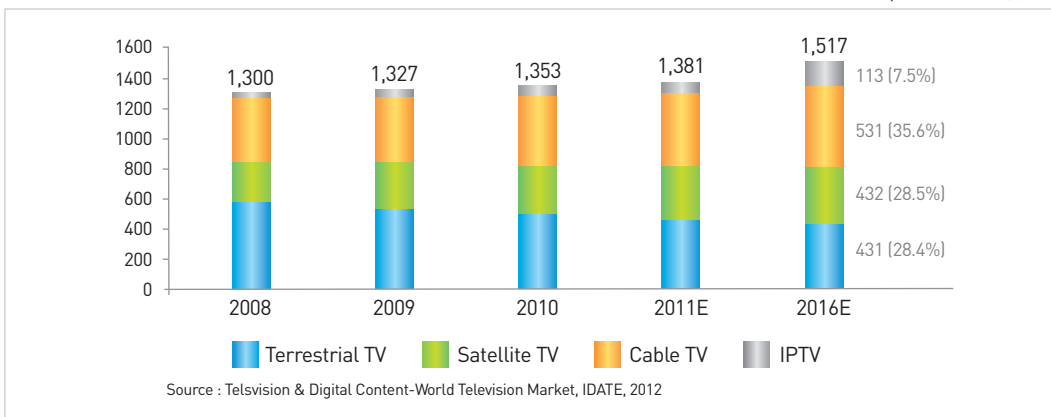
According to IDATE (2012), the Europe's telecommunications, Internet, and media research firm, TV sales growth amounted to 9.5% as TV industry had restored in 2010 from the global economic downturn in 2009. The sales growth of the world TV market, however, started to decrease again since 2010

that it was forecasted to reach 2.9% in 2012, and 5.9% in 2016 (See Figure I-1).

The number of households by the type of world's TV reception showed the highest percentage (45.4%) of terrestrial TV, occupying 590.8 million households based on 2008 figure. However, terrestrial TV continued to decline in its trend and appeared to occupy only 515 million households (37.3%) in 2011. Cable TV, however, has shown a steady growth

[Figure I-2] Trends of TV Reception Changes by Type

(unit : million households)



in recent years and the number of households viewing cable TV is expected to be about 541 million by 2016, which represents the highest market share (35.6%) and almost will reach the saturation level by then (see Figure I-2). Cable TV in Europe, on the other hand, has been gradually declining in trends, and IPTV (Internet Protocol Television) has slowly replaced cable TV. In the North American continent, however, cable TV is still strong and accounted for the highest rate of market share.

The TV advertising market is largely segmented by broadcast TV advertising and online & mobile TV advertising. Broadcast TV advertising consists of terrestrial TV advertising, multi-channel TV advertising, and others, while online and mobile TV advertising consists of mobile TV advertising and online TV advertising. Looking at the composition of advertising media, broadcast TV advertising is shown via cable, satellite, telecommunications companies, and public TV while online TV advertising consists of program advertising through the Internet and TV Web site advertising. Mobile TV advertising consists of mobile TV site advertising and video advertising.

The scale of the world's TV advertising market reached US\$ 196.5 billion in 2012, which represented a 6.2% growth compared with the previous year. The major factor in the growth of the TV advertising market can be attributed to the growth of broadcast TV

advertising. Especially, the expansion of new multi-channel platforms, the transition from analog to digital, and the dissemination of high-quality (high-definition) TV acting as important factors in the growth of the TV advertising market. In future, the TV advertising market is expected to gain more benefits than in any previous time. The TV advertising market is expected to grow continuously at an annual average of 6.7% during the period of 2012-2016, and to achieve market size of US\$ 254.7 billion in 2016. In particular, the growth of the online and mobile TV advertising market is expected to be noticeable. Tablet PCs and TVs connected to the Web have become a popular platform in North America and the Middle East, and the growing popularity of tablet PCs is expected to expand the use of mobile TV and the advertising market.

Broadcast TV advertising in 2012 amounted to US\$ 190.3 million, which comprised 96.8% of the total TV advertising market, and of the broadcast TV advertising, terrestrial TV advertising comprised the largest portion at 67%. On the other hand, although the proportion of multi-channel TV advertising was lower than terrestrial TV advertising, the growth rate is expected to be higher in the future with an average annual growth rate of 8.7% and is expected to form a market size of US\$ 76 billion in 2016. The online and mobile TV advertising market in 2012 was US\$ 6.2 billion, which accounted for about 3.2% of the total TV advertising market. The online

TV advertising market is about three times larger than the mobile TV advertising market at the moment. However, the mobile TV advertising market is expected to grow faster than the online TV advertising market expect-

ing to show an average annual growth rate of 27.3% during the period of 2012-2016, and in 2016, its market size is expected to reach US\$ 4.2 billion (See Table I-2).

[Table I-2] World TV Advertising Market by Composition

(unit: US\$ 100mn, %)

Classification	2010	2011E	2012E	2013E	2014E	2015E	2016E	CAGR (2012~2016)
Broadcast TV ad	1,756	1,800	1,903	1,961	2,151	2,201	2,410	6.1%
Terrestrial TV	1,204	1,211	1,275	1,289	1,415	1,419	1,558	5.1%
Multi-channel TV ad	467	504	544	587	648	693	760	8.7%
Other ¹⁾	85	85	84	85	88	89	92	2.3%
Online and mobile TV ad	39	50	62	78	96	114	137	21.9%
Online TV ad	8	11	16	21	28	34	42	27.3%
mobile TV ad	31	39	46	57	68	80	95	19.9%
Total	1,795	1,850	1,965	2,039	2,247	2,315	2,547	6.7%

Note 1) broadcast TV advertising sales of Germany and Spain

Source : Global entertainment and media outlook: 2012-2016, PricewaterhouseCoopers, 2012 (date modified by KAIT)

C. Trends in the World Telecommunications Market

The world telecommunications market in 2012, as the globalization of the mobile platform is intensifying, was accelerating the integration with the existing PC platform together with the expansion of the tablet market focusing on mobile devices, the growth of the mobile broadband sector appears to be prominent. In 2013, an era of owning one mobile phone per person, contrast with the world's population is expected to be open. Ericsson,

the global telecom equipment manufacturer estimated the mobile phone subscribers to exceed 6.6 billion in 2012, and the global mobile phone subscribers at 7.5 billion by 2013, which in fact, surpasses the world population of 7 billion. In particular, the market experts focus on the growing proportion of smart phones in the global mobile phone market. According to IDC, the global IT market research firm, the proportion of the smart phones in the entire mobile phone market is expected to increase by 8.5%, from 40.3% in 2012 to 48.8 % in 2013. In addition, unlike

the feature phones, the smart phones use large amounts of multimedia services, such as video resulting in a substantial increase in network load too. Also, as the number of Mobile Internet services had increased, the amount of data transfer via mobile phones doubled during the year 2011, which was contrast to the voice call traffic that stayed on the same level as the previous level. In addition, Ericsson (2012) estimated a 60% increase in mobile data traffic worldwide during the year of 2011-2017, and it is expected to grow approximately 15-fold by 2017. Therefore, there is a great need to prepare for the anticipated problems due to the rapid increase in mobile data traffic.

According to a report published by Gartner, the global research firm specializing in IT, the revenue of the world telecommunications market reached US\$ 2,166 billion in 2012, and is estimated at US\$ 2,234.6 billion in 2013, showing a 3.2% increase over the previous year. The world telecommunications market is expected to grow continuously during the period of 2011-2016 at an annual growth rate of 2.7%, to reach a value of US\$ 2,446 billion in 2016. And the world telecommunications services market stood at US\$ 1,654.7 billion in 2012 that the proportion of the telecommunications services which took 76.4% in the global telecommunications market (see Table I-3).

[Table I-3] World Telecommunications Market Forecast

(unit: US\$ 100mn, %)

Classification	2010	2011	2012	2013	2014	2015	2016	CAGR (2011~2016)
World telecommunications infrastructure	1,786	1,872	1,894	1,966	2,054	2,136	2,208	3.4%
World telecommunications service	15,680	16,634	16,547	16,807	17,242	17,654	18,018	1.6%
Mobile devices (retail sales)	2,410	2,861	3,218	3,574	3,785	4,031	4,233	8.2%
Total (growth rate)	19,876 (6.1%)	21,366 (7.5%)	21,660 (1.4%)	22,346 (3.2%)	23,081 (3.3%)	23,822 (3.2%)	24,460 (2.7%)	2.7%
Telecommunications services portion	78.9%	77.9%	76.4%	75.2%	74.7%	74.1%	73.7%	

Note) Proportion of telecommunications services is that of the telecommunications services accounted for in the global telecommunications market
Source : Gartner, September 2012 (date modified by KAIT)

Looking at the world telecommunications market revenue by sector, the mobile services market sales based on 2012 figures accounted for 47.1%, the largest proportion of the global

telecommunications market (US\$ 1,191 billion). Owing to the overall slowdown in the growth of the global economy, the global telecommunications market analysis has

revealed a slowing growth by category except for the mobile device market which is expected to show a marked growth during

the period of 2011-2016, and is estimated to achieve an average annual growth rate of 8.2% based on retail sales (see Table I-4).

[Table I-4] World Telecommunications Market Status and Forecast by Sector

(unit: US\$ 100mn, %)

Classification	2010	2011	2012	2013	2014	2015	2016	CAGR (2011~2016)
Corporate telecommunication applications	161	164	165	171	178	181	184	2.3%
Corporate networking equipment	363	383	415	436	451	463	475	4.4%
Carrier network infrastructure	798	828	793	812	857	904	945	2.7%
Telecom operations management system	464	497	522	546	568	587	604	4.0%
Enterprise network services	2,964	2,982	2,815	2,711	2,633	2,555	2,473	△3.7%
Consumer wired network services	3,608	3,702	3,542	3,494	3,482	3,476	3,467	△1.3%
Mobile services	9,109	9,950	10,191	10,603	11,127	11,624	12,079	4.0%
Mobile devices	2,410	2,861	3,218	3,574	3,785	4,031	4,233	8.2%
Total	19,876	21,366	21,660	22,346	23,081	23,822	24,460	2.7%

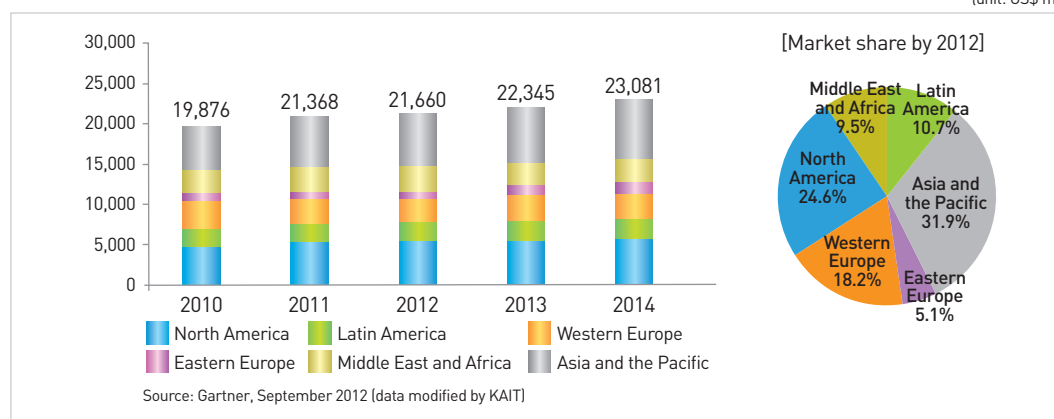
Source : Gartner, September 2012 (data modified by KAIT)

For the regional market share of the global telecommunications market in 2012, the largest proportion of 31.9% accounted for Asia and the Pacific, followed by North America

(24.6%), Western Europe (18.2%), Latin America (10.7%), Middle East and Africa (9.5%), and Eastern Europe (5.1 percent) (see Figure I-3).

[Figure I-3] Regional World Telecom Market Status and Forecast

(unit: US\$ mn)



2. The Broadcasting and Telecommunications Policy Environment of Korea

In 2012, the broadcasting and telecommunications policy environment of Korea was changing fast to keep abreast with the convergence of mobile devices such as smart phones and tablet PCs, and in the mobile ecosystem, together with the diffusion of the new content market such as games and advertising, the change is even accelerating. Factors like the popularization of smart phones, the rapid expansion of mobile traffic, and the increasing use of mobile devices through Internet games appeared to have led us to the mobile era. The field of smart devices based on an open platform is expected to sustain the structural growth of the market in 2013 and especially, the diffusion of the content business centering the mobile platform is much anticipated in the coming years.

A. Trends of the Domestic Broadcasting and Telecommunications Market

The in 2012 national GDP (Gross Domestic Product) under the influence of the recession in the United States and Europe, showed a slow growth rate of 2.0% (approximately KRW 1,103 trillion in GDP), which was a 1.6% decline compared to the previous year. The average GDP growth rate for the five years in 2008-2012 was shown to be 3.1%. According to the Bank of Korea (January 2013), prospects of the financial stability of the Euro Zone and the stabilization of international oil prices are predicted to have a positive impact on the domestic market that the GDP growth in 2013 is expected to be 2.8% that is a 0.8% increase, compared to that of in 2012 (see Table I-5).

[Table I-5] Trends of Korea's GDP Growth

(unit: KRW 1bn, %)						
Composition	2008	2009	2010	2011P	2012P	Average (2008-2012)
GDP (net, KRW 1bn)	978,499	981,625	1,043,666	1,081,594	1,103,467	1,037,770
GDP growth rate (net, %)	2.3	0.3	6.3	3.6	2.0	3.1

Source : The Bank of Korea, Ministry of Strategy and Finance [date modified by KAIT]

In 2012, the Korea's ICT industry exports recorded US\$ 155.2 billion, which was a 0.9% decrease compared to 2011 due to the impact of the global economic downturn especially, the European financial crisis. In particular,

of the 2012 ICT major export items, wireless communication devices showed a sharp decline rate of 14.7% (compared to 2011) in the beginning of the year though it was continued to rise from the third quarter of the year, and

the reduction of other major export sectors such as liquid crystal devices (0.3% decrease) and memory (18% reduction) also affected the overall decrease in exports. Conversely, the semiconductor process and controller, and other semiconductors' integrated circuit showed a strong performance and played a positive role in exports. The total exports in 2012 recorded US\$ 548.2 billion, which was a 1.3% decrease compared to 2011, however, an increase in the proportion of the ICT industry exports seems to have a positive effect

on the total value of exports. The ICT industry imports in 2012, on the other hand, was US\$ 77.9 billion, which showed a 4.4% decrease compared to 2011, and the share of the entire import was also reduced by 0.5%. As a result, though the total trade balance in 2012 appeared to be lower compared with the year 2011, the ICT trade balance in 2012, in spite of the difficult economic situation, recorded US\$ 77.3 billion in 2012, achieving a 2.9% increase compared to 2011. (See Table 1-6).

[Table 1-6] Status of ICT Industry Import and Export

(unit: US\$ 100mn, %)

Classification \ Year		2008	2009	2010	2011	2012P
Export	Total exports	4,220	3,635	4,664	5,552	5,482
	ICT industry exports	1,312	1,210	1,539	1,566	1,552
	Portion	31.1%	33.3%	33.0%	28.2%	28.3%
Import	Total import	4,353	3,231	4,252	5,244	5,195
	ICT industry imports	735	620	756	815	779
	Portion	16.9%	19.2%	17.8%	15.5%	15.0%
Total trade balance		△133	405	412	308	286
ICT trade balance		576	589	783	751	773

Source : Korea Customs Service, National IT Industry Promotion Agency (data modified by KAIT)

The industrial output of the domestic broadcasting and telecommunications market in 2011 reached about KRW 156 trillion, a 2.9% growth rate compared to 2010, however, the preliminary estimates for 2012 showed a 4.1% decrease at KRW 150 trillion compared to 2011. Of the production value of the broadcasting and telecommunications industry in 2012, the revenue of services increased by

2.3% compared to the previous year, whereas, that of the broadcasting and telecommunications equipment decreased by 8.8%.

Looking at the broadcasting and telecommunications services' sectors in 2012 in detail, while output of the broadcasting services and the telecommunications services showed a similar level of production scale as 2011, output of the broadcasting and telecommuni-

cations services convergence sector showed a high growth rate of 11.5% compared to 2011. The broadcasting and telecommunications convergence sector showed a strong compound annual growth rate of 16.3% during the year of 2008-2012, and is expected to surpass the production scale of the broadcasting services in the near future. In line with this, the

broadcasting and telecommunications service sector is also analyzed to increase sharply. In the broadcasting and telecommunications equipment sector, however, both broadcasting equipment and telecommunications equipment showed a decline in the production value (see Table I-7).

[Table I-7] Status of the Korea Broadcasting and Telecommunications Industry Output Value

(unit: KRW 1bn, %)

Classification	2008	2009	2010	2011P	2012P	Rate of Change	CAGR (2008-2012)
Broadcasting and Telecommunications industry	1,407,304	1,514,322	1,517,737	1,561,611	1,497,114	△4.1%	1.6%
Broadcasting and Telecommunications services	579,912	605,033	630,427	656,225	671,572	2.3%	3.7%
Telecommunication services	426,617	435,981	436,355	440,924	440,750	0.0%	0.8%
Broadcasting services	92,878	95,194	107,382	116,224	120,346	3.5%	6.7%
Convergence services	60,417	73,858	86,690	99,077	110,476	11.5%	16.3%
Broadcasting and Telecommunications Equipment	827,392	909,289	887,310	905,386	825,542	△8.8%	△0.1%
Telecommunication devices	698,457	768,389	732,179	745,908	681,060	△8.7%	△0.6%
Broadcasting equipment	128,936	140,900	155,130	159,478	144,483	△9.4%	2.9%

Note) 2012 rate of change is compared with that of 2011

Source : Korea Association for ICT Promotion [KAIT]

Given the environment of the domestic industry that has an export-oriented industrial structure, the delayed recovery of developed countries' economy, and on-going economic uncertainty of the Euro Zone were seen to have a negative effect on the telecommunications equipment sector and resulted in a decrease in the production level.

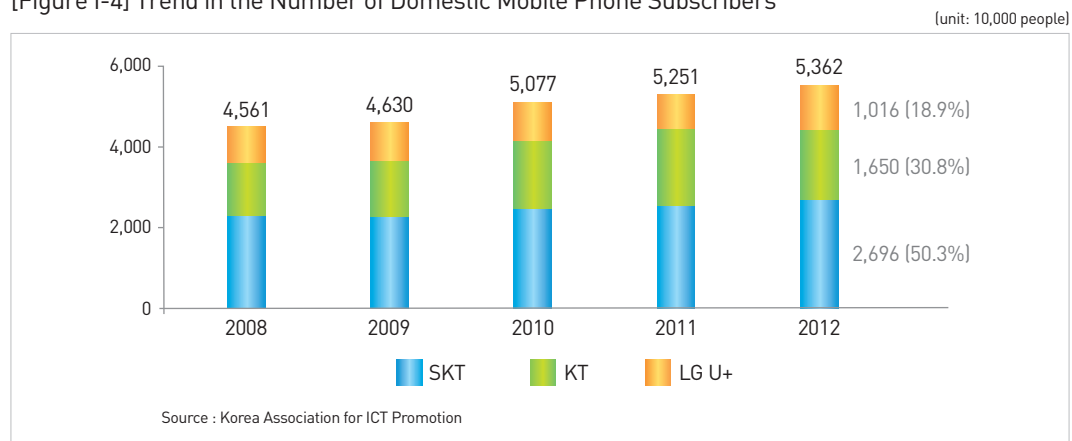
The number of Korea's mobile phone sub-

scribers in 2011 recorded 52.51 million, and it was reported to have reached 53.62 million in 2012, which showed a 2.1% increase compared to the previous year. The proportion of the market share by operators, as of December 2012, SKT, KT and LG U+ accounted for 50.3%, 30.8%, and 18.9%, respectively. Per subscriber, CDMA (Code Division Multiple Access) was composed of 20.0%, while

WCDMA (Wideband Code Division Multiple Access) 50.5% and LTE (Long Term Evolution) 29.5%, though the number of LTE subscribers are expanding quite rapidly. However, MVNO (Mobile Virtual Network

Operator) subscribers were recorded at 1.28 million, which appeared 2.4% lower compared to the total mobile phone subscribers. (See Figure I-4).

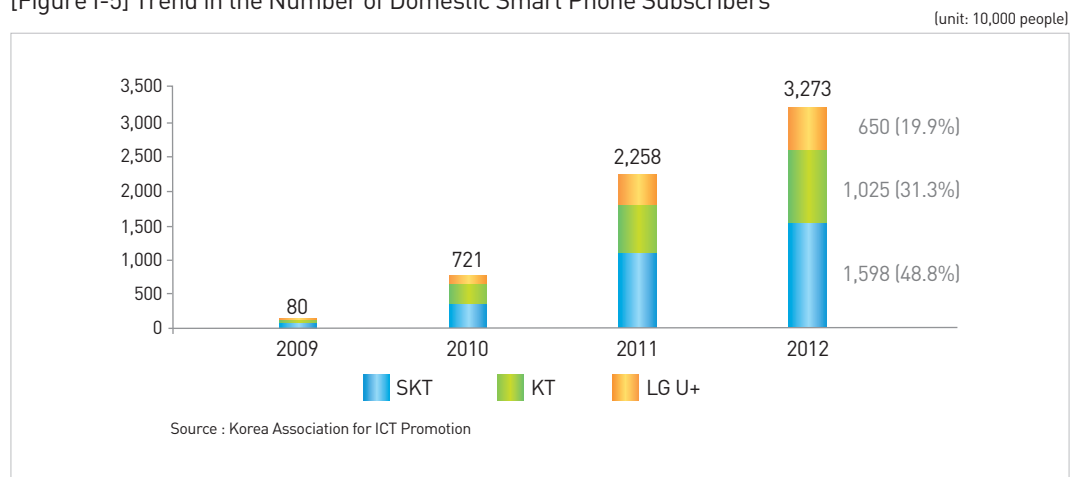
[Figure I-4] Trend in the Number of Domestic Mobile Phone Subscribers



Along with the rapid growth of smart phones in 2011, the number of Korea's smart phone subscribers in 2012 showed a sharp increase of 45% to 32.73 million, compared

to the previous year. By operators, SKT accounted for the highest proportion at 48.8%, followed by KT, and LG U+ in the order (See Figure I-5).

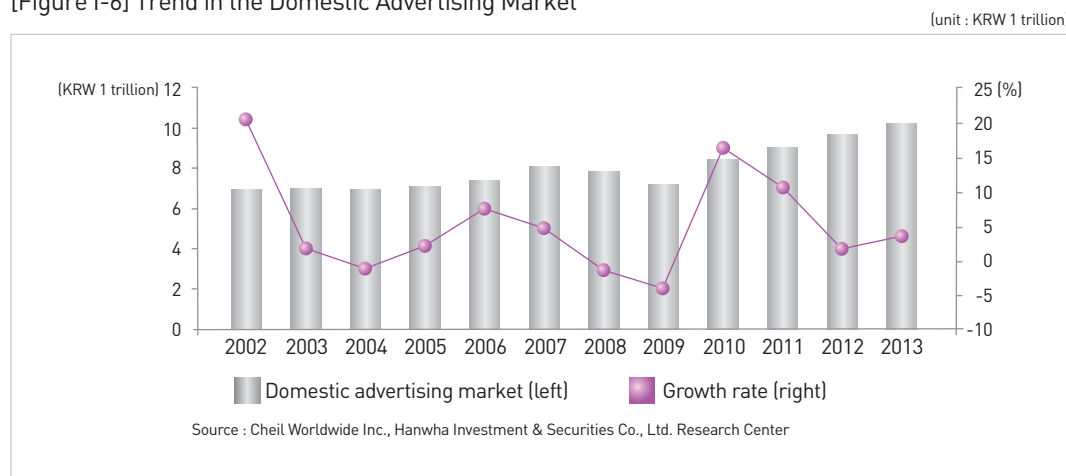
[Figure I-5] Trend in the Number of Domestic Smart Phone Subscribers



According to Cheil Worldwide Inc. (February 2013), a strong domestic economy, which began in 2010 continued in 2011, and the domestic advertising market in 2011 was recorded at KRW 9,560.6 trillion, which grew by 10.9% from the previous year. The domestic advertising market in 2012, however, had achieved KRW 9,770.6 trillion, which was only a 2.2% increase compared to 2011 due

to the global economic slowdown. The advertising market in 2013 is difficult to forecast due to falling exports as the exchange rate conditions have worsened and the burden on the household debt repayment, however, considering the OECD had predicted a growth rate of 3.1 % for Korea, a slight improvement on the advertising market can be anticipated. (See Figure I-6)

[Figure I-6] Trend in the Domestic Advertising Market



The Korea's broadcast advertising market in 2012 reached KRW 3,607.2 trillion, and it is projected to reach approximately KRW 3,575 trillion in 2013, which is down by 0.9% compared to the previous year. In particular, the terrestrial TV advertising revenue in 2012 was decreased by 7.1% compared to that of 2011, and although there was a favorable factor of the London Olympics, the advertisers' reduction on the overall advertising expenses due to the sluggish domestic demand

were identified as the main factor for a low performance. In addition, the 2012 cable TV (including total tv programming channels) advertising sales reached KRW 1,321.8 trillion, which showed a 12.6% growth compared to 2011, and this growth was by including the advertising sales of total TV programming channels, which opened in December 2011. 2013 is projected to reach KRW 1,330 trillion, which is a 0.6% growth compared to 2012 (See Table I-8).

[Table I-8] Forecast of the Domestic Broadcast Advertising Market

(unit: KRW 1bn, %)

Classification	2008	2009	2010	2011	2012	2013E	2013 Growth rate
Territorial TV	18,997	16,709	19,307	20,775	19,307	18,800	△2.6
Radio	2,769	2,231	2,565	2,604	2,358	2,430	3.0
Cable TV (include total TV programming channels)	8,600	7,794	9,649	11,741	13,218	13,300	0.6
IPTV	53	114	205	170	235	280	19.1
Skylife	95	95	153	122	130	140	7.7
DMB ^{Note1)}	114	176	271	267	168	150	△10.7
SO ^{Note2)}	-	524	590	664	655	650	△0.8
Total	30,628	27,643	32,740	36,343	36,072	35,750	△0.9

Note 1) DMB : Digital Multimedia Broadcasting 2) SO : System Operator, cable television system operator
Source : Cheil Worldwide Inc., Hanwha Investment & Securities Co., Ltd. Research Center

The Internet advertising sales in 2012, on the other hand, reached KRW 1,954 trillion which was a 5.3% growth from the previous year, and is expected to reach approximately KRW 2.08 trillion in 2013, which is about 6.4 % growth compared to 2012. This falling growth rate of Internet advertising sales, which marked some 20% growth in 2011, was seen largely attributable to the fast dif-

fusion of smart phones and that mobile advertising is absorbing the demand on new advertising. The mobile advertising sales, as a result, skyrocketed from KRW 600 billion in 2011 to KRW 2,100 billion in 2012, which represented a 250% growth. The mobile advertising sale in 2013 is forecast to be 4,000 billion, which shows a 90.5% growth (See Table I-9).

[Table I-9] Forecast in the Domestic Internet Advertising and Mobile Advertising Sales

(unit: KRW 1bn, %)

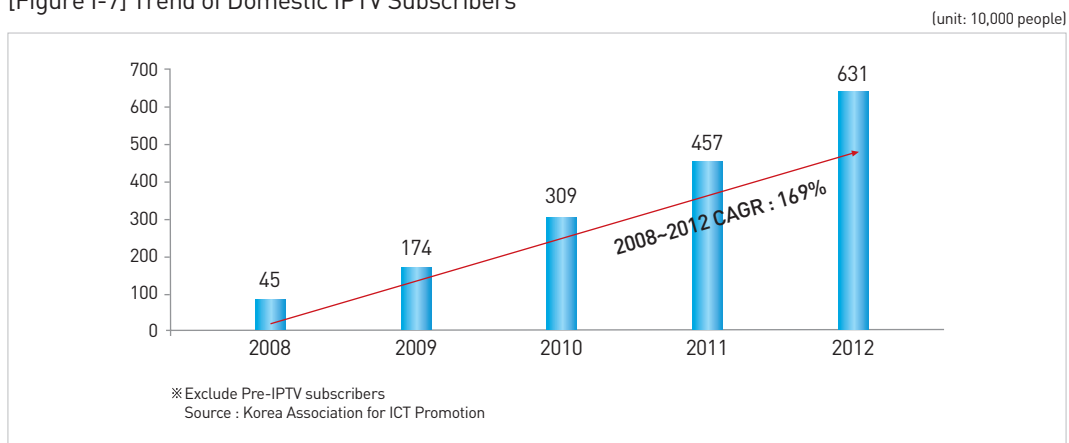
Classification		2008	2009	2010	2011	2012	2013E	2013 Growth rate
Internet ad	Search ad	7,500	8,250	10,440	12,440	12,950	13,650	5.4
	Exposed ad	4,400	4,180	5,030	6,120	6,590	7,150	8.5
	Internet Total	11,900	12,430	15,470	18,560	19,540	20,800	6.4
Mobile ad		-	-	5	600	2,100	4,000	90.5

Source : Cheil Worldwide Inc., Hanwha Investment & Securities Co., Ltd. Research Center

IPTV which corresponds to the convergence of broadcasting and telecommunications services as having the subscribers about 6.31 million in 2012 was to achieve a high growth rate of CAGR 169% during the year of 2008-2012 (see Figure I-7). While cable TV took about seven years to reach 6 million subscribers, and satellite TV took nine years to achieve 300 million subscribers, IPTV achieved surpassing 6 million subscribers less than 5 years after the commencement of the

service. In the social aspects, IPTV is expanding its role in solving social problems beyond the individual company's revenue model through public services such as education and health care. Furthermore, IPTV is expected to be developed to expand the area of communications convergence area by providing a new experience with the existing TV and cable TV, such as VoD (Video on Demand) and multi-angle.

[Figure I-7] Trend of Domestic IPTV Subscribers

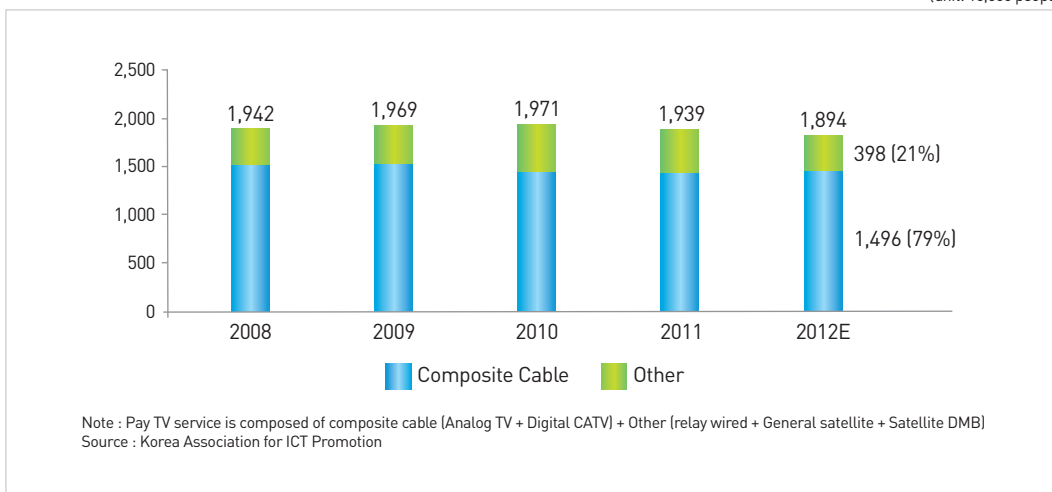


The number of Korea's Pay-TV subscribers in 2012 reached about 18.94 million and due to the reduction in the number of Analog CATV (Cable Television) and satellite (General satellite + Satellite DMB) subscribers, it showed a decline rate of 2.3% compared with the previous year. The reason for the number of fixed-line subscribers who accounted for a large proportion of the Pay-TV service showed no significant difference was because

though Digital CATV subscribers had been steadily increasing, Analog CATV subscribers had been reduced at the same time that the total number was being offset. In addition, for satellite, which accounted for the majority of other cases, as the number of IPTV subscribers increased, the number of satellite subscribers was shown to be absorbed into the IPTV subscription (See Figure I-8).

[Figure I-8] Trend of Domestic Pay-TV Service Subscribers

(unit: 10,000 people)



B. Changes in the Broadcasting and Telecommunications Policy Environment

In the 2012 ICT Development Index, published by the International Telecommunication Union (ITU), Korea was ranked as # 1 country out of 155 countries polled. This means Korea showed the world's highest standard in accessibility, availability and utilization for the information communication technology (ICT). This is meaningful by virtue of the fact that we had achieved this recognition for three consecutive years, not only in the year 2012. The ICT Development Index is a comprehensive representation of the degree of development of the country's information and communication and the information gap between the countries, and by comparing the index, it can set the standards

to bridge the gap between developed and developing countries. The fact that Korea was rated highly from ICT based on these recognized standards has a significant meaning that shows the aspects of Korea as the ICT powerhouse with the best infrastructure in the world.

Of the 2012 broadcasting and telecommunications policy, total TV programming channels on broadcasting and the diffusion of LTE services in the telecommunications appears to have led to a new growth leap. Above all, these effects bring about the expansion of the broadcast advertising market in the field of broadcasting that gives more choices to users in communications, and lead to a competitive system that allows service providers to develop a variety of content. With the introduction of LTE services, the current LTE users are increasing rapidly exceeding 15.81 million

users based on December 2012 figures. The background of this growth in LTE seems to reflect the fact that the users take the mobile Internet speed to be the most important factor. With focuses on this mobile market, as the IT equipment is developed fast and the traffic speed is getting faster, the improvement of image and sound quality have become generalized. Instead of owning contents via downloads, the trend of using image and sound with a real-time streaming on all platforms without regard to the time and the place is expected to be even greater.

The improvement of smart environments and the dissemination and the spread of smart media that transform the lives of the users and change the domestic stage to the arena of global competition simultaneously play the role as a growth engine of the country. As we gradually enter into the smart ecosystems, technology to provide the ICT services that the users demand will be developed quickly. Based on the ICT infrastructure, as the variety of information is readily available, we are gradually moving towards a knowledge-based society. Based on the systematically, well-prepared ICT policy environment, Internet of Things, Big Data, Cloud Computing, and Smart Work will contribute to achieving the sensitivity of the human-centered society through new ICT technologies and convergence service.

As the smart devices are diffused and the social media such as social network and blog

creates new values of society, the paradigm of ICT market is seeing the change. That is, the rapid change is underway by shifting the focus from the existing manufacturing and wired communications to Internet and mobile convergence. Until just a few years ago, the ICT market was central to the equipment vendor or network operators, however, as the ICT market is transformed into a combination of organic CPND, its competing paradigm with the advent of content and proliferation of Internet-based open platform is changing to the Mobile-centric. As a result, users (customers) demand-oriented services have been an important issue and services are being developed for the new revenue-generation. In particular, 2012 was at the height of the ICT paradigm shift.

Because of the ICT paradigm shift, the ICT Market in 2013 is expected to have even bigger changes in terms of mobile, social, information and cloud services. In other words, social is becoming the content itself and mobile is expected to be the center of personal and corporate lives. Furthermore, the new value market will be created through Big Data, and the era to provide Intelligence to the cloud through the Internet connection will be developed quickly.

Connection creates new human-centered values. In other words, at the heart of new value creation by more connections, faster connections, and more intelligent connection, human exists. In the 1st Industrial Revolution,

steam engine became an important driving force, while in the 2nd Industrial Revolution, electric had been an important driving force to change the world. Today, the digital-based ICT infrastructure has been the driving force behind the creation of new values, and has been the springboard role of national prosperity. In 2013, the ICT policy environment will accomplish the harmony of ‘Communication and Creation’. In other words, the value of creating new connections gives vitality to daily lives, business activities, and will play an important role in solving social problems and economic activities by creating new business opportunities and jobs. Through the ICT, new growth opportunities and values to overcome the low-growth era will be advent.

Under the circumstances of lack in provisions for solving today’s problems such as climate change, aging, unemployment and alternative plans for global competitiveness, the ICT paradigm shift gives us expectations for a positive change. That is, the ICT paradigm shift will help to solve the problem in hand such as resolving environmental and social issues, improving the user’s quality of life, and providing new business opportunities, and will play a role as a growth engine of the country. 2013 will be the first year that starts a shift in generation of the ICT in earnest.



II

Policy Goals of the Korea Communications Commission

1. Overview
2. Organizational Status and Jurisdiction Work
3. Innovation Outcome of Business System
4. Major Accomplishments in 2011
5. Major Policy Goals for 2012

II Policy Goals of the Korea Communications Commission

1. Overview

The Korea Communications Commission was established by the ‘Act on the Establishment and Operation of the Korea Communications Commission’, as a collegial body directly reporting to the President of the Republic of Korea. The purposes of KCC, as the regulator of broadcasting and telecommunications, are to proactively respond to the phenomenon of convergence between broadcasting media and telecommunications; guarantee the freedom of broadcasting and its public and public-interest nature; and ensure a balanced growth between broadcasting and telecommunications so as to strengthen the international competitiveness of the local broadcasting and communications industries; protect rights and interests of the public; and contribute to enhancing the welfare of the public through independent operation of the Commission.

KCC is responsible for establishing policies to guide the process of convergence between broadcasting and telecommunications as well as policies for promoting converged digital

services and developing related technologies; establishing spectrum-related policies and managing spectrum resources; establishing broadcasting and telecommunications policy; developing pro-competition policies for the broadcasting and telecommunications market; upgrading broadcasting and communications networks; preventing undesirable effects of broadcasting and communications; establishing policies for protecting broadcasting and communications users; and investigating unfair practices by broadcasting and communications businesses and mediating industry disputes and business-consumer disputes.

KCC is composed of five standing members including the chairman and the vice chairman. Of the five standing members, two including the chairman are directly appointed by the President of the Republic of Korea, and the remaining three are nominated by the National Assembly and appointed by the President of Korea¹⁾. The standing members deliberate and vote on important issues related to broadcasting and telecommunications and the operation of KCC

There are sixteen laws that are directly and

1) One of the three standing members is nominated by the negotiating body of the political party to which the President of the Republic of Korea belongs or used to belong, and the remaining two, by other negotiating bodies.

indirectly related to KCC and its areas of responsibility, as listed below

- ▶ Legal basis for establishment : The Act on the Establishment and Operation of the Korea Communications Commission
- ▶ Digital convergence : Two laws including the Framework Act on the Development of Broadcasting and Communications
- ▶ Broadcasting : Five laws including the

Broadcasting Act and the Korea Educational Broadcasting System Act

- ▶ Communications : Seven laws including the Telecommunications Business Act and the Act on Promotion of Information and Communications Network Utilization and Information Protection, etc.
- ▶ Radio waves : Radio Waves Act

[Table II-1] Laws Related to the Korea Communications Commission

Law	Description	Dates Enacted and Amended
Act on the Establishment and Operation of the Korea Communications Commission	<ul style="list-style-type: none"> • Legal basis for the establishment of the Korea Communications Commission, composition and organization structure thereof • Responsibilities of the Korea Communications Commission; its method of operation; establishment of a deliberation committee 	Feb. 29, 2008 Enacted May. 23, 2012 Amended
Framework Act on Broadcasting Communications Development	<ul style="list-style-type: none"> • Basic directions and plans for broadcasting and telecommunications policy • Promotion of broadcasting and telecommunications; establishment of technical standards; disaster management; establishment of the Broadcasting and Telecommunications Development Fund 	Mar. 22, 2010 Enacted Feb. 22, 2012 Amended
Internet Multimedia Broadcast Services Act	<ul style="list-style-type: none"> • Classification of Internet multimedia businesses (IPTV service providers, content providers) • Market entry restrictions, service zones and ownership restrictions 	Jan. 17, 2008 Enacted Jul. 14, 2011 Amended
Broadcasting Act	<ul style="list-style-type: none"> • Freedom of broadcast programming; public responsibility of broadcasting • Licensing, re-licensing, approval and re-approval of broadcasting businesses 	Jan. 12, 2000 Enacted Feb. 22, 2012 Amended
Korea Educational Broadcasting System Act	<ul style="list-style-type: none"> • Capital of the Korea Educational Broadcasting System and capital contributions • Appointment of board members; creation of a board of directors 	Jan. 12, 2000 Enacted Mar. 22, 2010 Amended
Foundation for Broadcast Culture Act	<ul style="list-style-type: none"> • Establishment of a board of trustees for the Foundation for Broadcast Culture • Legal basis for the establishment of the Broadcast Culture Promotion Fund 	Dec. 26, 1988 Enacted Feb. 29, 2008 Amended

Law	Description	Dates Enacted and Amended
Special Act on the Digital Transition of Terrestrial TV Broadcasting and the Activation of Digital Broadcasting	<ul style="list-style-type: none"> •Phase-out date for analog TV broadcasting •Measures to ensure low-income viewers' access to DTV 	Mar. 28, 2008 Enacted Apr. 22, 2009 Amended
Radio Waves Act	<ul style="list-style-type: none"> •Procedures for the allocation, assignment, retrieval and re-allocation of frequency spectrum resources •Procedures for licensing, inspecting and using radio stations 	Dec. 30, 1961 Enacted May. 23, 2012 Amended
Framework Act on Telecommunications	<ul style="list-style-type: none"> •Technical standards for telecommunications equipment and facilities •Management of accidents and disasters disrupting telecommunications 	Dec. 30, 1983 Enacted Jul. 23, 2010 Amended
Telecommunications Business Act	<ul style="list-style-type: none"> •Classification of telecommunications services and service providers, market entry rules, pro-competition measures and mechanisms to ensure fair competition •Telecommunications user protection system 	Dec. 30, 1983 Enacted Jan. 17, 2012 Amended
Protection of Communications Secrets Act	<ul style="list-style-type: none"> •Procedures for communications interception and accessing communications data •Telecommunications operators' duty to cooperate to ensure the secrecy of communications 	Dec. 27, 1993 Enacted Nov. 02, 2009 Amended
Act on Promotion of Information and Communications Network Utilization and Information Protection, etc.	<ul style="list-style-type: none"> •Restrictions on the collection and use of Internet users' personal information •Requirement to use real name for Internet bulletin board users and ban on the transmission of illegal spam messages 	May 12, 1986 Enacted Feb. 17, 2012 Amended
Internet Address Resources Act	<ul style="list-style-type: none"> •Use and management of Internet address resources •Establishment and operation of the Internet dispute conciliation committee 	Jan. 29, 2004 Enacted Jun. 09, 2009 Amended
Information and Communications Construction Business Act	<ul style="list-style-type: none"> •Registration of construction businesses; technical standards for construction design •Restrictions on the scope and number of contracts granted to single constructors and restrictions on subcontracting 	Jan. 22, 1971 Enacted Jan. 17, 2012 Amended
Act on the Protection, Use, etc. of Location Information	<ul style="list-style-type: none"> •Classification of location information businesses; market entry rules •Rules on the use of personal location information by emergency rescue organizations 	Jan. 27, 2005 Enacted Mar. 14, 2012 Amended
Act on the Broadcast Advertising Sales Agency	<ul style="list-style-type: none"> •Permission and ownership restrictions on the broadcast advertising sales agents •Support measures for the balanced development of broadcast advertising 	Feb. 22, 2012 Enacted

* As of March 2012

2. Organizational Status and Jurisdiction Work

A. Organizational Status

[Figure II-1] The Current Standing Commissions of the Second Term Commission (as of April 2013)



Kyeong-Jae Lee, Chairman

Lee graduated from Seoul National University with a B.A. in Sociology(1964) and served in the military service as a second lieutenant, ROTC(1966). He worked as a journalist at the Dong-A Ilbo(1980), as a chief journalist of the Department of Politics(1991) and as a visiting scholar at George Washington University(1992). He served as a chief public Relations Secretary to the President & Blue House Spokesperson(1993), as a vice-minister of the Bureau of Public Information(1995), as a member of the Korean National Assembly and served four consecutive parliamentary terms as a constituency representative between 1996 and 2012. He has been serving as a chairman of KCC since April 2013.



Choong-Seek Kim, Vice -Chairman

Kim graduated from Korea University with a B.A. in Philosophy (1977). He obtained an M.A. in Mass Communications at Chung-Ang University (1993) and a Ph.D. in Media at the Graduate School of Media and Governance, Keio University, Japan (2010). He worked as a reporter at the DongA Ilbo, a major daily newspaper in Korea (1978), as a vice-chief of the Science and Culture Department (1995), as president of DongA Ilbo Tokyo (2002), and as an editorial column writer (2005). He was appointed as a full professor of journalism and mass communications at Kyungwon (presently Gachon) University (2009) and he served as a standing commissioner of KCC (March 2011-September 2012). He has been serving as vice-chairperson of the Second Term Commission of KCC since September 2012



Sung-Kyu Hong, Commissioner

Hong graduated from Hankuk University of Foreign Studies with a B.A. in Political Science and Diplomacy (1975) and obtained an M.A. in Broadcasting from the Graduate School of Journalism and Mass Communication, Chung-Ang University (1998). He worked at KBS (Korean Broadcasting System) as a director of the Politics and Culture Office (1992), as an executive director of the News and Policy Planning Department (1999) and as a head of the Special Mission Bureau (2002). He served as a vice-president at TU Media Corp. (2004) while teaching at Chung-Ang University as a professor of mass communication (2007) and he served as a vice-chairperson of KCC (March 2011-September 2012). He has been serving as a standing commissioner of the Second Term Commission of KCC since September 2012.



Dae-Hee Kim, Commissioner

Kim graduated from SungKyunKwan University with a B.A. in science of public administration (1982), and after the Graduate School of Public Administration, Seoul National University (1984), he completed the Graduate School of Carlton in Canada (1997). Employed through the Civil Service Examination (26th), in 1983 he served as the Ministry of Information and Legal Officer (1998), Commissioner of Communications in Jeonbuk (2004), Information and Communication Cooperation Director of the Ministry of Information and Communication (2007), Assistant Minister for Planning and Coordination of Broadcasting and Telecommunications Commission (2010), and Broadcasting Information and Communications Adviser of the Executive Office of the President (2011). He has been serving as a standing commissioner of the Second Term Commission of KCC since November 2012.



Moon-Seok Yang, Commissioner

Yang graduated from Sungkyunkwan University with a B.A. in Confucianism (1993) and went on to obtain an M.A. in Politics (1996) and a Ph.D. in Journalism and Mass Communication (2002). He worked as a member of the policy committee, National Union of Mediaworkers (2002), a secretary-general of the People's Coalition for Media Reform (2006), a director for planning, Korean Association for Broadcasting and Telecommunication Studies (2007), and a director at the Institute for Public Media (2008). He served as a standing commissioner of KCC (July 2010 ~ March 2011) and has been serving as a standing commissioner of the Second Term Commission of KCC since March 2011.

KCC, through an enactment of 「Act on Broadcast Advertising Sales Agency」 and the amendments of 「Broadcasting Act」, newly established the Broadcast Advertising Policy Bureau and the Broadcast Market Research Bureau, which are responsible for the survey work including the broadcast advertising market regulation and the promotion of business and prohibited acts for broadcast markets and added 10 more resources necessary to perform its work, and to perform the management and supervision of nation's network operational status check, some organization plans had been revised (June 1, 2012).

Through newly established policies and the

broadcast advertising bureau, it performed the formulation and execution of medium and long-term policy of broadcast advertising, improvement of laws, and system related to broadcast advertising, competition policy of the broadcast advertising sales agency market, and managing and supervision of the operators.

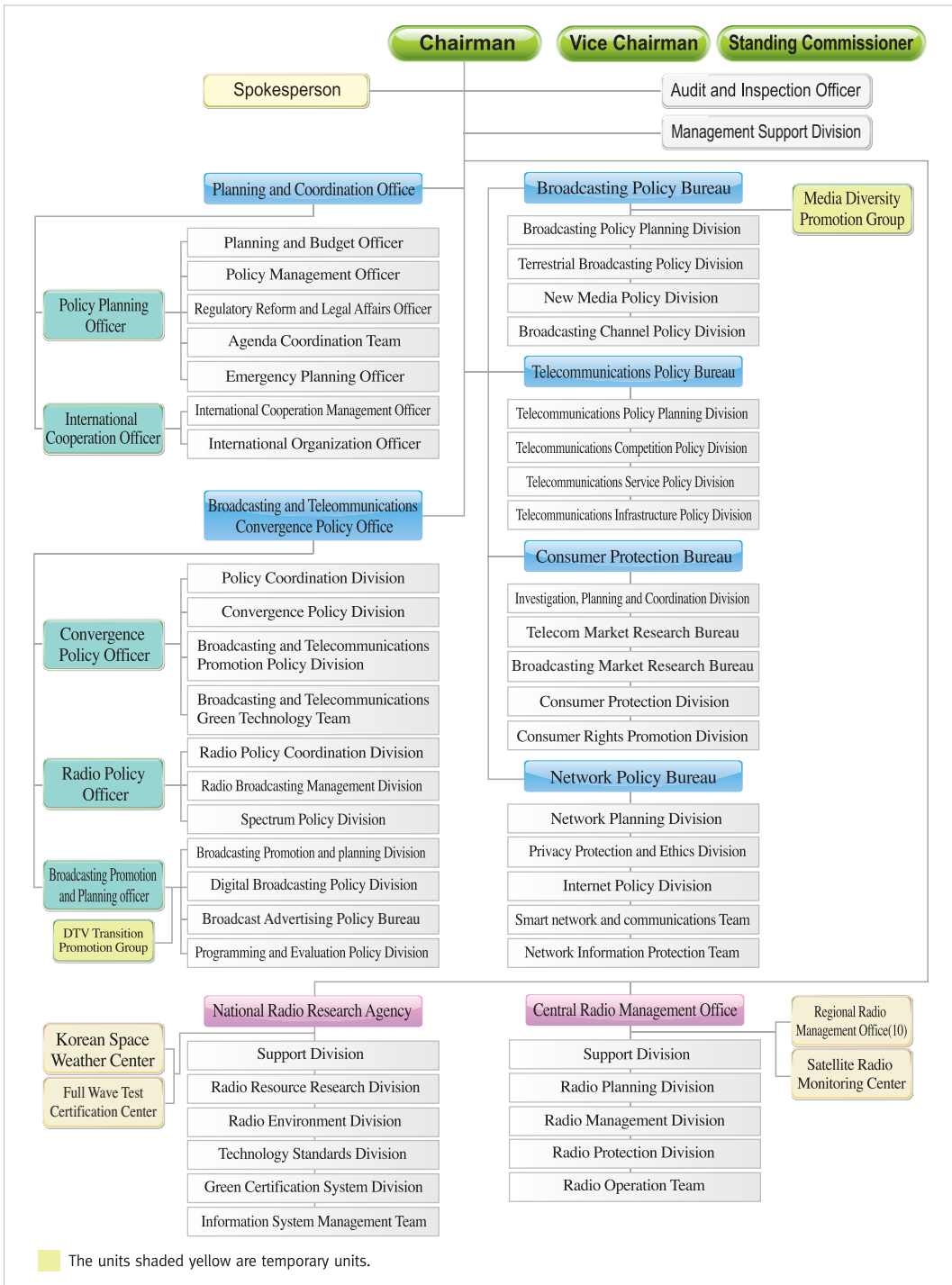
In addition, the existing market research division is divided into the Telecommunications Markets Research Bureau and the Broadcasting Market Research Bureau; and through the newly established Broadcasting Market Research Bureau, it performed the work of corrective action and check the status

of implementation of corrective command of management and sanctions for prohibited acts for broadcasters, Internet multimedia broadcasters and broadcast advertising sales agency operators; and also, to analyze the terms to protect the rights and interests of viewers, the improvement procedures of business, protect the rights of viewers and to improve matters

pertaining to the system for the creation of an environment for fair competition of broadcasting of the broadcast advertising market, some office were reorganized.

The Commission's organization is reconstituted 2 offices 4 bureaus 6 chief officers 34 divisions and 4 teams, and the detailed organization is shown in Figure II -2.

[Figure II-2] Organization Chart of KCC (as of December 2012)



B. Jurisdiction Work and Segregation of Duties

Areas of Responsibility (pursuant to Article 11 of the Act on the Establishment and Operation of the Korea Communications Commission)

1. Broadcasting regulation;
2. Telecommunications regulation;
3. Issues related to spectrum research and the management of spectrum resources; and
4. Other responsibilities assigned by this Law or other laws to the Korea Communications Commission.

Key Areas of Deliberation by the Commission (pursuant to Article 12 of the Act on the Establishment and Operation of the Korea Communications Commission)

1. Issues related to the basic planning of broadcasting and communications;
2. Issues related to licensing, re-licensing, approving and registering broadcasters, including revocation of a licenses or cancellation of any approval granted;
- 2 of 2. Issues related to the permission, cancel and approval of operators of the broadcast advertising sales agency in accordance with the law regarding the broadcast advertising sales agency
3. Issues related to licensing, or revoking the license of, telecommunications operators;

4. Issues related to the efficient use of frequency spectrum resources;
5. Issues related to the establishment of broadcasting and telecommunications technology policies;
6. Issues related to ensuring fair business practices in the distribution of broadcasting programs;
7. Issues related to upgrading the quality of broadcasting and communications services and universal services;
8. Issues related to the coordination of joint projects between broadcasters and telecommunications operators, mediation of disputes between the latter or between the latter and users;
9. Issues related to the authorization of arrangements and agreements between telecommunications operators on the supply or sharing of telecommunications facilities, interconnection or information sharing;
- 2 of 9. Issues related to the establishment of measures to protect the human body from electromagnetic waves
10. Issues related to the enforcement of rules prohibiting certain practices by broadcasters and telecommunications operators such as taking disciplinary dispositions or imposing fines;
11. Issues related to broadcast advertising and its programming;
12. Issues related to broadcasting and communications research and support;
13. Issues related to the processing of viewer

-
- complaints, protection of broadcasting and communications users and ensuring their welfare;
14. Issues related to the establishment, management and operation of broadcasting and communications funds;
 15. Issues related to international cooperation and trade in broadcasting and communications;
 16. Issues related to North-South Korea cooperation and exchange in broadcasting and communications;
 17. Issues related to the planning and execution of the Commission's budget;
 18. Issues related to developing and submitting legislative proposals including amendment and repeal proposals, relevant to the Commission's areas of responsibility and enacting, revising and repealing the Commission's internal bylaws and regulations; and
 19. Other issues delegated to the Commission under this Law or other laws for its deliberation.

KCC integrated some of the tasks conducted by regional radio management offices under the Central Radio Management Office, which manage radio waves and broadcasting and communications at regional levels, to reduce the number of the offices from 12 to 10 and improve the work efficiency of the Office.

KCC also changed the name of Radio Research Agency to National Radio Research Agency to reflect its increased status conducting researches of the impact of electromagnetic waves on human bodies, preparing standards for the broadcasting and communications sector and administering testing and certification of broadcasting and communications equipment and devices. Detailed division of duties of the department of the Commission is shown in Table II -2.

[Table II-2] Divisions and Sections of the Korea Communications and Their Duties and Responsibilities

Classification		Duties and Responsibilities
Planning and Coordination Office	Policy Planning Officer	<ul style="list-style-type: none"> • Management of policy-making and planning processes across all areas of the Commission's activities, and organizational and personnel coordination • Budget planning, management of income and expenses and accounting • Establishing mid and long-term plans for Funding and its management and supervision; and raising and operating relevant funds
		<ul style="list-style-type: none"> • Comprehensive management of and support for the Commission's regulatory activities, performance management and trend analysis • ICT planning for the Commission and the implementation and operation of information systems
		<ul style="list-style-type: none"> • Developing or reviewing legislative bills and cooperation with the legislature and other external bodies • Administrative adjudication and affairs related to lawsuits, the approval of incorporation, appointment of officials in affiliated organizations or approval of new appointments therein
		<ul style="list-style-type: none"> • Response to national emergencies and the management of security measures and disaster response measures • Planning for the management of accidents and disasters paralyzing telecommunications systems and improving the response system
		<ul style="list-style-type: none"> • Calling for the meeting of the Commission, developing an agenda and documenting the meetings • Receiving agenda items proposed for the Commission's meetings and organizing subcommittees and expert committees
	International Cooperation Officer	<ul style="list-style-type: none"> • A comprehensive Management of developing international cooperation policy including inter-governmental cooperation • Negotiations with WTO, FTA and other international organizations on broadcasting and telecommunications-related issues and the management of North and South exchange in broadcasting and telecommunications
		<ul style="list-style-type: none"> • Formulation and promotion of relations with international organizations involved in broadcasting and telecommunications -related activities • Operation of broadcasting and telecommunications-related international organizations and policy development
Broadcasting and Communications Convergence Policy Office	Convergence Policy Officer	<ul style="list-style-type: none"> • Development of broadcasting-telecom convergence policy, and the development and evaluation of medium and long-term broadcasting and telecommunications service policy • Overall control and adjustment of researches and studies related to broadcasting and telecommunications
		<ul style="list-style-type: none"> • Formulation of comprehensive plans to promote convergent services including Internet multimedia • Formulation of a national vision and growth strategy based on broadcasting and telecommunications and digital convergence
		<ul style="list-style-type: none"> • Formulation of policies regarding the promotion and distribution of broadcasting programs and the training of broadcasting and telecommunications personnel • Activation policy for the production of public-interest programs. Promotion of Korean-language broadcasting in overseas

Classification			Duties and Responsibilities
Broadcasting and Communications Convergence Policy Office	Convergence Policy Officer	Broadcasting and Telecommunications Green Technology Team	<ul style="list-style-type: none"> •Development of broadcasting and telecommunications technology promotion-related policy and manpower development •Green IT plans for the broadcasting and telecommunications field
	Radio Policy Officer	Radio Policy Coordination Division	<ul style="list-style-type: none"> •Establishment of basic plans for spectrum promotion and policies related to spectrum assignment and auctioning •Spectrum use and spectrum free-related policy development. Anti-trust on surveillance of spectrum and security activities for the broadcasting and telecommunications field.
		Radio Broadcasting Management Division	<ul style="list-style-type: none"> •Policy development in the areas of fair use of spectrum and viewing support technology for hearing-impaired viewers •Radio station-licensing and inspection policies and Conformity Assessment Policy including broadcasting and telecommunications equipment
		Spectrum Policy Division	<ul style="list-style-type: none"> •Developing policies to promote the efficient use of spectrum resources •Development of spectrum resource use technology plans, assignment of satellite spectrum and international registration
	Broadcasting Promotion and Planning Officer	Broadcasting Promotion and Planning Division	<ul style="list-style-type: none"> •Policy measures for guaranteeing universal access to broadcasting and protecting viewers' rights •Protective policies on a neglected class of people of broadcast programs. Support for the deliberation of broadcasting's publicity and public interests
		Digital Broadcasting Policy Division	<ul style="list-style-type: none"> •Policy development in the areas of DTV reception environment and DTV transition •Policy undertakings to provide TV services to remote areas with limited access to broadcasting
		Broadcast Advertising Policy Bureau	<ul style="list-style-type: none"> •Establishment and enforcement of the Medium and long-term policy of broadcast advertising. Formation and operation and improvement of the legal system •Competition policy of the broadcast advertising sales agency market. Permission and change of the broadcast advertising sales agency operators
		Programming and Evaluation Policy Division	<ul style="list-style-type: none"> •Policy development in TV programming, •Basic plans for TV program evaluation and sponsorship notices related policies
	Broadcasting Policy Bureau	Broadcasting Policy Planning Division	<ul style="list-style-type: none"> •Establishment of fair medium to long-term broadcast basic policy and public broadcast policy •Policy establishment of fair competition environment of the broadcast market and measures to ensure the public interest of broadcasting
		Terrestrial Broadcasting Policy Division	<ul style="list-style-type: none"> •Terrestrial TV policy and local TV development policy •Policy related to licensing and re-licensing of terrestrial broadcasters and other approval processes
		New Media Policy Division	<ul style="list-style-type: none"> •Basic planning for new media and cable TV services •Policy related to licensing and re-licensing of competent broadcasters
		Broadcasting Channel Policy Division	<ul style="list-style-type: none"> •Basic Plans for the broadcast channels used in the business and registration and approval of Broadcast channel business •Public interest channels and public channels policymaking

Notice 1) WTO : World Organization,
Notice 2) FTA : Free Trade Agreement

Classification		Duties and Responsibilities
Telecommunications Policy Bureau	Telecommunications Policy Planning Division	<ul style="list-style-type: none"> •Comprehensively responsible for telecommunications service policy •Medium and long-term policy related to the telecom industry and the promotion of WiBro
	Telecommunications Competition Policy Division	<ul style="list-style-type: none"> •Medium and long-term competition promotion policy for the telecommunications market •Policy related to licensing and merging of common carriers and the telecom resale scheme
	Telecommunications Service Policy Division	<ul style="list-style-type: none"> •Policy-making and improvement measures related to mobile handset subsidy programs •Establishment of telecommunications service system and user status' survey and analysis, combined sales related policy
	Telecommunications Infrastructure Policy Division	<ul style="list-style-type: none"> •Comprehensive management and utilization of communication resources planning. Internet phone activation policy •Establishment, management and maintenance of telecom facilities. Formulation and implementation of wired and wireless number portability plan
Consumer Protection Bureau	Investigation, Planning and Coordination Division	<ul style="list-style-type: none"> •Broadcasting and telecommunications market research policy and medium and long-term policy on dispute resolution procedures and systems •Creation and operation of a broadcasting dispute conciliation committee and legal advisory committees
	Telecommunications Market Research Bureau	<ul style="list-style-type: none"> •Investigation of unlawful, unfair or irregular business practices and issuance Under Article 50 of the Telecommunications Business Act and corrective action orders •Policy related to auditing the accounting practices of Telecommunications carriers
	Broadcasting Market Research Bureau	<ul style="list-style-type: none"> •Investigation of unlawful, unfair or irregular business practices and issuance of Broadcasting Act, Internet Multimedia Broadcast Services Act and Act on Broadcast advertising sales agency and corrective action orders •Viewers' rights protection and system improvement on the establishment of fair competition environment on broadcasting and the broadcast advertising market
	Consumer Protection Division	<ul style="list-style-type: none"> •Policy for the protection of broadcasting and telecommunications users. Telecommunications service quality assessment and improvement •Regulatory improvement to increase the welfare of telecom users and make the use of telecom services easier and more convenient
	Consumer Rights Promotion Division	<ul style="list-style-type: none"> •Supervision of the creation and operation of viewers committees •Programming management for viewer-produced programs and viewer-participated programs and support for disadvantaged populations to improve their access to broadcasting
Network Policy Bureau	Network Planning Division	<ul style="list-style-type: none"> •Policy development for upgrading, and ensuring the safety and reliability of broadcasting and telecommunications networks •Ensuring interoperability between broadcasting and telecommunications networks and their standardization
	Privacy Protection and Ethics Division	<ul style="list-style-type: none"> •Policy related to the protection of personal information within broadcasting and telecommunications networks and legislative activities for the enactment and amendment of related laws and regulations •Policy related to licensing and re-licensing of location information service providers and internet ethics

Classification		Duties and Responsibilities
Network Policy Bureau	Internet Policy Division	<ul style="list-style-type: none"> • Expansion of Internet use infrastructure and the promotion of Internet use • Development and standardization of Internet address resources, Wireless Internet service activation and fair competition
	Smart network and communications Team	<ul style="list-style-type: none"> • Future Internet policy, Promotion of new Internet business models such as machine-to-machine communications and cloud services • National Grid-based deployment and service activation, and international networks management
	Network Information Protection Team	<ul style="list-style-type: none"> • Services protection related to the broadcasting network guidelines. Technology development and technology standards establishment • Establishment of response systems to intrusions to broadcasting and telecommunication networks and the issuing of forecasts and alerts
Spokesperson		<ul style="list-style-type: none"> • Overall control, examination and evaluation of social media policy communication including designation of online spokesperson(s) (added by the organizational reshuffle of 10/10/2011)
Audit and Inspection Officer		<ul style="list-style-type: none"> • Audit of the Commission and its affiliated organizations • Audit of broadcasting and telecommunications-related institutions reporting to the Commission, review of petitions submitted to the Commission and the investigation of rule-breaking activities and other illegal or unfair activities
Management Support Division		<ul style="list-style-type: none"> • Personnel management, including reward and discipline, training and the management of employee history • Policy support to the Commission, ceremony and event management, building and security management, welfare of civil servants

C. Public Agencies Under the Jurisdiction of the Commission

Public agencies under the jurisdiction of KCC include Korea Communications Agency (KCA) and Korea Internet & Security Agency (KISA). Major institutions affiliated with KCC include Korea Broadcasting System (KBS), Korea Educational Broadcasting

System (EBS) and Foundation for Broadcast Culture. As the jurisdiction public office, Korea Broadcast Advertising Promotion Corporation was established by the enactment of 「Act on Broadcast Advertising Sales Agency」 and its legal bases, purposes and major functions of the institutions and organizations are shown in tables <II-3, 4, 5> below.

[Table II-3] Public Agencies Under the Jurisdiction of the Korea Communications Commission

Name of institution	Title of the Head of institution	Head of institution	Legal basis for establishment	Purpose of establishment/ key responsibilities
Korea Communications Agency (KCA)	Director	Yoo-suk Yang	Article 66 of the Radio Waves Act	Conducting projects aimed at the efficient management of radio waves and promoting broadcasting and telecommunications, and radio waves; management of the Broadcasting and telecommunications Fund; tasks and projects commissioned by the government.
Korea Internet & Security Agency (KISA)	Director	Ki Joo Lee	Article 52 of the Act on Promotion of Information and Communications Network Utilization and Information Protection, etc.	Upgrading information and communications networks (excluding duties related to the construction, improvement and management of information and communications networks); promotion of the safe use of information and communications networks; international cooperation in broadcasting and telecommunications and efficient support of overseas market bids by Korean broadcasting and telecommunications businesses.

[Table II-4] Organizations Related to the Korea Communications Commission

Name of institution	Title of the Head of institution	Head of institution	Legal basis for establishment	Purpose of establishment/ key responsibilities
Korea Broadcasting System (KBS)	President	In-gyu Kim	Article 43 (1) of the Broadcasting Act	Setting high standards for broadcasting as a state-run national broadcasting network; efficient management of Korean and overseas broadcasting.
Korea Educational Broadcasting System (EBS)	President	Yong-Sup Shin	Article 1 of Korea Educational Broadcasting System Act	Complementing school education through its educational programs; providing lifelong education for Koreans; contributing to the development of education in Korea and ensuring equal access to education.
Foundation for Broadcast Culture	President	Jae-woo Kim	Article 1 of Foundation for Broadcast Culture Act	Ensuring that broadcasters fulfill their social responsibility; contributing to the advancement of broadcast culture in Korea and welfare of Koreans.

[Table II-5] Public Corporation Under the Jurisdiction of the Korea Communications Commission

Name of institution	Title of the Head of institution	Head of institution	Legal basis for establishment	Purpose of establishment/ key responsibilities
Korea Broadcast Advertising Corporation (KOBACO)	President	Won-Change Lee	Article 24 of the Act regarding the broadcast advertising sales agency	Advertising sales agency, balanced development of broadcast advertising and broadcast advertising industry activation, and broadcasting and communications advertising industry promotion-related businesses, and government services

D. Annual Expenditure Budget of 2012

In 2012, the Commission's budget expenditures amounted to KRW 1,120.4 billion, which breaks down by funding source, to KRW 284.4 billion for the general account, KRW 10.1 billion for the Innovative City Construction special account, and KRW 825.9 billion for the funds. By field, the

amount breaks down to KRW 536.8 billion for communications, and KRW 583.6 billion for culture and tourism. By function, the amount breaks down to KRW 96.7 billion for wage and compensation, KRW 15.3 billion for basic expenses, KRW 720.2 billion for project costs, KRW 20 billion for internal transactions and KRW 268.2 billion for financing. For details, see table II-6 below.

[[II-6] Annual Expenditure Budget of Korea Communications Commission in 2012

(unit: KRW 1bn)

Classification		2011	2012	Change	% change
Total [Budget + Fund Appropriations]		8,653	11,204	2,551	29.5
By Funding Source	□ Budget	3,208	2,945	△263	△8.2
	• General accounting	3,050	2,844	△206	△6.8
	• Innovative City Development special accounting	158	101	△57	△36.1
	□ Fund appropriations	5,445	8,259	2,814	51.7
	• Broadcasting and Telecommunications Development Fund	5,445	8,259	2,814	51.7
By Field	□ Telecom	5,409	5,368	△41	△0.8
	□ Culture and tourism	3,244	5,836	2,592	79.9
By Expense Category	□ Wage and compensation	947	967	20	2.1
	□ Basic expenses	158	153	△5	△3.2
	□ Project costs	6,564	7,202	638	9.7
	1. Promotion of broadcasting and telecommunications convergent and transition to digital broadcasting	1,364	2,055	691	50.7
	2. Improvement of the quality of broadcasting and telecommunications services and the promotion of their use	975	1,016	41	4.2
	3. Upgrading network infrastructure and strengthening information protection ¹⁾	900	809	△91	△10.1
	4. Protection of users' rights and the creation of a fair competition environment	232	235	3	1.3
	5. Development of infrastructure for radio and broadcasting industry and support for overseas expansion ²⁾	764	697	△67	△8.8
	6. R&D of broadcasting and telecommunications and building the base of promotion	1,993	2,085	92	4.6
	7. Other administrative support ³⁾	336	305	△31	△9.2
	□ Internal transactions (transfers between accounts and between funds, etc.)	500	200	△300	△60.0
	□ Financing (using surplus funds from the Broadcasting Development Fund)	484	2,682	2,198	454.1

1) Reasons for reduction: reduction includes KISA operating supports (△ KRW 5.3 billion) and etc.

2) Reasons for reduction: business termination in 2011 includes Radio Resource Census (△ KRW 2.3 billion) and etc.

3) Reasons for reduction: Reduction in the annual take in accordance with the building of complete system of broadcast communications administrative information projects (△ KRW 2.9 billion)

E. The Status of KCC Efforts for Legislation in 2012

In 2012, KCC submitted the revised bill to the National Assembly, which included 「Telecommunications Business Act」 to block the altered phone number and mandate the outgoing calls' assistance of international numbers as well as introducing the consumer protection work assessment to secure a more convenient use of broadcasting and telecommunications services for the people; and the 「Radio Waves Act」 for the designation of Electromagnetic Radiation Human Protection Center and the 「Broadcasting Act」 to allow the production of indirect advertising

outsources for the activation of the broadcast advertising market. In addition, for the maintenance of provisions for the delegation of authority of the broadcasting and telecommunications' development fund collection, it revised 「Basic Act for the Broadcasting and Communications Development」, and also, promoted the amendment of 「Information and Communications Construction Business Act」 to lay the foundation for the adequacy assessment of low-cost subcontracts and submitted to the National Assembly that on the whole, it actively promoted the government legislation to improve the use environment of broadcasting and telecommunications.

[Table II-7] The Status of KCC Efforts for Legislation in 2012

Law	Date submitted to the legislature	Highlights
Act on the Protection, Use, etc. of Location Information	Sept. 24. 2012 (submission to the subcommittee of the responsible parliamentary committee)	<ul style="list-style-type: none"> •Exemption from obligations for the businesses that do not deal in personal location information to get permission etc. •Revision of the clauses requiring immediate notification upon providing location information
Radio Waves Act	Oct. 22. 2012 (submission to the subcommittee of the responsible parliamentary committee)	<ul style="list-style-type: none"> •Improvement of management of public frequencies reserved for national security and diplomacy •Establishment of countermeasures against cosmic radio wave disasters •Designation of Electromagnetic Radiation Human Protection Center
Broadcasting Act	Dec. 03. 2012 (submission scheduled)	<ul style="list-style-type: none"> •Introduction of the concept of external producers in Broadcasting Act and allowing indirect advertising by the producers •Pre-confirmation and announcement of the broadcasters that will transmit events of national interest, like the Olympics and World Cup
Basic Act on the Development of Broadcasting and telecommunications	Dec. 27. 2012 (submission to the subcommittee of the responsible parliamentary committee)	<ul style="list-style-type: none"> •Maintenance of authority delegation provisions for the Broadcasting & Telecommunications Development Fund's Collection •Collection time agreement of Broadcasters' contributions
Information and Communications Construction Business Act	Dec. 28. 2012 (submission to the subcommittee of the responsible parliamentary committee)	<ul style="list-style-type: none"> •Allow information and telecommunications services contractors to perform the design and supervision of information and telecommunications construction work •Registration is permitted in principle except for the Works Registration being prohibited •Preparation of the basis for the assessment of low-cost subcontracts' adequacy

In 2011, KCC promoted the regulatory reform of 41 projects in 4 areas including broadcasting, telecommunications, network, and radio; and in the year 2012, in accordance with the convergent environment change, it included areas of convergence in the field of broadcasting, and also, promoted the regu-

latory reform of 54 projects in five areas including broadcasting convergence, communications, consumer protection, network, and radio by adding the field of broadcasting and telecommunications' consumer protection scheme.

[Table II-8] Regulatory Reforms in 2012

Classification	Project	Status
Broadcasting Convergence	1 Deregulation of the duplication role of broadcasting business ownership and management	Revision of the Enforcement Decree in progress
	2 Improvement of the prepaid procedures in TV subscription	Revision of the Enforcement Decree Completed
	3 Legislation on the selection process of public channels	Revision to the Rules completed
	4 Deregulation on the 'Natural mineral water' advertising	Revision to the Rules completed
	5 Deregulation of sponsorship	Revision to the Rules completed
	6 Laid the foundation for the recognition standards for the domestic production of broadcast programs	Revision to the Notice completed
	7 Introduction of the notice system before the expiration of IPTV business license	Revision to the Notice completed
	8 Reduction of the required documents for the IPTV content business's registration	Revision to the Notice completed
	9 Improvement of the participation restrictions on the national research and development projects	Enactment of the Notice completed
	10 Abolishment of approvals on the satellite operator's terrestrial broadcast retransmission in the region	Revision of the Enforcement Decree in progress
	11 Expansion of the contributions' reduction of broadcasters with management difficulties	Revision of the Enforcement Decree Completed
	12 Improvement of the business qualification's requirements of a linkage type TV e-commerce	Revision to the Guidelines completed
	13 Prepare the basis of ad sales support for the local and small & medium-sized broadcasters	Enactment of the Notice completed
Telecommunications	14 Fee reduction service of the vulnerable group and expand its recipients	Revision of the Enforcement Decree Completed
	15 Improvement of the calculation criteria of the universal services' loss compensation	Revision to the Notice completed
	16 Improvement of the accounting separation standards of telecommunications business	Revision to the Notice completed
	17 Relax the licensing criteria of international roaming settlement agreement	Revision of an Act in progress
	18 Enforcement of open handset distribution system	Operational measures completed

Classification	Project	Status
Telecom- munications	19 Improvement of the display method of telecommunications service charges VAT	Establishment of the Guidelines Completed
	20 Enhancement of the convenient charging service of prepaid SIM	Operational measures completed
	21 Expanding the range of communication equipment provided	Revision to the Notice completed
	22 Grant the MVNO services' number portability	Revision to the Notice completed
	23 Refine the screening criteria for the approval of critical telecommunications equipment installation	Revision of the Enforcement Decree Completed
	24 Prepare the user notice system in case the communication fee exceeded the limit	Enactment of the Notice completed
User Protection	25 Reduced the range of communication facilities, which are designated as an urban planning	Enactment of the Notice completed
	26 Clarification of the details of prohibited acts on Broadcasting Act	Revision of the Enforcement Decree Completed
	27 Improve the evaluation system of the IPTV broadcast market competition situation	Revision of the Enforcement Decree Completed
	28 Prepare the damage verification procedures of users' communications	Revision of the Enforcement Decree Completed
	29 Prepare the increase and decrease standards of penalty related to broadcasting prohibited acts	Enactment of the Notice completed
	30 Mitigation of corrective actions' published size	Revision to the Notice completed
	31 Improve the standards on fines that are imposed on telecommunications business	Revision to the Notice completed
	32 Improve the appeal policy of the prohibited acts on broadcasting	Revision to the Notice completed
	33 Simplify the termination procedures of telecommunications services	Improvement measures prepared
	34 Expand the support range of vulnerable groups of broadcasting	Establishment of Basic Plans in progress
Network	35 Expand the communication access rights of the handicapped	Revision to the Guidelines completed
	36 Improve the billing system of mobile content's open market	Revisions to the Guidelines completed
	37 Simplify the submitted documents for the business license of location information	Revision of the Enforcement Decree Completed
	38 Minimize the collection of personal information of companies	Establishment of the Guidelines Completed
	39 Mitigation of computational facilities obligations	Revision to the rules in progress
	40 Switch-tolerant principles of the registration of information and communication works	Revision to the rules completed
	41 Introduction of hearing procedures in case of sales suspension of Information and communications' construction business	Revision to the rules completed

Classification	Project	Status
Network	42 Set the maximum incentive of fines on nonpayment	Revision to the rules in progress
	43 Establish the standards to prevent the personal information abuse of users	Revision of the Enforcement Decree Completed
Radio Waves	44 Relieve the burden of radio waves royalties for mobile communications business	Revision of the Enforcement Decree Completed
	45 Propagation M2M (M2M) service fee cuts	Revision of the Enforcement Decree Completed
	46 Simplify the submitted documents for the application of radio station license	Revision to the Notice completed
	47 Simplify licensed · inspection procedures of main channel relocation DTV ^{Note 1)} stations	Establishment of the Guidelines Completed
	48 Actualizing the standards of electric field strength in the broadcasting field	Revision to the Notice in progress
	49 Improve the sea-level observations' radar approval system	Revision to the Notice completed
	50 Allow amateur stations to install in multiple places	Revision to the Notice completed
	51 Improvement of redundant regulatory safety inspection of electronics products	Revision to the Notice completed
	52 Switch the permission of compact earth station to report system	Revision of the Enforcement Decree Completed
	53 Improve the certification procedures of assembled PC	Revision to the Notice completed
	54 Expand the unlicensed band wireless microphone	Revision to the Notice completed

Note 1) DTV : Digital Television
As of January 10, 2013

3. Innovation Outcome of Business System

KCC set the performance goal as to improve the quality of people's lives through the accomplishment of 'Smart Korea enjoyed by all its Citizens', in ways to communicate with the people and to prepare the smart support system to implement the administration framework of broadcasting and telecommunications, and efforts to achieve the target performance indicators had been made accordingly.

While pursuing the seamlessly communication with the public by strengthening the PR capability in preparation for the media environment changes, KCC promoted to improve the level of policy outcomes through performance management and system improvement. Moreover, by operating a broadcasting and telecommunications' comprehensive disaster management system, it contributed to the establishment of a national disaster prevention system as well as the smooth promotion of policies by the proper allocation of financial resources through an efficient budgeting, enforcement and settlement, and a comprehensive management of broadcasting and telecommunications policies.

A. Establish the Administrative Support System for Broadcasting and Telecommunications being Together with the People

To establish the administrative support system for broadcasting and telecommunications being together with the people, KCC promoted the management tasks of 'strengthening the promotion of government policies to the public and the press', 'the policy and institutional management support to communicate with the citizens', 'advanced regulatory reform and systematic legislative support', 'efficient meeting operations', and 'establishment of a broadcasting and telecommunications' disaster management system and 'construction of an emergency preparedness'.

First of all, in order to strengthen the communication system to the public according to the expansion of smart devices' spread and the change of mobile service environment, KCC established an online PR system promoting policies utilizing the various national participatory events such as, 'puzzle quiz' on the Commission's major achievements, 'making the beautiful SNS world' and 'the utilization of free Wi-Fi zone', and promoting UCC (User Created Contents), and MVNO phone through webtoon & digital conversion, and free Wi-Fi zone related policies, along with strengthening the promotion of sensibility communications to meet the people at eye level.

For the systematic performance management and evaluation, and the results feedback, KCC established the performance management action plan for 2012 and managed the performance results by leveraging the

efficient management of e-Comprehensive Assessment System. In addition, ‘Policy Customers’ Representatives Meeting for Broadcasting and Telecommunications’ was held to exchange the policy of the Commission and the voice of the scene, gathered together the policy leaders of enterprise, academia, research and private associations, and Committee Chairman, and also, by actively promoting the selection of ‘the Month’s Good Policy’, KCC endeavored its efforts to satisfy the public needs and enhance the quality of policy, and consistently promoted the improvement of policies and institutions to communicate with the people by identifying best practices of civil administrative improvement to contribute to the elimination of the national complaints.

Accordingly, KCC received the best rating in the division of ‘Green Growth’, the 1st place in the sector of ‘Satisfaction Policy’ and excellent ratings in the sector of ‘Policy Management Capabilities’ and ‘regulatory reform’ from the result of 7 areas of the government performance evaluation conducted under the auspices of the Office of the Prime Minister in 2012 that it emerged as the best organization from the government’s performance evaluation perspective.

Meanwhile, a total of 54 regulatory reforms were discovered to protect the vulnerable social group, to promote the user convenience and to alleviate the burden of businesses. In addition, 5 additional ‘temporary regulatory

moratorium’ was discovered to defer the regulation challenges to overcome the economic crisis for a certain period of time. As such, by discovering and improving a variety of broadcasting and telecommunications restriction issues, KCC created the broadcasting and telecommunications administration environment that could provide convenience to the people and vitality to the enterprises.

As the public awareness on the performance of these regulatory reform had been improving each year, KCC was chosen as the ‘Excellent’ government organization in the 2012 regulatory reform satisfaction rating (under the Prime Minister’s supervision). In addition, according to the enactment and the revision of ‘Broadcasting Act’, ‘Information and Communications Construction Business Act’, ‘Act on Promotion of Information and Communications Network Utilization and Information Protection’, ‘Act on Broadcast Advertising Sales Agency’, and ‘Act on the protection and use of location information’, and the preparation of the sub-decree on time to ensure that the Commission’s major policies were implemented in a timely manner, KCC ensured the proper timing and effectiveness of the law and enhanced the trust of the people and predictability.

As well, in order to faithfully reflect the purpose of the establishment intent of a collegiate administrative body, except when unavoidable, the Standing Commission was held only if 5 of all its commission members

attended, and also, KCC improved the operating system to closely examine the importance and urgency of the agenda in advance, so to decide whether to assume the face-to-face meetings of the Standing Commission. In addition, by activating the Standing Commission initiatives on the agenda and reinforcing the review and analytical capabilities of the agenda, the Standing Commission's Policy Research Support Bureau was composed and operated to improve the quality and professionalism of the policy.

Of the pre-perception of crisis and for a rapid recovery in the event of circumstances, KCC operated the disaster dispatch, and by building the complete broadcasting and telecommunications' disaster response system utilizing the broadcasting and telecommunications disaster management system among relevant agencies, it quickly and efficiently overcame natural disasters (4 times hurricanes). Also, through the operation of a disaster broadcasting online system, it requested disaster broadcasting in case of various disaster situations to the national broadcasters in real-time via Breaking News, Newsflash, closed captioning, and etc., efficiently and consistently so to minimize the damage to the public. As a result of these efforts, the Commission was selected as the best organization of the 402 training participation institutions in the '2012 Disaster Safety Training Evaluation', organized by the Central Safety Management Committee and the National Emer-

gency Management Agency (NEMA), and was awarded the Presidential Organization Commendation, in coupled with the Presidential Organizations Commendation in the '2011 national infrastructure and disaster management assessment' that KCC raised its status to the highest level of skills in administrative agencies in the field of crisis and disaster management.

B. Trusted Administrative Support of Broadcasting and Telecommunications

For the trusted administrative support of broadcasting and telecommunications, KCC promoted the management tasks of 'the workplace to grow together, making of the vibrant workplace atmosphere', 'the trusted public offices' establishment', and 'strengthening the planning and organizational empowerment'.

In addition, KCC established the 'Mid and long-term workforce management plan' to secure and utilize the human resources necessary to achieve the vision and goals by analyzing the job characteristics and scope, the current staffing structure in a timely manner, and to foster core human resources, and conducted the training of new delegation to meet the characteristics of the city departments and also, customized training for improving performance. In addition, KCC enhanced its status of social contribution activities by

promoting ‘Help children of families without parents’, ‘Love all campaign’ and through a practical movement of love neighbors’ campaign such as ‘Consolatory visits to social welfare facilities’.

For the ‘Trusted social offices establishment’, KCC held meetings regularly between the Committee and the private Executive Officers of broadcasting and telecommunications’ sectors to promote the clean civil and official network activation as well as to promote anti-corruption policies, and installed and operating on the integrity ombudsman so to foster the administrative climate to keep the laws and principles.

In order to proactively respond to the rapid rate of changes in the broadcasting and telecommunications environment, KCC established the ‘Mid-term manpower planning (2012 ~ 2016)’ with focuses on the preparation of the relevant workforce planning over the foreseeable future. As well, it relieved the stiffness of the operating personnel by implementing a fluidal quota of employees and a quota management system, along with an efficient promotion of broadcasting and telecommunications’ convergent policy and to respond flexibly to the new policy demands, reorganized the office and amended detailed rules (June 1, 2012). Through the revision of board office organization and efficient manpower planning and implementation, KCC strengthened the organization’s planning policy capabilities and ultimately, contributed

to the achievement of organizational goals.

4. Major Accomplishments in 2011

To keep abreast with changes in broadcasting and telecommunications policy environment such as media convergence and the Big Bang, competition on ecosystems led by global IT companies, content competitiveness of enterprises, and user-centric media environment changes, KCC promoted businesses in line with the building of a first-class broadcasting and telecommunications’ country leading the smart era of today. Major policy outcomes promoted by KCC in 2011 are as follows.

A. The Realization of a Global ICT Hub in Korea

In 2011, in response to the smart era in earnest, KCC established and presented the mid to long-term development strategies of broadcasting and telecommunications by establishing the ‘Broadcasting and Telecommunications Basic Plan’ (November 2011) pertaining the future directions and execution plans of the Commission until 2013. It also established ‘the 2nd Commission’s Major Policy Direction’ in July 2011, and the basic plan (draft) reflecting the detailed implementation plan and budget of major policy direction in August.

In addition, to respond to lack of frequency due to surge in wireless traffic, the Mobile communication frequency auction was held for the first time in Korea by securing additional 800 MHz, 1.8 GHz, and 2.1 GHz band and by this, KCC successfully laid the foundation for the market-based fair competition environment. Also, as the ‘Mobile Gwanggaeto plan’ (January 2012), which was to acquire new frequencies for mobile communication was announced, the plan to obtain a new frequency width of more than 600 MHz by 2020 and timely supply of frequency was finalized.

Moreover, by leveraging TV idle bandwidth with the quality of broadcasting and telecommunications services anytime and anywhere available at a low cost, the groundwork for the introduction of idle bandwidth services were laid. First, KCC conducted a demand survey for agencies such as local governments, public agencies, and broadcasters to discover services model including Wi-Fi (Wireless-Fidelity) and disaster services; and selected two agencies who performed potential experimental services (June 2011), and after verifying the high usability of TV idle bandwidth of their services (November 2011), TV idle bandwidth utilization plan was established in December 2011.

As more than 20 million smart phones being deployed and expanded to the service area of tablet PCs and smart TVs, KCC established the wireless Internet infrastructure of

smart era such as expanding Wireless Broadband Internet (WiBro) services nationwide in March 2011, and launching LTE commercial services starting from the Seoul region (SKT / LG U+, July 2011).

To create conditions for upgrading network to provide for the future broadcasting and telecommunications convergent services, KCC prepared ‘the Internet Development Plan for the future’. This plan, through the report to the national IT strategy committee, helped to established the ‘Giga Internet Commercialization Promotion Strategy (draft)’ (June 2011). And together with the construction of the Giga Internet pilot network, which to be 10 times faster than the existing network, it discovered and provided a large amount and high quality of additional broadcasting and telecommunications’ convergent pilot services including the start of Giga Internet commercial services (ahead of its scheduled launching time) in September 2011.

For the activation of emerging cloud services as a way to enable IT cost savings, and implementation of Green IT technology, KCC laid the foundation for the service activation such as enhancement of test beds, execution of cloud services’ pilot projects and maintenance of related policies. While strengthening the competitiveness of the domestic cloud industry by ‘establishing the spread of cloud computing environment and strengthening the competitiveness strategy’ to enhance the

reliability of service users, KCC prepared ‘SLA (Service Level Agreement) guide’ and introduced the certification system for the early proliferation of cloud services market. With the development and dissemination of long-term prediction model of greenhouse gas and mitigation scenarios, it became easy for the broadcasting and telecommunications carriers to reduce greenhouse gas emissions; and by setting the energy saving goals in the field of broadcasting and telecommunications and inspecting and managing the power usage performance and reduction plans of major carriers in the field of broadcasting and telecommunications, the greenhouse gas reduction targets of 15,700 TOE (Ton of Oil Equivalent) in the broadcasting and telecommunications sector of the 2011 was successfully accomplished.

Through the experimental broadcasting of high-definition 3DTV, KCC laid the foundation to lead the international broadcast standards and technology, and also, to promote the next generation of broadcasting industry. During the World Athletics Championships in Daegu, by broadcasting it live on terrestrial channels from the world’s first high-definition 3D, it demonstrated the level of technology on commercialization; and after this event, ATSC (Advanced Television System Committee, the United States Digital Broadcasting Standards Commission) decided to promote the 3DTV standardization as the Korean way of 3D broadcasting technology as the candi-

date, and the MPEG (Moving Picture Experts Group, International Organization for Standardization under the video research meeting) also adopted it in standard.

By reflecting the next-generation mobile communications (4G) technology developed in Korea to the international standards at last (January 2012), KCC established the environment for the early adoption of the 4G mobile communication service. As well, in order to reflect WiBro developed in Korea and evolving technologies of LTE to the 4G international standards, KCC submitted 20 articles after receiving experts’ comments, and secured the international competitiveness of the mobile communications industry according to international standards.

The 14 of numerous mobile communications experts in Korea are participating in the chairmanship activities, such as Vice-Chairman of International Conference on the Standardization of ITU-R WP5D (ITU-R Working Party 5D) and Co-Chairman of the organization’s highest decision-making of 3GPP (3rd Generation Partnership Project, 3-generation mobile communications standards organizations); and in relation to the 4G international standardization, KCC succeeded in hosting 4 major international meetings in Korea, such as APG-12 (APT Preparation Group 2012) 5th meeting (September 2011, Busan), 29th CJK IMT Standards Cooperation Council (September 2011, Seoul, Korea), 3GPP2 (3rd Generation Partnership Project

2) HoD / SC / OP (April, 2011 Seoul, Korea), and etc. that it contributed to enhancing the status of the country as the IT powerhouse once again.

By the enactment of ‘Net Neutrality and Internet Traffic Management Guidelines’ (December 2011), KCC guaranteed the access to the Internet and for a continuous development of the ICT ecosystem, established basic principles of net neutrality, and at the same time, protected the rights of Internet users and avoid situations in the market deviant.

B. Creation of Smart Ecosystem and New Industries

For the development of domestic cloud industry, ‘the Expansion of Cloud Computing and Strengthening the Competitiveness Strategy’ was announced (May 2011) after the economic policy coordination meeting with related ministries. KCC operated a government-wide cloud computing policy council, together with enterprises, academia, researchers, and official professionals, and also, through the cloud services’ activation promotion meetings, discussions carried out on agendas to activate the cloud services such as existing statutes maintenance and manpower training. Meanwhile, to help SMEs to develop, test and verify cloud service models and solutions, KCC also operated cloud service test beds.

While establishing the ‘M2M Comprehen-

sive Support Center’ (May 2011) that could test and verify M2M equipment and services, Smart Farm service to create an environment for the spread of M2M had been promoted on a trial basis. In addition, R & D projects to secure the core technology of next generation of M2M were also being promoted.

In March 2011, in order to activate the Near-Field Communication (NFC) services, which was emerging as a key element of smart mobile business and to facilitate the creation of new industries, the NFC based ‘Mobile Smart Life Services plan’ was prepared. As well, to create an environment enabling NFC payments and application services, KCC proclaimed ‘Myeongdong NFC Zone’ in November 2011 and initiated diverse NFC-based pilot application services.

In regards to a rapidly growing smart TV, KCC established ‘Smart TV industry development strategies’ (April 2011) for the competitiveness and activation of domestic services; and composed and operating on the domestic smart media related official forum to induce the discovery of the future policy demands and cross-industry cooperation from the perspective of whole ecosystem. In addition, while composing and operating on the ‘Smart TV Standardization Task Force’ in June 2011, it identified 14 standardization issues in September and promoted to reflect them in the ICT standardization strategy map of the Information and Communication Technology Association (TTA).

IPTV, the representative convergent service, was seated safely on the pay TV market, exceeding 4.57 million subscribers (December 2011) since its inception of a full-fledged service in January 2009, and based on its bi-directional characteristics, it was being actively used in the public sector such as schools (38,000 classrooms), Military units (29,000 units), and study rooms (900).

KCC improved the MVNO related business environment in order to induce operators without frequency or facilities to enter the mobile communication market. By accepting the Standard Terms and Conditions of Wholesale Offers Report of SKT in March 2011, it laid the groundwork for a smooth agreement between operators such as wholesale offers procedures, use cost, limitations of liability, and MVNO numbering of the SKT, along with additional support measures by operating the service task force for the improvement of the MVNO related business environment and supported a smooth market entry of MVNO operators (April~ May 2011). In addition, to enable MVNO operators to use '010' number (the same as existing mobile phone operators), KCC prepared a regulatory reform (May 2011), and through the revised 'Telecommunications Number Management By laws (KCC Notice), it laid the foundation to grant 010 numbers to MVNO operators (July 2011). Moreover, through an enactment of wholesale offers' guidelines, it prepared a basis for massive discount rates on a large

quantity purchase (July 2011), which could receive additional discount of up to 6%, depending on the purchases of the MVNO; and also, prepared a basis for the wholesale cost calculation on MVNO data-only' which was subject to an additional 50% discount, compared to the wholesale cost of existing data.

KCC started the integrated App Store (K Apps) service on November 30, 2011, in which the users could develop and use contents, regardless of carriers and the operating system (OS). To ensure global compatibility such as the content of the integrated App Store, KCC enabled it to be the world's first commercially available Apps by applying the technical specifications of the global carrier of App wholesale marketplace, WAC (Wholesale Applications Community).

Furthermore, The 'Marketing Cost Guidelines' were introduced to induce price cuts by reducing excessive marketing costs of 3 major mobile telecommunications operators and invest them on contents and R&D, instead. And, while establishing the 'Assessment Plan of Telecommunications Market Competition Situation (November 2011)' with the content of expanding the target for the competitive situation assessment, as expanding the target for the competitive situation assessment from the basic telecommunications business to major value-added telecommunications business (Internet portal companies, etc.), it laid the foundation work to evaluate the competitive situation for the entire ecosystem of the tele-

communications market.

Through market surveillance activities, KCC ensured corrective actions and measures on improved regulatory effectiveness on subsidies on mobile phone handsets (September 2011) against unfair competition, and it also created an environment of fair competition to protect the user's interests by enacting 'Corrective Actions (February 2011) imposed on high-speed Internet prizes' provided and terms and conditions in relation to this.

C. Realization of Advanced Digital Broadcasting

In December 2011, initiated by the comprehensive programming broadcast and specialized on news channels, it was a turning point in our broadcasting history to demonstrate the improvement scheme on viewers' welfare and enhancing the diversity of broadcasting industry. And, by creating an environment of fair competition, such as conducting a program fee payable status survey on program providers (PP), standard maintenance, and re-imposing permit conditions of local CATV operators (SO), it promoted the qualitative improvement of the broadcasting market on the whole. KCC also put extra measures to support the nature of SME on home shopping channels by strengthening the recommendations of SME supports on home shopping companies, SME criteria on conditions of re-approval, and selecting the SME dedicated

home shopping broadcasting channel operator (March 2011, of the home shopping channel). As well, KCC laid the foundation work to ensure the diversity of broadcasting by securing a limited regulatory of viewership share for broadcasters, and the corresponding results (calculation) of viewership share depending on the viewership share (ownership limits, advertising time limits, airtime transfer restrictions, and etc.) were reflected in the re-licensing assessment of broadcasters and approval of changes in the screening process.

To help small and medium-sized content producers including program providers, local CATV operators and independent producers promote and sell self-produced content, the content distribution and management system was established (2008-2011), and also, Digital Broadcast Content Support Center, which is a comprehensive support facility in content planning, production, distribution, and transmission is under construction in Koyang City (2010-2013, KRW 227.6 billion). Meanwhile, to ensure viewers to enjoy the high-class broadcasting and telecommunications' convergent content, KCC produced and supplied (a total production of 116 episodes in 2011, KRW 18 billion) high-quality public & public interest focused, creative contents suitable for digital broadcasting environment.

Through ongoing consultation with related agencies, broadcast advertising for the bottled mineral water was fully granted from 2013 onwards. In relation to the permission

of broadcast advertising of bottled mineral water, by the amendment of the prohibition rules of broadcast advertising of drinking water (December 2011) in the “Drinking Water Management Act”, KCC contributed to the expansion of advertising base on the demand of the broadcast advertising market.

KCC also promoted a pilot project to transition to digital broadcasting to examine a ripple effect, problems and improvement points in line with the analog TV shutdown. Accordingly, analog broadcasting in the area of Kyungbuk Uljin (September 2010), Chonnam Kangjin (October 2010), Chungbuk Danyang (November 2010), and Jeju Island (June 2011) was terminated and replaced with a full scale digital broadcasting, instead. Also, by strengthening the promotion of digital conversion, digital switchover awareness (90.8%) and penetration rate (94.4%) were all improved that it laid the foundation on the voluntary preparation for the transition to digital broadcasting. In order to protect the vulnerable socio-economic alienation from digital broadcasting conversion as well as to prepare a basis for the support of ensuring viewership rights, KCC revised the laws and regulations including an enactment (March 2011) of Notices regarding the application process and methods for the households who wish to receive the support.

KCC contributed to the protection of viewer rights by ensuring universal viewership rights related to sports broadcasting.

As well, by installing the Sports Televised Development Council (KS) among 3 terrestrial broadcasting companies, it induced a sequential programming organized by the joint broadcasting on events of national interests (July 2011), and also, laid the groundwork to ensure fair competition in the broadcasting market by providing the details on prohibited acts on universal viewership rights (Notice draft) (October 2011).

In addition, by the promotion of certification system of excellent domestic broadcasting equipment, the reliability of domestic companies was enhanced and the market outlet was expanded. In support of this, KCC raised standards and certification for 15 kinds of broadcasting equipment and provided the performance testing on developed equipments, technical consulting and testing & certification services.

D. Enforcement of Broadcasting and Telecommunications Users' Welfare and Information Protection

The revised 「Enforcement Decree of the Telecommunications Business Act」 was promoted to streamline the application process (effective January 2012) of the next higher tier's fee reduction and to include Internet phone in the fee reduction target. Internet phone fee reduction include the contents of fee exemptions of the registration fee and

monthly basic charges for recipients of basic living, 450 minutes free calls, and 50% reduction on the handicapped and the National Merit's calls. And, as the prepaid SIM is free of monthly basic charges or cheaper than normal phone calls that it can contribute to the fee reduction of small amount users, KCC prepared activation measures of prepaid SIM that could induce a planned consumption of communication. Main contents for this were the expansion of prepaid SIM services (voice. SMS; Short Message Service data. MMS; Multimedia Messaging System), introduction of number portability between pre/post paid lines, preparation of online sign-up process, activation of a variety of charging ways and reduction in the minimum charge amount; as well as, PR (October 2011) activities to raise the users' awareness about these had been carried out. Especially, by performing the number portability of the representative number service (October 2011), companies who had been constantly promoting the use of representative number can not only cut the costs by moving the carrier without changing the number but also, contribute to improving the quality of service.

As the introduction of open mobile phone handset distribution policy became necessary to diversify the existing mobile phone handset distribution structure from mobile carriers into manufacturers, marts, and etc., KCC prepared the plan of 'mobile phone handsets distribution open system' in November 30,

2011 that gave grants mobile phone handsets without the registration of IMEI (International Mobile Station Equipment Identity Code) to be used except for, mobile phone handsets reported as lost or stolen (blocking the communication in this case).

While expanding broadband services for the use of broadcasting and telecommunications' convergent services, such as IPTV, and Internet phone anywhere in the country including rural villages, it established the provision of universal broadcasting and telecommunications' convergent services by expending the Broadband convergence Network (BcN) in rural areas in ways of providing low interest loans to network construction that was worth of KRW 20 billion, SK Broadband and the construction status check (April 2011) of LG U+ in the rural BcN (Broadband convergence Network).

By promoting actively the system improvement points for the users, user benefits had been increased accordingly. Through measures such as the preparation of reimbursement plan (August 2011) for not refunded amount by carriers, system improvements of mobile carriers' mileages (August 2011), improvement of mobile phones' youth calling rate system (November 2011), mandated the insurance product descriptions to major carriers about the mobile phone insurance service, and preparation of guidelines (June 2011) on the receipt of the compensation report after business hours or on holidays, KCC

enhanced the user convenience on the whole. In addition, while ensuring the user's right to know and prevent unfair billings through the improvement of indicating clearly the expected termination costs and contract period on the communication service bill (November, 2011), efforts had been made to prevent the spread of damage by issuing complaints forecast (May 2011) in relation to the bomb-like charges for the overseas data roaming of smart phone users, and deploying the user campaign on this (July-August, 2011).

By activities of corrective actions (April 2011) through the survey of broadcasting and telecommunications' service users for damage, KCC contributed to protect the interests of users by improving the irrational system and providing the use information.

Meanwhile, KCC encouraged the autonomous service competition of providers and improved the broadcasting and telecommunications' use environment by the preparation of the User Security Evaluation Plan (December 2011), along with carrying out a variety of activities to prevent damages such as users' damage prevention education program and operation of homepage to provide information, and broadcasting and telecommunications' UCC throughout the year; as well, by holding a 'Broadcasting and Telecommunications' User week' on November 30, 2011, it contributed a consensus on reasonable broadcasting and telecommunications services for the culture of safety and user-centric.

By the watch recommendation V2.0 for providing people a safe and comfortable 3D viewing experience and the content production guidelines V1.0 (December 2011), 3D viewing experience had been improved.

In addition, KCC prepared a more convenient viewing environment for a neglected class of people in broadcasting such as the handicapped and the elderly with hearing impairment. While ensuring the rights to access to broadcasting of the underprivileged such as the deaf-blind and the elderly with hearing impairment by the provision of broadcast receivers devoted to their needs continuously (cumulative 13.6 ten thousand pieces in 2010 → cumulative 15.2 ten thousand pieces in 2011), as amended "Broadcasting Act" (July 2011) and the Act (October 2011), it improved the rights to access of the handicapped to broadcasting by mandating the broadcasting of programs (by broadcasters) for the handicapped. Meanwhile, by an enactment of Notices regarding the broadcast programming for the handicapped (December 2011), it specifically proposed the basis and ways necessary for the broadcasting to the handicapped; and for the improvement of access rights to broadcasting for the handicapped, it expanded the support on the broadcast production for the handicapped on pay-broadcast media such as cable TV and PP, in addition to the terrestrial broadcasting (46 business providers in 2010 → 53 business providers 2011).

KCC established the broadcasting environ-

ment that anyone can easily access media through the provision of broadcast participation infrastructure of the Community Media Center, while enabling the broadcast participation and enhancing the media literacy of the viewers through the support of media education and production infrastructure, it strengthened the media accessibility of a neglected class of people through the media education for the underprivileged for broadcasting, and the support of content creation. In addition, by encouraging the use of the EBS elementary and middle school lectures and the Mobile SAT education services through the construction of elementary and middle school dedicated Internet site (March 2011), elementary and middle school education program (2,941 programs), SAT lecture program production (24,967 programs), and college entrance exam education program through smart phones (April, 2011), it had an effect of reducing the private education expenses on the whole.

The response system against cosmic radio disaster such as geomagnetic storm caused by sunspot explosion (2013) and ionospheric disturbances were prepared. National Research Institute Center, a part of cosmic radio propagation (August 2011) was built as an organization dedicated to the observations and analysis as well as the forecast and alarm for sunspot explosion; and as the impact of cosmic radio waves in the overall IT, such as broadcast communication disorders are

growing, for the protection of national infrastructure, and to minimize the damage, draft amendments of 「Radio Waves Act」 (December, 2011) that could respond to the cosmic radio disaster management were prepared.

5. Major Policy Goals for 2012

Through the network of always being connected, KCC made a full-fledged entry into the smart era, and in accordance with the changes in the policy environment in the transition to a knowledge and service-oriented soft-economic society, it presented ‘Smart Korea Enjoyed by All its Citizens’ as its vision; and set policy goals as ‘The Realization of an Advanced Country in Broadcasting and Telecommunications where Everyone becomes Happy’ and ‘Securing the Global Competitiveness of the Broadcasting and Telecommunications’.

In addition, together with the launch of the second term of Commission, KCC saw the global competition of the ICT ecosystem becoming further intensifying sparked by the advent of a full-fledged smart era, and as broadcasting and telecommunications established itself as the center of people’s lives, KCC set the policy directions in response to changes in the policy environment that can ensure the harmonious development of the industry and the public interest of broadcasting in 2012 and they are: the realization of

a global ICT hub in Korea; the creation of a smart ecosystem and new industries; the realization of advanced digital broadcasting; and the enhancement of broadcasting and tele-

communications users' welfare and information protection, and the work had been carried out accordingly.

[Figure II-3] Visions and Policy Goals





III

Performance of the Broadcasting and Telecommunications Policy in 2012

Section 1 Realization of a Global ICT Hub
in Korea

Section 2 Creation of a Smart Ecosystem
and New Industries

Section 3 Realization of Advanced Digital
Broadcasting

Section 4 Enhancement of Broadcasting
and Telecommunications
Users' Welfare and Information
Protection

III

Performance of the Broadcasting and Telecommunications Policy in 2012

Section 1

Realization of a Global ICT Hub in Korea

1. Technologies Developed for Enhancement of Networks and Future Network

A. Enhancement of Fixed Networks

1) Steady deployment of broadband wired internet access

KCC, in pursuit of network upgrades and bridging the gap of network infrastructure between the cities and rural areas, continued to promote the expansion of broadband infrastructure by the revitalization of broadband PON deployment projects and providing loans to support projects for the high-speed public networks, and as a result, approximately 93% of domestic households using the Internet (18.25 million households), used broadband wired Internet access as of the end of December 2012.

With the proliferation of broadband integrated network infrastructure, the new broadcasting and telecommunications convergent

services such as IPTV, Internet Phones, and etc. were commercialized in full-scale, and the number of the IPTV service subscribers recorded exceeding 60 million since September 2012, which was 3 years and 10 months since its inception of the service.

On the other hand, KCC, based on the world's highest levels of broadband wired Internet, strongly induced the expansion of carrier's Wi-Fi, in which Wi-Fi zone was built nation-wide and operating in 210,000 locations as of the end of December 2012; and through the co-building and opening of Wi-Fi between carriers, free Wi-Fi service environment is now available in 2,000 public places such as public service centers in the government offices, terminal and etc. throughout the country.

As succeeding in dissemination and expansion policy of Ultra Broadband Convergence Network (uBcN;), in 2012, Korea was rated as the world's No. 1 country in the OECD Optical Access Networks' (Fiber / LAN; Local Area Network) penetration rate (per

100 Inhabitants) and the wireless broadband subscriptions (per 100 Inhabitants) as well as, the world's No. 1 in ITU's ICT Development Index, in which we established a global presence as a country that plays a pivotal role in the world's leading IT infrastructure.

2) Giga Internet service infrastructure

To accommodate the growing number of high-capacity, actual feeling like multimedia services and to respond proactively to the rapidly growing wireless and wired traffic, KCC promoted the Giga Internet-based service projects, which is 10 times faster than the BeN. In addition, it identified the future high quality service applications such as 3D, and UHD (Ultra-High Definition), and promoted a variety of revitalization projects to promote and raise awareness of the Giga Internet both internally and externally. As well, it promoted Giga Internet service infrastructure project such as Giga-class PON deployment, etc. leading people to use domestic ICT skills and infrastructure that were ahead of the world's standard.

By conducting the Giga Internet pilot project, KCC inspired commitment to Giga Internet diffusion in the private sector. Also, it organized and operated the Network Development Council to discuss on the direction of development of wired and wireless network between enterprises, academies, and research areas for the spread of Giga Internet commercialization.

Furthermore, during the period of Yeosu Expo in May 2012 (May 12 to August 12), Giga Internet service was provided to promote the Korea's excellent Internet infrastructure, and in July and August, to keep pace with the government's expansion policy of high school graduates' recruitment, Giga Internet experience on-site training for the Meister and vocational high schools students was conducted in order to support the workforce to foster the next-generation digital infrastructure.

KCC will continue to support a variety of infrastructure enhancement projects for the expansion of Giga Internet use and to lay the foundation for the development of core technologies research, testing, validation, and quality standards on the related technologies in the future.

B. Deployment of Next-generation Mobile Telecommunications Networks

With the release of a variety of mobile terminals with Internet access such as smart phones, and tablet PCs, the amount of wireless data services' use had skyrocketed. The wireless data traffic increased by approximately 8.3 times in 2011 and until the first half of 2012, it already exceeded the amount of traffic of the previous year. Thus, KCC established the next-generation mobile networks' environment for the business provid-

ers of LTE, and WiBro, so that people can take advantage of faster and more reliable wireless data services.

As the mobile communications are changing from voice to data-centric, the value of Wibro networks enabling large amounts of wireless data to be readily available at a cheaper cost than LTE was under appraisal from the new perspective.

WiBro operators, after the frequency re-allocation in March 2012, expanded the coverage to the Busan Subway Line 1~3, the new development areas of metropolitan city (Youngjong, Gwanggyo, etc.) and subway extension intervals (Bundang Line and Gyeongui Line). As the active dissemination of personal router (egg / bridge) that combined to provide discounts with smart phones' calling plan, the number of WiBro subscribers recorded at 1.01 million as of the end of December 2012 and increased by 26.6% compared to the end of 2011.

For LTE(Long Term Evolution), SK Telecom and LG U+ began commercial services from Seoul and metropolitan areas in July 2011. In 2012, LTE nationwide network was built for the first time in the world, and with the release of a variety of LTE supported

smart phones, it expanded the dissemination of a full-fledged service. LG U+ completed the construction of nationwide network in January and SKT in June 2012, respectively. KT started its LTE commercial service in January 2012 and completed the construction of nationwide network in October 2012. <See Table III-1>.

On the other hand, domestic carriers, to increase the data processing capacity and speed in traffic-intensive areas including cities, made the next-generation LTE technology such as Multi-carrier and Quad Antenna commercially available for the first time in the world.

As quickly deploying the nationwide network, LTE service became available for all users without regional disparities, and service carriers provided next generation services such as VoLTE (Voice over LTE voice call using the LTE network). The number of LTE subscribers exceeded 10 million in August 2012, only 1 year and 2 months since its inception of services. As of the end of December 2012, the number of LTE subscribers of 3 mobile carrier's SKT, LG U+ and KT recorded, 75 million, 43.8 million, and 39 million, respectively.

[Table III-1] Yearly Performance of Deployment Status of LTE Nationwide Network

Year	SKT	KT	LG U+
Year 2011	27 Cities Nationwide	—	82 Cities Nationwide
Year 2012	84 Cities Nationwide (March) Nationwide network(June)	84 Cities Nationwide (April) Nationwide network(October)	Nationwide network (March)
Year 2013	Optimization and reinforcement	Optimization and reinforcement	Optimization and reinforcement

※ In accordance with the change of the administrative area, expanded 84 Cities in 2012 from 82 Cities in 2011.

The initiative to build KCC's next-generation mobile networks has a great signification in laying the foundation to enhance the competitiveness of the rapidly changing mobile industry sparked by the advent of the smart era, and to respond to the explosive growth of mobile traffic due to the proliferation of smart devices. Also, by establishing the development strategies of next-generation mobile communications industry, it established the infrastructure to lead the global mobile communications' industry and by the introduction of new technologies approach for next-generation mobile communications and supplying the frequency in a timely manner, it has opened the way to respond to rapidly growing wireless Internet traffic, owing to the proliferation of smart devices.

C. Telecommunications Antenna Maintenance

The communication cables contributed to the expansion of networks of the country, however, the excessive and scrambling antenna problem had emerged as a social issue.

Complaints had been continuously increasing for the reasons of scrambling antenna impairing the urban landscape, threats to traffic safety from the aerial installation that did not meet the regulations, Jeonju rollover accidents, and etc. Until lately, the antenna maintenance was being pursued by the autonomous providers, however such fragmentary maintenance works lacked in improvement effects that the government decided to establish a comprehensive long-term maintenance plan for the antenna so to promote a systematic and full-fledged maintenance scheme.

Accordingly, KCC came up with a comprehensive maintenance plan (aerial wires and communication cables), with the relevant ministries in November 2012.

1) Laid the foundation for a systematic antenna maintenance

For the government's comprehensive and systematic antenna maintenance, for every five years, with the goal of the next 10 years, a mid to long-term maintenance plan was established. Accordingly, maintenance works will be carried out for more than 20 metro-

politan cities with the population of 0.5 million people by the year 2017, and in the small city of less than the population of 0.5 million people by 2022. Under these plans, KCC, by setting goals based on the underground induction potentials of the antenna, and the scale and financial burden on the maintenance target of the existing antenna, plans to promote the intensive maintenance of the antenna over the next two years.

A total of KRW 1,500 billion of the private capital is expected to be invested in the maintenance of the antenna in 20 cities (7 Metropolitan cities, 13 cities) with the population of more than 0.5 million people over the next five years; and the level of KRW 200 billion won investment per year will be extended to the level of KRW 300 billion in future. Also, it is expected to support a part of costs of the antenna maintenance by providing low interest loans of the broadcasting and telecommunications development fund to small broadcast operators who cannot afford the funds.

2) Intensive maintenance and management of the antenna

As the most fundamental measures of the antenna maintenance, the investment is expected to expand the annual KRW 140 billion funding for the continued promotion of the underground induction business of the antenna, pursued by the Korea Electric Power Corporation and the municipalities together. For the existing antenna, however, it is sched-

uled to develop the standardized maintenance techniques based on the type of scrambling antenna to be applied during the actual maintenance and also, to prepare guidelines for the antenna maintenance and management accordingly. The Korea Telecommunications Operators Association (KTOA) plans to build a comprehensive antenna information DB about all installed antenna nationwide and provide this information to municipalities and road management authorities.

3) System improvement for the antenna maintenance and the underground induction

It is expected to pursue the revision of 「Telecommunications Act」 in order to give operators themselves the obligation to install and maintain the antenna. Also, to encourage and induce the underground antenna, when the existing poles and communication are going underground, the reduction rate of underground pipeline fee for occupation and use will be applied (the underground communication operator are granted a reduction of 50% in accordance with the current 「Enforcement Decree of the Road Act」.

4) Establishment of cooperation and support system

For the systematic implementation of general plans and main decisions, KCC formed ‘the Aerial Maintenance Policy Council (Chairman: Kim, Dae - Hee Standing Commission-

er)’ by engaging the relevant ministries (KCC, Ministry of Knowledge Economy, Ministry of Land, Transport and Maritime Affairs), Seoul Metropolitan Government, Korea Electric Power Corporation, Telecommunications & CATV operators to participate, and held the first meeting in December 2012. The council, for the intensive maintenance of the

antenna in the 20 metropolitan cities over the next five years (2013 - 2017), made a decision to organize the ‘Regional Aerial Maintenance Promotion Council’ and to conduct a survey. The Regional Aerial Maintenance Promotion Council will serve a practical role in the selection of the target areas for regional maintenance and survey, and etc.

[Figure III-1] Examples of the Antenna Maintenance



2. Development and Provision of Radio Wave Resources

A. Timely Provision of Radio Frequency Bands

1) Activities of the 2012 World Radio Communication Conference (WRC-12)

Acquisitions of new frequency bands for next generation's mobile communication services, and the broadband public services have emerged as a global issue and a major policy challenge. KCC participated in the World Radio Communication Conference 2012 (WRC-12), held for four weeks from the January 23, 2012 in Geneva, Switzerland and through the radio wave diplomacy to the stakeholders of international organizations such as the International Telecommunications Union (ITU) and the Asia Pacific Telecommunity (APT) and the stakeholder countries, KCC exerted its best efforts to secure radio

frequency bands. For this, about 3,500 people from the world's 153 ITU Member States, and delegations of international organizations participated in the World Radio Communication Conference 2012, and a total of 55 delegations from Korea consisting of KCC, the Department of Defense, the Ministry of Land, Transport and Maritime Affairs participated and played an active role in pursuing our agenda. In the World Radio Communication Conference 2012, a total of 33 agenda was discussed, in which not only big agendas for radio frequency bands having a ripple effect on the domestic industry such as broadcast satellites and unmanned aerial systems, but also, a variety of agendas to promote the benefits of people's lives such as marine radar and public use frequency bands, and effective response systems for disasters were treated as core agendas.

As a result, first, a total bandwidth of 2,925 MHz new frequency was distributed: the bandwidth of approximately 273 MHz for

[Figure III-2] WRC-12 Activities



aviation and maritime, 302 MHz for radar, 700 MHz for broadcasting and 1,650 MHz for science. In this process, through consultation with the Department of Defense, the Ministry of Land, Transport and Maritime Affairs, KCC succeeded in achieving to en-

sure frequency bands required for unmanned aerial vehicle (weather and ocean observation), and marine radar (maritime surveillance for disasters such as tsunami, etc.) <See Table III-2>.

[Table III-2] WRC-12 Main Results

Classification	Agenda			Expectation
Select 'Mobile communication radio frequency bands' distribution' for the next agenda	<ul style="list-style-type: none"> •Not limiting to particular radio frequency bands, but assume it in the next meeting after thorough studies on the ITU-R Note¹⁾ for the next three years. 			<ul style="list-style-type: none"> •The successful implementation of the Mobile Gwanggaeto plan is expected.
The first region's 700 MHz broadcast bands is distributed to mobile communication	<ul style="list-style-type: none"> •The 700 MHz bands (694 - 790 MHz) are specified for mobile service distribution and IMT. (Effect after the entry of the WRC-15) 			<ul style="list-style-type: none"> •Secure the economies of scale and national competitiveness
21-GHz-bands broadcast satellite network and sharing criteria of ground manganese (Agenda Item 1.13)	<ul style="list-style-type: none"> •Establish the broadcast satellite networks' international registration procedures and technical specifications' related standards and sharing criteria of ground manganese •Allocation of additional bandwidth of 100 MHz for radio frequency of existing feeder links for the broadcasting-satellite service 			<ul style="list-style-type: none"> •Secure frequency bands for the next-generation satellite •Efficient use of frequency bands as possible to be operated in terrestrial networks
	Field	Purposes	Bandwidth (MHz)	Expectation
New frequencies' distribution (the width of 2,925.75375 MHz)	Air-Sea	Frequency bands for the operation of unmanned aircraft	61.000	<ul style="list-style-type: none"> •Activation of unmanned aircraft industry and strengthening the national competitiveness.
		New frequency bands for the aeronautical mobile business	209.975	<ul style="list-style-type: none"> •Expanding the domestic airport navigation facilities and management skills
		Maritime mobile communications frequency bands for the digital-switch	1.17325	<ul style="list-style-type: none"> •Switch to digital maritime communications
		Frequency bands for the safety of ships and ports	1.1775	<ul style="list-style-type: none"> •Enhance the maritime safety and security system, according to the enhancement of vessel's sophisticated location tracking system

	Field	Purposes	Bandwidth (MHz)	Expectation
New frequencies' distribution (the width of 2,925.75375 MHz)	Radar	3~50 MHz marine radar frequency bands	2.425	•Early warning of Tsunami, prevention of marine pollution, rapid search in case of disaster
		15.4 ~ 15.7 GHz high resolution imaging radar frequency bands	300.000	•Enlarge the public affairs utilization bands
	Science work	Frequency bands for lightning detection	0.003	•The safety of life and the public interests
		22.55 ~ 23.15 GHz space research frequency bands	600.000	•Laid the foundation for the space science's technology development such as lunar exploration, and space development.
		37 ~ 38 GHz frequency bands for manual works	1,000.000	•Prepare the foundation for the basic science field research such as radio astronomy.
	Broadcasting	Frequency bands for meteorological-satellite services	50.000	•Strengthen to cope with a climate change through the advancement of meteorological observation
		21.4 ~ 22 GHz UHDTV frequency bands for satellite broadcasting	700.000	•Next generation satellite broadcasting services available such as UHDTV, 3DTV

Note1) ITU-R : ITU Radio Communication Sector

For the next meeting of the World Radio Communication Conference 2015, the 27 agendas including 'ways to secure new radio frequency bands of mobile communications' (18 special agendas and 9 permanent agendas) were adopted. Especially, KCC, by discussing the WRC-12 cooperation plans with each of the participating countries' senior representatives and key personnel of ITU and also, establishing an occasional cooperative system with mobile operators, contributed greatly to determine the agenda of the additional frequency bands to ensure mobile communica-

tions. New frequency bands are expected to be distributed in 2015, after the research with regards to the agendas discussed over the next three years.

By reflecting the results of the WRC-12 and completing the revision of the related Notices namely, 'the Republic of Korea Frequency Bands Distribution Table' and 'Wireless Equipment Rules', KCC satisfied the needs for new technologies of the industry and laid the foundation for promoting the convenience of users.

2) WiBro radio frequency bands reallocation

KCC approved the reallocation of WiBro radio frequency bands after a plenary session in March 15, 2012 to KT and SKT who filed their application for reallocation of WiBro radio frequency bands of 2.3 GHz as it was due to expire on March 29, 2012.

WiBro radio frequency bands to be reallocated were a total bandwidth of 57 MHz : 2,330 ~ 2,360 MHz bandwidth of 30 MHz for KT and 2,300 to 2,327 MHz bandwidth

of 27 MHz for SKT. From the evaluation of the jury, KT and SKT were selected for reallocation as they obtained scores in excess of the established criteria in the reallocation review <See Table III-3>. Especially, by allowing WiBro radio frequency bands to be used for wireless LAN (WLAN; Wireless Local Area Network) relay when re-assigned, KCC strived to increase the radio frequency bands' utilization efficiency in response to the rapidly growing wireless traffic since the introduction of smart phones

[Table III-3] Reallocation of WiBro Radio Frequency Bands

Radio Frequency Bands Allocation	•KT: 30MHz bandwidth of 2.3GHz, SKT: 27MHz bandwidth of 2.3GHz
Duration	•7 Years (After three years, and five years, it can be reduced through the interim findings)
Use	•WiBro service and Wireless Lan Lelay
Technical Methods	•WiBro or more advanced methods afterwards
Reallocation Conditions	•Implementation and checking the integrity of the radio frequency bands' usage plan, interference measures, co-building of wireless LAN · use, etc.
Reallocation Cost	•Based on expected sales KT: KRW19.3 billion, SKT: KRW17.3 billion (2% per year based on actual sales imposed)

B. Promotion of Mobile Gwanggaeto Plan

1) Decision on Mobile Gwanggaeto Plan

KCC estimated the growth in mobile traffic volume to be about 11 to 13 times from 2011 to 2020, and the required quantity of radio frequencies to accommodate this is expected to be additional bandwidth of approximately

450 to 610 MHz by 2020. Accordingly, in order to respond to the surge in mobile communication traffics and to lay the foundation to supply radio frequencies in a timely manner, KCC published 'the Mobile Gwanggaeto Plan' in January 2012 to gradually secure additional radio frequency bands more than 600 MHz by 2020 <See Table III-4>.

[Table III-4] Mobile Gwanggaeto Plans to Secure Radio Frequency

Period	Short-term (~2013)	Mid-term (~2016)	Long-term (~2020)
Frequency (Width)	700MHzband(40MHz) 1.8GHzband(70MHz) 2.1GHzband(60MHz)	2GHzband(40MHz) 2.6GHzband(30MHz) 3.5GHzband(160MHz)	Additional bands to secure (200MHz)
Total	170MHz	230MHz	200MHz

2) Secure short-term and mid-term frequency

In accordance with the Mobile Gwanggaeto plan, taking market conditions into consideration, KCC decided to come up with an early allocation plan to secure short-term radio frequencies by the end of 2012. Also, KCC attempted negotiations to adjust Korea & Japan radio frequencies in the bandwidth of 2.6 GHz, and derived the agreed strategic direction to secure the mobile communication frequency bands that the two countries could co-exist, and at the same time, in favor of our country.

3) Secure additional long-term frequency

In addition, for the planned provision of additional radio frequency bands under the Mobile Gwanggaeto plan, KCC identified and secured additional candidates for IMT bands, and conducted activities to reflect the derived IMT candidate bands to the international standardization (ITU-R; ITU Radio communication Sector). For each band, it evaluated the priority of secured bands and selected the candidate bands <See Table III-5>.

[Table III-5] IMT Candidate Bands (Draft)

Priorities	Bands (Available bandwidth)	Remarks
1	3,600 ~ 3,800MHz (200MHz)	<ul style="list-style-type: none"> The channels settlement(draft) already confirmed in Europe Satellite earth stations and distance needed (Kuemsan, Ashan)
2	1,442 ~ 1,502MHz (40MHz)	<ul style="list-style-type: none"> Bands under consideration for the utilization for broadcasting services in Europe and high possibility to be selected as international common bands.
3	3,800 ~ 4,200MHz (70MHz)	<ul style="list-style-type: none"> Bands under review for the use of same bands in the United States, the United Kingdom, etc. Necessary to separate from satellite earth stations
4	4,800 ~ 4,830 (30MHz)	<ul style="list-style-type: none"> Already mobile work bands and as a high-frequency, wide service coverage is difficult, but possible to review for the city's hotspots
Total	340MHz width	

Meanwhile, for the selected IMT candidate bands, KCC made contributions to international standardization in ITU-R, and through the early selection of candidate bands that were required to be secured first, it played a leading role in international standardization. In addition, KCC participated in the 13th ITU-R WP5D meeting held from July 16 to 20, 2012 in Geneva, Switzerland, and made the submission of six contributions of the country, all of which were reflected in international standardization. Since the new IMT international common bands are expected to be distributed at WRC-15, by identifying candidate frequency bands for mobile communication and strongly suggesting them to the international organizations, KCC has paved the way for mobile broadband radio wave acquisitions and frequency bands in response to the upsurge of the mobile communication traffic.

C. Efficient Use of Public Radio Frequency Bands

The approval of the use of radio frequency bands is a system that exempts the authorization procedure for the installation of radio stations for military communications and diplomatic works of the foreign embassies under the 「Radio Waves Act」, and in order to establish a clear legal and procedural system for approving the radio frequency use, to protect users of the approval of the use of radio fre-

quency bands and to improve the efficiency of it, the approval of the use of radio frequency bands, KCC promoted the improvement of the approval of the use of radio frequency band. As such, some revision (draft) of the 「Radio Wave Act」 was in the deliberation and decision of the State Council in October 16, 2012.

1) System clarification for the approval of the use of radio frequency bands

First, KCC, by clarifying the definition of the approval of the use of radio frequency bands, created a legal basis that could establish specifically for the approval of the use of radio frequency bands and the management system.

Second, the screening and approval process for the approval of the use of radio frequency bands was clarified by law. As a result, the issuance of ‘Approval Certificate’ for the approval of the use of radio frequency bands became possible in accordance with the legal basis, rather than being notified in the existing written documents.

Third, it clarified the legal terms of radio stations that are subject to the approval of the use, in accordance with the approval of the use of radio frequency bands, and in case it is necessary to change some of approved items, the changes can be made by going through the change approval process <See Table III-6>.

[Table III-6] System Improvements for the Clarification for the Approval of the Use of Radio Frequency Bands

Classification	Permit or Declaration of Radio Station	Approval of the use of radio frequency	
	Current	Current	Revision
Newly Defined	Article 2 (Definitions), the regulations define the terms of frequency distribution, frequency allocation, specify frequency, return or reallocation of frequency	No provisions of terms	Approved for use in newly defined terms
Establish the administrative procedures for the approval for use	Of permit and report items in Act 21 (permission to change), Act 22, Article 2 (Change Report), in case of changes, receive a check for the permission to change and review of change.	No explicit basis of regulations and provisions of mutatis mutandis	Laid the approval procedures and screening criteria
Laid the foundation for the opening of a radio station that are approved for use	In paragraph 2 of Article 21 of the Act (authorization on the opening of a radio station), it specify the basis of eligibility for the opening of a radio station.	Processed in accordance with the eligibility of permission	Prepare the ground for the opening of radio stations. according to the approval of the use and prepare for the basis of change approvals

2) User protection for the approval of the use of radio frequency bands

KCC established regulations for administrative sanctions to cancel and stop the outage, and operating limitations, when the radio station opened by the approval of the use of radio frequency bands has been in violation of the 「Radio Waves Act」. As a result, the us-

ers of radio waves are expected to be able to use the clean and stable radio waves without confusion and interference.

In addition, KCC has established clear standards for the operating range of the radio station opened by obtaining the approval of the use of radio frequency bands <See Table III-7>.

[Table-7] Matters for Improvement of User Protection for the Approved Radio Frequency Use

Classification	Permit or Report of Radio Station	Approved Radio Frequency Use	
	Current	Current	Revision
Follow-up	The basis of explicitly dispose of sanctions according to establishment permission, loss of effect for report, cancellation of the permission, etc in the Law, Article 72 (cancel the opening permit of radio station, etc.)	No based regulations for disposal of sanctions	Laid the foundation for the cancellation of outage, permit of the radio station approval for use
Enhance the predictability of the operation of radio station	The Law, Article 25 (radio station management), Article 25, paragraph 3 (report of radio station operations) specify the start date of radio station operation based on the completion report and completion inspection.	No separate provisions for the starting date of radio station operations	Establish regulations to operate in accordance with the approval certificates

3) Promote the efficient use of the approval of the use of radio frequency bands

KCC laid the foundation for the return of radio frequencies for those who had been approved for the radio frequency use but not using it, regardless of the expiration date.

As a result, more efficient use of unused radio frequencies was ensured, especially, by encouraging the users to return unused radio frequencies by themselves, rather than reclaiming it through the process of recovery or relocation, it improved the procedural efficiency of it <See Table III-8>.

[Table 8] Matters for Improvement of System for Approving Radio Frequency Use

Classification	Permit or Report of Radio Station	Approved frequencies of use	
	Current	Current	Revision
Efficient use of radio frequencies	The Law, Article 25 (radio station management) specifies that in case the operation of radio station is closed/stopped; report this to the authority so to allow the utilization of returned radio frequencies.	No obligation to report for the abolition of radio station, lacks in legal basis for the return of radio frequencies	Laid a basis of regulations for the return of radio frequencies that are not in use, in the case of the abolition of radio stations, etc.

D. Utilization of the White TV Space

White TV Space (Idle TV bands) refers to radio frequency channels that are not used or left empty in a region so as to prevent interference among TV broadcasting bands (channels 2 to 51 : 54 to 698 MHz, total 300 MHz). In particular, the radio frequency waves belonging to the same bands may be used for diverse applications as they have superior spectrum properties, including a long-range distance and high penetration ratio. As such, KCC prepared a long-term strategy and annual initiatives by establishing the ‘Basic Plan for the Utilization of White TV Space’ in December 2011, and explored diverse service models through a survey on demand for

frequency use in order to utilize such white TV space, and selected two consortia namely, the Super Wi-Fi Service (Jeju Consortium, Jeju-do) and the underground disaster video service (NEMA: National Emergency Management Agency Consortium, Namyangjoo), and they have been conducted the pilot services.

In 2012, KCC, based on the progress of these, pursued actively the utilization policy of White TV Space. First, to reflect the new services that will be utilized in the White TV Space, it prepared some revision (draft) of the Frequency Distribution Table of the Republic of Korea (KCC Notice No. 2011-45), and drafted notice (KCC Announcement No. 2012-113, September 21, 2012), and have

plans to establish technical standards for the services to be introduced in order to protect the TV broadcasting service.

Along with this, KCC organized the ‘Technical Standards Verification Committee’ to enable the share of White TV Space without causing noise or interference with the broadcasting service, and carried out the verification work at both home and abroad. As well, it performed consultations with stakeholders from various fields for utilizing White TV Space policies and promotional activities.

3. Emergence as a Global Hub for the Future Internet

A. Deployment of Future Internet Testbeds at Home and Abroad

1) Enhancement of domestic research networks (KOREN)

KOREN(KOrea Advanced REsearch Network : Broadband integrated R & D network), a leading nonprofit test network infrastructure, provides high-speed broadband networks to universities, research institutes and businesses and supports a testing and verification of networks and the state-of-the art applications of technology R & D. KOREN has achieved over 151 domestic and international joint research efforts per year utilizing the research network.

In July 2012, KCC openly recruited re-

search tasks aimed at utilizing the research network in order to help develop network technologies using KOREN. Of these, it selected and supported a total of 12 tasks, including IT framework research based on the CPS (Cyber Physical Systems) and research on the mobile network’s virtualization control architecture. For the research and test networks supported by KOREN, unlike the general commercial Internet, network configuration and the path can be adjusted in accordance with the terms of the research situation, and can deliver a Giga-grade high-capacity traffic. Owing to this, the researchers are able to analyze development techniques and the performance of equipments, and test in a more realistic network environment using KOREN.

2) Co-leading of International Research Network (TEIN)

International Research Network (TEIN; Trans-Eurasia Information Network) is a broadband international research network connecting 19 Asian countries and 34 European countries. It was established for the purpose of development of next-generation Internet and application technologies between the Asia-Europe, and to lay the foundation in the field of IT enabling a variety of academic research and education, and bridging the information gap between the countries. Korea, without the European Commission’s budget support, has been participating in the TEIN4

project by building and providing the line resources (10Gbps) in Korea-Hong Kong-Singapore section.

In addition, it has been newly promoted an eTEIN-KOREN task from 2012 in order to discover and support the detailed tasks such as the deployment of infrastructure for the OpenFlow-based SDN (Service Digital Network infrastructure, the digital information network) to play a beachhead role for the domestic future network-related industries to advance in the overseas markets and to leap for the global testbeds; the deployment of the global remote medical imaging platform; the research on global open IPTV services.

B. Competitiveness Enhancement of Smart Internet Technology

Based on KCC's 'Plan for Internet Development for Future Preparations' published in June 2011, 2012 was the year to promote the development of technologies for implementing it. KCC has exerted considerable efforts to enhance the global competitiveness for technologies by obtaining the patents and promoting international standardization. During the period of 2010 - 2012, a total of KRW 89 billion invested in technologies, and about 20 tasks were deployed each year, including the wired or wireless network upgrade, the Smart Internet, and future innovations. As a result, in 2012, the second-generation WDM-PON

(Wavelength Division Multiplexing-Passive Optical Network) technology (Wavelength tunable light source array method) enabling the realization of high-speed, low-cost, wide area of Internet was developed, and demonstrated for the first time in the world; and the CDN (Content Delivery Network, the content transmission network) interworking technology resolving the service quality degradation when using the competitors' content, and responding actively to the cannibalization of network markets of the global Internet companies such as Google and Akamai, was developed in collaboration with the major 3 mobile communication carriers.

In addition, to secure the power of execution of the 'Plan for Internet Development for Future Preparations' and to vitalize the industry, KCC established the 'Activation Plan for the Future Research and Test Network Using Internet' (December 2012) and attempts to support a systematic virtuous cycle that future Internet technologies' development, testing, validation, demonstration test and pilot services by utilizing KOREN / TEIN that are leading to the commercialization, and it also plans to continue to work in preparation for the expanded wired and wireless traffic due to the emergence of a variety of new services, and for ensuring the high speed and high quality technology.

2) OpenFlow is the first standard communication interface that is defined between the control layer and the transport layer of the SDN architecture. Such OpenFlow makes it possible to manipulate by being connected directly to the packet transfer function of network equipment such as switches and routers

C. Promotion of Conversion to Next-generation Internet Protocol (IPv6)

1) Active conversion to IPv6

KCC prepared specific programs for introducing IPv6 (Internet Protocol version 6) by publishing the 3rd Basic Plan for the Development and Promotion of the Use and Management of Internet Address Resources (December 2011), and detailed action plans for the adoption of IPv6 in order to address the shortage of IP4 addresses, primarily by providing the means for using Internet services in an environment where IPv4 and IPv6 coexist.

To encourage active conversion to the IPv6 service, KCC plans to designate the following tasks ► preparation of the IPv6 infrastructure for future Internet services ► deployment of comprehensive systems for providing IPv6 service information and enhancing perception of IPv6 in different sectors ► designation of 3 major tasks for the technical support to SMEs ► establishment of IPv6 service-base for the mobile service that requires a lot of IP address and the future Internet service ► provision for creating opportunities to actually apply IPv6 by sector through ‘Korea IPv6 Day’. As well, KCC is continued to expand the IPv6 applicable operators by providing IPv6 best practices to avoid problems for operators and users using IPv6, and a comprehensive IPv6-related-to-date information

including manpower training and consulting services.

D. Promotion of Smart Work

1) Building the environment for active introduction of smart work

KCC set the policy goal of 2012 as the ‘Spread of Seamlessly Warm Smart Work’ and published the ‘Plan for the Active Promotion of Smart Work to the Social Vulnerable Groups and the SMEs’ in January 2012.

Further, KCC promoted the measures to relieve obstacles that may arise when introducing the smart work system and active introduction of smart work through the policy maintenance such as the enactment of 「Smart Work Promotion Act」 intended to protect the employees of smart work and build a systemic support system of the government, and the preparation for the foundation to enable the smart work system.

2) Deployment of pilot projects of Smart Work

In order to induce the early settlement of smart work scheme nation-wide and to lay the foundation for the growth of related businesses, KCC put its efforts to discover service models of smart work by implementing pilot projects that are specializing in areas with powerful ripple effects. In 2012, to achieved the policy goal of the ‘Spread of Seamlessly Warm Smart Work’, it promoted the ‘Devel-

opment of dissemination · welfare oriented smart work pilot services'. After implementing the smart work system and pilot projects in 2012, it is expected to be fully commercialized from 2013 onwards.

KCC, by discovering and developing such pilot projects and at the same time, enhancing the easy use of services for users and creating more affordable new calling plans, expects to enable a cheaper, easier and more convenient smart work for the social vulnerable groups and SMEs.

4. Reinforcement of the Foundation for New Engines for Economic Growth

A. Development of Next-generation Sore Technologies

By 2010, KCC had supported broadcasting and telecommunications R & D projects in collaboration with the Ministry of Knowledge Economy utilizing the information and communication promotion fund, however, by the enactment of 「Broadcasting and telecommunications Development Act」 in 2012, KCC promoted on telecommunications development R & D projects on its own through the broadcasting and telecommunications development fund. KCC organized and operating on a task force specializing in a creative R & D planning, efficient management, and fair

assessment; and it laid the foundation for the promotion of R & D on its own by the enactment and announcement of regulations of the research and development management for the operation of R & D projects.

The direction for the support of research development on R & D projects was set to lay the foundation for a win-win growth of related industries by enhancing the technological competencies of the venture companies, and to foster future smart new industries. Also, it set to secure a roadblock patent by investing in creative and innovative technologies, and through this, aims to strengthen the competitiveness of international patent to respond effectively to the knowledge war.

In 2012, KCC invested KRW152.7 billion on a variety of promising services for the creation of innovative technologies. First, in response to the era of smart media, it invested in promising media technologies such as a high-definition 3DTV, UHDTV which are 4 to 16 times sharper than the current ones and can watch 3DTV without glasses, the next-generation smart TV that is operated by sound and movements and supports features such as intelligent search, interactive advertising, and augmented broadcast. Second, with the aim of actively responding to the wireless Internet revolution, it promoted the development of technologies for the activation of mobile services, including communications intelligence things, and LBS (Location Based Service). Third, it also promoted the development of

new services utilizing radio wave such as precise and convenient three-dimensional breast cancer diagnosis technologies, which are to the level of MRI and wireless power transmission technologies that make laptops and other portable devices available without wire charges. Fourth, it supported the development of pre-emptive future Internet source technologies for the implementation of improvement of frequency usage efficiency and a new network architecture, as well as for the trans-

formational mobile communications (Beyond 4G) to overcome the limitations pertaining in the existing Internet (high-speed, high-quality, security, guarantees, and etc.) <See Table III-9>. Lastly, it pushed the development of based technologies to move forward utilizing broadcasting and telecommunications that were developed to solve social issues such as green growth, prevention of ICT dysfunction, implementation of a safe social back bone network.

[Table III-9] 2012 Key Performances of the Development of Broadcasting and Telecommunications Source Technologies

Classification	Performance
Next-generation broadcasting	•International standardization of Korean Terrestrial Full-HD 3DTV technologies (December 2012)
Mobile · Radio Waves	•600Mbps class 4G standard completed and LTE-Adv (January, 2011), WiBro-Adv (January 2012) demonstrated
Future Internet	•The world's first demonstration of WDM-PON (September 2012), Giga-class Internet development which is 10 times faster (September 2012)
Convergent Technology	•Interactive point control technologies for the disabled (April 2012)
Information Protection	•Development of 'LEA' passwords for embedded (July 2012), which is 2.7 times faster than AES and has a low-power consumption

1) AES : Advanced Encryption Standard

2) LEA : Lightweight Low-power Encryption Algorithm

In future, KCC plans to promote next-generation source technologies for R & D taking a patent battle in the broadcasting and telecommunications market that is becoming increasingly fierce into full consideration and also, the trend that the initiative competition of the global ICT market is evolving to software and convergence technologies. It also

plans to continue to develop technologies for securing a roadblock patent targeting the global market; and for a variety of new services and for the creation of new markets, it is expected to continue with the research and development of the SME centric technologies of high-quality in parallel.

B. Strengthening of Global Standards Competitiveness

In 2012, KCC promoted a pre-emptive standardization along with the introduction of smart strategy services such as Cloud, things intelligent communication (M2M), next-generation mobile communications, 3DTV, and Smart TV. To this end, the Telecommunications Technology Association (TTA), by reflecting the policy of KCC and the Ministry of Knowledge Economy, established the ‘ICT-focused Technology Standardization’s Strategy Map Ver. 2012’ containing comprehensive strategies of international standardization of the ICT sector for the deployment of smart society. In the strategy map of standardization published, the field of ICT standardization was re-organized to four core technologies - sense convergent media, intelligent service SW, conversion content, and ICT convergence, and two common based technologies - wired and wireless communications infrastructure and information protection; and selected 31 technologies, including Smart TV, and things intelligent communication that were required for a pre-emptive standardization, and prepared strategies for international standardization.

Through the technologies development · patents · standards linkage along with the establishment of ICT standardization strategy map, KCC strives to secure international standard patents that are capable of taking the ad-

vantageous position in the market and creating high-value-add businesses, and depending on the level of international standardization and technologies development, it continues to promote the strategic standardization. Along with this, from June 2012, it has established the promotion plan for the ICT standardization strategy map Ver. 2013, which is going to be reflected in the next year plan, and is making efforts to discover the leading items for international standardization to secure pre-emptive and high-value-added standard patents and also, is preparing a coping strategy at the national level.

Ver. 2013, by reflecting the standards users’ viewpoint better than the existing strategy map, is expected to develop a service structure by each field and a comprehensive information mapping map, and to reinforce the technologies development · patents · standards linkage strategy.

Next, KCC has coordinated the agreed position with the enterprises, academic institutes, and research associations by the operation of the Korea ITU study committee, and by reflecting it to the international standards, continuously promoted to strengthen the competitiveness of the nation · companies. the ITU as an institution to perform the international standardization in the field of telecommunications · broadcasting · information by the intergovernmental treaty, each country has responded through the national organization.

KCC, by organizing and operating the Korea ITU Research Committee and the preparation group of WRC (World Radio-communication Conference) has built a national response system for the ITU and has provided ongoing support. The Korea ITU Research Committee aims to enhance the competitiveness of the domestic ICT industry through international standardization such as the ITU and the Asia-Pacific Telecommunity (APT), and to secure and protect radio waves resource. That is, the main contents include: strengthening the national competitiveness by reflecting domestic broadcasting and telecommunications technologies and policies to the international standardization; developing the domestic industries by securing and protecting radio waves resource and laying the groundwork for the advancement of overseas markets; brining up the domestic standards experts and expanding capabilities through systematic international standardization activities; and enhancing the capacity to respond to international standardization by supplying the latest trends of international standardization in a timely manner.

Also, KCC is fostering and supporting international standardization experts in the field of broadcasting and telecommunications strategy, and strengthening the capabilities of private standardization through linkages with the experts of international standardization and international standardization strategy forums. For this purpose, it expanded to support the

development of ‘close to the life’ standards for the promotion of national benefits. KCC will continue to make efforts in expanding the market by applying domestic technologies to international standardization to enhance the competitiveness of global standards in the future and inducing them to be applied on the development of domestic application technologies and also, contributing to the promotion of user convenience.

C. Creating Environment for Green Broadcasting and Telecommunications Services

In July 2009, as the ‘Green Growth Five-year Plan’ was established and enforced as the national policy, KCC established the green growth promotion plan in December 2009 and it has been performing the tasks for the green growth in the field of broadcasting and telecommunications. KCC promoted policy issues by reducing the energy consumption of broadcasting and telecommunications sectors (Green by ICT) in accordance with the 「Framework Act on Low Carbon, Green Growth」 (Green by ICT), and the reduction of energy consumption in other sectors through the optimal utilization of broadcasting and telecommunications network services and the development of related industries (Green by ICT).

KCC’s main promotion businesses for 2012 are categorized as the management by

energy target in the field of broadcasting and telecommunications, the development of the green broadcasting and telecommunications' business models, and the establishment of groundwork for the green broadcasting and telecommunications.

First, as the '2010 Departmental Energy Target Management System' was introduced for the reduction of greenhouse gas emissions in the field of the ICT, KCC promoted energy management goals targeting the major broadcasting and telecommunications providers. It set the reduction targets for 17 providers with high greenhouse gas emissions in the ICT sector and organized and operating on the Council to check on a half-yearly performance. Through the operation of the council, it set the reduction target at 18,000 TOE, however, the results of the reduction check until the third quarter of October 2012 revealed at 49, 579 TOE, achieving a 275% decrease in the performance of power consumption.

Second, it discovered 10 types of business models that could be applied to areas of high greenhouse gas reductions such as energy management systems, manufacturing and distribution, etc., by taking advantage of broadcasting and telecommunications' technologies and the infrastructure, and of them, three types namely, the M2M-based home energy management service, the integrated smart app traffic information service, green IDC (Internet Data Center, and another type of con-

tainer data center) were chosen as candidates of pilot project models by the consultation with the experts and the screening meetings of business development group.

Third, in order to lay the groundwork for the green broadcasting and telecommunications, KCC continued to promote the green certification system for the broadcasting and telecommunications sector and completed a total of 15 certifications -13 green technology certifications and 2 green businesses, and for the expansion of private sectors' participation and the induction of the rapid growth in the green industry, it promoted to revise the relevant Notices including the expansion of the business authentication of green technologies and the introduction of the confirmation system of green technologies' products. It also discovered and promoted green certification's best practices, and operated the Green ICT Forum as well as international standards' responding activities including the ITU-T (International Telecommunication Union Telecommunication Standardization Sector) · ISO (International Organization for Standardization).

In addition, the Green ICT Forum was established to broaden the base of green broadcasting and telecommunications in the private sector through the establishment of organizations for the discussions on reducing greenhouse gas emissions, responding to carbon trading schemes, and preparing the green ICT sector policies and systems. In particular,

3) Consist of KT, SKT, LG U+, SKB, KBS, MBC, SBS, Daum, NHN, SK Combs, T-Broad, CNM, Hyundai HCN, CJ, CMB, Hyundai information technology, and LG CNS

a sub-committee is divided into 4 sectors - international trend analysis of broadcasting and telecommunications industries and cooperation between the countries; broadcasting and telecommunications technologies' standardization; improvement of policies and systems; and manpower training and public relations - and the future performance of subcommittees is expected to be utilized as basic materials for the formulation of government's green ICT policies, and even for a pre-emption of international standardization, it is expected to contribute in a great deal.

Meanwhile, from the government's performance evaluation conducted in 2012 against 40 central administrative agencies, KCC received the 'Best' ratings in the 'Green Growth' sector in a total of seven areas, and in the future, by developing the standards related to the reduction of greenhouse gas emissions, and the activation of Green ICT Forum and the green certification system, KCC is expected to continue to expand green growths through the ICT (Green by ICT).

D. Diffusion of Broadcasting and Telecommunications Convergent Services

In February 2012, KCC prepared and published the 'Three New Growth Plans for Building IT Convergence Ecosystem', reflecting the preparation for the next-generation web platform environment that does not depend on any particular terminals, build up of a common platform and a common app store for TV leveraging HTML5 (Hyper Text Markup Language 5, the next generation of Web standards-compliant), and establishment of a cooperation system between the industrial principals. That is, the establishment of three new growths' IT convergence ecosystem (m-cloud, Adv-smart TV, Tele-Screen) encompassing mobile, home, and outdoor areas for securing the future of global IT initiatives is the main content. The background of the establishment of three new growths' IT convergence ecosystem is to secure global initiatives for the future IT industry in the fast-paced IT paradigm shift such as smart techniques, and to prepare for a virtuous cycle that can create new industries <See Table III-10>.

[Table III-10] Main Contents for the Establishment of Three New Growths' IT Convergence Ecosystem

Domain	Main Content
(Mobile) m-Cloud	<ul style="list-style-type: none"> •Build a Web-based app development environment •Development of cloud-based web contents' virtual technologies •Promotion of pre-emptive mobile cloud's pilot services
(Home) Adv Smart TV	<ul style="list-style-type: none"> •Facilitate the development of integrated smart TVs •Lay the foundation for the production of big-screen web apps •Development of next generation remote control technologies (UI / UX)
(Outdoor) Tele-Screen	<ul style="list-style-type: none"> •Development of Tele-Screen system technologies •Establishment of Tele-Screen pilot zone •Establishment and operations of the Tele-Screen Industry Association

In March 2012, KCC invited the public for the contest of 2012 broadcasting and telecommunications convergence services pilot projects for the establishment of three new growths' IT convergence ecosystem to secure the global initiatives for the future of IT. By promoting broadcasting and telecommunications convergence public services more effective and strategically, it has been promoting N screen-based pilot projects such as providing the information on a variety of performance and cultural events, and store promotions of local small business owners whereby all citizens can easily participate by including not only TV and mobile devices, but also, 'Tele-screen', which is referred as the 4th of the screen.

The six new broadcasting and telecommunications convergent public services developed in 2012 enabled mobile life broadcasting services, participatory outdoor studio broadcasting services, Tele-screen-based public outdoor service, HTML5-based local gov-

ernment integrated media service, marketing support services for traditional markets, live broadcasting services of cultural performances to be supplied by N-screen media such as smart phones, Smart TV, and Tele-screen in the field of mobile, home, and outdoor sectors.

KCC aims to provide leading pilot projects not simply as pilot projects but through a systematic process of development, technical testing and verification, as authentic commercial services from 2013 onwards.

E. Support for Active Growth of Radio Industries

1) Basic plans for the promotion of life radio Industry

The life radio wave industry refers to wireless devices and the related services that can be used in various fields of everyday life using a low power of radio waves. As radio technologies are applied in various fields in-

cluding energy, transportation, medical, and security, the life radio industry is expected to grow rapidly. However, the majority of domestic companies of life radio industries are suffering from financial difficulties and lack of manpower, not to mention the shortage in investment for the future.

To overcome these problems, KCC published the ‘Basic Plans of Life Radio Industry Promotion’ in June 21, 2012 pertaining 4 detailed plans: ► establishment of customer-centric policy-making ► strengthening the competencies of life radio industries to lead the world market ► laying the foundation for the future growth of life radio industries ► fostering the manpower for radio industries suitable for the smart age.

2) Production support for test products

KCC promoted to enable radio waves’ industries in various ways by facilitating SMEs complaints and comments smoothly, and promoting the actual activation of industries by providing the funding support.

First of all, 11 experts who worked for more than 7 years in the radio broadcasting related SMEs such as for the low power radio waves’ equipments, radio broadcast equipments, antennas, etc., were appointed as the ‘Radio Broadcasting Ombudsman’, so to establish more substantial radio waves’ policies by reflecting the feedback of the actual scene and utilize them for regulatory improvements.

In addition, KCC selected the final 5 SMEs

and supported them with funds that were required for the production of test products.

5. Improvement of Capacity to Respond to Internet-based Society

A. Improvement of the Internet Service Environment

1) Improvement of the usage environment for Active X

As the number of users using a variety of browsers increased, and mobile Internet users such as smart phones, etc skyrocketed, concerns on web compatibility such as malfunctioning of Internet services, and being exploited as the paths of malware infections also grew. To respond to this, KCC prepared and published the ‘Plan for Improving the Internet Service Environment’(March 2011).

Further, to improve the web browser’s usage environment concentrated in IE (Internet Explorer), and to improve the environment of high utilization of older versions of IE6, it staged offline campaigns for the improvement of the usage environment for the Internet by the public-private conjunctionally.

Meanwhile, the Korea Internet & Security Agency (KISA) is operating the Web Technology Support Center (web.kisa.or.kr) for the diversification of web browsers’ usage and the introduction of technologies and

trends to web developers; and providing the introduction of various web browsers' features and links to download, and information on alternative technologies of Active X, web standards and technology trends.

Lately, the ICT trends are changing from smart devices and OS platforms-focused to standard techniques-based open web due to the mobile revolution, as such, to improve the domestic Internet environment that is fit to the global environment, and to strengthen the competitiveness of software industries, the 'Plans for the Expansion of Next Generation of Web Standards (HTML5) were prepared and published in July 2012.

B. Establishment of Internet Service Principles

In the early stage of the diffusion of Internet, Internet-based services and networks development were in the complementary relationship, however, due to the increase in traffic and saturation of the internet subscribers' market, the gap between investments and the revenues grew, which concerns the reduction in the 'network' investment, and also, the possibility of limiting or blocking traffic, resulting in unreasonable discrimination of free Internet access.

Therefore, the balanced policies are required to ensure access to the Internet service and to steadily upgrade the ICT ecosystem.

As the main authority of the net neutral-

ity policy, KCC prepared the ground for the national network neutrality debates through the operation of the Net Neutrality Forum in 2011, and as a result of net neutrality forum activities, it performed the 'Guidelines on Net Neutrality and Internet Traffic Administration' (hereafter, net neutrality guidelines) in January 2012.

KCC set the purpose of net neutrality guidelines as the creation of a fair and open Internet service environment and ensuring inclusive sustainable development of the ICT ecosystem, and declare the rights of Internet users comprehensively and at the same time, presented the basic principles of traffic administration which are as follows: ► transparent disclosure of traffic management information ► blocking banned (except for, when the need for a reasonable traffic management is recognized) ► discrimination prohibited (except for, when the need for a reasonable traffic management is recognized) ► permission of a reasonable traffic management for the cases of network security, reliability, congestion management, and enforcement of laws if necessary.

In addition, as the follow-up measures of guidelines, details of plan regarding the Internet traffic management were required. As such, KCC operated the 'Policy Advisory Committee on the Net Neutrality and Internet Traffic Administration' consisting of a total of 26 people, including academic experts, consumer groups and industry experts (tele-

communications operators, portals, manufacturers, the comprehensive cable companies) from February 2012, and prepared the ‘Standards (draft) on the Rational Management of Networks and the Transparency of Traffic Management’.

The basic direction of standards (draft) is to ensure the transparency and the rationality of traffic management, and by presenting the rationality criteria (transparency, proportionality, non-differentiation, etc.) of traffic management, along with the rational traffic management type, it aims to prevent the network operators’ arbitrary traffic management and disclose the network operators’ traffic management information to the user in a transparent manner.

KCC discussed the standards (draft) at the plenary meeting at the end of November 2012, and plans to establish the relevant policy measures through further discussions and comments in the near future.

C. Deployment of Wireless Data Traffic Statistics

As smart mobile devices are widely used, communication usage patterns have changed dramatically from wired to wireless, and from voice to data-driven. Accordingly, the wireless data usage is increasing rapidly, however, the existing statistics have been calculated mainly on voice call volumes of wired network and thus, the need to deploy the wireless data traffic statistics has been raised.

Therefore, based on the discussion of a task force team consisting of 3 mobile communication providers, research institutions and stakeholders on every month from January 2012, KCC prepared the revision of the ‘Enforcement Decree of the Telecommunications Business Act’ that entails the target statistics of telecommunication carriers’ currently focusing on voice calls (in accordance to the current statutory) to include data statistics, and as a result, wireless data traffic statistics were calculated.

By deploying the traffic statistics, it laid the ground for the judgment of government’s networks policies, frequency policies, and net neutrality policies, and by the establishment of communications policies, it is expected to improve the user convenience of telecommunications <See Table III-11>.

[Table III-11] Disclosure Standards for Wireless Data Traffic

Classification	Content	Method
By wireless communication technologies	2G/3G/4G/WiBro/Wi-Fi Traffic usage	Monthly disclosure
By mobile handsets	Feature phones, smart phones(3G/4G) traffic usage	
By user characteristics	Heavy users (3G/4G), unlimited / general calling plan (3G) traffic usage	Quarterly disclosure

Section 2

Creation of a Smart Ecosystem and New Industries

1. Promotion of Seven Main Smart Services

A. Promotion of Cloud Service

1) Introduction of cloud service certification system

KCC, to relieve anxieties for users of Cloud Service in terms of its quality and security, introduced a high quality certification program for high stability of Cloud Service. While implementing the certification system to build a foundation for the user trust of Cloud Service, which is in the early stage in Korea, it enhanced the quality of services and established a system to strengthen the competitiveness of the domestic Cloud industry.

2) Laws and regulations maintenance related to cloud

To contribute to the development of the national economy by promoting the development and the use of a domestic Cloud Computing Service and to create an environment to use Cloud Service safely, KCC prepared the enactment of 「Acts on the Cloud Computing Development and Consumer Protection」 and made a pre-announcement of legislation in July 10, 2012. After then, it received feedbacks and consultations from multi-stake-

holder groups and interagency and carried out a various tasks and discussions.

3) Establishment of support measures for the expansion of Cloud Data Center

KCC came up with ways to deploy the CDC (Cloud Data Center) to strengthen the competitiveness of domestic Cloud industries that lack in global competitiveness. This strategy holds three policy tasks aiming to: ① build and operate the CDC strategy and support the overseas market expansion, ② lay the foundation for the CDC diffusion, and ③ encourage the use of CDC; and 9 practical tasks jointly pushed by KCC and its related agencies.

Based on this strategy, KCC plans to build and operate the technology development for the stable CDC use environment to expand the domestic CDC transition and deployment and then, operate the CDC service evaluation system. As the mid to long-term strategy, it plans to provide incentives to companies who deploy and transit to the CDC and for the small and medium operators who lack in material and human resources, it plans to support the CDC used businesses so that SMEs can attempt to improve the productivity by taking advantage of the CDC.

4) Enhancement of national awareness and strengthening the domestic and international Cloud cooperation system

In order to seek ways to share technologies and policies with domestic and foreign parties, and to promote public relations of and international cooperation for Cloud Computing, KCC held the Asia Cloud International Forum, along with the ‘2012 Clouds Conference’. In these international forums, other than the existing 3 countries of Korea, Japan and China, Vietnam had attended and shared activation strategies for Cloud Computing of each government and Cloud Computing-related promotion activities of participated institutions; and discussed joint-cooperation on each issue raised in a Cloud Computing sector, including legislation, standardization, and certification.

B. Infrastructure Deployment for M2M Communications Services

1) Infrastructure deployed to support the development of M2M communications

In accordance with promotional directions for the advancement of test environment of the ‘Comprehensive M2M Communications

Support Center’ (May 2011), KCC has facilitated additional equipments such as building of 4G (WiBro, LTE) system, radio waves shielding box, and a new service (smart home care service). Through these, it can promote the development of M2M communications services by small and medium sized venture businesses and support them to shorten the product development period, which aims to improve the global market competitiveness by advancing to the overseas market ahead of their competition. In addition, KCC’s efforts holding the ‘Business Partnership Meeting’ twice to expand the commercialization opportunities for the SMEs and for the promotion of win-win cooperation between the large companies and the SMEs received fervent responses in the market.

Furthermore, in order to contribute to enabling the domestic M2M communications and create quality new jobs, the training session designed to experience services firsthand for the students of relevant departments of the national universities was conducted, and through the basic training of M2M communications to the Seoul Digitech high school students, it has made efforts to foster the entry-level technical manpower. (See Table III-12)

[Table III-12] Operating Performance of M2M Business Support Center

Classification	Use Results	Technology Consulting	Registration of New Members
Year 2011	180 times	11 cases	114 cases
Year 2012	321 times	25 cases	135 cases

2) Development of global standards for M2M communications and promotions of standardization

KCC is actively pursuing M2M communications standards' development projects. The major tasks of M2M communications standardization are the 'Development of Mobile Networks Based-technology Standards', and the 'Development of Open-type M2M Service Technology Standards', aiming the standardization of handsets and service platforms for M2M communications services, and vigorous standard contributions to TTA, IEEE (Institute of Electrical and Electronics Engineers), 3GPP, ETSI (European Telecommunications Standards Institute), and oneM2M (M2M, the Global Standard Cooperation) are underway.

Especially, in response to the launch of oneM2M (July 2012), which is the M2M Global Standards Cooperation, it organized and operated TF consisting of specialized agencies and it actively pursued domestic technologies to be reflected in international standards through activities like advancing

to the chairmanship of the Technical Plenary Bureau.

3) Plans to secure core technologies for next generation M2M communications service

KCC is accelerating the discovery and development tasks to support service-related SMEs such as the development of M2M communications-related application services from 2012 onwards, and to secure core technologies of M2M communications. Also, it is pursuing the development of M2M communications source technologies such as the 'Development of Standard Platform for Wibro/LTE-based M2M Communications Terminals', the 'Development of Core Technologies for Dev1 nJ nano Joule / bit ULP (Ultra Low Power) Communication', and the 'Distribution-type End-to-end Communications Technology Development for Mobile Real-adjacent services' (See Picture III-3).

[Figure III-3] Concept Map of M2M Core Technologies Development Tasks



The task of ‘Development of Standard Platform for Wibro/LTE-based M2M Communications Terminals’ is performing HW/SW and the service test verification of M2M communications terminals and by participating a number of international exhibitions including the MWC 2012 (Mobile World Congress 2012) or the ETSI M2M Workshop, it proved the superiority of its technology. These results are made available for domestic small and medium companies as technologies are expected to be transferred to the M2M Communications Comprehensive Support Center in the first half of 2013. The task of ‘Development of Core Technologies for Dev1 nJ nano Joule / bit ULP (Ultra Low Power) Communication’, on the other hand, is focusing on acquiring intellectual property rights of source core technologies for the ultra-low-power communication circuit design, and in parallel, it is promoting international standardization activities such as IEEE 802.15 with regards to Telemedicine. Through this, the domestic technology is expected to contribute greatly to lead the telemedicine field by utilizing M2M communications.

Finally, the ‘Distribution-type End-to-end Communications Technology Development for Mobile Real-adjacent Services’ intending to improve existing communication methods availing the transmission through a network of base stations and a wired core, and between adjacent terminals, can transmit directly without going through the base station, and

thus, it is expected to contribute significantly to reduce the load on the existing network infrastructure.

In addition, for the development of the SMEs’ creative application services and to improve the market competitiveness, KCC discovered through the open competition and performed the ‘Development of 4G M2M Communications-based Intelligent Remote Video Surveillance System Utilizing Sensor Convergence Technologies’ and the ‘Development of an Indoor Location Tracking Technology using the Space Convergence UX technologies of the Physical Space and the Virtual Space’.

C. Development of Base Industries for Near Field Communications (NFC) Technologies

1) Diffusion of NFC payment infrastructure nation-wide and application services’ standardization

In order to expand the base of application services such as NFC application standards’ development and pilot services through the ‘Grand NFC Korea Alliance’, which is the council that all NFC stakeholders can participate, KCC promoted the hosting of NFC briefing sessions to the major domestic member stores including department stores, convenience stores, gas stations, and cafes that as of December 2012, mobile payments became available in 22,000 member stores nation-

wide.

In addition, in collaboration with mobile telecommunications carriers, KCC had been developing the standards for ‘Mobile Touch Services’, which are easily accessible to credit card payments, membership mileages, discount coupons, and etc. with just a single touch in the mobile payment process, and it came in effect as a national standard in October 2012.

2) Promotion of NFC-based pilot project

KCC has been promoting the deployment of NFC payment infrastructure of mobile telecommunications carriers, issuance of mobile card of credit card companies and related user activation promotions from the ‘Myeongdong NFC Zone’ pilot project - the large scale project that a variety of NFC application services are demonstrated and applied for the promotion of NFC payments and application services. In addition to this, the VAN company supported the replacement of NFC payment machines, and franchise member stores performed S/W upgrades to accept the mobile payment in the POS(Point of Sales) system. Through these, NFC application service developers, based on the experience from pilot projects, laid the foundation to advance to the global market.

In addition, by operating NFC pilot projects in the 2012 Yeosu World Expo, it contribute to the improvement of awareness of the public with regards to NFC, and by introducing a variety of services to foreigners in conjunc-

tion with international events, it played a significant role in upgrading the image of Korea as a IT powerhouse.

Furthermore, KCC, in cooperation with the Seoul City Government, plans to attach NFC tags to 30 historical and cultural relics in every corner of Seoul, so to provide the related information to the tourists through smart phones, and information about the exhibits to the general users and the handicapped by the use of audio-visual equipments and smart phones as well as, NFC-based mobile post-paid traffic card services are underway. As such, KCC is expanding diverse NFC-based services including new business items, together with the related companies.

D. Strengthening the Competitiveness of Smart TV Service

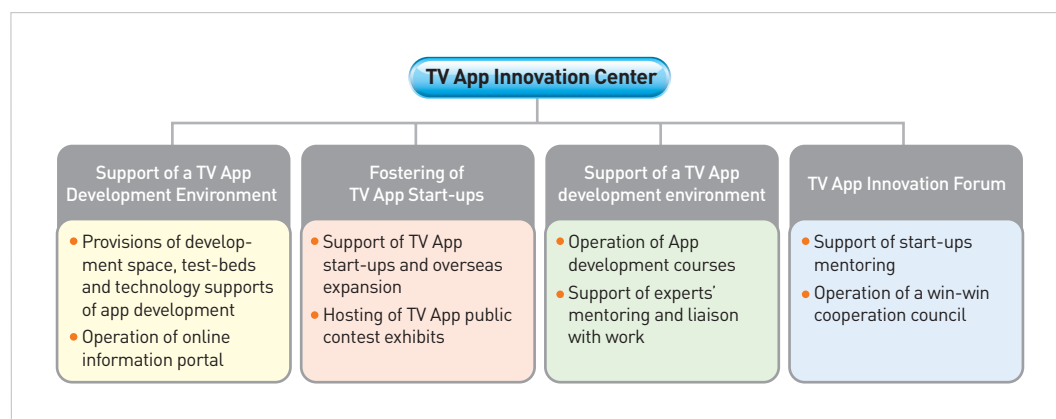
As the main projects for 2012, KCC pursued to lay the foundation for the development of TV Apps’ activation, and to promote the HTML5-based TV platform standardization and standard-size verification projects.

First, in April 2012, the ‘TV App Development Revitalization Infrastructure Plan’ was prepared to lay the groundwork for the development of TV Apps’ activation. According to this plan, in May 2012, the plan to build the ‘TV App Innovation Center’ that provides a comprehensive support to the development of Apps in terms of the space, testbeds, online information portals, and etc. was published.

Also, in June, a win-win cooperation council consisting of specialists from manufacturing, telecommunication and cable companies was organized and operated to facilitate the development of TV Apps and in July, along with the opening ceremony of the ‘TV App Innovation Center’, it went into full operation and selected 19 teams through TV App Production Competitions and App developers’ start-up supports’ projects; then, for the selected

ones, KRW 540 million was invested as to support these projects. In October, furthermore, in order to strengthen the competitiveness of the Smart TV industry, the TV App Academy was newly opened to train TV App development professionals, which are a core element of competitiveness and recruited 150 young workforces who hope to be experts in this field.

[Figure III-4] TV App Innovation Center Overview



Along with the deployment of the Center, KCC promoted the ‘TV App Start-Up Development Programs 2012’ in order to discover innovative TV App ideas and to support entrepreneurship. In October 2012, it ran a total of six times, five-day hands-on training courses from the TV App Innovation Center that avail the experience all across the TV App development processes to foster the TV App development personnel and the systematic education to train them.

Second, among the ‘Three New IT Convergence Ecosystem Deployment Plan’ published in February 2012 to secure the future of global IT initiatives, KCC pursued the HTML5-based TV platform standardization in earnest that helps escape from specific OS dependencies as a part of the ‘Smart TV Ecosystem’ from May. So far, each operator's platform is dependent on the particular OS such as IPTV, DCATV, Smart TV, and etc that the content market is fragmented and

causes a lot of inconvenience in the development of Apps, not to mention the cost aspect of it. Since these are all slowing down the activation of TV App ecosystem that KCC has been looking for measures that are interoperable in an open TV platform environment. In addition, as the next generation of Web standards, HTML5 is spreading as a standard platform of the entire IT industry such as PCs, smart phones, tablet PCs, and etc, and international standardization for the application of HTML5 in the field of TV platform is pursued in the W3C, KCC has prepared preemptive countermeasures to respond to this.

As the new HTML5 web-based open platform environment is deployed in accordance with the platform standardization, it became possible to ‘One Source Multi Use’, without the specific dependencies of OS. Thus, KCC is planning to make its best effort to activate the creation of App contents and to accelerate the advent of 1 person creation and venture enterprises.

E. Development of Location Based Service (LBS) Industries

1) Development of infrastructure for fostering LBS industries

In order to foster industrial LBS industries, providing an infrastructure for smart mobile Internet service, KCC organized and operated the ‘Location Information (LBS) Win-win Strategy Forum’ inviting the location infor-

mation providers and its related companies. In addition, it operated the LBS Business Center to support legal counseling, permission or declaration support, deployment of industrial statistics systems, and overseas advancement of small LBS providers, and developed a various activities to foster industries such as operating revenue-generating support programs through the public competition of potential LBS services.

With the exponential growth of the small LBS providers using location information owing to the dissemination and spread of smart phones, the LBS Business Support Center opened through a LBS Council in September 2011 performs the following tasks for small LBS providers: ►report-related consultation and operational supports ►LBS related statistics and trends survey ►mitigation of common complaints of LBS operators ►report of illegal operators and relevant agencies’ notification work (See Table III-13).

[Table III-13] 2012 Status of Monthly Support for LBS Providers

(unit : cases)

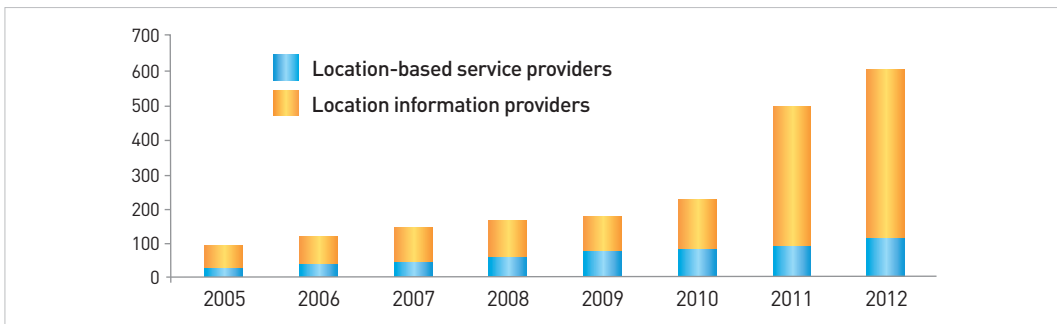
Month	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sept.	Oct.	Nov.	Dec.
Legal Assistance	173	184	193	185	176	206	252	242	171	176	207	91
Report Support	500	631	453	431	424	467	503	452	282	242	352	207
Total	673	815	646	616	600	673	755	694	453	418	559	298

Source : 'LBS Business Support Center', LBS Industry Council, 2012

In addition, KCC held the 'Potential LBS App & Web Competition' for small venture companies utilizing LBS and provided programs that can generate a variety of revenue models such as linkage with investors and

business networking so that individual or small LBS providers can enter into the market and gain a foothold to make businesses in the current monopolistic LBS market structure dominated by large-scale operators.

[Figure III-5] Trends of Increase in LBS Providers



2) Improvement of regulations over LBS providers

For the promotion of LBS industries, the 「Act on the Protection, Use, etc. of Location Information」 was revised (published and enforced from June 25, 2012), having deregulations as the main content including streamline the submission of documents for the permission of LBS providers, and accordingly, the 'Detailed Examination-based Assessment

Methods of LBS Business Permit "(Notice No. 2012-40) was revised and enforced.

F. Promotion of 3D Broadcasting Services

The recent broadcasting service market is experiencing the transition to a new broadcasting service era, in which actual feeling like media including 3D and Smart TV is

emerging as the new growth opportunities since the digital conversions of broadcasting. Thus, KCC has exerted its efforts in securing the commercial base for 3D broadcasting services by applying high-definition 3D broadcasting technologies developed for the first time in the world and achieving the global market dominance.

1) Terrestrial high-definition 3DTV pilot broadcast

KCC successfully conducted the world's first terrestrial high-definition 3D pilot broadcast in metropolitan areas through the EBS and the SBS channels for one month in April 2012.

In addition, by conducting 3D broadcast of the London Olympics through the channel 66 in all metropolitan areas in July-August 2012, it started the terrestrial high-definition 3D pilot broadcast in earnest. Since October 2012, aiming for the commercialization of high-definition 3D broadcast, and for the verification of technologies and services, 3D pilot broadcast was expanded to nation-wide on two terrestrial regular channels of the MBC and the EBS for two months.

2) 3D TV standardization and Development of next-generation broadcasting technologies

KCC has continued its efforts to communicate from all walks of life on 3DTV broadcast standards and to preempt the World's 3D

standards. First, KCC is actively pursuing a dual-stream type technology standardization which is high-definition 3D broadcast that is developed in Korea independently. After the enactment of national standards at the Telecommunication Technology Association (TTA) in the end of 2011, KCC has been spurring international standardization, and in January 2013, it achieved results of the domestic 3D broadcast scheme finally being approved as an ATSC international standard from the United States Digital Broadcasting Standards Commission

Furthermore, KCC has been promoting the development of next-generation broadcast technologies and introduced the Gigabit Internet-based Ultra-High Definition (UHD) video service and the glasses-free 3D Digital Signage at the '2012 IT EXPO Busan Exhibition' held in Busan BEXCO in September 2012.

3) System Improvement and promotion of standardization of high-definition 3D broadcasting

KCC revised the relevant Notices to facilitate the development of broadcasting technologies that was rapidly changing and to activate 3D broadcast. In case the additional verification was necessary by the operation of experimental station ahead of commercialization and additional validation was in need for services application of new technologies, it revised some of the rules on radio equipment

(KCC Notice No. 2012-90, October 17, 2012) to allow other broadcast services (experimental and test-oriented broadcasting) that were different from technical standards.

In addition, for the promotion of 3D services, KCC enhanced a variety of promotional and support activities. First, in April 2012, KCC operated a booth to showcase 3D content in the MIPTV 2012 (Marche Internationale des Programmes de Television 2012), the world's largest content market held in Cannes, France. In addition, from 15 to 18 May 2012, it held workshops for the equipment and technical training, overseas broadcasting and symposium participated by film industry stakeholders, and business markets through the '2012 World IT Show' held at COEX, Seoul, and the '2012 Seoul International 3D Fair'.

G. Boosting of TV e-commerce

Amid growing demand for the boosting of synchronized TV e-commerce due to the diffusion of IPTV, digital cable TV, Smart TV and other advanced technologies, KCC organized the 'Interlocked TV e-Commerce Study Group' consisting of academic and industry experts from February 2011 onwards. Based on the results derived from the research and opinions from related industries, KCC came up with ways to promote TV e-commerce. In April 26, 2012, KCC conducted a public hear-

ing with relevant business providers, and collected opinions of home shopping, products' sale type data broadcasting, general broadcast channels using operators (PP), CATV operators (SO), Internet multimedia broadcast operators (IPTV), and e-commerce technology developers, and by reflecting these opinions, the 'Plan to Promote the Broadcast Program-linked TV e-commerce' was voted at KCC's plenary meeting.

The Activation Plan of Interlocked TV e-commerce contains the expansion of the range of operators who can provide TV e-commerce and pilot services for the convenient product search and the development of payment methods. In order to improve unclear qualifications' requirements for operators which have restrained the active promotion of TV e-commerce businesses, the 'Guidelines on Auxiliary Data Broadcasting' was amended by paragraph 3 of Article 9 so to clearly defined the criteria for proven carriers, and encourage the market entry of new players; as well, the range of proven carriers were also defined as broadcast channels' operators who did the professional programming on product introduction and sales, and telecommunications' operators with a total amount of investment capital · basic assets more than KRW 500 million. In addition, in order to improve on the use convenience in interlocked product search · payments, it standardized TV e-commerce payment methods,

4) 5 Home shopping companies, KTH, SKB, TV flea market, Hwa-sung industry, iDigital Home Shopping

5) Those who perform the telecommunications sales work or parties who perform the telecommunication work in accordance with an agreement with him/her in the Act on consumer protection in E-commerce, etc. defined in Article 2, paragraph 3,

and improved the remote control UI / UX technologies and interlocked TV e-commerce payment methods by operating the Expert Council consisting of IPTV, cable operators, developers, and financial depository.

To practice the revitalization plan, KCC organized a TF consisting of the relevant operators and experts in the Korea Digital Media Industry Association from June, and carried out discussions on the business plan and the organization of business execution consortiums. In August 2012, the three consortiums with relevant operators were organized, and from October, KT Consortium, SK Broadband Consortium, and CJ E & M consortium promoted pilot services to 4 million households. Through pilot projects, a variety of services that are available for the purchase while watching a various broadcast programs on TV channels will be accelerated.

In addition, thanks to pilot projects, it developed interlocked TV e-commerce related operators' collaborative models, and achieved the effect of technology improvements on enhancing the convenience of remote control payments, as well as the development of new markets and analysis on the characteristics of each media. Based on this, KCC will continue to promote projects to boost interlocked TV e-Commerce in future.

2. Development of Innovative Ecosystem and Venture Infrastructure

A. Activation of Mobile Contents

In the past, to use mobile contents on the mobile phone, the wireless portals operated by mobile carriers had to be used, however, due to the diffusion of smart phones, the open market (App Store), which is the direct transaction marketplace between content providers (CP) and consumers is widespread.

In order to activate the domestic open market in the current open market environment dominated by foreign operators such as Apple and Google, Mobile carriers deployed the domestic integrated App Store, K (K-Apps), which is the wholesale marketplace of smart phones' applications. K Apps were created in the domestic mobile content market in November 2011 to respond to the Apple and Google App Stores by the collaboration of three mobile carriers, and by jointly supplying web-based contents of the three companies, it has the advantage of facilitating contents smoothly and minimizing the cost of the supply, as well. Also, from the developers point of view, contents developed to a single standard can make sales not only to the three domestic mobile carriers but also, in the market concurrently through a linkage with the global integrated App Store (WAC; Wholesale Application Community) system via K

Apps so that it can secure the global distribution base. As the web platform developed by K Apps had been recognized its excellence that it was adopted as the standard specification of the Global integration App Store in February 2012, it achieved the performance of entering into a license agreement worth of KRW 2,800 million.

K Apps have been operating a community on a regular basis to collect the developer's complaints or feedbacks, and according to the development trend of HTML5, which is next generation web standards, it held a TF meeting to prepare ways to expand the K Apps utilizing his. By the support of App development costs to encourage the participation of developers, 536 kinds of new Apps have been developed.

Enabling mobile contents have a significant meaning that it is a representative case for the

establishment of a broadcasting and telecommunications environment to grow together through fair competition and win-win cooperation between the open market operators such as giant mobile carriers, manufacturers, and SME's contents' providers. As well, in terms of establishing a bridgehead for the effective market expansion of domestic business providers, it requires a continuous attention.

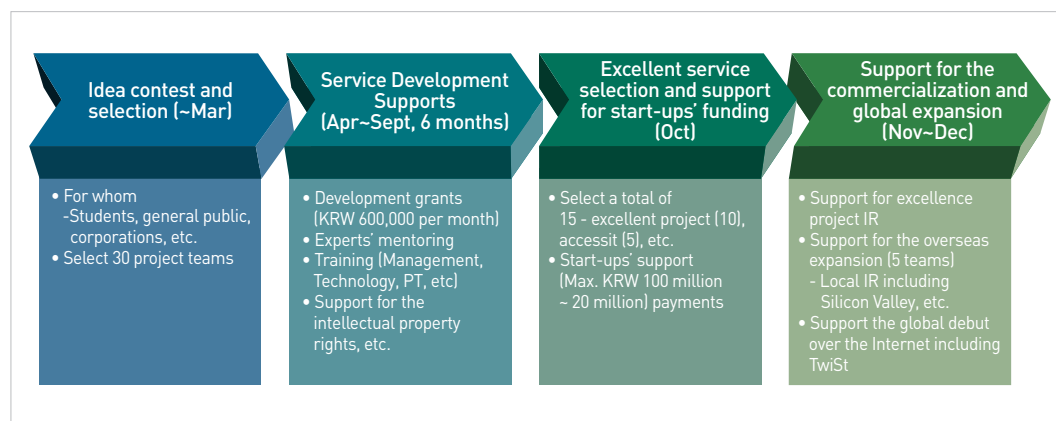
B. Promotion of Venture Business Growth

1) Development of Internet Business Startups (IBS)

In 2012, KCC, in conjunction with Google, prepared and operated the 'Global K-Startup Program 2012', which reinforces the support of global sector expansion

January 2012, KCC signed the Memo-

[Figure III-6] K-Startup Program Process



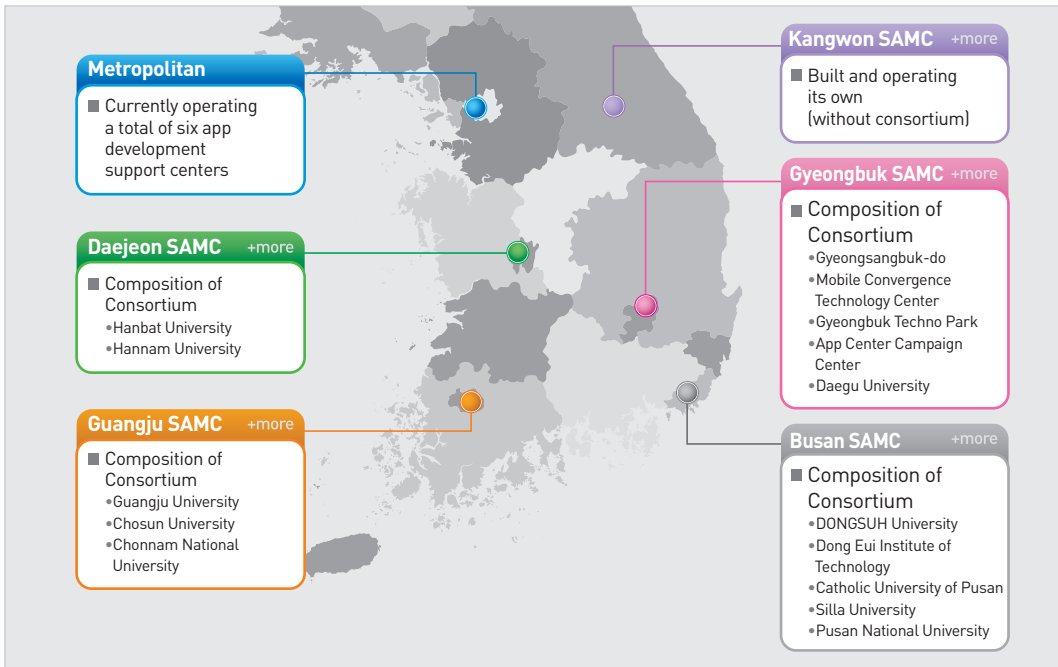
random of Understanding (MOU) with the Google to develop start-up businesses and support the developers, and published the ‘Plan for Global K-Startup Program 2012’ in February 2012 and held a contest for the university students (& graduate school students) and the general public regarding a variety of ideas for new Internet services.

Meanwhile, KCC agreed with the App Center Campaign Headquarters and Google Korea on the need for a systematic development of domestic startups and signed the MOU in November 2012 for the building and operating the startups incubating center and for the join use of domestic and foreign experts’ professional networks. Through these, it plans to provide a physical-based infrastructure such as office spaces for start-ups, equipments for the development, and etc., and by taking advantage of the expert’s network, it plans to concentrate its support to the overseas markets expansion and safe landing in the market.

2) Centers for supporting development of Smart Mobile Applications

The domestic IT · Internet market promoted the enhancement of national competitiveness across all smart mobile industries, whereby publishing the ‘Wireless Internet-enabled Comprehensive Plan’ in April 2010 to respond to changes in the smart mobile environment, and also, founded the ‘Smart App Development Support Center (SMAC)’ to support the app development companies who are the core element of the mobile industry. The SMAC, which is the offline regional hub center that supports the training of developers and test-beds, was established in six locations in the metropolitan area, and 5 locations (Busan, Gwangju, Daegu, Daejeon, and Gangneung) in the provincial area as the bases and enabled any local developers and companies in the region to test the developed apps using devices furnished at the center and to use various educational programs, as well, by deploying the online support center (www.smac.or.kr), it provided an open platform, open S / W modules, professional cooperation channels, and the trend of smart mobile at home and abroad. Currently, a monthly average of 11,000 visits is recorded.

[Figure III-7] Smart Mobile Application Development Support Center



C. Enhancement of Venture Business Technologies

For the establishment of ecosystem that enables the sustainable growth of broadcasting and telecommunications' venture businesses, KCC made its continuous efforts in 2012 to enhance core technologies' capabilities and to build a technical support infrastructure for the field of market competitiveness.

KCC promoted the infrastructure for the technical support in order to improve the technology of venture companies. R & D for deploying infrastructure for promoting next generation mobile telecommunications

technologies was to support the venture enterprise-centric growth as wireless NFC technologies are emerging as the core common technology that widely applied to broadcasting and telecommunications equipments such as smart phones, smart pads, and navigation. Of the wireless NFC technologies, Bluetooth, ZigBee, NFC, and Wi-Fi technologies have large growth potentials and high impacts as well as suit for the small venture enterprise-centric market. However, as equipments and test facilities required for the development of products and services in the field of wireless NFC are expensive, it is difficult for small venture companies to be equipped with nec-

essary means, not to mention the skilled technicians to operate the equipment.

Therefore, KCC's major tasks are the building and operation of the support environment of next generation wireless NFC technologies, and the promotion for the commercialization of next generation mobile telecommunications technologies. R&D for building and operating the support environment of next generation wireless NFC technologies contains the technical support of next generation WPAN (Wireless Personal Area Network, NFC communications network technology) including Bluetooth and ZigBee, NFC technical supports, and the building and operation of next generation Wi-Fi technical support environment. R&D for promoting the commercialization of next generation mobile telecommunications technologies was divided into technical information provision, consulting, difficult technical support, and testing technical support.

As the technical support platform business, KCC has supported the building and operation of support environment of next generation wireless NFC technologies, along with the promotion of commercialization support of next generation mobile telecommunications technologies. As the major tasks to pursue, it provided the latest technologies and market trends' information by sector, the promotion to commercialize small & medium-sized venture companies' products, and the operation of a specialist pool for the difficult

technology support.

Furthermore, KCC provides a bimonthly newsletter containing a review of national and international standardization trends and business development issues, and success stories in order to provide the latest technology news by sector and information on market trends that are necessary for the development of new business strategies and product differentiations of small and medium sized venture companies; and through workshops of next generation mobile telecommunications technologies, it introduces the latest technology trends and certification trends for the international recognition test. As the convergent IT such as Uhealthcare and smart cars are expected to be activated in future, KCC plans to expand support services gradually by securing professionals in these fields.

D. Support for Win-Win Development between Large Companies and SMEs

Along with the progress to the smart era, KCC intended to build a win-win cooperation environment between the large companies and the SMEs for the promotion of the domestic Internet business industry, which is the main sector to drive the future economic growth. To this end, from 2011, starting from the discovery of new Internet services and commercialization supports, it has been promoting the 'Global K-Startup Program 2012'

project in order to strengthen the support to the global expansion in 2012. In addition, it provides information on smart mobile trends at home and abroad, and through the operation of the ‘Smart Mobile App Development Support Center’, it supports the training of smart mobile app developers and test beds.

3. Promotion of Competition among Broadcasting and Telecommunications Services

A. Licensing and Renewal Licensing of Broadcasting System Operators

Licensing and renewal licensing of broadcasting system operators are one of KCC’s essential mission to perform. In 2012, license renewal was reviewed for 7 terrestrial DMB providers, 66 cable broadcasting operators, 1 press channel operators and 2 home shopping channel operators as their licenses were scheduled to expire in 2012.

1) Renewal licensing of specialized-news channels and home shopping operators

During February 2012, the renewal of licensing was examined for 3 business operators namely, YTN Co., Ltd. CJ Home Shopping and GS Home Shopping Co., Ltd. whose licenses were scheduled to expire on March

2012.

Of these, the YTN specialized-news channel was charged with recommendations for the renewal of licensing conditions - on the operation of Fair Broadcasting Commission, the implementation of a staff training program plan, and the operation of viewers’ evaluation on the program, and was approved for the renewal of licensing for the broadcasting business over the next 5 years (March 13, 2012 13- March 12, 2017).

The renewal of licensing was also approved for two home shopping channel operators for the next five years (March 13, 2012 13- March 12, 2017), however, the renewal conditions of - the preparation of a win-win cooperation plan with SMEs and a plan to strengthen the viewers’ protection - were imposed.

2) Renewal licensing of CATV operators

In the same period as the review of license renewal for home shopping companies, KCC carried out a review of 35 cable operators whose licenses were scheduled to expire between end March and April 2012, and permitted license renewal for 35 operators for the broadcasting business over the next five years.

In addition, in July 2012, an additional review on the license renewal for 31 comprehensive cable television operators, whose licenses’ periods were expiring between July and December, 2012 was carried out. From

the examination results, 26 out of 31 operators were approved for the license renewal by earning more than the standard score for the license renewal for the next 5 years, however, 5 operators did not meet the standard score that by imposing conditions to the complement of the gaps and to check the fulfillment of the conditions, they were permitted for 3 years' license renewal.

Meanwhile, as the common conditions to all the comprehensive cable television operators under review of license renewals, KCC requested more than 25 ~ 28% of the total revenue of annual broadcasting license fee, depending on the digital conversion rate, to be paid for PP program fees, and digital conversion related plans to be carried out sincerely.

3) Renewal licensing of terrestrial DMB operators

During November 2012, a review of licensing renewal was conducted for the seven terrestrial DMB operators including the Korea Broadcasting System (KBS), whose licenses were scheduled to expire at the end of December. From the results, 6 operators who earned more than the standard score were permitted for the renewal of licensing for the next 3 years, but 1 operator who received below the standard score was put on hold for the permit, and the hearing was to be conducted in accordance with the 「Broadcasting Act」, and the Administrative Procedure Act. At

the same time, some operators were imposed conditions to the implementation of plans to build broadcast auxiliary stations in order to relieve the poor reception problem of terrestrial DMB.

4) License renewal of terrestrial broadcast operators

KCC conducted a review of license renewals for the three stations of the Korea Broadcasting System (KBS), namely, KBS Gyeongin 1 DTV broadcasting station, KBS Korean people broadcasting shortwave station, KBS 3 standard FM station. Examination results showed all three stations earned more than the standard score and re-approved for licensing. KCC allowed the renewal of licensing for the relevant broadcasting companies based on conditions and recommendations, including the 'Implementation Plan of its Own Program Production'. These stations' permits are valid for 1 year from January 1, 2013 until December 31, which was determined by considering the permit validity period and the unity of the entire Korean Broadcasting Corporation Stations.

B. Support to Sound Growth of IPTV Services

IPTV, after achieving 1.7 million subscribers in 2009, 3.09 million in 2010, and 4.57 in 2011, it secured 6.31 million subscribers in 2012, successfully settling in the pay-TV

market. As of August 2012, of 24.13 million pay-TV subscribers, IPTV subscribers accounted for approximately 23.5% and its proportion is steadily increasing. Conditions for its steady growth are provided by the promotion of increased investments by service providers in contents or infrastructure, and support of the development of new services and next generation source technologies.

The biggest achievement of IPTV is the introduction of competition in the pay-TV market and by realizing more than 6 million subscribers within four years from the launch of commercial service, it showed an explosive growth and sparked competition on the existing exclusive pay-TV market, which was mainly focused on cable television services. Relatively, it took 9 years to achieve 3 million subscribers for satellite TV and 6 years for 4 million subscribers for cable TV. After the introduction of IPTV, it contributed to other platforms evolve to the next level of services such as introducing VoD services to the one-way and real-time-oriented cable, etc. Also, by the introduction of IPTV, it laid the foundation for the market structure that can be formed by the economic mechanism from what it used to be the public thinking oriented broadcasting market and thus, it promoted deregulations and facilitated M & A in the cable industry.

Another achievement of the diffusion of IPTV is the expansion of the new type (& new sectors) contents. IP-based IPTV ser-

vices offer a wide range of bi-directional services such as education / information / games / karaoke / polls / multi-angle, etc. and lay the groundwork for new types of contents' creation. Together with this, through the provision of the two-way program, like the professional baseball polarized relay and non-real-time VoD, it has contributed to expand the media options of users and shift the viewing paradigm. By providing the video-on-demand, and etc., the change in viewing patterns was occurred in the form of selecting contents at the time the user wants without any time constraints. In addition, the spread of IPTV services from the public sector including school, defense, health care, traffic IPTV, and etc., to IPTV study room, after-school education, and etc., also contributed to bridging the educational gap. Other than these, as the content distribution path was diversified owing to the diffusion of IPTV, it broadened the revenue structure of content providers such as PP, and by promoting the competition of digital in the pay platform market it induced the digitization of the entire platform market including terrestrial.

In order to further promote the successful diffusion of IPTV in the future, KCC plans to build a system to meet the new media environment to promote the competitiveness of the global new media market. With the advent of Smart TV, IPTV is facing a new competitive environment, however, KCC plans to ensure the competitiveness of IPTV by the

overseas expansion, secure the quality of contents, and create an environment the viewer can use contents in an easy and convenient way.

C. Promotion of Sound Competition in the Telecommunications Service Market

KCC, to support the MVNO system introduced in March 2010 and the early settlement of reseller mobile telecommunications services, established and published the ‘comprehensive plan for the activation of mobile communications resale (MVNO) services’ in March 2012 (See Table III-14).

KCC, in its comprehensive plan, pursued three major implementation strategies ① improve a resale business environment, ② improve a resale service environment, and ③ relieve uncertainties of resale markets and 10 promotional tasks for the activation of resale services.

First, it improved the supply environment of mobile phones by performing the self-sufficient supply of mobile phones for the improvement of a mobile communications’ resale business environment. As such, resellers were allowed to provide the same services as the existing carriers such as international roaming and supplementary services, and made Wi-Fi networks of the mobile commu-

[Table III-14] A Comprehensive Plan for the Activation of Mobile Communications Resale (MVNO) Services

Three major strategies	① Improvement of a re-sale business environment	② Improvement of a re-sale use environment	③ Release uncertainties of the re-sale market
Ten promotion tasks	① Improvement of mobile phone demand environment ② Expansion of the provision of re-sale services such as international roaming, value-added service ③ Provision of wholesale wireless LAN (Wi-Fi) networks ④ Mitigation of cost burden such as spectrum fee	⑤ Expansion of the move of universal subscriber identity module (USIM) ⑥ Improvement of a number portability system ⑦ Improvement on the recognition and credibility for re-sale services	⑧ Recalculation of whole-sale cost and mitigation of the regulations for large purchase discounts ⑨ Review the time extension for the wholesale provision obligation system ⑩ Review the expansion of providing wholesale obligation service

nication carriers available by wholesale.

In addition, to mitigate the cost burden of resellers, the 「Wireless Telegraphy Act」 was amended to postpone the collection of spectrum fee for three years. As a result, cost sav-

ings of about KRW 15 billion is estimated to be realized for the resellers.

Second, it promoted the expansion of universal subscriber identity module (USIM) portability, and the improvement of the num-

ber portability system to promote re-sale services' use environment. By operating a number portability TF from December 2011, after going through in-depth analysis of feedbacks from stakeholders and experts, it prepared the amendment of Notices, which included resellers (Korea Cable Telecom, CJ Hello Vision ONS, Telecom, etc.) of existing mobile communication carriers (SKT, KT and LG U+) to be subject to the number portability obligation.

As a result, the number portability MVNO subscribers was slightly below 1,000 in June, however, the number had been increasing at a rapid rate and recorded 5,200 subscribers in July, 8,500 subscribers in August, and 9,900 subscribers in September. In addition, for the activation of the prepaid market, which is the reseller's flagship market, it plans to promote number portability between prepaid services and postpaid services from April 2013.

Meanwhile, KCC recruited publicly a new name that people can easily understand and is familiar to use, and the 'MVNO Phone (frugal phones)' were decided as the promotion term for the mobile telecommunications' resale service. For the promotion of 'MVNO Phone', KCC deployed the promotion for the general public in association with the Advancement of the Korea Association for ICT Promotion (KAIP), and the Korean MVNO Association, etc. and contributed greatly to the improvement of people's awareness about the resale service. The advertising of MVNO

Phone was performed on 3 channels, including KBS Radio, and about 20,000 promotion posters of the MVNO Phone were distributed in relevant agencies, operators, dealers, universities, 3,815 national municipalities, and etc. Also, for the citizens using the subway, advertising on the free newspapers (Metro) and 400 poster advertising in the subway carriage were carried out.

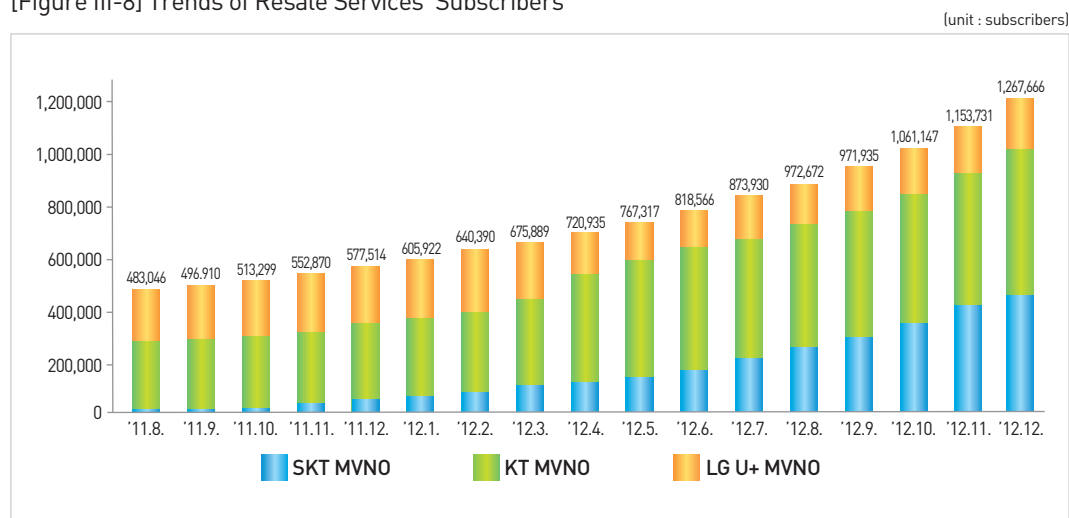
Third, as the basis of wholesale return calculation is disclosed every year in a transparent manner to release uncertainties of the resale market, and by mitigating the standard discount for large quantity purchases, the scale of subscriber base per discount section is adjusted downwards by 50,000 subscribers each (1% additional discount for more than 150,000 subscribers ~ 6% additional discounts for more than 1.15 million subscribers), re-sale business conditions have been greatly improved.

Through the introduction of wholesale offers and support policies of mobile telecommunications resellers, a variety of new operators make entries to the mobile telecommunications market, and introduce more than 20% cheaper rates' products compared to the existing mobile telecommunications' carriers, laying a cornerstone for the rates competition in the mobile communications market. The number of resale service subscribers is steadily increasing at an average of 5 to 6 % from the previous month, and looking at the net subscribers, the fact that MVNO showing a

higher performance than the existing carriers is noteworthy. In particular, as LTE service has been provided through some resellers

since September, the resale service subscribers reached approximately 1.27 million as of end December 2012 (See Figure III-8).

[Figure III-8] Trends of Resale Services' Subscribers



D. Improvement of Systems for Licensing Common Carriers

Those who want to operate the key telecommunications business shall obtain permission in advance according to the 「Telecommunications Business Act」 Article 6 (Permit of the key telecommunications business operator, etc.), and of key telecommunications businesses, the service that requires frequency bands, the allocation of frequency bands should be obtained according to the 「Wireless Telegraphy」, along with a permission screening. The screening for permission for the key telecommunications business is preceded to

the corporation applied for permission regarding the eligibility of the application and the corporate business plan.

In June 2012, KCC revised the screening criteria related to the evaluation for permission of key telecommunications business operators in order to complement some deficiencies appeared in the process of operating the current permit system. Looking at the major amendments first, as the ‘Adequacy of the Plan to Protect Users’ was added to the screening criteria by the amendments to the 「Telecommunications Business Act」, it was established as a separate evaluation item, and the point distribution was raised (5 points

→10 points); and conversely, assessment items that were weak in direct relevancy to the ability to provide the key telecommunications business were lowered in the point distribution (16 points → 11 points). Also, baseline scores (the lowest scores) during the quantitative evaluation of the corporate applied for permission associated with the financial viability, profitability, stability, growth, credit ratings, and etc., were lowered (60 points → 40 points) to mitigate the financial capacity assessment of the corporation applied for permission.

In addition, it improved the evaluation of permission to be fairer and more objective by complementing the application documents that were required to confirm the relationship of the corporation's shareholders through the Investment Letter of Commitment of the corporation applied for permission during the evaluation for permission and the confirmation of investment-related board resolutions, etc.

KCC is expected to continue with the improvement of system that reflects the market reality with respect to the market entry and exit of telecommunications market in future.

E. Improvement on the Facility Supply System

Also in Korea, as the 'Telecommunications' Equipment Conditions and Cost Estimating Standards' that left discretionary negotiation calls to existing operators was all amended in

December 2003, for the key telecommunications business operators who owned essential facilities and the key telecommunications business operators corresponding to a certain criteria of the volume of business and market share, it made mandatory to sign the agreement with the competitors and provide the pipeline, poles and cables between the subscriber section.

Since then, the cost for the provision of facilities had been adjusted for a few times and in 2012, some of the 'Facility Provision Notices' was amended having the improvement of the fiber-optic cable provision standards, pipeline conditions' provision standards, reasons for rejection of facility provision, and the minimum costs of fiber optic use; and newly defined the term of pipeline, and newly establish and shorten the facility provision treatment period as the main contents. The main contents of partial amendments are as follows:

In relation to the improvement of facility provisions, first, the standard for fiber optic cable provision was improved. The target for the fiber-optic cable provision was extended from fiber-optic cables built prior to 2004 to fiber optic cables built prior to 2006 providing that fiber-optic cables built in 2004-2005 are subject to this scheme only if the conduits cannot be provided. And, the fiber-optic cable reserve margin that the provider prepares for the failure demand of its company to be shrunk to 27% from 35% of the operating

line, so to increase the use availability of the requested carriers.

Second, conditions of pipeline provisions were improved. With respect to the pipeline reserve margin that is not required to lend in order for the operator to prepare for its failure demand, 135% of the thickest cable was laid at the entrance section and 137% of inner tubes between the entrance sections were newly built. And to minimize disputes between operators, the calculation standards for determining whether the pipeline is available or not was clearly defined by the formula.

Third, the reason for the rejection of facility provisions was improved. Of reasons for the rejection of facility provisions, regulations are set to disapprove the provider's own standards that the provider himself/herself does not comply with to be provided as reasons for rejection of use operators' requests to facility supply.

Fourth, the minimum cost for the use of fiber-optic cables is rationalized. The regulations set for the minimum cost of the fiber-optic cables' use, regardless of the distance, however, if it was to provide high-speed Internet services to individual customers, the minimum calculated interval for the fiber-optic cables' use (the entrance section: 100m → 50m, between the entrance sections: 200m → 100m). Note that the minimum charge for the use of entrance sections is KRW 15,835 based on 100m and between entrance sections, KRW 16,464 based on 200m.

Fifth, it stated items to reconsider such as range & conditions of fiber optic cable provisions, and the designation criteria of facility obligations' provision until December 31, 2014 in addenda of the Notice.

F. Revision for the Notice of Accounting Separation Standards

In November 2012, KCC revised Notices to 'Accounting Separation Standards of Telecommunications Business' containing details of accounting separation by service of the key telecommunications business operators. The revised Notice this time has mitigating financial reporting obligations of small and medium sized operators and actualizing the relevant provisions in accordance with changes in the telecommunications market as the main contents.

First of all, of the key telecommunications business operators whose sales reports to be submitted to KCC, standard sales for the operators who can make a simplified reporting⁶⁾ are raised to below KRW 30 billion from the existing below KRW 10 billion, so to ease the burden on small and medium sized operators from the financial reporting.

In addition, for the first half of the accounting data⁷⁾ (separate from a sales report) to be submitted after the end of each first half of year, submitting duties are abolished as IR data of each operator can be used as an alter-

native, and of detailed services (total 28) for the key telecommunications business services that are required telecommunications business operators' separate accounting, services that were unnecessary for the accounting separation due to lower utilization of accounting information in accordance with changes in market conditions, were integrated into the similar services (or other services).

On the other hand, as the LTE service users have increased, it separated the accounting for the LTE service such as the existing 2G and 3G services. And, as one frequency band is provided to a plurality of services since the introduction of the LTE service, mobile communication service that used to be classified based on the used frequency was changed to classify according to international standards.

In addition, by considering the users of smart phones' flat fare is increasing, service fee revenues are separated by a flat fare and a pay-per-use fare, and also, by considering increased revenues of wholesale provisions of mobile telecommunications operators due to the activation of the AI-Ddeul-Phone, to fit the current market situation in the relevant regulations, it added wholesale revenues of operators as a separate item. The revised bill is expected to be applied from the sales report written in 2012.

G. Improvement on the Evaluation System of Communications Market's Competition Situation

Under the Article 34 of 「Telecommunications Business Act」, KCC carried out the competitive situation assessment for the telecommunications business every year in order to establish a competitive policy for the efficient competition system of the telecommunications business and the creation of a fair competition environment.

In the assessment of 2012 telecommunications market competitive situation, the key telecommunications service markets were classified and evaluated by landline phone, mobile phone, high-speed Internet and private line.

The result of assessment of competitive market situation showed in the wired telephone market, KT maintained the market dominance with a high rate of market share of the domestic telephone market (city · suburbs · Internet phones, international calls) which was the same as the previous year. As well, in the mobile phone market, SKT maintained the market dominance with the same rate of market share as the previous year.

In particular, as the obligation scheme of wholesale provisions being introduced in November 2010 and resellers (MVNO) service initiated in earnest from July 2011, by operat-

6) Simple reports: submit only 2 items (statement of financial position, income statement) of the full sales report template (30 items)

7) Accounting document of the first half of the year: Total of 5 items including statement of financial position, income statement, sales statistics, operating income statement by rendered service, and statement of selling operating expenses

ing the TF for the MVNO market situation assessment to identify system improvements and the effect of the introduction of polices, a mobile communications' market situation assessment system focusing on resale services was prepared. Through the trading market analysis of the wholesale market between operators (MNO) and resellers (MVNO), the wholesale supply and demand conditions were identified, and on the other hand, in the trading market, the retail market analysis between the resellers and service users, the level of competitiveness of resale services within the entire mobile communications service market was determined.

4. Establishment for Principles of Fair Competition

As the growth rate of broadcasting and telecommunications market is being slowed down and the number of subscribers of mobile telecommunications carriers having arrived at the saturation level, a fierce competition to attract subscribers has been intensified and there is a growing rate of coupled communication services including rates' discounts and service benefits. Thus, a various damage cases related to the registration and the termination of use agreement occur frequently. In addition, the development and penetration of smart devices including smart phones, the type of damage caused by unfair acts has

been complicated and diversified, followed by the explosion of data traffic and increasing communication failures. However, in the domestic broadcasting and telecommunications sectors, there has been a consuming competition, involving further improved qualities or price cuts, payment of subsidies or giveaways rather than efforts to promote the rights for users

Therefore, KCC has established the foundation for the post-regulations of broadcasting and telecommunications such as the introduction of prohibited acts and legislations of the broadcasting market, actively pursuing the policies in relation to the improvement of system for strengthening the consumer protection measures and rights of options for enhanced users, and made aggressive efforts for the broadcasting and telecommunications' dispute resolutions.

A. Laid the Foundation for the Post-regulation of Broadcasting and Telecommunications Services

1) Introduction of prohibited acts on the broadcasting market and legislation

The amendment of 「Broadcasting Acts」 had been published in July 14, 2011 in order to ensure fair competition and to compensate for provisions of appropriate countermeasures for the acts harming the interest of viewers, mainly caused due to the lack in post-market regulatory provisions of the broadcasting

market. Subsequent to this, the sub-decree maintenance work was carried out in the following year in 2012. This included 6 types of prohibited acts; ► access denied to essential facilities without legitimate reasons, change of channel organization, stop and deny provisions of channel programs ► deny, delay, and limit of appropriate revenue allocation ► unfair discrimination of viewers ► violation of use terms ► fees charged different from the agreement ► unjust use of the viewers' personal information, and 24 regulations in detail. Broadcasters such as terrestrial, cable broadcasting stations (SO) and comprehensive programming channels (PP) are subject for such prohibited acts. In addition, along with ongoing business briefings, it appeared to have some movement on the establishment of a cooperative system.

2) Improvement on the system and policies in relation to the broadcasting and telecommunications post-regulatory

As the need for the improvement of fair competition between businesses and the related system being highlighted, coupled with the release of pre-deregulations, intensified competition among operators and the introduction of new services, the trend of damage types by the user is increasingly complex and diversified. Therefore, KCC has made efforts to prepare policies to establish the groundwork for post regulations of broadcasting and telecommunications services so that operators protect

the users by themselves and to prepare for the protection measures in accordance with this.

First, in relation to the investigation on prohibited acts of broadcasting and telecommunications carriers, it defined fairer and more efficient business processing procedures. As the follow-up action of the amendment to the 「Broadcasting Acts」, additional provisions were cited relating to prohibited acts of broadcasters in the business process regulations (Notice) on those of the current broadcasting and telecommunications business, and the amended prohibited acts of the 「Broadcasting Acts」 were reflected in prohibit acts of business processing regulations, including subpoena such as materials, making a corrective action draft, and the way in which appealing to the provisions. Also, by taking advantage of the overall market trend analysis, it tried to suppress violations by establishing the foundation for the systematization of the pre-and post-regulatory and institutional improvement.

Second, for an effective response to unfair competition and acts to harm the interest of viewers in the broadcasting and the broadcast advertising market, the Broadcast Market Investigation Bureau was newly established (June 2012), and in the pay TV market, the guidelines (May 2012) that set forth examples of the type of unfair competition relating to broadcast channels' use operators and related compliance matters was prepared. And also, the guideline (July 2012) that regulates the in-

hibitory actions against viewers' interests that are related to collective agreements of pay-TV operators was also prepared, so that the carriers can comply with the laws voluntarily by being able to predict whether a certain case is subject to violation of the law or not by themselves.

Third, the guidelines were developed (July 2012) to provide a reasonable and objective criteria in relation to channel contracting procedures between pay-TV operators and operators using broadcast channels, and the survey was conducted (September 2012) regarding the violation of prohibited acts on fake and exaggerated business activities relating to the digital transition of general cable stations (SO) operators who jumped on the bandwagon of terrestrial digital transition policies.

As such, thanks to KCC's continued institutional improvement efforts, 「Broadcasting Acts」 were amended, and prohibited acts-related regulations were introduced that had been the backbone of the broadcasting market's post-regulations, however, recognitions of systems introduced and intents of them are needed to be improved among the relevant operators. Accordingly, in order to prevent violations through awareness-raising activities for the operators in advance, KCC made an effort to increase the predictability of regulations by introducing the content of systems and standards in detail. In addition, it pursued the detailed criteria research (December 2012) on the prevention of prohibited acts

in violation of the broadcasting and telecommunications markets in advance, improvement on the effectiveness of regulations and prohibit acts of the materialized broadcasting market and detailed criteria for sanctions, and at the same time, it continually reviewed the ways to improve post-regulations by analyzing the overall market trends such as domestic and international broadcasting and telecommunications market trends, market competition situations and social issues.

B. Strengthen the Measures for User Protection

1) Damage prevention for users and rights promotion

In the 2011 parliamentary audit, matters as to improve compensation schemes for damages' procedures in case of the mobile phone failure and user terms and conditions that were unfavorable to the users to be changed to more of a user-centric were discussed. Thus, KCC prepared policies for the damage reduction of users and for the enhancement of the consumer interests through corrective actions for the inhibition acts on the users' interests and the improvement of business processing procedures as well as improving the compensation system.

First, it analyzed the Terms and Conditions and civil complaints related to the termination of telecommunications service (April-June 2012), and consulted and promoted on

a various termination methods with mobile telecommunications carriers and as a result, the terms of termination procedures of use agreement was revised to be similar to the sign-up process or something of easy methods (September 2012).

Second, the use agreement related documents should be always accessible by the users, and the use agreement has to be kept for up to six months after termination of service agreement. In addition in the event of changes of important service items by operators, this should be notified to the user in advance.

Third, when the user is not able to use the service for a long period of time, it does not apply the service pause duration and to the limited frequency of; and the return period of rental equipment has to be also decided by the agreement between users and operators, and even after a return period was due, charges cannot be imposed. It improved the policy to exempt the fee in case the owner was dead, and also, exempt the fee when the user moves to an area where the service is not available or a service restricted area.

Fourth, to reduce the damage of the 060 telephone information service users, it established and operated a monitoring system (January 2012), and improved key business processes of deliberation (2012 May). Additionally, it improved carriers' business process procedures, and promoted the practice of 'damage prevention instructions' (March 2012) so to take the lead in preventing dam-

ages of an illegal use of other's name in using telecommunications services.

Fifth, based on the compensation status of problems caused and the survey on foreign cases (March 2012), it prepared 'improvement on the Terms and Conditions of mobile phone (draft)' with an aim to expand the level of compensation and the scope associated with the compensation for damages in the event of telecommunications problems (June 2012) and to strengthen operators' network management responsibility.

Finally, regarding the interests of the users in using combination products, if the service is not available for part of combination products for reasons not the responsibility of the user, it is recognized by the termination of the contract without penalties for all products combined. In this case, instead of terminating the entire agreement, users can continue receiving the existing discount for the rest of the service, and one year after the contract, the operators will not be able to impose penalties for prizes.

2) Strengthening the right of choice for users and improvement on the information use

KCC, as well as an improved system for enhancing user protection measures, put an effort to protect users in a variety of ways, and by providing diverse and objective information, induced rational choices of users.

It helped the subscribers know LTE cover-

age in advance by having mobile operators declared LTE coverage so that the subscribers make a reasonable choice whether to join the LTE service or not (March 2012). In addition, by improving the service handling procedures such as the rates' notice of mobile phone's international roaming services that are easy to be compared and strengthened the guidance on operators, it enhanced the level of broad-

casting and telecommunications information to be provided. Lastly, it simplified the bill of telecommunications service (May 2012), and conducted an interim review on the status of whether to implement the improvement measures or not (October 2012) so to resolve complaints regarding the billing charges (See Table III-15).

[Table III-15] System Improvement on the Broadcasting and Telecommunications Service Use Information

- Enforcement of LTE coverage prior notice system (March 2012)
 - Consumer protection by improving the sign-up process including prior notices on LTE shadow area
- Enhance users' convenience of international roaming service (March 2012 to May)
 - International call carrier pre-selection, data to make rates' comparison, International carrier roaming rates by comparison, rates' simulation by country, strengthening the sign-up process of the international roaming service
 - Complaints reduction and ensure the user's right to terminate, enhance the rights to choose, improve the convenience for a person who is visually impaired by improving the billing (May 2012)
 - Improve the bill (May 2012) including expected termination costs (every three months), cancellation information of the initial date in reckoning and the expiration date of contract period, handsets price information such as handsets' factory price, installment of principal, actual price to purchase, bill provides voice guidance for the visually impaired.

A bulletin board (March 2012) providing a smart media literacy education was established for the vulnerable social group, and by the newly establishment of contents providing information, the 'major product comparison by service' (May 2012), a reasonable consumption of users is derived by providing a comprehensive comparison information on mobile communications high-speed Internet - IPTV rates products. Then, a website (www.wiseuser.go.kr) dedicated to users was constructed that provides information related

to the utilization and damage prevention of broadcasting and telecommunications services. Meanwhile, by operating broadcasting and telecommunications honor journalists consisting of different classes, it contributed to the promotion of the user interests by publishing the analysis on domestic · international consumer protection and the improvement and implications in relation to this.

For the safe broadcasting and telecommunications service for the elderly, a professional instructors' group (April 2012) was organized

and the relevant training was carried out (May ~ November 2012), and by disseminating damage prevention-related leaflets, it tried to relieve the smart divide. In addition, for the foreign people residing in Korea, foreigner specialized services and multilingual service guides (May 2012) were disseminated, and prevention of damages and utilization of education and improvement of services' use environment were promoted (April 2012).

3) Resolve complaints of smart phones open market

KCC performed the system improvement plan (June 2012) for the consumer protection such as strengthening the notice system of pay-contents and payment certification procedures to resolve a variety of civil complaints including the payment of mobile contents in the smart phones' open market whereby unfair competition is rapidly increasing in accordance with the advent of the open ecosystem,

4) Improvement on the user protection environment

KCC improved policies on current issues such as rates' notices and quality ratings to improve the consumer protection environment.

First, the current situation is in need of improvement of the bill for operators with the small number of subscribers such as CATV operators or special category telecommunica-

tions operators, however, difficulties arise in coordinating differences between operators according to the characteristics of business. Thus, through active feedback and adjustment, it tried to expand a mutual understanding between operators and enhanced to provide a user-friendly bill.

Second, to reduce the information asymmetry, according to the spread of smart devices, a mid-and long-term damage prevention education and training utilizing smart devices and active measures were set up, and a variety of ways for users to evaluate the level of protection and specific questions to seek for evaluation models were prepared (December 2012).

Third, ARS system (Automatic Response System, automated phone answering system) that had user complaints filed up due to its complex use methods and toll charges, was induced to improved the ARS service experience by checking, evaluating, publishing and notifying individually (February 2012) the implementation status through the 'Guidelines for the ARS service improvement'. In addition to this, excellent operating agencies were awarded by the recognition (April 2012) of the chairman of KCC so to induce and encourage the ARS system improvements.

Fourth, in order to induce the improvement of quality and to provide an improved broadcasting and telecommunications service to the user, the previous year's results for the quality evaluation of broadcasting and telecommuni-

cations service was released (April 2012). All carriers received excellent assessment results; however, for the remote areas which had insufficient evaluation results received recommendations for improvement. Also, high-speed internet access and wireless internet service had been improved over the previous year, however, for some inadequacies, operators' self-improvement was induced. The quality evaluation results of paid users' digital broadcasting (IPTV, DCATV, satellite) service was significantly improved compared to the previous year and showed that it met international standards. Based on the results of the previous year, sectors with a high quality level was switched to operators' self ratings and, focusing on the services that were new and in need of improvement such as the LTE service and by collecting the opinions of experts of related associations, research institutions, consumer groups, and broadcasting and telecommunications operators, established and promoted a quality assessment plan in 2012. In addition, through the 'Wise User (<http://www.wiseuser.go.kr>), users can check the quality standards of broadcasting and telecommunications services in the local areas that they often use.

C. Broadcasting and Telecommunications Dispute Resolution and Strengthening the Remedy for Damage

KCC promoted a variety of tasks as well as the improvements of broadcasting and telecommunications dispute system for a rational and effective dispute resolution.

First, in January 16, 2012, as retransmitting negotiations' agreement between 3 broadcast companies (KBS, MBC, SBS) and CJ Hello Vision, KBS-2TV broadcast was normalized in 84 cable TVs nationwide, and other cable TV operators through the consultation with terrestrial broadcasters were voting to approve the abolition of retransmitting approval system in the region, and resolved retransmitting disputes as quickly as possible, by securing the universal viewing rights of terrestrial broadcast.

Second, KCC expected to improve and prevent future recurrence of disputes by compensating the transmitting dispute resolution procedures by the introduction of 'compulsory arbitration conducted by virtue of one's authority', 'financial' system, and through the resolution of terrestrial retransmission system by newly establishing the 'broadcasting maintenance and resumed command rights' when stopped broadcasting (February 2012). Also, it established the conditions for fair competition between broadcasters to achieve the equitable implementation of the regulatory between pay TV operators (See Table III-16).

[Table III-16] Improvement on a Territorial Broadcasting Retransmission System

Classification	Content
Resent dispute resolution complementary procedures	Abolition of refusal procedures of the current broadcasting dispute 'arbitration' system and when encountered with great disputes, preparation of a rapid dispute resolution method by the introduction of the 'authority of adjustment' basis and the broadcast dispute 'financial' system.
Maintain-newly resumed command of broadcast	Newly establish the broadcast maintenance and resumed command of broadcast in order to minimize the damage of the pay-TV viewers due to the stopping of broadcast caused by the retransmission dispute
System Improvement on Terrestrial broadcast regional retransmission	Abolition of terrestrial broadcast retransmission in the region in order to implement the principle of proportionality of regulations between broadcasters

On the other hand, in order to protect the users of search advertising market effectively, it established the procedures for the settlement of the dispute in accordance with the 2012 standard terms and conditions. The Online Advertising Mediation Committee's aggregate number of dispute cases as of December 2012 showed there were many small advertisers and it was disadvantageous to users when signed the contract, and this has led to disputes between operators.

Accordingly, to prevent disputes and protect victimized cases by unfair contracts, KCC prepared 'the standard contract terms of search advertising agencies' and composed the standard contract terms and conditions with related agencies.

As a result, advertisers and agencies take advantage of the standard contract terms and conditions, and in case of any dispute, resolve disputes quickly by the adjustment decision of the Online Advertising Mediation Committee in accordance with the Standard Terms and Conditions, and improvements were

made to an effective remedy of the rights of the dispute parties.

5. Enhanced Advancement into Overseas Broadcasting and Telecommunications Service Market

A. Support to Overseas Advancement of Broadcasting and Telecommunications Services

1) Provisions of the broadcasting and telecommunications overseas information

KCC has supported to actively respond to the rapidly changing broadcasting and telecommunications' convergence era by providing related systems and market trends quickly and accurately to domestic companies and broadcasting and telecommunications operators who hope to advance to the overseas

markets but have difficulties in doing so due to lack in information. For this, through the broadcasting and telecommunications' overseas information provision system, CONEX (www.conex.or.kr), it provided in-depth information on policies and operators trends regarding 10 items of broadcasting and telecommunications such as smart 4G, Internet-based TV, broadcasting services and contents of a total of 54 countries including 32 promising countries for overseas expansion and 22 information demand countries and efforts have been made to improve the convenience of user centric. In particular, it promoted the wired and wireless environment by the building of Mobile Web (<http://m.conex.or.kr>) in 2012 so that information can be obtained anytime and anywhere from smart phones. In addition, in order to activate CONEX through ongoing promotional activities, efforts have been made to strengthen communication with the users through the search advertising, quiz events, and SNS interlocking

2) Hosting of overseas roadshows

Roadshow is a business to broaden the entry-basis for relevant countries by holding a one-to-one business counseling to local buyers and business briefings in the strategic countries regarding excellent services and technologies of our country and has been carried out in conjunction with companies

that wish to enter the overseas market. By selecting the areas for roadshow and holding a wide variety of broadcasting and telecommunications companies to participate through a demand survey conducted for the national broadcasting and telecommunications companies, it facilitates the overseas expansion of our technologies and services. In 2012, convergence roadshow held a total of six times in the main strategic countries such as the CIS (the Commonwealth of Independent States) region, Latin America, Japan, Southeast Asia, and etc.

3) Support for the broadcasting and telecommunications services' overseas consulting

KCC held the foreign consulting business providing the project feasibility study (F / S Feasibility Study) of the same business for four times for local governments and enterprises who were assertive in our broadcasting and telecommunications technologies and services such as broadcasting and telecommunications, information security and the ICT sector and wanted to implement actual services. Through the economic analysis and testing service, it helped our technologies and services to advance to the overseas market aimed at promising countries. Status of overseas consulting projects conducted in 2012 is as follows:

[Table III-17] Year 2012 Performance of Global Consulting Promotion

Companies	Countries	Projects	Overseas Partners	Project Period
INTERSECUTECH	Rwanda	(F/S) Government Security	The Council for the Development	April 25 to October 24
A&D Eng	Kazakhstan	(F/S) Frequency Management System	Telecommunications technology Support Analysis Center	April 25 to September 25
WINITECH	Belarus	(F/S) Emergency rescue system	Emergency Department	Jul 11 to Dec 31
NANOTRONIX	Iraq	(F/S) Government satellite networks	The Ministry of Communications	July 13 to November 30

4) Support for the Broadcasting and telecommunications tailored business consulting and export consulting

KCC held open recruitments and selected broadcasting and telecommunications' promising SMEs who have the potential for the overseas expansion and supported a one on one customized consulting with savvy consulting firms who have expertise in the countries that they wish to venture. Also, in order to resolve difficulties that occur during the company's overseas expansion propelled, it organized the pool of relevant professionals such as trade information, overseas market research, certificates information, contracts and legal matters so that they can always access to advisory supports both online and offline. In particular, the "Visiting ICT Export Fair" was held in Busan, Incheon, and etc. to resolve the difficulties of community-based small businesses for the overseas expansion, and it is expected to expand gradually the venue for such fair.

5) Broadcasting contents showcases

KCC held the 2012 'showcase for broadcast contents' for four times in Oceania, CIS, Europe, and the Middle East to find a new market for domestic broadcasting contents and to support the overseas market expansion. The characteristics of the business in 2012 were to pioneer a new market for broadcasting contents in countries where Korean broadcasting contents was so called, a wasteland such as Oceania (Australia, New Zealand), CIS (Kazakhstan, Ukraine), Europe (Hungary, UK) and Middle East (Bulgaria, Turkey, Jordan, etc.). This was based on the strategic judgment that now when interests in Korean cultural contents have heightened as the New Korean Wave was sweeping around the world including 'K-POP', is the time to actively respond to the demand and changes of the global market and also, the right time to diversify and expand the contents market. In the 2012 showcase, terrestrial broadcasters such as KBS Media, MBC, SBS content hub,

EBS, etc., and comprehensive channels such as Channel A, CJ E & M, Arirang TV, YTN, modern media, the University of television broadcasting, CU media, as well as, the major PP broadcasters participated. Business providers who participated in the 2012 showcase contributed to expand domestic broadcasting contents into overseas markets and the spread of the Korean Wave through visits and interviews to local broadcasters, broadcast programs screening, business conference and networking events and Korean wave cultural experience events. Also, 'Oceania' showcase was held in 05~11 February in Australia and New Zealand where Korean broadcast contents were nonexistent, and achieved the performance of USD468,100 worth of export counseling.

B. Leading Activities for International ICT Cooperation

1) Systems Strengthened to respond to agenda of international organizations

Through the attendance at meetings of the multilateral international organizations such as OECD, ITU, and the core of the UN agencies such as APT, ESCAP (Economic and Social Commission for Asia and the Pacific), KCC enhanced the Korea's influence and status in the international organizations and it has been actively participated in the broadcasting and telecommunications policies' discussions of international organizations in

order to create a favorable environment for domestic broadcasting and telecommunications technologies and services in overseas markets, and to reflect our technologies to the future technology standardization.

Looking at the main content to promote, first, KCC participated in major policy decisions by attending the meetings of the OECD (ICCP; Committee on Information, Communications and Computer Policy) and the Working Party meetings as well as the Trade Commission (TC) and actively responding to broadcasting and telecommunications issues; and through this, it has been expanding its influences in the international community. In the regular meetings of the ICCP Committee and the Working Parties, it led the discussions on major agenda such as reflecting the success cases of our policies in Internet Economy Outlook, wireless Internet Price comparison, silver economic and ICT, and Botnets and report related to the protection of information.

Meanwhile, Korea became the host country to the next meeting (2014) of the Plenipotentiary Conference which is a 6 time member of the council of ITU and ITU C-level decision-making bodies, thus, the status as a ITU key member and responsibilities associated with this is getting higher. KCC participated in the ITU Board of Directors (3~14 July), and a various Working Groups' Board of Directors (from March to December) and also, participated in ITU's operations and strategic plan-

ning, and major policy decisions. Through this, it has been expanding its influences in the international community, as well.

KCC endeavor its efforts to strengthen the position of our country through the entry of bureau of various international organizations in 2012. As our Dr. Sang-won Go was elected as the Vice-Chairman in the 64th OECD ICCP Committee (Paris, France, October 23 - 24), we performed to advance to the Bureau of Information and Communications Policy Committee for six consecutive years since 2007 and was able to enhance the impact on the international ICT policy formulation process. In addition, in the 33rd Working Party on Information Security and Privacy (WPISP) meeting (October 18 - 19) and the 47th Working Party on Communication Infra and Services Policy (WPCISP) meeting (December 10 ~ 11), the 32nd Working Party on Information Economy (WPIE) conference (December 7 to 8 days), our Professor Tae-myeong Jeong (Sungkyunkwan University), Professor Nae-chan Lee (Hansung University) and Dr. Sang-yeol Nam (Institute of Information and Communication Policy, KISDI) were re-elected as Vice-Chairman, respectively for 2013. Accordingly, we kept the vice chair of ICCP Committee and all four Working Parties under the ICCP Committee, and through the expansion of this Bureau, we can participate more actively to international debates on each working group of the OECD ICCP Committee, and this is expected to be

the springboard that led to the development of a global policy.

2) Hosting and attending of international organization meetings

KCC had attracted a forthcoming 2014 ITU Plenipotentiary Conference (PP-14) in the ITU Plenipotentiary Conference 2010 held in Guadalajara, Mexico. Since the hosting of the ITU Plenipotentiary Conference, KCC has been preparing systematically for a successful Plenipotentiary Conference. In May to August 2011, a host city was confirmed as the city of Busan from the domestic and ITU peer review, and the ITU Plenipotentiary Conference's preparatory task force was launched in December 2011. The '2014 ITU Preparatory Committee of Plenipotentiary Conference and regulations for the Preparatory Planning Group' (President Directive), was enacted and performed in July 2012. Then, a separate manpower for the preparatory planning group of Plenipotentiary Conference was set after having been consulted with the Ministry of Public Administration and Security and the preparatory planning group of ITU Plenipotentiary Conference was officially launched and it has been performed the systematic preparation work since.

The 2014 ITU Plenipotentiary Conference to be held in Korea can be an important opportunity to increase the international status of the ICT diplomacy by showing the Korean ICT developments and future vision to 3,000

8) Botnet is a network consisting of zombie PCs that have been infected by malicious code Bot that spreads spam or malware, etc. so hackers can control freely

attendees including more than 150 delegations consisting of ministers and vice ministers from the world's 193 countries. In addition, during the Plenipotentiary Conference, the ICT summit, Asia's top ICT exhibitions and Korean wave events are going to be held that it is expected to be beneficial for domestic ICT companies and the content industry that have been promoting the overseas market expansion to advance to the overseas market. Under the recognition of the important event of the ITU Plenipotentiary Conference that could have a significant impact on improving our nation's international reputation and the support for the overseas market expansion of domestic companies, KCC is doing its best to ensure for the successful hosting of the event.

In addition to this, KCC participated in the policy discussions of Information and Communication of the Asia-Pacific region attended by the APEC (the Asia-Pacific Economic Cooperation), Information and Communication Working Group (April, July 2012), Korea-ASEAN (Association of South East Asian Nations), the Minister of Communications Conference (11 August 2012), and UN ESCAP general meeting (2012, 5 May). Also, KCC participated in the discussions leading the policy presentations and the contribution presentations attended by the 36th APT Management Committee, November 2012. This round of Management Committee was held in Bangkok, Thailand, and in order to gradually expand the contribution of South Korea

on APT and to contribute to the regional co-development, it proposed a new EBC-K (Extra Budgetary Contribution-Korea). The New EBC-K intending to expand the existing EBC and diversify the business based on the demand of member states, and dispatch experts to share Korea's development experience and know-how, received the support of many Member States. In addition, as the host country of the 2014 ITU Plenipotentiary Conference, it proposed to hold the 1st APT preparatory meeting for the Plenipotentiary Conference and also, the preparatory meeting for the World Telecommunication Development Conference (WTDC), and confirmed them to be held in early April 2013. During the year 2012, by actively participating in the discussions of the revised regulations of working group to ensure the financial transparency of APT, Korea fulfill its responsibilities as a key member state and consolidate its position in the APT. As well, it promised to participate in the 2013 6, 7, 8th regulations revised meetings of the Working Group for members to discuss regulations. In relation to the annual Korean-ASEAN Telecommunications and IT Ministers Meeting (TELMIN), the 8th Korean-ASEAN senior officials meeting and the 7th Korean-ASEAN Telecommunications and IT Ministers Meeting was held in 2012. Through the 7th Korean-ASEAN Telecommunications and IT Ministers Meeting, Korea's major ICT policy status and performance was introduced. In addition, to

contribute to the establishment of the ICT Master Plan for the promotion of the ASEAN Community by 2015, ASEAN ICT cooperation projects are underway. With respect to this, in the 6th Korean-ASEAN Telecommunications and IT Ministers' Meeting in 2011, the major achievements in the first year of the 'Korean - ASEAN ICT Partnership Project adopted as the Korean-ASEAN ICT Cooperation Project, and the future cooperation plans were also announced. The main contents of the 'Korean-ASEAN ICT Partnership Cooperation Project' consists of an infrastructure utilization cooperation, new technologies and services' expansion cooperation, capacity-building cooperation and knowledge-sharing cooperation.

3) Enhancement of international ICT development index

In the ICT Development Index (IDI) published by the International Telecommunication Union (ITU) on October 11, 2012, Korea was ranked as the top country of the 155 countries surveyed. ITU's ICT Development Index is a comparative analysis of ICT development index between ITU Member States aiming to evaluate the development of ICT across countries, digital divide, and growth potential. In the ICT Development Index ratings in 2012, Korea was ranked as the world's No. 1 and Sweden the No 2, followed by Denmark, Iceland, and Finland. In addition, the United Kingdom was ranked as No. 9, the

United States No. 15, and among Asian countries, Japan was ranked as No. 8, Hong Kong No. 11, Singapore No. 12, and Macau No. 14 that including Korea, only 5 countries in Asia were ranked within the top 20. The ICT development index consists of three categories for the ICT accessibility, availability and utilization, and Korea was also the world's No. 1 in the level of use and utilization sector which indicates the level of ICT utilization, also the accessibility (11th) sector was evaluated as excellent. By detailed indicators, it was recorded with top ratings in wired phone lines (3rd), Internet access households' ratio (1st), the number of wireless high-speed Internet subscription (3rd), the number of wired high-speed Internet access subscription (4th), and institutions of higher education's enrollment rates (1st).

4) Increased global cooperation among governments

KCC held the '8th Communications and IT Ministers' Meeting' with the participation of ministers and vice ministers of 17 countries at COEX in Seoul, on May 15, 2012 to strengthened international cooperation in the field of broadcasting and telecommunications, and to seek the way to the future of broadcasting and telecommunications industries as well as to set the stage to support the overseas expansion of the domestic broadcasting and telecommunications companies, together with the personnel taking the world's lead-

ing role. In conjunction with this, the 'Korea Communications Conference' was held on May 15 - 16, and 'World IT Show' from 15 to 18, May The 8th Communications and IT Ministers' Meeting, with the theme of the 'new economy' in the connected community' with regards to the connectivity (communication · connectivity) that is a focused topic due to the expansion of the mobile world today, discussed plans to the creation of a new IT market and future directions taking advantage of this. In addition, they emphasized that they were together in solidifying an international cooperation system, and with the theme of 'Smart Communications : Revolution and Evolution', the 'Korea Communications Conference' was held on 15-16 May and in this event, domestic and international broadcasting and telecommunications' policymakers in seven countries, company representatives and 36 experts had been participated as a speaker, and presented over broadcasting and telecommunications' policies and industry trends and future visions. The general participants reached more than 1,597 people.

And, KCC put a lot of efforts in strengthen cooperation with certain countries through local councils. One of them is the 'KANZ Broadband Summit', which is ministerial talks of South Korea, Australia, and New Zealand. The 'KANZ (Korea Australia Newze-land)' was held as the 2003 Korean-Australia Broadband Summit initially, however, New Zealand participated from the second meeting

that it was developed to three countries' regional forum. In 2012, the '7th KANZ Broadband Summit' was held in conjunction with the Communications and IT Ministers' Meeting at COEX in Seoul from 14 to 16, May, and the meeting took place attended by the Secretary of all the three countries. Through the Expert Forum, policies and mutual technical cooperation in the field of broadcasting and telecommunications of the three countries namely, South Korea, Australia and New Zealand were discussed. Also, in conjunction with the 'World IT Show', it supported the expansion of domestic firms in the region through the opportunity to establish business meetings between the three countries.

Second, in the 7th Korean-ASEAN Communications and IT Ministers' Meeting and the 'Korea, China, Japan Ministers' Meeting' in conjunction with this, Korean Gye-cheol Lee, KCC's Chairman, Gwo-hwa Si, the Undersecretary of China's Industrial City of information Department, Tetsuo Yamakawa, the Undersecretary of Ministry of Internal Affairs and Communications of Japan were participated and discussed in depth regarding the revision of the cooperation agreement and new areas of cooperation, and by reorganizing the existing working groups that are divided into eight division to practice council to overseas and through this, six areas of cooperation were defined. In addition, through the cooperation of the international conferences, forums, and etc. we ordered to respond jointly to the

cooperation for the cloud service and an initial market preemption of global companies, and also, proposed to expand the existing private standardization cooperative activities to the cooperation between the governments.

5) Increased cooperative activities with international organizations

KCC is continued to promote co-operation with the international organization such as the World Bank, the APCICT(Asian and Pacific Centre for Information Communication Technology for Development) and the ITU. As the cooperation activities with APCICT, which is the ICT professional training institute under the United Nations, regional forums, and privacy and information protection workshops were held for the building of Asia Pacific ICT human capacity and contributions were paid for the training to perform the broadcasting and telecommunications' sector in developing countries. In addition, in collaboration with the World Bank, through the broadcasting and telecommunications technology, policy support, and information security advisory in developing countries, the consultation was ongoing from March to December 2012 to lay the foundation for the overseas market expansion of our companies.

KCC also conducted standardization advisory in the ITU standardization cooperation projects as part of the collaboration with the Laos' Ministry of Post and Telecommunications in order to bridge the digital divide in developing

countries, and held a technical consultation workshop. In addition, it continues to cooperate with the ITU by facilitating beneficiary representatives to visit Korea for the purpose of the study to obtain advices from the R & D sites of the Telecommunications Technology Association, domestic companies, and research institutions.

C. Response to Trade Negotiations in Areas of Broadcasting and Telecommunications Services

In accordance with the simultaneous FTA implementation strategies, Korea, led by Korea-Chile FTA in April 2004, negotiated the deal of 9 negotiations, and of them, 8 came into effect, and 7 negotiations are underway. Through the analysis of the broadcasting and telecommunications market and regulatory regimes of FTA negotiating partners, KCC exerted its efforts to expand open markets for the strategic countries to enter by establishing an effective FTA broadcasting and telecommunications sectors' negotiation strategies and participating in the negotiations.

In addition, since the launch of the DDA negotiations - subsequent negotiations of the Uruguay Round negotiations based on a resolution of the WTO Ministerial Conference held in Doha, Qatar, in November 2001, the WTO members discussed further liberalization in the field of agriculture, non-agricultural, and services. KCC induced the

open market of the negotiating partners by superimposing our position through continuous findings of the WTO DDA negotiations' trends and aggressive negotiations to respond to it. KCC identified the negotiating agenda through the broadcasting and telecommunications' market and regulatory system analysis for our major trading partners, and participate in multiple countries and bilateral negotiations in response to market liberalization negotiations of broadcasting and telecommunications sector, and by actively participating in the discussions of trade principles of ICT service, international mobile roaming charges, and telecommunications services and classification system of audio-visual service, it tried to understand the trends of the member states and represented our position accordingly.

D. Expand the Supporting Projects for Developing Countries

KCC invited broadcasting and telecommunications sectors' policy makers in developing countries, and relevant professional personnel to conduct the training business and succeeded in building so called, a friendly network. Through this, it committed to continuous efforts to raise the status of our country as a ICT powerhouse in the international community. Starting from the APT developing countries' government officials invited training projects in 1988, it celebrated 15 years anniversary in 2012. In 2012, it operated 17 courses in the

broadcasting content policy and distribution process, information security technology and policy process, and invited 349 trainees from 93 countries. Also, local workshops were held to strengthen the network of trainees and the local alumni association for the training graduates of Mongolia was formed. In particular, enhanced trainee DB management function through revamping the website of invited training business was to be used laying the foundation for the future expansion to the overseas market and the inter-governmental exchanges. The global personal network of broadcasting and telecommunications established through invited training programs is expected to contribute greatly in the overseas expansion of domestic companies in the long term.

E. Promotion of South-North Cooperation in Broadcasting and Telecommunications Services

The direct businesses between the South and the North Korea have been interruption, however, KCC, with the activities of the broadcasting and telecommunications exchange promotion committees as the center, is in the process of research and discovery of cooperation projects that can be pursued when inter-Korean relations were improved in the future and when this happens, KCC plans to actively promote the exchange and cooperation with the north, based on the business content that has been researched and discovered.

Section 3

Realization of Advanced Digital Broadcasting

1. Preparation of Foundation for Growth of Global Media Businesses

A. Improvement of Regulation Over Ownership and Management of Multiple Broadcasting Service Businesses

In a smart media environment where the emergence of new services is accelerating and the competitive landscape between operators is changing, there is a need to build an environment that the operators are better equipped with competitiveness both internally and externally by establishing a fair competition environment between operators and attracting capital investments in the broadcasting industry.

Accordingly, first, KCC prepared the ‘Plan to Improve Regulation over Ownership and Management of Multiple Broadcasting Service Businesses’ from March 2010 to June 2011, and checked the progress through the Commission’s workshop. In August 2011, it held a public hearing attended by operators and related professionals, and with the regulations that had no disagreement about the mitigation or abolition, it promoted the revision of the ‘Enforcement Decree of the Broadcast-

ing Act’.

B. Improvement of System for Program Organization and Assessment

Due to changes in the broadcasting environment such as the Korea-USA FTA Agreement, the emergence of total TV programming channels, and the termination of terrestrial analog broadcast, the need to improve a broadcast programming system to reflect these changes has increased sharply. As such, to effectively respond to changes in the broadcasting environment and to secure competitiveness between broadcasting providers as well as to expand the broadcasting market, KCC improved the programming and evaluation system

1) Improvement on the broadcasting programming system

First, KCC agreed on some of revisions of the ‘Notice on Programming such as Broadcast Program’ on February 17, 2012 including the certification standards and procedures for the domestic production. Revised Notices are regarded as meaningful as it sets the criteria required for fostering industries in relation to locally produced broadcast programs so to

increase the predictability of the regulatory, and lay the foundation to enhance the capability of the domestic broadcasting industry. Major revisions are the preparation of certification standards and procedures for domestic productions and, improvement on standards for local animation productions' recognition, and establishment of standards for outsourced productions' recognition.

First, KCC has newly established standards for locally produced broadcast programs' recognition. 'Locally produced broadcast programs' are defined as broadcast programs that have the local capital investment ratio more than 30% and the aggregated scores per planning and production elements more than 60% (14 points) of the total score (22 points). Thanks to this, it is expected to enhance the capacity of locally produced broadcast pro-

grams' industries as during the production of broadcast programs, it promotes to attract foreign investments and increase in the utilization of overseas' manpower.

In addition, KCC revised the standards for locally produced animation programs' recognition. This has been revised to reflect the reality of locally produced animation industries that is evolving to creative industries, and locally produced animation programs are defined as 'the domestic capital investment ratio more than 30% and the aggregated scores per planning and production elements more than 16 points (out of 30) of the total scores. However, animations that can be applied whether they are recognized as locally produced animation programs or not are limited to the ones that have copyrights / profit-sharing rights (See Table III -18).

[Table III-18] Scores Based on Production Elements to be Recognized as Domestically Produced Animation Programs

Classification	2D		3D		Stop Motion	
	Current	Revised	Current	Revised	Current	Revised
Copyright/ profit-sharing rights	2	-	2	-	2	-
Pre-production	12	14	10	14	10	14
Production	11	12	13	12	13	12
Post-production	5	4	5	4	6	4

On the other hand, for the activation of locally produced animation industries, KCC revised the 'Enforcement Decree of the Broad-

casting Act」 and the 「Notice on Programming such as Broadcast Programs」, and expanded locally produced animations industries sub-

ject to new programming operators.

The new programming target operators of locally produced animation programs are expanded from the existing terrestrial broadcasters to terrestrial broadcasters and total TV programming channels operators (hereafter, referred to Total TV Programming PP), operators using broadcast channels that organize more than 50% animation programs per year (hereafter, referred to Specialized PP) and thanks to this, the new demand of 29 episodes (based on 30 minutes, 26 parts) per annum is expected to be created. The new program-

ming ratio of locally produced animations is applied differentially on a basis of KRW 50 billion in the case of total TV Programming PP, and KRW 5 billion of the specialized PP that organize more than 50% of animation programs per annum.

And, by reference to the existing cases using weighting, in case locally produced animation programs were organized in prime-time, the notice is revised to grant weightings of 150% so to induce domestic animations to be organized in primetime (See Table III-19).

[Table III-19] Coverage Ratio for the New Programming (Obligations) of Locally Produced Animations

Total TV programming PP	(unit: KRW billion, %)			
	More than 700	700 ~ 600	600 ~ 500	Less than 500
	1	0.7	0.5	0.3

Specialized PP	More than 200	150 ~ 200	100 ~ 150	50 ~ 100	Less than 50
	1	0.8	0.6	0.3	N/A

2) Improvement of a broadcasting evaluation system

Broadcast ratings are a comprehensive evaluation system regarding broadcasters' broadcast content, programming, and operation to improve the quality of broadcast programs and enhance the public accountability of the broadcasting in accordance with the Article 31 and Article 17 of the 「Broadcasting Act」. The broadcast evaluation has been conducted

by KCC annually and the results have been reflected in the re-licensing of broadcasters.

a) Year 2012 broadcast evaluation

KCC performed the 2012 broadcast evaluation. The year 2012 broadcast evaluation was carried out on broadcast contents, programming and operations for 339 channels, a total of 150 operators in 2011 (See Table III-20).

[Table III-20] 2012 Target Operators for the Broadcast Evaluation

	Terrestrial			SO	Satellite		PP		Total
	TV	R	DMB		General	DMB	News	Home Shopping	
No. of operators (No. of channels)	46channels +3channels (DMB exclusive) (TV 64 channels, R 155 channels, DMB 19 channels)			94 channels	1 channel	—	1 channel	5 channels	150 channels (339)

The 2012 broadcast evaluation ratings were based on the ‘Rules on Broadcast Ratings’ and the ‘Detailed Criteria of Rating Scales’ that were revised on December 30, 2010.

Looking at the main contents amended at the time, while the assessment items had been greatly simplified, new items such as ‘Major Management Issues’ Adequacy and Suffi-

ciency of Disclosure such as Management Vision and Organizational Management Skills, etc.’, the ‘Efforts to Establish Fair Trade in Distribution including Broadcast Programs’ and the ‘Adequacy of Personal Information Protection’ were established (See Table III-21).

[Table III-21] Main Contents of Broadcast Evaluation’s 4th Amendment

- Simplify the evaluation item (a total of 31 items→10 items, detailed scale 69 items→35 items)
- [Total] Newly established the ‘Major Management Issues’ Adequacy and Sufficiency of Disclosure such as Management Vision and Organizational Management Skills, etc.’, ‘Efforts to Establish Fair Trade in Distribution including Broadcast Programs’ and ‘Adequacy of Personal Information Protection’ items
- [Terrestrial TV] Newly established ‘Broadcaster’s Own Assessment of Programs’ Quality’, ‘Overall Ratings Reflecting the Viewers’ opinion’ items
- [SO/satellite/news/home shopping PP] newly established item: ‘Programming Ratings for the Handicapped Viewing Support Programs’
- [Home shopping PP] newly established ‘Partner Satisfaction Survey’, ‘Programming of Viewers’ Evaluation Programs’ items

The broadcast evaluation for 2012 was carried out by receiving the submission of relevant documents from broadcasters, and then, preparing the report pertaining evaluation results by the broadcast evaluation support group. Afterwards, broadcast evaluation results were all agreed (November 20, 2012) before publishing on the Commission’s website.

b) Year 2013 Broadcast ratios’ standard criteria

KCC made some amendments to the ‘Rules on Broadcast Ratings’ in December 2011. Looking at amendments at the time, KCC expanded the target for broadcast ratings to the total TV programming PP. As the total TV programming PP started its first broadcast in December 2011, KCC specified broadcast

ratings for the total TV programming PP from 2012 broadcast episodes, and confirmed

the scale of broadcast ratings by the amended rules (See Table III-22).

[Table III-22] Broadcasting Evaluation Scale of Points for Terrestrial, Total TV Programming, and News PP's

Classification	Terrestrial	Total TV Programming	News PP
Contents area	300	210	120
Programming area	300	215	130
Operations area	300	275	250
Total	900	700	500

In addition, KCC newly established the 'Efforts for Switching to Digital' item for the smooth promotion of digital conversion ahead of the termination of terrestrial analog broadcast on 31 December 2012. Ratings for the evaluation item of the 'Efforts for Switching to Digital' was granted 100 points for terrestrial TV (from a total of 900 to 1000 points), 50 points for total TV programming operators and satellite broadcasters (from a total of 500 to 550 points), however, this evaluation item is only applicable temporarily - terrestrial TV until 2013 and total TV programming and satellite broadcasters by 2015.

On the other hand, KCC established standard criteria for the 'Investment in Certified Products' to maximize the relevant local demand through broadcast equipments' reliability and stability in the broadcast equipment market, where the large demand is expected due to the trend for converting to digital around the world. Of the current op-

erating area, assessment items for 'Efforts for Broadcasting Development / Investment in Broadcasting Technologies', and the 'Investment in Certified Products' were established, and 5 points were allocated to terrestrial TV services; and 2/3 of the scores for terrestrial TV services were allocated to other media.

As such, in accordance with the revised rules on broadcast evaluation, KCC published the detailed broadcast evaluation criteria to be applied in the 2013 broadcast ratings on the website in June 2012.

C. Establish a System for the Protection of the Diversity of Public Opinion

1) Composition of the 2nd Media Diversity Committee

As the term of the 1st Media Diversity Committee Members founded in March 2010 according to the amendment of the 「Broad-

casting Act」 in 2009 had ended, the 2nd Media Diversity Members were appointed in May 2012 by KCC. The 2nd Media Diversity Committee consists of four newly appointed experts from various fields including the Chairman and 4 members were reappointed from the 1st Media Diversity Committee Members. The term for the 2nd committee is the duration of 2 years, the same as the 1st Committee's term. The 2nd Media Diversity Committee took over the task of the 1st Committee's and finished work in the development of combined factor index between media, and performed the tasks of reviewing the share of audience research results in 2011, establishing the plan for the 2012's share of audience research, reviewing the deliberation and decision on notice amendments to the criteria regarding the share of audience calculation, and the development of inter-media aggregate influence index.

2) Survey on broadcasters' share of audience

The regulatory of share of audience is a regulation that restricts the broadcaster's share of audience not to exceed 30%, and it is calculated by summing up the share of audience of the broadcaster's and the related parties. In the 「Enforcement Decree of the Broadcasting Act」, it is regulated to estimate the one-year share of audience until 30 June based on the previous year. And the result is utilized in the assessment of the broadcaster's permit,

licensing, change of licensing, re-licensing in accordance with Section 2 (4) of Article 69 of the 「Broadcasting Act」.

KCC released estimation results of the 2011 broadcasters' share of audience after the deliberation of the Media Diversity Committee and the medium exchange rate utilized in this estimation on July 5, 2012. The target for the estimation was a total of 373-channel of 237 broadcasting organizations (corporate standards) who operate TV broadcast channels. Of these, share of audience of Korea Broadcasting System (KBS) was estimated to be 35.951% but it is not subject to the limit of audience share (30%) since it is fully invested by the government; and no other operators exceeded the limit (30%) of audience.

3) Development of the inter-media aggregate influence index

The 「Broadcasting Act」 as amended in July 2009 had the Media Diversity Committee developed the inter-media aggregate influence index until December 31, 2012. The inter-media aggregate influence index is an indicator that shows not only the share of audience but also, to measure the influence of broadcasting service providers in diverse media markets in an integrated manner.

As such, the Media Diversity Committee continued to perform a various research from the 1st phase of Committee in 2010 and through a process of consultation several times, it completed the development of inter-

media aggregate influence index.

The inter-media aggregate influence index can be used in a variety of ways. It may serve as a means for monitoring the concentration of public opinions of the media market as a whole, and may be utilized as a means to expansion and complement the restricting system of share of audience, which is currently being implemented. KCC will prepare a plan on how the specific use of the index should be through multilateral reviews in the future.

D. Deregulation of Terrestrial TV Broadcast Time

The regulatory of terrestrial broadcast airtime is a policy carried out since KBS opened a broadcasting station in 1961 as part of the national energy-saving scheme. In the case of developed countries, however, there are virtually no regulations on terrestrial broadcast airtime, and even in Korea, it has been applied only to terrestrial broadcasters. Lately, while PP has made a rapid growth owing to the recent changes in the media environment, the influence of terrestrial broadcasters have gradually decreased and there were voices that questioned the effectiveness of these regulations.

By considering this situation comprehensively, KCC collected opinions from all walks of life and carried out its own investigative work for the relief of broadcasting time limit, and based on the results, it abolished the

regulatory of terrestrial broadcast airtime in September 2012, which had been maintained for 51 years.

At the same time, in order to avoid the negative effects that degrade the quality of programs as the airtime increases, KCC prepared the following recommendations aiming for viewers' protection, and the diversity of broadcasting programs and securing of the public interest.

Thanks to the deregulation of terrestrial broadcast time, it open the new paths that ensure the autonomy of terrestrial broadcast and guarantee access rights to broadcast of the socially and economically vulnerable groups who had difficulties in having access to pay-TV broadcast. In addition, through the realization of clean broadcast at the night time zone, the social contribution of terrestrial broadcast is expected to be even greater.

E. Public Channel Selection and System Improvement

1) Selection of public interest channels

Due to the fierce competition between the media as a result of changes in the media environment, the industrial aspects of the broadcasting are emerging, however, the socio-cultural aspects of broadcasting's public interest cannot be denied. Thus, as a way to represent the interests of minorities in the broadcasting market, and enhance the diversity of pay-TV channels, a system for the compulsory

programming of public interest channels have been performed continuously since 2005.

KCC determines and announces the public interest sector and selects public channels through a fair screening of operators corresponding to each field of application. The field of public interest started in 10 areas in 2006, which the number had gradually changed every year then, reduced to three areas from 2010, and continued with it until 2012. The field of public interest that has been in operation since 2010 is in three areas: social and welfare, scientific and cultural promotion and the support of education; KCC selected the 3 channels in each sector, a total of nine channels as a public channel each year and make them compulsory to be on air.

The public channel for 2013 selected through KCC screening is Korea Profession broadcast, Parenting broadcast, Legal TV (social welfare sector), Arirang TV, Art TV Arte, Science TV (scientific, and cultural promotion sector), EBS Plus 1, EBS Plus 2, EBS English (education support sector). The compulsory transmission of the selected channel is valid from January 1, 2013 to December 31, 2013.

2) Improvement of a public interest channel system

On the other hand, in order to improve the public channel system itself, the amendments of the 「Enforcement Decree of the Broadcasting Act」, which includes comprehensive

cable television operators (SO) and satellite operators to operate more than one welfare channel for handicapped were announced in July 2012. As the welfare channel for the handicapped is added to the compulsory programming, the public interest in the field of broadcasting was revised in order to rule out the possibility that the redundant operation of the welfare channel for the handicapped from the compulsory programming by the field of existing public interest sector. In addition, KCC revised Notice of the 「Public Interest in the Field of Broadcasting」 by organizing the content of professional programming concisely such as deleting unnecessary examples to improve the clarity of the professional programming by the public interest sector.

3) Establishment of Plans for the General Development of Local Broadcasting

KCC established the local broadcasting development plan to stabilize the management of local broadcasters and to have them participated more actively in the implementation of the locality. Four main policy directions associated with this are as follows:

First, promote the creation of local broadcast content distribution. To this end, based on the Article 22 of the 「Act on Broadcast Advertising Sales Representative, etc.」, and the basic plan of broadcasting and telecommunications, KCC reviewed the production support to the contents of public and public interest of local broadcasters. In addition, for

the activation of local broadcast content distribution, it is preparing a utilization plan of the digital broadcast support content, which is currently being built to facilitate the local broadcast content's archives, production, and distribution, and also, the distribution plan on the local broadcast content through the N-screen service is under consideration.

Second, facilitate a sound financial footing of the local broadcast. In order to ensure the advertising sales and the conservation of radio waves revenue of local broadcasters who stands relatively at weaker position under the condition of ads' competition expected after the 「Act on Broadcast Advertising Sales Representative」 had been passed, KCC is considering the ways in which to ensure the support of combined sales of local broadcasters and central broadcasters, and to establish the condition for the allocation of radio waves as a screening criteria during the screening for the permit of private media representatives. Also, to facilitate local broadcasters' revenue to be reinvested in content creation, it has been advising to avoid the allocation of excessive dividends when re-licensing it by fully considering the dividend payout ratio, dividend rates, production costs, investments, and HD production facility investment.

Third, promote the rationalization for local broadcast regulations. To this end, KCC is reviewing the related content to improve the self-programming regulatory and to deregulate the outsourced production.

Fourth, build the policy infrastructure for the local broadcasting, KCC organized the Local Broadcast Development Committee and the team-based work organization in the terrestrial broadcast policy division and has been discussing on the development of the local broadcasting. In addition, it continues to monitor the overall broadcasting policy and the situation of the management of the local broadcasting

4) Legislative support for broadcasting and telecommunications rates' deductions from income

The household signed up for pay-TV in Korea reached approximately 24 million households by the end of March 2012, and as pay-TV has already become necessities, broadcasting and telecommunications related household spending has been rising along with it. From this viewpoint, KCC promoted tax support measures in the field of broadcasting and supported the legislators to put forth this at the parliament.

Specifically, to collect the opinions of the stakeholders to raise tax support measures for three months from January 2012, and from May, for the revision of the “Act on Restriction of Special Taxation”, it suggested the relevant content to the Ministry of Strategy and Finance, and promoted Practical discussions. In September, by gathering all the relevant contents, it supported initiatives for the amendment of the ‘Act on Restriction of

Special Taxation' of Senator, Dae-chul Park.

The core of the relevant legislation is to include the broadcasting and telecommunications service fee in the target deductions from income within the limit of KRW 1.2 million per annum during the year-end tax adjustment. To be consistent with the goals that we provide benefits of the income deduction for services essential to people's lives, of value-added services such as games and video-on-demand-related expenses were excluded. The implementation of the revised law is expected to contribute to the revitalization of the broadcasting industry and help people on a certain part of their lives.

5) Improvement of a terrestrial retransmission system

The days when the cable TV was the only pay-TV service, retransmission of terrestrial broadcast was not a big problem. However, as the multimedia was in progress, while the value of the content was rising, the revenue structure of the terrestrial had worsened and thus, terrestrial broadcasters start to put an effort to monetize its channel retransmission, and as a result, since 2009, disputes often occur over a terrestrial broadcast retransmission between pay-TV operators and terrestrial broadcasters

- a) Complementary measures for dispute resolution procedures

KCC has spread actively trying to arbitra-

tion whenever there is a retransmission dispute, and to effectively mediate disputes between broadcasters in the future, it made the resolution on the ways to improve the retransmission system having the complementing of dispute resolution procedures as the gist. Its main contents are the following four items.

First of all, by deleting the provisions that prevent the adjustment procedure to be initiated if a refractory opponent refuses to attend for arbitration, it became harder for the parties of disputes to refuse the adjustment.

Second, if a serious infringement of the viewers such as the retransmission dispute is expected, an authority control system to intervene to resolve the dispute without the need for arbitration of the parties to the dispute was introduced by KCC.

Third, to strengthen the dispute resolution function, financial institutions were established to contend only with lawsuit to KCC's decision.

Finally, to recover the viewers' infringement caused by the retransmission dispute rapidly, provisions were established to commend to resume broadcasting or to maintain broadcasting for a certain period of time.

Plans improving these policies strengthened the authority of KCC as a mediator so to prevent the infringement of viewers that may occur in the course of a dispute between operators and is expected to be able to derive the active agreement between the parties to a dispute.

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- b) Improvement of a terrestrial broadcast retransmission in the region

KCC also improved the retransmission system within the area of satellite broadcasting through measures to improve a retransmission system. Under the current law, for the case of comprehensive cable television operators, they are required to receive an approval only for the off-shore retransmission of terrestrial broadcast; on the other hand, for the case of satellite broadcasters, they are required to receive approvals for both regional and off-shore retransmission.

Thus, to lay the foundation of fair competition between pay-TV operators through the implementation of regulatory equity, satellite operators, just like comprehensive cable broadcasting operators are subject to the approval of KCC in the case of cross-border retransmission of terrestrial broadcast only. As the approval scheme for the regional retransmission, which has been applied only to the satellite having been abolished, satellite providers can now supply contents based on equivalent conditions as the comprehensive cable broadcasting providers.

6) DCS Services administrative penalties for violations

The DCS (Dish Convergence Solution) is a technology that transmits the satellite signal by converting to IPTV broadcast signals. KT Skylife Co., Ltd., after recruiting satellite TV subscribers since May 2012 had been pro-

vided satellite broadcasting signals received from the KT telephone company through the Internet network by utilizing DCS technology.

Meantime, the Korean Cable TV Association had raised the problem of illegal acts of such DCS services that KCC performed a legal review of the relevant provisions of the 「Broadcasting Act」 and the 「Radio Waves Act」. As a result, KCC found that Satellite services through DCS were beyond the scope of the permitted range of the satellite business and the station operating range, and thus, made corrective recommendations to KT Skylife Co. Ltd. to stop the recruitment of new subscribers of the satellite business through DCS methods.

7) Operation of the broadcasting system research group

The background of illegal decision for DCS services was due to the fact that satellite services through DCS had virtually no difference to IPTV and these services may have the current regulatory framework that permits broadcast services rendered by the way of transfer be a nominal. However, preventing the use of new technologies such as DCS may not be helpful to the development of the broadcasting market in the long term. From this viewpoint, KCC organized and operated the broadcasting system research group to explore the ways to apply new technologies on the broadcasting market considering the

Korean market condition.

The research group is composed of 9 experts in broadcasting, telecommunications, legal, managerial, technical fields and experts in the relevant industries such as cable, satellite and IPTV. The research group, through ongoing meetings and public debates, has been establishing a system of policy measures for the convergence of broadcasting & telecommunications and media broadcasts, and measures to improve the existing 「Broadcasting Act」, as well. In particular, it identifies the tasks to implement taking overseas cases, viewers' benefit, fair competition, broadcasting development aspects into account, and reviews the improvement method of legal system. The study group is scheduled to be operational by 2013 and plans to research on policy measures step-by-step by dividing them to short-term and long-term tasks.

8) Assessment of broadcasting market's competition situations

As the broadcasting market competition has been intensified due to the expansion of broadcasting market and activation of convergence services, the need to monitor the situation of competition in the broadcasting market has increased in order to ensure the rationality of competition and regulatory policies in the broadcasting market. For this, KCC has been performed the assessment of broadcasting market's competition situation based on the previous years' since 2010.

In accordance with the 「Broadcasting Act」, as amended in January 2012, KCC organized the 'Assessment of Competitive Market Situation's Committee', which after performing the assessment of competitive situation of the broadcast market each year, report the results to the National Assembly. As such, KCC appointed nine experts in the field of economic, legal, accounting and conversion technology as the Assessment of Competitive Market Situation's Committee members.

The assessment of broadcasting market's competitive situation committee conducts the evaluation, and direct investigation and research are performed by specialized research institutes selected through the public procurement service's open competitive bidding. For the '2011 broadcasting market competition situation assessment' conducted in 2012, the Korea Information Society Development Institute (KISDI) was selected as the research institutes.

9) Approval of OBS offshore retransmission

OBS's offshore retransmission had already been approved in 2011 for the comprehensive cable broadcasting in the city of Seoul. In order to improve the regulatory equity related to this and to create a smooth distribution environment for the competitive local broadcast contents, KCC approved OBS's off-shore retransmission of satellite operators and IPTV operators.

KCC deliberated and decided on the retransmission management plan of the satellite broadcasting and visualized the approval of the OBS off-shore retransmission of the satellite broadcasting. And, based on this, the OBS retransmission in Seoul applied by KT Skylife Co., Ltd. was being evaluated for the approval. The expert jury consisting of six in the field of broadcasting, laws, management, technology, and viewers concluded that there was no problem in the OBS off-shore retransmission of the satellite broadcasting in terms of evaluation items such as the balanced development between the broadcast media, protection of viewers' rights, broadcastings' public interest and technical stability under the 「Enforcement Decree of the Broadcasting Act」.

Followed this, in September 2012, the OBS retransmission in Seoul was approved for providers of IPTV broadcasting (KT, SKB, LGU+). The expert panel of judges examined from various angles and approved the OBS offshore retransmission in Seoul via IPTV considering the fact that retransmission had already been permitted in other media such as SO · Satellite, to improve the viewers' choice, and to enhance the understanding of local cultures.

By the approval of OBS off-shore retransmission, KCC is expected to have a positive impact in terms of the balanced development between media, improvement of viewer's options, and promotion of competition for quality contents.

2. Enhancement of Global Competitiveness of Broadcasting and Telecommunications Contents

A. Support to Foundation for Production of Broadcasting Contents

Majority of Korea's broadcast channels operators and independent producers are experiencing a lot of difficulties in the production of high-quality contents as it has vulnerability in terms of the size of capital and workforce. In order to resolve this, problem it is necessary to generate infrastructure for producing quality contents and to enhance competitiveness of contents by expanding investments on small and medium producers, deploying a comprehensive support system for content planning, production and distribution as well as fostering professional resources. To lay the foundation for this, KCC promoted the founding of the Support Center for Digital Broadcasting Content and implemented policies for support to contents production to strengthen the competitiveness of broadcast contents and to secure the diversity.

First, KCC has promoted the founding of the Support Center for Digital Broadcasting Content, which can provide one-stop comprehensive support to the overall value chain including planning, production, transmission and distribution broadcasting contents. The

Support Center for Digital Broadcasting Content is a comprehensive support facility for the planning, transmission and distribution of broadcasting contents that meets a smart media environment for targeting the small and medium broadcasting companies, and has plans to become the industrial hub of next generation of broadcasting contents. Having the completion by July 2013 with the goal, KCC has promoted the construction of the Support Center for Digital Broadcasting Content as planned, and the center is expected to be used by small and medium PP so to deploy a stable infrastructure for production of contents in future.

Second, KCC supported the production of public or public service contents, two-way contents and 3D contents to strengthen the competitiveness of broadcasting contents and to secure diversity. For this, about KRW 20.5 billion budgets were provided over two occasions in March and September, 2012.

In 2012, KCC, in order to induce production of experimental dramas and to the development of new writers, actors and directors, supported a total of 16 productions of one-act dramas and 3 productions of TV movies for the creation of new revenue models in one act.

For the production support of two-way contents which are broadcasting and telecommunications' convergence contents, KCC supported T-commerce project to discover two-way business models of PP or manu-

facturers for the activation of the two-way broadcasting. Also, in order to explore the two-way broadcast programs' exports based on an excellent domestic IT infrastructure, it newly promoted the pilot project of the two-way broadcast programs' format.

In addition, to develop overseas new markets and to promote competition between operators, KCC improved in such a way to support the 3D production from the existing support of production after examining the project proposal to support the trailer production then, evaluate the performance of it after going through the support of overseas famous contents market.

In the 'KOREA 3D Showcase' that introduced a total of 44 domestic excellent 3D contents, along with 17 production support works of 3D content to MIPTV 2012, which is the world's largest broadcasting program market held in Cannes, France in early April 2012, 13 companies including CJ Power Cast, 3D Plans, and Krispy participated and raised over USD 1.1 million in sales and participation in investment.

KCC increased diversity and strengthened public functions of broadcasting by supporting the production of public and public interest contents that are apt to be excluded from program organization due to competition for share of audience, KCC also contributed to strengthened production capabilities of local municipal broadcasting companies or program providers with inferior conditions

by providing them with opportunities for producing quality programs. Furthermore, to compensate for the problems of high quality public service contents being dying out, because they are only broadcasted on channels getting supports for high-quality public interest contents and not transmitted to the other broadcast channels, thus, by ensuring the broadcasting rights for 39 small and medium-sized broadcasters regarding 103 public and public interest programs being produced in 2010 and 2011, it enhanced the views' accessibility for the excellent public interest content.

B. Development of Expert Personnel of Broadcasting and Telecommunications Industries

In January 2012, KCC prepared plans to implement strengthened programs for training experts of broadcasting and telecommunications services in order to enhance the expertise of broadcasting field workers. To actively respond to changes in the broadcasting and telecommunications services environment, the training program include those on common educating for such new technologies as smart media and 3 D broadcasting in accordance with the latest broadcasting trends, education customized to job groups of broadcasting services including producers, writers, reporters and engineers, and specialized education for such next-generation mobile

or future services as M2M communications, smart TV, future mobile communications and 4G broadcasting.

KCC conducted common education courses essential to the production of broadcasting contents to enhance the professionalism of the production broadcasters under the broadcasting and telecommunications ever-changing convergence environment, and to foster a balanced broadcasting and telecommunications specialized manpower through the expansion of educational opportunities for local broadcasters and small and medium sized venture companies. The courses were designed to develop high-quality content creation capabilities that can advance in the global marketplace through advanced education curriculum of 3D content production, 4K-camera shooting practice, N-screen content planning, and global content marketing. Also, it expanded its beneficiaries who were eligible for training an average of 1,642 people in 2011~2011, compared to an average of 907 people in 2009~2010.

The training program by job category was performed on 2,309 people as of December 2012. This intends to develop the creative broadcast video content and to foster the international broadcast professionals by providing curricular of courses required for field work. This includes PD retraining, broadcast journalist retraining, broadcast writer retraining, terrestrial digital broadcasting technology human resources training, cable digital broad-

casting technician retraining, the announcer retraining, independent PD retraining, broadcast performer retraining, and voice actor retraining

The future professional education services sector aims to build the new growth engines of the human infrastructure. By conducting the training for ten future services, programming for the next generation of mobile service and platform strategy to the incumbent and prospective employment of small and medium venture companies in the field of broadcasting and telecommunications through convergence technologies next-generation mobile professional manpower training projects. In the case of professional training for convergence technologies, the MCS (Mobile Service Convergence) sector, Cloud wireless infrastructure, future Internet field, driver training in embedded Linux were included in the curriculum, and 644 people completed the training course as of end-December 2012, while in the case of professional training of the next generation of mobile, HTML5, android network programming, and mobile UX design planning were included in the curriculum and 535 people completed the training courses.

C. Enhancement of Market Vigor of Broadcasting and Telecommunications Contents

In 2012, KCC pursued a various policies for the creation of a healthy domestic contents ecosystem. It established an intergovernmental cooperation system in overseas for the export of broadcasting and telecommunications contents, and extended the support for the exports and overseas market expansion through overseas road show, showcase, and foreign consulting promotion in the field of strategic items with high possibility of overseas expansion and services.

For the creation of a healthy contents' ecosystem, it held the support for broadcasting rights' signing ceremony for the small and medium broadcasting companies in August 2012. Support for broadcasting rights aims to derive a win-win cooperation ecosystem of broadcasting contents and to improve the welfare of viewers by providing excellent public contents produced by the production support project to the small and medium broadcasting companies who have difficulties in the supply and demand of contents for free, and provided a total of 103 programs to the 39 small and medium broadcasting companies in 2012.

In addition to this, in October 2012, it promoted the 'Beautiful Down' campaigns, which is to eradicate the illegal distribution of the content. As of 2011, the reality is that about KRW 2,500 billion of damage was

caused due to piracy of movies, music, etc., and 3 out of 10 people downloaded about 1 billion of illegal contents through the web hard, torrent, etc. The 'Beautiful Down' campaign with the title of 'the right download, you are beautiful!' is co-developed by KCC and platform operators, content producers, and broadcasting & patent related associations through the Good Downloader in the broadcasting sector.

KCC promoted a various policies for the market vitality through the expansion of global competitiveness of broadcasting and telecommunications contents. The promotion of broadcasting and telecommunications' showcase and support of overseas road shows and overseas consulting projects are the main content.

In February 2012, the annual operating plan for showcases was established, and the showcase of broadcast contents was held for Oceania, Central Asia and European region during the first half of the year. In addition, by holding the showcase of broadcasting contents in six countries in three regions, mainly focusing on the areas with a relatively weak phenomenon of the Korean wave, KCC pushed forward an opening of Export Fair and the promotion of Korean broadcast content through visits to the local broadcasters. Furthermore, by promoting overseas road shows in collaboration with private, official, and academic sectors, KCC explored the opportunity to spread of performance such as

IPTV-related domestic companies' overseas expansion and the execution of local pilots and commercial services of our broadcasting and telecommunications services. KCC established the annual overseas road shows operating plan in February 2012, and organized and operated the overseas roadshows-related ICT overseas market expansion council from March. Accordingly, roadshows were held in Kazakhstan and Russia in May, and Argentina in September. In conjunction with the international consulting, KCC has promoted the selection of the primary consulting assignments of the construction of Rwanda information protection system and the Laos's radio monitoring system in April, and the second consulting assignments of the Belarus emergency rescue system and the Government of Iraq's satellite communication network in June.

In future, KCC will continue to promote policies for the creation of a healthy content ecosystem to improve the market vitality of broadcasting and telecommunications contents and also, to prepare support measures for the expansion of exports and overseas markets by promoting the global expansion of the Korean Wave and strengthening the global competitiveness of broadcasting and telecommunications contents.

D. Activation of Outsourced Production

According to a continuous promotion of policies for compulsory organization of programs of outsource production introduced in the domestic broadcasting market since 1991, and the latest advent of total TV programming, outsourced market is furthermore expanding and the subject of production of broadcast programs has been diversified.

However, it was pointed out that there were limits in terms of qualitative growths as it had not fostered competent outsource production of non-drama genre and unfair trade disputes between the broadcasters and outsource production companies were filed. Thus, KCC pushed policies for the establishment of a

fair trade environment between outsourced manufacturers and broadcasters and as a result of it, try to establish a framework that can be aligned with the growth of the balance of power between the broadcasters and outsourced manufacturers.

1) Laid the foundation for the enhancement of competencies of outsourced production companies

KCC, as revised the organization of programs Notice in February 2012, laid the groundwork for fostering outsourced manufactures who are equipped with the entire production including directing, and shooting by adopting recognized standards for outsourced production (See Table III -23).

[Table III-23] Major Items of Standard for the Outsourced Production Recognition

- If the outsource manufacture is responsible for at least three of the following, it is recognized as the outsourced program
 - ① Conclusion of a contract with writers
 - ② Conclusion of a contract with the main performers
 - ③ Conclusion of a contract with the main staff
 - ④ Raise more than 30% of production costs
 - ⑤ Execution and management of production costs

In addition, when broadcasters and outsource manufacturers share the recording original and organized outsourced production programs in the field of liberal arts in the main viewer hours, a certain percentage (110%) is to be added when calculating the volume of organization of programs, and

though this, establish the financial basis of the manufacturer by utilizing the shooting the original and induced activation of the outsource program production in the field of liberal arts.

2) Deployment of a fair competition environment of outsourced production

KCC has contributed greatly to set a win-win base through the allocation of indirect advertising revenues between the three terrestrial broadcasters and the Korean Drama Publishers. The three terrestrial broadcasters and the Korean Drama Publisher Association have signed a Memorandum of Understanding (February 2012) for distributing the indirect advertising revenues produced by outsources

production equally in order to activate the outsourced production programs and to maximize the revenue base of outsource manufacturers. Through this, until the 「Broadcasting Act」 that allows the sales of indirect advertising is amended, indirect ad sales of outsource production programs after deducting the cost is equally distributed between broadcasters and outsource manufacturers (See Table III -24).

[Table III-24] Main Content of the MOU between the 3 Broadcasting Corporations and Korea Drama Production Association

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- The three terrestrial broadcasters and the Korean Drama Publisher Association have signed a Memorandum of Understanding regarding the revenues distribution of outsourced production of drama to promote a win-win base of both parties through the expansion of the revenue base of outsource manufacturers.
 - Revenues distribution of indirect ad sales of outsourced programs is allocated equally to the 5:5 ratio (after deducting the cost) between the three terrestrial broadcasters and outsourced manufacturers, A separate agreement between the parties is allowed.
 - Revenues distribution of indirect ad sales of outsourced programs is applicable until it is amended by the Broadcasting Act, which allows indirect advertising sales of outsource production programs.
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3. Driving Media Industries by Growing Advertisement Market

A. Introduction of Competition of Broadcasting Advertisement Sales Market and Laid the Foundation to Support the Small and Medium Broadcasting Companies

1) Improvement on the Broadcast advertising sales system

KCC attempted to improve a broadcast

advertising sales system to introduce competition in the terrestrial broadcast advertising sales market. Since 2009, it listened to the feedback of stakeholders and experts regarding the improvement plans through a number of meetings held and local broadcasting tours, etc. Based on this, by preparing the improvement plan of a broadcast advertising sales system in December 2009 and KCC's opinion regarding the enactments and amendments to the Act of 6 members of a legislative body's motion and submitted it to the National Assembly. And, as laws promulgated in Febru-

ary 22, 2012, enactment of a law that took about 3 years was finalized.

The enacted 「Act on Broadcast Advertising's Sales Representative」 has the basic framework as it is to be sold only through the broadcast advertising sales agents (media representatives), like the current terrestrial broadcast advertising, however, what broadcast advertising sales agents was limited to the Korea Broadcasting Advertising Corporation is now allowed to the private media representatives who obtain the permission of KCC in order to introduce competition. Only, KBS, MBC, and EBS were to sell broadcast advertising through a government-owned corporation (the Korea Broadcasting Advertising Corporation).

As the parliament's legislative work was finished, the enactment of subordinate legislation such as Decree, and Notice was performed without a hitch by KCC. Decree was enacted in May 22, 2012, and the sub-enactment was completed in turn including private media representatives' permission Notice (July 26), fines detailed criteria Notice (August 17), broadcasting and advertising's combined sales support Notice (September 11), organize accounting standards Notice (September 21) and organization and operation of the broadcasting and advertising's balanced development committee Notice (December 28).

2) Launch of the Korea Broadcast Advertising Corporation

One of the follow-up measures in accordance with the 「Act on broadcast advertising sales representative」, KCC officially launched the Korea Broadcast Advertising Corporation in May 23, 2012

The Korea Broadcasting Advertising Corporation is the government investment Co. Ltd. with the capital size of KRW 300 billion. In accordance with the 「Act on the Broadcast advertising's sales representative」 (Annex No. 9.), it succeeds the property, bonds, obligations, rights and obligations belonging to the existing Korea Broadcasting Advertising Corporation. Its business excludes SBS ad sales business sectors from the old corporation's business. Instead, it has expanded to areas of new media agencies such as cable and IPTV, and the advertising industry promotion functions have been added.

The Korea Broadcast Advertising Corporation is responsible for broadcast advertising's sales agency works of SBS, local broadcasters and all terrestrial broadcasters except for OBS, and it is expected to play an important role for the promotion of the advertising industry including the establishment of future advertising standardization and the construction of advertising industry statistics system, etc.

3) Select the new licensed corporation for the Broadcast advertising sales agency business

After the private media representatives' permission notice was completed (2012 July 26), KCC promoted to the approval procedures of new private media representatives including a new permit application, composition of the panel of judges, etc. As the Media Create Co. Ltd. who had been the advertising agency for the sale of SBS's advertising sales applied for a new permit procedure of a private media rep, KCC, by organizing the panel of judges composed of civil experts, examined the licensing requirements under the media representatives Act including the public interest and fairness of advertising sales plan, the adequacy of the support measures of the small and medium broadcasting, and the adequacy of the management plan. Based on the results of the licensing examination, KCC's final decision was to permit the Media Create Co. Ltd as the agency of private broadcasting advertising sales (July 2012, August 22, 2012).

While granting a new permit to the Media Create Co. Ltd., KCC also imposed permit conditions to ensure the business performance capabilities as the agency of broadcast advertising sales, and the publicity and diversity. The main contents of the conditions of the permit are as follows: ► the non-binding sales' support for the small and medium broadcasting companies ► the compliance

of the advertising agreement signed between SBS and local commercial television ► the support plan for the development of broadcasting and advertising, and ► the improvement plan to prevent undue interference such as broadcasters' media representatives management.

4) Support for the small and medium broadcasting including Legislation of combined sales support, etc.

When the competition in the broadcast advertising sales market begins in earnest, whilst the support to the combined sales of the small and medium broadcasting that has been a normal practice is discontinued or reduced, it appears to be concerns that the sudden reduction in advertising revenue to local terrestrial broadcasters and medium-sized terrestrial broadcasters has been pointed out. In order to resolve these concerns, it was necessary to seek legal support measures for the small and medium broadcasting company.

As a result, in conjunction with the enactment (draft) of the 「Act on the broadcast advertising sales representative」, KCC released a comprehensive support direction of the small and medium broadcasting in February 3, 2012 including the support for the local broadcast's advertising income distribution through permit requirements and conditions of the media representatives, and the support for the small and medium broadcasting's own ad sales (non-combined sales) (See Table III -25).

[Table III-25] Main Content for the Direction of Supporting the Small and Medium Broadcasting

- ① Advertising income of the local broadcast network is supported based on the permit requirements and conditions.
 - When screening for the authorization of Media representatives, examine the support plan based on the agreement between central-local broadcasters and ensure this through the imposition of the conditions of the permit.
- ② Enactment of the combined sales' support notice of the small and medium broadcasting
 - Notice the combined sale's percentage over the past five years of the small and medium broadcasting the small and medium broadcasting and imposed the scale of combined sales to the public and private rap by the small and medium broadcasting
- ③ Support for the local network broadcaster's own ad sales
 - When authorizing media representatives, examine the support measures of the Local broadcaster's own advertising sales and, imposed the permit conditions necessary for the support of local community's self-advertisement sales such as founding and operation of the media rap local office
- ④ Other policies support
 - Promoting the policy improvement of local broadcasters to help to alleviate the burden of self-organized
 - ※ Pending legislation in the bill, A legislative proposal for the transition of the number of relay of programming restrictions to self-made regulatory restrictions is pending legislation in the bill.
 - Allow production sponsorship to broadcasters for the small and medium broadcasting to attract sponsorship for the self-produced programs (August, 2011)
 - If necessary, review the reduction of the Development Fund for broadcasting and telecommunications given the status of the management of the small and medium broadcasting

KCC set the direction to keep the existing support structure of combined sales to minimize the changes in the market and determine the target for the combined sales support by the public media rap and private media rap, and notified the enactment of administrative notice. However, as comments raised

regarding structural changes from the small and medium broadcasting and the National Assembly, in the course of the administrative notice, KCC made some changes on the support structure of combined sales (as follows), and notice was enacted in September 2012 (See Table III -26).

[Table III-26] Sales support Target for the Combined Sales by Media Rap.

Public Rap.	Local MBC, EBS, Gyeongin broadcasting, Gyeonggi broadcasting, CBS, the Buddhist Broadcasting, Peace Broadcast, Far East Broadcasting, the original sound broadcasting, YTN Radio, English broadcasting (3)
Private Rap,	Local commercial TV, OBS

For the minimum support size in the combined sales of each of the small and medium broadcasting companies in accordance with the laws and regulations, it was calculated as a percentage of combined sales of the small

and medium broadcasting, compared to a total of five years immediately preceding financial year of sales of terrestrial broadcast advertising media representatives. However, new small broadcasters who opened the sta-

tion less than five years (OBS, YTN Radio English broadcast), given that advertising revenue has continuously rising, the support scale is calculated in such a way that the weight of certain percentage (17.3%) is added to the ratio of combined sales revenue based on 2011 to calculate the support size.

In addition to this, in order to improve the effectiveness of policies supporting the small and medium broadcasting to ensure the public-

ness and diversity of broadcasting, KCC plans to check the combined sales support for the implementation of media representatives every year. In case the combined sales support is not executed appropriately, KCC may impose corrective actions, less than KRW 10 million fines, and less than KRW 500 million, and can take sanctions of canceling the license of media representatives or suspending the business (See Table III -27).

[Table III-27] Sanctions on Combined Sales Support Duties Violation

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- ① Less than three years in prison or KRW 50 million or less fine (the Law Article 40, paragraph 4).
 - ② KRW 500 million or less fines (the Law Article 38, Paragraph 2)
 - ③ Corrective order (the Law, Article 37)
- ※ In case of the violation of Corrective orders, cancellation of the permit, suspension of the business, KRW 500 million or less fines, less than KRW 10 million fines can be charged separately
-

B. Generation of Infrastructure for Promoting Internet Advertisement Market

1) Development support of new types of Internet or mobile advertisement

To support policies to nurture active excavation of the next-generation mobile Internet advertising business model, KCC built the 'Internet and Mobile Advertising Test Panel' in April 2012, and selected a total of eight companies including the Semantic Wrap Holdings, Mezzo-media, and etc. to provide opportunities of field tests such as pilot services for the new type of advertising model and measuring the effect of them.

The 'Republic of Korea Mobile Advertis-

ing Awards' was held by KCC in September 2012 for the discovery of creative mobile advertising platform model, and 'Challenge! Making Coca-Cola Advertising' (Revolution Communications, Korea Coca-Cola) was awarded with the top prize (KCC's Chairman's Award), a gold medal in marketing and design sector, and a silver medal in Cross-Media / Devices Division. Also, Future Stream Networks' Hong jun, the director of headquarters and the 'Korea Onlinead Association' were awarded a special prize. In this award ceremony, a total of 12 submissions from 4 categories in mobile advertising technology, design, marketing and cross-media had been awarded.

To support the industry through the Internet

advertising market, mobile workforce supply and demand, the online advertising professional development and training courses were opened in October 2012, and conducted common basic courses (3) paying attention to practical applications that are differentiated from other institutions training courses for students and the general public seeking employment for the internet mobile advertising agencies, rap companies, platform companies, and developers, and intensive courses (3) of production and planning.

Mobile advertising industry statistics and the user behavior survey to improve the reliability of the mobile advertising market and to induce the activation of ads were conducted. By analyzing the advertising industry and execution by type surveyed on advertising revenues and executory costs against more than 500 companies including advertising agencies, advertisers and media reps, it suggested the substantial advertising market indicators, and contribute to the advertisers efficient ads' spending and the growth of sales of related companies.

2) Advancement of distribution structure or use environment for Internet or mobile advertisement

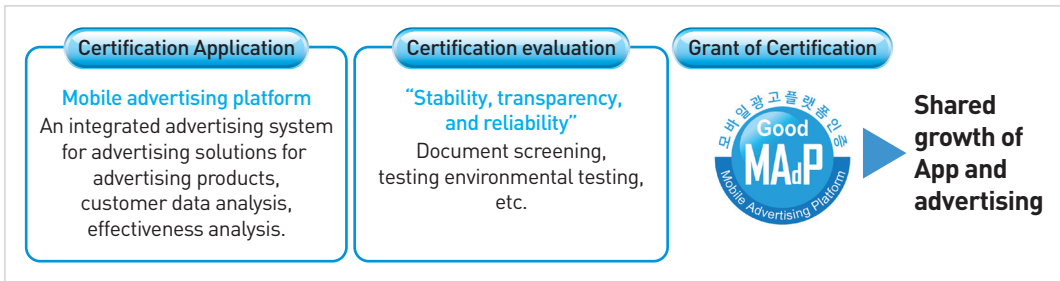
KCC held the 'Online Advertising Policy Forum' and the 'Smart Adware & Networking App Day' to provide opportunities for a win-win cooperation and communication of companies, and carried out the research on

standardization to establish the standards for mobile advertising terminologies, formulation type, size, and indicators of advertising effectiveness.

In addition, the 'Mobile advertising platform (MAdP) Certification', which was introduced as a pilot project in October 2011 was carried out in earnest in April 2012. Followed by the first authentication of the Meso-media's 'Man' of and the DNA Soft's 'Real Click', the Ad Mobi's 'Admobi' was certified in February 2012. In 2012, a total of 13 companies applied for certification, and among them, the three companies were certified in November and the three companies are under examination. In this project, as the type of mobile advertising platform is diversified, it complement the certification standards from the existing 'In-app Advertising'-driven to be applied to the 'Compensated Advertising', as well. Companies to receive certification is subject to certification charges based on actual operating expenses, however, in the case of start-ups and venture companies, authentication can be proceed taking the fee exemption benefit.

KCC, in collaboration with the Korea Onlinead Association, produced and published the Online Advertising Act and Policies Guidebook to provide guidance on legal framework for practitioners in December 2012. This guidebook is designed to organize the domestic laws related to online advertising, and is expected to provide information,

[Figure III-9] The Authentication Process of Mobile Advertising Platform and its Expected Outcomes



including: ▶ commonly applied laws on Internet advertising ▶ laws on Internet advertising by item ▶ Internet advertising review regulations ▶ Internet advertising standards' bylaws. In addition, by building 'applications to provide information on online advertising' in December 2012, it made possible to access to the information about online advertising and related matters.

4. Promotion of Switching to Digital Broadcasting

As the terrestrial analog TV broadcasting was terminated in December 31, 2012 based on the enactment of the 'Special law regarding the digital conversion of terrestrial TV broadcast and activation of the digital TV

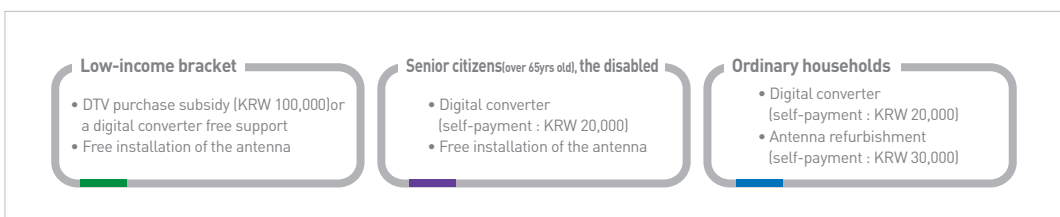
broadcasting' in March 2012, KCC conducted a various policies to prepared for the full-fledged digital terrestrial TV broadcast.

A. Support Viewers Switching to Digital

1) Support of direct reception households

In order to guarantee a minimum of viewers' rights of households that received only the analogue terrestrial TV broadcasts via an antenna, KCC implemented policies such as support the auxiliary DTV purchase and digital converter. KCC, after initiating the support for low-income families in the metropolitan in July 2011, extended to the whole country in November and extended the support targets to general households in January 2012.

[Figure III-10] Information for Households Receiving Direct Support



KCC supported low-income families to purchases (KRW100,000) DTV to help them watch broadcast programs with vivid HD quality and selected and distributed low-income families only DTV; and for socially

vulnerable groups such as the elderly and the handicapped, it pursued a policy to support and install converters and antennas free of charge (See Table III -28).

[Table III-28] Performance Status of the Direct Reception Household Support

(unit : household)

Classification	Low-income group	General households	The elderly and the hand capped	Total
DTV purchase subsidy	71,233	-	-	71,233
Digital Converter or Antenna repairing& improving	50,768	154,362	176,390	381,520
Total	122,001	154,362	176,390	452,753

In addition, KCC established a coordinated system with community centers (3,477 centers nationwide) and post offices (2,661 offices) to receive applications of government support smoothly, and it built and operated nationwide digital TV broadcast conversion support centers (17 centers) to promote activities of government support. It also operated separately a nationwide call center (Tel : 124, 350 operators) for guidance and counseling of digital conversion.

As a result, as of December 28, 2012, it completed the government support to 452,000 households having received analog TV broadcasts directly so that more than 99.7% of the total household can now watch digital TV broadcasts.

2) Support for social welfare facilities

KCC, for senior centers, community centers, and social welfare facilities that can be alienated from the project to support the terrestrial broadcasters' direct reception, donated and installed 6,289 digital TVs and 11,910 digital TV digital converters free of charge in collaboration with operators, consumer electronics manufacturers, and home shopping as to avoid inconvenience in viewing the high-definition digital TV broadcast (See Table III -29).

[Table III-29] Support for Social Welfare Facilities

(unit : pieces)

Classification	Principal of Support	Facilities	Support results
DTV	KT	Children's Center, Multicultural Center	1,974
	Home Shopping Companies	Senior centers, community centers, etc.	3,515
	Hi-Mart	Nationwide elderly people living alone	150
	LG Electronics	Underprivileged (Singapyeong Flower Village)	150
	Samsung Electronics	Nationwide elderly people living alone	500
	Sub Total		6,289
Digital Con- verter	KCC	Senior centers, community centers, etc.	11,910pieces (7,798centers)
Total			18,199

B. Digital Conversion PR Business

1) Target-specific Customized Promotion

KCC promoted a personalized promotion by class (normal, low-income, elderly, and disabled) and by region (urban, rural), together with subtitles in order to induce the government support for the digital transition. It also held a briefing on government support by visiting the elderly people living alone (5,395 people), and the Disabled Association (239 Associations, 3,742 people), etc. for the promotion of vulnerable groups such as the elderly and the handicapped, and allowed Dolbomi (the assistant) of elderly people living alone to apply for the government support on behalf. Especially, KCC did its best to ensure the social vulnerable groups not to be excluded from the government-funded

project by producing and distributing Braille instructions (13,000 instructions) inherent to the visually impaired, people and sending an e-mail to 12,904 visually impaired people among many other pursuits.

KCC held a briefing in town and township of agricultural and fishing village to encourage them to apply for government support, and distributed promotional materials of government posters in post offices (2,661), community centers (3,477), town halls (31,000), and agricultural cooperatives, fisheries cooperatives, forestry association (6560) branches, and also, attached government support posters on each unit of apartment complexes (2,669) that are the target for the building of digital master antenna television nationwide.

2) Closed captioning and virtual finish

KCC performed closed captioning to guide the viewers through the end date of analog TV broadcasts and the application of government support for the households receiving analog TV broadcasts from January 2012 by the end of broadcasts by region. The closed captioning promotion team (broadcasting companies and municipalities, etc.) reinforced the screen size, the number of daily conduct, and time step-by-step, in consideration of the performance of government support and complaints, and from April, in the area of more than 98% penetration of digital TV broadcast receiving devices, virtual shutdown was performed. Also, one month before the end of regional analog TV broadcasts, it induced an early apply for the households that were

not ready for the digital switch, and for the rapid support, it performed closed captioning (50% of the screen size) on a regular basis from 3~4 weeks before the end of analog TV broadcasts, and from 1 to 2 weeks before the end, the virtual shutdown was conducted often that it contributed greatly to end analog TV broadcasts without a hitch.

KCC promoted the publicity in preparation for the switch to digital through TV and newspaper ads. By utilizing the national dailies and TV media that have a high awareness of people, it carried out publicity utilizing the mass media for four times for voluntary switching to digital and also, leading to the application of government support (See Table III -30).

[Table III-30] Promotion through Mass Media

Classification	Media	Duration	Subject
1st phase TV · Newspaper public service advertising	TV	2.23 ~ 3.3	4 Central and 48 regional broadcasters
	Newspaper	2.29 ~ 3.9	11 media including comprehensive daily newspapers
2nd phase TV · Newspaper public service advertising	TV	6.4 ~ 6.30	4 Central and 48 regional broadcasters
	Newspaper	6.1 ~ 6.30	13 media including comprehensive daily newspapers and free newspapers
3rd phase TV · Newspaper public service advertising	TV	9.2 ~ 9.30	4 Central and 37 regional broadcasters
	Newspaper	9.10 ~ 10.9	14 media including comprehensive daily newspapers
4th phase TV · Newspaper public service advertising	TV	11.23 ~ 12.30	4 Central and Gyeongin broadcast
	Newspaper	12.7 ~ 12.20	21 including comprehensive daily newspapers

4) Operation of the digital broadcasting Call center

For the information of switching to digital such as how to switch to digital, government support information and how to apply, how to install digital converter, phone application, and receipt, KCC built a call center of nationwide unit in January 2010. After then, considering the government support situation and incoming call status, it expanded the workforce step-by-step to ensure a rapid consultation (150 people in January, 200 in April, 250 in July, 300 in October), and as of December 2012, the workforce of 350 people attend the calls from 09:00 to 22:00 per day, 365 days throughout the year.

C. Improvement on the Digital Broadcasting Transmitting and Receiving Environmental

1) Improvement on the transmitting and receiving environmental improvement

As the terrestrial analog TV broadcast ended in December 31, 2012 and it switched to digital TV broadcasting, it may cause poor reception of households who cannot watch digital TV broadcasts. For resolving

this problem, the efforts for the building of a transmission and reception environment by KCC are as follows:

First, it is the expansion and building of digital TV broadcast auxiliary stations. KCC specified terrestrial broadcasters, as the terrestrial broadcasters' reauthorization conditions, to transition their existing analog TV broadcast's auxiliary stations (1,125 stations) to digital in one-to-one manner until June 2012, and as of December 2012, it established additional 111 digital TV broadcast auxiliary stations and ensured the digital TV broadcast coverage at the level of existing analog.

Second, it is the building and expansion of low power repeaters. KCC abolished the permit system for low power repeaters in December 2010 to help broadcasters relieve the poor reception problems effectively. KCC carried out pilot projects for the installation of low power repeaters in 2010-2011, and signed a co-building and operation agreement of low power repeaters with KBS, MBC, SBS, and local broadcasters in June 2011, and by installing 144 units, it facilitated a total of 99,785 households to receive and watch digital TV by 2012 (See Table III -31).

[Table III-31] Yearly Status of Building Low Power Repeaters

Classification	Year 2010	Year 2011	Year 2012	Total
Center	14	30	100	144
Household	28,021	19,403	52,361	99,785

Third, it is the response of the poor reception using a satellite receiver. In December 9, 2011, in accordance with the agreement for the promotion of joint project of a satellite receiver rental support in collaboration with KBS Digital Watch 100% Foundation, and Skylife, by renting out a satellite receiver for free for the households with poor reception of new digital TV, it helped cope with digital poor reception. As a result, as of December 28, 2012, it relieved the poor reception by supporting 7,005 units of satellite receiver.

2) Project to support master antenna televisions

As part of digital transition support program

for a low-income group, KCC promoted the master antenna television's facility improvement projects for the public rental housing, together with the SH.LH construction and the Regional Urban Development Corporation. By the end of June 2012, the master antenna television's facility promotion projects for 299 complexes were completed, so a total of 804 complexes, 550,510 households were able to watch digital TV broadcasts, and also, through the master antenna television's facility improvement project for the private apartment house, a total of 3,835 complexes, 2,210,812 households were able to watch digital TV broadcasts by the end of 2012 (See Table III -32).

[Table III-32] Improvement Status of the Public Rental Housing and Private Apartment House's Master Antenna Television

Classification		~ 2010 results	Year 2011 results	Year 2012 results	Total
Public rental housing (Low-income rental)	Complex	250	255	299	804
	Household	219,961	134,980	195,569	550,510
Private apartment house	Complex	944	463	2,428	3,835
	Household	703,897	299,289	1,207,626	2,210,812
Total	Complex	1194	718	2,727	4,639
	Household	923,858	434,269	1,403,195	2,761,322

D. Promoting Pay-TV Switching to Digital

In order to enable the switch to digital pay TV such as cable TV, satellite, and IPTV, the

'Switch to Digital Pay-TV Policy Direction' was confirmed and released by KCC in October 2012.

The digital conversion of pay-TV has been proceed by the pay-TV operators on its own

since 2005, however, as of June 2012, the rate of digital conversion of Pay-TV was at 54.8% level, and there still remained 11 million analog / SD subscribers. In particular, because of the burden of purchasing cost of a digital TV and high digital pay-TV charges in comparison to the analog, it is not easy for a low income group to switch to digital.

KCC's switch to digital pay-TV policy directions are in three-folds: ① system improvements to enable competition between Pay-TV operators ② supports for digital conversion of a low-income group and ③ protection of viewing rights of analog TV households.

First, KCC is planning to make the digital conversion of pay-TV broadcasts autonomously in the market by activating the competition between pay-TV operators.

Second, in the case of low-income group, select the 'low-income families only' digital TV and make a digital TV available at about 50% cheaper compared to the market price, and also, it plans to allow the digital transition costs of low-income families to be minimized by developing and disseminating affordable digital rates' products targeting the vulnerable group such as low-income families and the elderly. Furthermore, it also plans to review the ways to expand the low-income fee reduction ratio (30%) that is enforced by pay-TV operators.

Third, to guarantee the viewer's rights of broadcasting for analog TV households, and

to alleviate the burden of replacing the TV, it plans to institutionalize the retransmission by converting the terrestrial digital broadcast to analog / SD for 3~5 years after the terrestrial analog broadcast had ended, and when pay-TV operators terminate analog / SD broadcasts, it is expected to obtain the approval of KCC by establishing the termination plan including measures to protect the subscribers in advance.

E. Development of Broadcast Equipment Industries

The domestic broadcasting equipment market has grown to the size of about KRW 160 billion as the digital conversion of broadcasting, and the convergence of broadcasting and telecommunications have started in earnest, however, it still has a high dependency on foreign products. Thus, KCC promoted tasks for the development of the domestic broadcasting equipment industry.

1) Broadcast equipment certification target selection, Expanding standard development and certification services

KCC has been operating the Broadcast Equipment Testing and Certification Center in the Telecommunications Technology Association (TTA) since November 2010 to support the development and activation of domestic broadcast equipments. Through the Broadcast Equipment Testing and Certification Center,

KCC selects additional broadcast equipments for certification every year, develop the test specification by selected broadcasting equipment, build the testing certification facilities by the broadcast equipment subject for certification, and based on the development of standards, it has been providing testing and certification services.

In 2012, KCC selected additionally a total of seven broadcasting equipments subject to certification. Broadcast equipments subject to the test certification service are 22 products and thus, it built a total of 90 test equipments and provided a professional testing and certification services environment by 2012. As of December, 2012, a total of 166 test certification services were carried out and the certificate have been awarded to 21 products.

2) Enabling the domestic equipment distribution and support for overseas expansion

In order to activate the domestic broadcast equipment's distribution, by strengthening the connection between customers and providers, and in cooperation with SI companies through online (<http://mall.kbta.kr>), it improved the selection rate of certified equipments when ordering broadcasting equipments. In addition, in cooperation with the Ministry of Knowledge Economy as a way to linkage with other departments, efforts have been made to build an efficient broadcasting equipment of public institutions by preparing

guidelines for deployment and operation of broadcasting equipments for public institutions and also, guidelines for the deployment of broadcasting system by the purpose and the size. Furthermore, KCC promoted the packaged exports for the entire radio broadcasting equipment that has the overall high demand in developing countries such as the spectrum management system. For this, while expanding the 'T-DMB (Terrestrial Digital Multimedia Broadcast) pilot projects in developing countries', it promoted Korea's digital conversion and management activities of propagation and carried out the basic work such as status of radio broadcasts in developing countries and analysis of their will to adopt the service.

In addition, for domestic equipment makers who have difficulties in marketing due to lack in public exhibition opportunities, KCC held the 'New broadcasting equipment exhibition' that provides the stage of the consumer-producer communication on a regular basis. As a representative of such exhibitions, it supported the domestic and the world's largest exhibition in the field of broadcasting equipment exhibition including the 'International Broadcast Audio & Light Equipment Show (KOBAS)', the 'National Association of Broadcasters (NAB)', and 'International Broadcasting Convention(IBC)'.

5. Enhanced Dignity of Broadcast Programs

The number of channels that can be watched by viewers has increased thanks to the launch of new channels and the digital transition; however, according to the fierce competition for share of audience, it might degrade the dignity of the broadcasting overall. Thus, KCC promoted to enhance the dignity of the broadcast program by considering the impact of broadcast programs to viewers' emotional development and using the correct language, and social requests to eradicate a vulgar broadcasting.

A. Strengthen the Self-regulation of Broadcasters

The first policy direction for improving the dignity of broadcast programs is the strengthening of self-regulation of broadcasters. To this end, self-regulations were to be made active such as broadcasters strengthen its own deliberations, and an efficient operation of the self-review board and KCC's regular broadcasters' hearing officer meetings. Also, to support the enhancement of cable TV deliberations, in cooperation with the Korea Communication Standards Commission, the PP self deliberation guide (April, 1,200 copies) and the deliberation casebook (May, 570 copies) were published and distributed.

B. Reinforcement of Legal Regulations such as Post-deliberation, Sanctions, etc.

KCC intended to improve the dignity of broadcast programs through strengthening the legal regulations. First, to prevent recurrence of vulgar programs such as coarse language, sexuality and violence, in cooperation with the Korea Communication Standards Commission, regular monitoring and review activities were enhanced. Also, it continues to make efforts to enhance the dignity of broadcast programs by carrying out deliberation by applying broadcasting language guidelines prepared by the Korea Communication Standards Commission and, further intensified deliberation for vulgar dramas such as short dramas (1 to 3 parts only) and coarse language, sexuality, violence, and etc. As a result, as of December end, 2012, 28 cases of broadcast language related such as course languages, 26 vulgar dramas in relation to sexuality and violence were against court sanctions (See Table III -33).

[Table III-33] Status of Broadcast Languages and Vulgar Dramas' Court Sanctions

Classification		Year 2010	Year 2011	Year 2012
A total of court sanctions		218	404	372
Coarse Language (Broadcast languages)	Sub-total	30(13.8%)	59(14.6%)	28(7.5%)
	Fine · apology · suspension	7	20	4
	Warning	23	39	24
Vulgar (sexuality, Violence)	Sub-total	13(6.0%)	20(4.9%)	26(6.9%)
	Fine · apology · suspension	1	2	1
	Warning	12	18	25

C. Establishment of a Sound Language Use Environment

KCC deployed efforts to create a sound language use environment. First of all, by deploying the purify languages campaign such as the production and broadcasting of the closed captioning of purifying broadcasting languages (May 2~13, 2012 (12 days), October 5~11 (7 days), Title: 'the Youth using the sound and beautiful language brightens the Republic of Korea), the special program (October 2 ~ 29, '10 of right language patterns (Mal-gil)', TV public service announcement (September 10 ~ November 7, 2012, 'Come on, Speak!'), it created a social atmosphere in relation to purifying the youth's languages and the right of use of our language.

Second, for the creation of a right language use broadcast environment, the 'Right

broadcasting Language Award' was newly established as a Special Award from 2011 in the 'KCC's Annual Broadcasting Awards'. The first time award winner of the 'Right broadcasting Language Award' was the SBS announcer team, and in 2012, the Korean Language Society of KBS announcer team received the awards.

Third, to create a right broadcast language use environment and to induce the production of high-quality broadcast programs, from March 2012, through the support of education programs for broadcast professionals including writers, broadcast journalists, voice actors, announcers, and broadcasting PDs, a total of 1,444 people including 240 PDs, 441 broadcast writers and journalists, and 185 voice actors and announcers were trained based on the end of December 2012.

Section 4

Enhancement of Broadcasting and Telecommunications Users' Welfare and Information Protection

1. Enhancement of Telecommunications Use Benefits and Right of Choice

A. Expand the Right of Choice for the Telecommunications Services' Users

According to the Census Bureau, the consumer price index (CPI) in the field of com-

munication has decreased $\Delta 6.7\%$ between 2007 and 2012, and especially, mobile call rates have continuously decreased from 103.3 in 2007 due to the registration fee & monthly fee cuts, enforcement as per second billing since 2008 to reduce the burden on the common people's living and thus, as of the end of 2012, it has decreased to 92.3, which is a $\Delta 11.0\%$ decrease (See Table III-34).

[Table III-34] Trend of the Telecommunications Consumer Price Index

Classification	Price Index (2010 = 100)						Year 2007 ~ 2012 Rate of change
	2007	2008	2009	2010	2011	2012	
Full price indices	90.3	94.5	97.1	100.0	104.0	106.3	16.0%
Telecommunications ^{Note1)}	102.6	101.1	101.0	100.0	98.4	95.9	$\Delta 6.7\%$
Mobile call rates	103.3	101.5	101.4	100.0	97.0	92.3	$\Delta 11.0\%$
Smart phone call rates	-	-	-	100.0	99.5	98.2	-

Note 1) Telecommunications (postal service, telephone and fax machine, telephone and fax service)
※ Source: The National statistical office, Consumer Price Index (2010=100, based on all the cities)

However, as the use of smart phones is expanding and the integrated flat rate subscription for the use of data in addition to voice calls has become popularized, the actual telecommunications rates' spending effect slowed down. Accordingly, KCC made an effort to mitigate the rates' burden and to expand the user's right of choice.

First, in consultation with the carrier, in the LTE (just like 3G), for a special group such as the elderly and youth, it induced mobile carriers to release the rates system that has a low monthly charge for the elderly, and the upper limit of use imposed for youth. For each carrier, a flat rate payment system of KRW15,000 has been introduced, which

lowered the rates' limit for smart phone users over the age of 65 and also, youth was able to use the special rates' system which the minimum rate was set at around \$ 20,000. Furthermore, mobile carriers lowered the minimum volume to use of voice calls of the optional rates system, which can be adjusted the volume of voice and data to suit the user's usage patterns, from 150 minutes to 100 minutes, and also plans to launch an optional rates' system for LTE.

The tariff phone (MVNO Phone) that lowered the calling rates instead of receiving subsidies on mobile phone handsets has contributed in expanding the user's right of choice and lowering the burden on telecommunications charges. Also, improvement measures for a prepaid calling rates system, which had been low in use was prepared, and the revision of Notice that avails the number portability for users of prepaid services was also completed. Furthermore, it improved the system to make subscription possible using online without visiting the dealership. As such, by the launch of prepaid data rates system, the convenience of smart phone users has been improved.

B. Building a 'Smart Choice', the Information Portal of Telecommunication Charges

Telecommunications charges in the past was simple, mainly focused on the standard rates system; however, as the fee structure is getting complicated in recent years and a wide variety of rates' products being released, it is becoming more important to receive accurate and sufficient information in order to reduce telecommunications charges. Telecommunications charges-related information is provided on mobile carriers' websites and also, by different institutions using a variety of paths, however the information is often fragmented and lack in convenience that the utilization rate is relatively low. Thus, KCC, by designating the Korea Telecommunications Operators Association (KTOA) as a dedicated institution in February 2012, and in participation with the three mobile carriers, built the telecommunications rates information portal 'Smart Choice' (www.smartchoice.or.kr) that provides general information relating to telecommunications charges systematically, and opened for operation in December 2012 (See Table III -35).

[Table III-35] Overview of Smart Choice (smartchoice.or.kr) Services

Smart Guide	Telecommunication charges' referral service, Telecommunication information assistant (Al-Li-Mi), Information service on terms and conditions
Smart Life	Non-refunded amount, Mobile gift card inquiry, Inquiry on illegal use of other people's name and lost mobile phones, etc.
Smart Report	Telecommunications user blog, housewives monitor group, experts column, etc

The 'Smart Guide' is an optimal telecommunications rates guide for saving telecommunications charges, and is composed of Recommendation of Rates, Alert Service, and Guidance Services on Terms. The rates referral service is the service, when the user enters his/her pattern to use, to recommend the optimal rates products. That is, when you enter the age, the type of service (feature phones, smart phones, 3G LTE), the contract period, the amount of use (voice, data, text), it shows the recommendation of the most suitable rates system, among the three telecom carriers' and four thrift phones' (MVNO) products.

The 'Smart Life', as an integrated and simple inquiry service relating to telecommunications services, integrates the following four inquiry system services: ► inquiry on non-refunded amount of broadcasting and telecommunications charges ► inquiry on mobile gift vouchers ► inquiry on identity theft ► inquiry on lost mobile phone handsets, and supports the user's convenient use of services.

The 'Smart' report' provides telecommunications charges-related information, by being aligned with the user's level, in a variety of formats such as expert column, and power bloggers post, etc. It also plans to provide relevant news and information relating to telecommunications charges by facilitating the 'Housewives monitor team (Ring the Bell)' who experiences telecommunications services and suggests improvement points, and the

'Power Telecommunications' that introduces rates system and supplementary services to users in a user-friendly manner.

KCC, through the establishment of a 'Smart Choice', puts on efforts to contribute to the practical reduction of telecommunications charges by providing accurate and timely information regarding the telecommunication charges.

C. Improvement of the National General Directory Number

KCC improved a general directory number system to promote a fair competition and to improve user convenience in September 2012. What is general directory number is a virtual phone number that the key telecommunications operator connects the caller's (user's) phone call to the actual recipient, and currently KT (1588, 1577, 1899), LG U+(1544, 1644, 1661), SKB (1566, 1600, 1670), ONS Telecom (1688, 1666), SK Telink, (1599), KCT (1877), CJ Hello vision (1855), and Ton Telecom (1800) are using general directory numbers. First of all, when the landline telephone user places a call to all directory numbers, and if the call is subject to long-distance telephone toll charges, the guidance comment, 'Long Distance Charges will be Applied on This Call' was inserted before connecting to the call for free. Also, for users misunderstand the general directory number as a free-for-service, in fact, it is a pay-for-

service was made to be promoted through the operators' websites, and telephone bills.

Further, the Terms and Conditions had improved in the direction that the existing system, when using the general directory number used for ARS, that is the user bears phone call charges in full is changed to the user bears the city portion only and the remaining excess to be borne by the subscriber, and was enforced from November.

Also, it improved the credit card payment processing services fees by deriving the seven wired telecommunications carriers to apply a fee of less than KRW 24 per credit card payment as to the existing KRW 39 per 3 minutes. Wired telecommunications carriers, after consultation with KCC, agreed to apply a fee of less than KRW 24 per credit card payment by being given with a new general directory number 1639, dedicated to the credit card processing service, and by taking their operating costs into account, included intelligent network usage fees and network maintenance costs.

D. Resolve User Complaints Regarding Telecommunication Charges

KCC enacted the Notice on the 'Basis of Notification on Overage Rates, etc.', which set forth the pre-notice guide of telecommunications operators to prevent users' damage (bill shock) due to unforeseen telecom billing,

and enforced it from July 2012.

First of all, considering that bill shock is caused greater when using data services, or to adolescents, regulations were set by strengthening the notice standards for data services (mobile phones, international roaming, WiBro). In particular, in the case of underage users, notice to be sent out to the legal representative, and should the user wants, the blocking of outgoing or access services to be provided. The prior-notice applies to mobile phones, WiBro, international calls and international roaming services, and in the case of international roaming services, it was to provide the users as soon as he/she arrives at the overseas regarding the service-specific rates of the country and other relevant information. The notice standards of the mobile phone, it sets forth the notice to be out an easy to understand way using text messages, emails, etc. more than one time when approaching usage limits on a service-by-service basis (voice, text, and data), and immediate notice when exceeded the limit of. In the case of data services, it is to continue to notice a certain amount of units (up to KRW 50,000) after having exceeded the limit. The notice standard of the WiBro and international roaming services (data) is the same as that of mobile phones, and international calls and international roaming services (voice) have to send out notices once a month as soon as the billing information is confirmed.

In addition, KCC prepared the 'Guidelines

on the Improvement of Telecommunications Service Rates' Notice System' to have operators provided accurate rate information to users. According to the guidelines, from June, 2012, telecommunications operators (including, SO) and mobile telecommunications resellers, when presenting the telecommunications rates on website, rates guide brochures, promotional flyers, and media advertisements, etc., to present the actual payment rates side by side including VAT and service charges, along with service charges.

E. Enforcement of Self-sufficiency of Mobile Phone

Domestic mobile carriers had registered handsets' identification number in their system and operated an enclosed type management system of the mobile phone handsets' identification number allowing communication only through registered handsets and because of this, a closed distribution structure focusing on mobile telecommunications carriers was formed. As a result, it caused controversy on transparency of handset prices, and raised issues such as the user's choice of handsets being constrained.

In addition, as the high-end handset market has been formed with the proliferation of smart phones lately, the handset purchase cost is a major cause of the increase in the burden of household's telecommunications costs. However, the domestic handset's distri-

bution structure was formed in a combination of manufacturer's incentives and mobile carriers' subsidies that it was difficult to spark the price war on handsets and low-end smart phones to be circulated in the market. In particular, in the case of the reseller of mobile telecommunications services, it was difficult to meet the supply and demand of handsets on its own that it caused great difficulties to enable the business.

KCC, since May 2012, performed a self-sufficiency system of handsets that the user purchases his/her own handset and select freely the telecommunications carrier and the rates system to use.

The major system improvements are as follows: first, the system has been reformed to have mobile carriers accommodated calls with handsets that are not registered with the identification number for mobile handsets, and to manage the identification number of mobile handsets that have been reported as lost / stolen, so to block the communication appropriately.

Second, the labeling system for the mobile phone handsets' identification number has been improved. In the meantime, as mobile carriers managed the identification number for mobile phone handsets, the identification number for mobile phone handsets produced locally did not need to be marked on the outside of handsets. However, as the need to improve the way in which the user can easily find the identification number for mobile

phone handsets was raised, it improved the system in such a way that for the handset to be released from May 2012 onwards, local manufacturers also have to label the IMEI number on the inside and outside of the handsets.

Third, the ‘Integrated Management Center of Identification Number of Mobile Phone Handsets’ has been built, in the mid-to-long-term, it also plans to promote sharing of information with overseas mobile carriers. Furthermore, in order to share and manage the reported identification number of mobile phone handsets comprehensively to block the illegal use of lost / stolen handsets, the ‘Integrated Management Center of Identification Number of Mobile Phone Handsets’ has been built in the Korea Association for ICT Promotion (KAIT). Along with this, by the amendments to the 「Telecommunications Business Act」, the sharing of information on the lost / stolen mobile phone numbers between mobile carriers and MVNO operators has made mandatory, and the damage and fabrication of the identification number for mobile phones has been prohibited.

Fourth, the standardization for the compatibility of multimedia message services (MMS) has been promoted, and for new smart phones to be released from May 2012, MMS specification is improved to unify with OMA (Open Mobile Alliance, Mobile Organization for Standardization), the international standard.

Fifth, the rates discount applied only to the

new distribution by mobile carriers has been improved to be applied all handsets, regardless of handset distribution channels. The major mobile carriers decided to apply the discount rates (approximately 25% to 35%) that used to be applied to subscribers who purchase the handset from the carrier when signing the service agreement, to the self-sufficiency handset subscribers equally.

Sixth, the integrated network interoperability test (IOT) environment has been established for self-sufficiency handsets. In order to enable self-sufficiency handsets to be distributed in the domestic market, the possibility of handsets’ mobile telecommunications network hazard and the quality of service have to be tested firsthand. Thus, KCC promoted the establishment of an integrated network IOT environment to facilitate the distribution of a variety of low-end handsets that ensured the quality from domestic and foreign manufacturers, and initiated a formal pilot service at the Telecommunications Technology Association (TTA) from September.

Seventh, the publicity has been strengthened to enhance the awareness of self-sufficiency handsets of users and to respond appropriately to the lost / stolen handsets. To this end, KCC built ‘the Handset’s Self-sufficiency Promotion Portal’ site (www.handsetselfsufficiency.kr), in association with the Korea Association for ICT Promotion (KAIT), and has been offered the service

since May 2012.

For the offline promotion, promotional posters (about 40,000 copies) and leaflets (about 460,000 copies) are distributed at carriers' distribution and dealer shops, manufacturer distribution networks and marts, and in June-August 2012, it raised awareness by displaying them on subways' frame-type ads.

Along with the implementation of self-sufficiency, the manufacturer such as Samsung Electronics and LG Electronics released a total of five kinds of self-sufficiency handsets and helps the user's choice.

Through the system improvement, the handset price competition is induced by the emergence of a variety of distribution channels including on and offline retailers, and the manufacturing and distribution of various handsets such as low-end handsets are expected to be accelerated. In addition, improvement on the structure of handset distribution is becoming a basis to activate the resale of mobile telecommunications services and prepaid rates system that it is expected to contribute the reduction of the users' burden on communication costs.

2. Strengthen the Support for Low-income Families / Underprivileged Groups

KCC, under the objective of enhancing the welfare of broadcasting and telecommu-

nications users and to establish a sound and safe use culture in 2012, set up the vision of 'Implementation of Broadcast and Telecommunications Welfare that can be Enjoyed Together', and has actively enforced the policy measures to protect users such as enhancing telecommunications accessibility, enhancing the broadcasting and telecommunications accessibility for the disabled and improving viewers rights' protection activities.

Also, in order to improve access for the underprivileged such as the hearing and visual impaired people, along with efforts made on dissemination of receiver, supports on broadcast production and dissemination of educational broadcasting shows, it strengthened the operation of the Telecommunications Relay Service Center. Also, efforts are made to establish a foundation not only to enhance the view's participation and interests, but also to bridge the information gap between regions and to promote the interests of the underprivileged viewers.

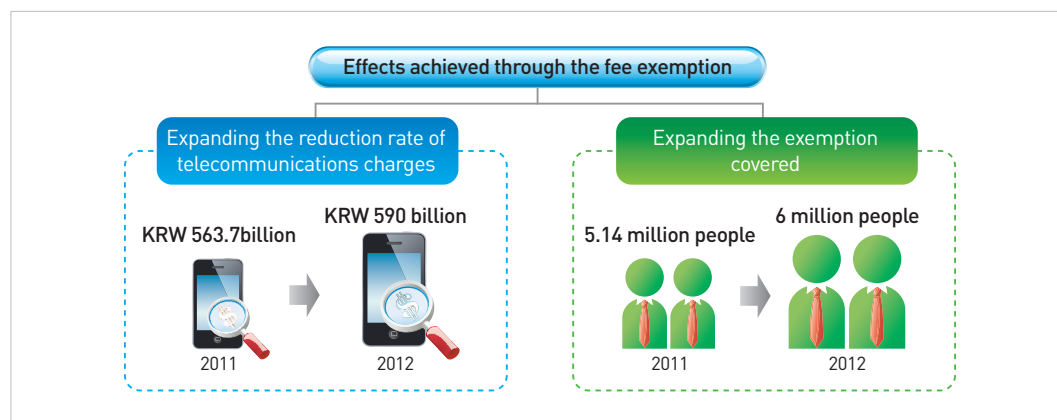
A. Enhancing the Accessibility to Telecommunications Use

In 2012, the multifaceted policy measures were promoted to improve people's accessibility for telecommunications use. First, as Voice over Internet Protocol (VoIP) and smart phones had been activated, important policies were implemented to enhance the accessibility to telecommunications use of vul-

nerable groups centering Internet phones and fixed type rates system of smart phones. Specifically, KCC carried out the amendments to the 「Telecommunications Business Act」, service charges and specific institutionalized works, and strengthen the promotion of enhanced accessibility to the general public so that policy enforcement can be widely known through a variety of methods. In addition, it started to manage the statistics' status by

mobile carriers and by the target at the government level, and waived monthly fees, registration fees and basic charges for the handicapped, men of national merits, and recipients of the national basic livelihood, along with the selection of the next higher class users additionally and enable them to benefit from the fee reduction. Thanks to these efforts, it made a noticeable performance in benefiting people with fee reduction policies.

[Figure III-11] Effects Achieved through Fee Exemptions



Next, according to the increase of smart phones users, it induced the release of optional rates system that have differentiated services, and has released calling plans for the elderly, the handicapped, the special class, and the small quantity users. By applying the LTE service, it enhanced the impact of selecting the calling plan that meets their mobile phone usage patterns and saving rates, alleviated the difficulties of the underprivileged and

strengthened the rights of choice for the users using the small volume of services.

Finally, KCC, by activating a prepaid rates system of the Year 2012, had it more favorable for the small volume of voice call users such as low income families, students and the elderly when using services. It prompted the introduction of number portability that can use the existing number with the prepaid rates system, and also enabled users to sign up for

a prepaid rates system through online. In addition, it expanded and implemented services that can be used with a prepaid rates system such as voice calls, SMS, wireless internet, and MMS.

B. Improve the Broadcasting and Telecommunications Accessibility for the Handicapped

The commission has been making efforts to ensure and improve the access rights to broadcasting for the broadcasting underprivileged group such as the visual and hearing impaired people, and the early with hearing deafness since 2000.

In 2012, through the 「Broadcasting Act」, it promoted the mandate of broadcasting for the handicapped, expansion and dissemination of broadcast receivers for the visual and impaired people, and also, increased the budget in regards to these compared to the previous year.

First, the expansion and dissemination of broadcast receivers for the handicapped in 2012 improved the access rights to broadcasting of the underprivileged, and especially, through the quality improvement of broadcast receivers, it relieved the uncomfortable part of watching TV for the handicapped.

Second, by the amendments of 「Broadcasting Act」 and the enactment of ‘Notice to ensure access rights for broadcasting of the

handicapped such as organizing the handicapped broadcasting programs for the handicapped and providing it’, in participation with the four terrestrial broadcasters, local terrestrial broadcasters, general broadcast channels operators and cable television operators, it increased the broadcasters’ organizing ratio of broadcast programs for handicapped, and production supports had also been expanded.

Third, it attempted to research the broadcast environment through broadcast environment research groups (a total of six subjects: the handicapped 2, multicultural families 2, the elderly 1, and utilization gap1) and based on these, it tried to establish policies, and in July, in order to maximize the effect, it also carried out business checks and interim reports subject to the target support groups. In addition, it organized the ‘Handicapped Broadcasting Guaranteed Committee’ in February, and held several meetings and then, expanded to more detailed works such as approval of goals related to the handicapped broadcasting, guidelines and standards calculation of production costs.

In addition to this, improvements on a variety of policies regarding telecommunications services and equipment-related standards, strengthening the training for sign language interpreters, and supports for organizing the screen commentary broadcast on regular programs and fostering manpower with major courses in the local universities were promoted.

C. Building the Broadband Convergence Network (BcN) in Farming and Fishing Villages

1) Deployment of networks in farming and fishing villages

KCC, in order to bridging the network infrastructure gap between urban and rural areas and to provide universal broadcasting and telecommunications convergence services, it promoted the building of efficient network for the expansion of BcN deployment in small rural areas of less than 50 households, by

establishing an organic cooperation between government, local government and operators, for the government support for small-scale farming and fishing villages where operators avoid investment for network, due to lack of profitability. In addition, for the deployment of BcN in rural areas nationwide, it promoted policies such as loans support for the deployment cost of telecommunication operators and imposing network deployment obligations that as of December 2012, BcN was deployed 89% in rural, and 98% of the city areas (See Table III -36).

[Table III-36] Subscription Rates Comparison of Broadband Convergence Network (BcN) between Urban and Rural Areas

(unit : %)

Classification	Year 2008	Year 2009	Year 2010	Year 2011	Year 2012
Farming and fishing village	56	63	76	86	89
City	74	83	90	98	98

As such, the government takes initiatives to urge and induce the establishment of a network of operators so that the building of BcN in small-scale rural areas can be done. Also, the foundation that the people living in rural areas can enjoy the benefits of a variety of broadcasting and telecommunications convergence services through BcN anytime is being laid, and in order to create the internet use environment such as the city in the future, this project will be pursued continuously.

2) Development of BcN specialized services models in farming and fishing villages

In order to resolve the issues in rural areas and to improve the quality of life through improving the utilization of the inhabitants of the BCN service, KCC discovered and disseminated BCN service models In 2012 such as multicultural family support, Wi-Fi wireless services in attractions in the region, resident communication services in the town hall, and local information services. To this end, it conduct a public competition in March 2012

for the discovery of rural BcN specialized service models, selected two primary local governments, and discovered and developed 4 types of rural BcN specialized service models.

By discovering and disseminating region-specific services that can provide a practical help to rural residents utilizing the expansion of broadband network deployment and broadband networks, it helps to improve the use environment of information and communication between urban and rural areas, and it will contribute significantly to improving the quality of life of rural residents.

D. Expansion of the Universal Communication Services

With the content of including internet phones to the service fee reduction scheme which had been prepared for the vulnerable group and expanding the subject to the exemption of mobile phone charges in October 2011, the amendment of the 「Enforcement Decree of Telecommunications Business Act」 was promulgated and enforced by KCC on February 28, 2012. Accordingly, recipients of the national basic livelihood, the handicapped and the families of national merit who had been using internet phones were able to get the fee reduction, and of the next higher tier group, recipients of parenting allowance and pension for the handicapped were able to get the mobile phone fee reduction.

Prior to this, from January 2012, the application process of a fee reduction has been simplified and the way in which the application to be made has been also diversified so it became possible to apply for the fee exemption with users' identification only without the need to submit proof documents for the qualification of the next higher tier group. Owing to simplified procedures for a fee reduction, users can visit dealer shops or the nearest community centers with one's identification only without a separate qualification documents submitted or he/she can apply for a fee reduction directly from residents service portal (www.oklife.go.kr) through the accredited certificate

In particular, KCC actively conducted promotional activities through TV, radio, newspapers, and posters so to make sure the vulnerable group such as those who are newly qualified for the support scheme to apply for a fee reduction.

For the recipient of national basic livelihood, the subscription fee and monthly charges are exempted and 450 minutes (150degree) of free calls are provided, while for the disabled and the men of national merit, a monthly service fee of 50% reduction is provided. Also, for the next higher tier group who receives parenting allowances and pensions of the disability, the subscription fee is exempted and a 35% fee reduction for each of basic fees and phone call charges is given within the limit of KRW 30,000. As a result,

it is estimated that the annual 770,000 households receive exemptions of a total of KRW 21.5 billion (KRW 27,922 per household) of the Internet phone bill. Also, for recipients of parenting allowances and disabled pensioners, it is expected that the annual 55,000 people receive fee reductions of a total of KRW 5.7 billion (KRW 103,636 per person) of the mobile phone bill.

On the other hand, through the amendment of the 「Enforcement Decree of the Telecommunications Business Act」 in August 2012, the fee reduction system for vulnerable groups such as the disabled and low-income families were organized systematically, taking the user convenience and the changing of telecommunications environment into account. In the case of the household unit of landline phone services (local, long distance, Internet phone) and high-speed Internet service, the eligibility of a fee reduction has been expanded to ‘households including the recipients’ for the disabled and men of national merit other than the recipients of national basic livelihood, so that anyone in the household can apply. And, a range of mobile phone service fee reduction has been clarified to IMT-2000 (International Mobile Telecommunication 2000) services and mobile telecommunication services introduced after then, and a new mobile Internet (WiBro) service has been newly added to these.

In addition, as the flat rate plan of subscriptions has surged due to the expansion

of smart phones’ diffusion, it is expected to decrease the reduction amount of the average monthly mobile phone bill of the recipients of national basic livelihood due to the current fee reduction system of the voice-centric (basic fee + calls), thus, it plans to pursue the amendments to the Notice that adjust the basic fee / monthly fee exemption limit from the existing KRW 13,000 to KRW 15,000 (a KRW 2,000 increase), and to perform this in 1/4 quarter of 2013. As a result, it is expected that of 370,000 recipients of national basic livelihood who signed up for the flat rate plan, 354,000 (95.7%) people are able to receive a further reduction of the annual KRW 8.4 billion.

E. Promotion of Telecommunications Relay Services

The Telecommunications Relay Service (TRS) for the disabled is a service that the message that the visual and hearing impaired people want to deliver is passed to a sign language interpreter via a text or a sign language video, then the sign language interpreter relay (interpret) the message to the receiver of the call in real-time.

By the use of TRS, job counseling, product inquiries or order processing, and financial handling can be carried out without the help of others, which ensures the rehabilitation and social participation of more than 270,000 vi-

sual and hearing impaired people. Thus, KCC established and enforced ‘Standards regarding the Telecommunications Relay Service using Telecommunications Facilitates’ in June 2012. The main content is to install the Telecommunications Relay Services Center at the Korea Information Society Agency (NIA) and depute the operation to it. The service targets are the relay of domestic calls, the Korean voices and texts or sign languages (video calls) as the principle, and it is to be provided year-round 24 hours a day, and 365 days a year. In addition, operators who are obliged to provide telecommunications relay services have to spend on telecommunications expenses for the operation of the Telecommunications Relay Service Center and shall cooperate with the technical support for the advancement of the center operation. KCC will integrate the general directory number to the special number 107 from 2013 for the promotion of user convenience and activation of services, and the new name ‘107 Soen-Mal-E-Um (Hand Speak Relays)’, which is easy to understand is going to be used for the relay services.

3. Promotion of the Interests of Broadcasting and Telecommunications Services’ Users

A. Enhanced Electromagnetic Waves Response System

1) Introduction of electromagnetic waves ratings’ labeling system

KCC promoted the introduction of electromagnetic grade labeling system to relieve the anxiety of the people and protect the human body from electromagnetic waves that occur in the radio equipment. This is taking the health effects of electromagnetic waves that occur in the radio equipment into account, and gives ratings for electromagnetic waves that occur in mobile phones and mobile communication base station. As the grading related enactment of the ‘Radio Waves Act’ was passed at the plenary session of the National Assembly in May 2012, in accordance with the ‘Radio Waves Act’ Article 47 Paragraph 2 (Item 1), electromagnetic rating system was introduced to ensure that electromagnetic grade standards, grade-indication targets and how to display related information to be notice to the Commission.



In the case of mobile phones’ electromagnetic grade, it is classified as two ranks according to the standard of the Specific Absorption Rate, and ratings to be put on the box of their products (See Table III -37), in

the case of the base station such as the mobile telecommunications base station, it is classified into four ranks according to the electromagnetic strength criteria as specified in the 「Radio Waves Act」, and the electromagnetic rating such as the relevant wireless equip-

ment, fences, and barbed wire, etc. was to be shown in a position where the public can easily identified with (See Table III -38).

KCC is planning to established the Notice on electromagnetic ratings in January 2013.

[Table III-37] Electromagnetic Strengths' Rating Criteria Such as the Mobile Communication Base Station

Grade	Classification	Display Methods			
1st grade	1/2 of public standards				
2nd grade	Below public standards				
Cautious Rating	Public ~ professional standards				
Warning Level	Above professional standards				
		1st grade	2nd grade	Cautious Rating	Warning Level
					

*Electromagnetic intensity : in excess of the intensity of electromagnetic waves' standards emitted by radio stations, taking the necessary measures such as installation of safety facilities and operation limit / stop

2) Electromagnetic waves research findings and information disclosure.

KCC announced the electromagnetic emissions' survey results of 5,552 radio stations such as settlements around the mobile communication base stations, etc. and 36 items of electrical appliances including electric blankets. From the results shown, it appeared that there were no radio stations or electronic appliances having exceeded the electromagnetic radiation human protection standards that they were safe for the human body. In May 2012, electromagnetic health effects study was presented through the Korea Electronics and Telecommunications Research Institute

(ETRI) (See Table III -116).

On the other hand, KCC began to release the Specific Absorption Rate related information on 409 models of 27 certified mobile phone companies by KCC over the past three years on the website of the National Radio Researchers (RRA) from July 2012. Also, already from 2007, the electromagnetic strengths' measurement result of mobile carriers has been published on the home page of the Korea Communications Agency (KCA) on a monthly basis. As such, KCC is trying to guarantee the right to know about the electromagnetic and to relieve the anxiety of the people with regards to this.

3) Establishment of Children and youth mobile phone guidelines

In September 2012, KCC enacted the 'Guidelines on the Mobile Phone Usage' that children and youth who are vulnerable to electromagnetic can easily practice in the everyday life. Guidelines are expected to be published as a publicity booklet and utilized not only by children and youth, but also by the front-line education field and parents who can refer it to the education map.

B. Enhance the Safety of 3D Viewing

Relieving the anxiety of viewers for 3D video and production and supply of high-quality 3D TV contents are more important than anything else. Accordingly, KCC has promoted the amendments through continuous researches regarding the 'Clinical Recommendations regarding the Safety of 3D Video' and 'Guidelines for the Production of 3D Broadcast Contents'.

1) Second revision of recommendations of clinical study on the safety of 3D images

In 2012, brain response experiments using the functional Magnetic Resonance Imaging (fMRI) and a study to quantify visual fatigue according to the 3D viewing through 3D content analysis based on the 3D stimulus indicator standards were conducted. In addi-

tion, safety assessment technologies for the 3D viewing vulnerable groups (patients with Parkinson's disease, dementia patients, or patients with brain epilepsy, school age children, etc.) were developed, and cause patterns of abnormal symptoms (dizziness, nausea, fatigue, visual, etc.) of the vulnerable groups watching 3DTV were studied. Based on this, KCC published the 2nd revision of the 'Clinical Recommendations about the Safety of 3D video (Ver. 3.0)' in December 28, 2012 and promotional materials were produced and distributed to make it easier for the people to understand this.

2) Revision of 3D content production guidelines

It promoted the development of video contents for the quality factors to produce contents as presented in the guidelines (Ver. 1.0) and the clinical testing. In addition, it conducted research on specific quantification methods of the 9 items such as the three-dimensional values without viewing discomforts' - acceptable range, size of the error, vertical error, focus error and so on. Based on this, 'Guidelines of 3D Content Production (Ver. 2.0)' that provides a numerical legend to specific factors that ensure a high-quality 3D production was released in December 28, 2012.

3) Promotion of 3D broadcast technology Standardization at home and abroad

KCC, by writing to the ITU-T SG9 regarding the test results of 3D viewing safety studies, achieved performance of the Draft New Report (DNR) being reflected in document (J.3D-Fatigue) in April 2012, and reflected in ITU-R SG6 3DTV Broadcast System Characterization Report (BT.2160) in October.

C. Establish a Legal Framework for the Prevention of Electronic Frauds (Phishing)

The 「Telecommunications Business Act」 Article 84 states that anyone who places a call to take a proprietary interest by deceiving others or for the purpose of damaging others such as verbal abuse, intimidation and harassment should not fabricate the sender's phone number (hereafter, refer to as a caller ID) or should not provide services that display a false phone number. However, if justification is provided such as it is for the purpose public interests or to provide a convenience to the recipient, it can be treated as an exception.

However, the voice phishing criminals are based in the overseas to avoid the pursuit of investigative agencies and by taking advantage of the technical loopholes of the electrical network and the use of frauds to obtain the reliability of users including the fabricating a caller ID as polices or prosecutions that the voice phishing damage is hardly abated.

Accordingly, KCC forced the duty of telecommunications operators to block numbers that the Caller ID had been manipulated, and if telecommunications operators do not fulfill these technical measures, it opts to impose a fine of less than KRW 30 million. Thus, KCC submitted the revised draft of the 「Telecommunications Act」 containing this provision to the National Assembly.

In addition, under the judgment that urgent eradication measures for the provision of voice phishing is necessary, prior to the enactment, in cooperation with the telecommunications' companies, 'Caller IDs' Tamperproof Guidelines' containing technical and administrative measures for the voice phishing prevention was released on June 28, 2012.

Accordingly, from July 2012, in front of all the international phone numbers that are displayed on the screen of the recipient's phone handsets, international identification numbers such as 00X (001, 002, 005, 006, 008, 009), 00XXX (00755, 00770, etc.) are appeared, and from January 2013, if incoming calls from abroad into the country are fabricated to the phone numbers of domestic public agencies (law enforcement agencies, financial institutions, etc.), the phone call itself is going to be blocked from the telecommunication networks in advance.

In addition, as the earlier anti-fraud measures were primarily focused on the prevention of voice phishing that the need for a comprehensive response to a variety of new

e-banking fraud (phishing) techniques, using text messages, Messengers, and by linking to a fake website was pointed out. Thus, KCC's relevant departments and the professional staff of the Korea Internet & Security Agency (KISA) established a co-TF and prepared 'Comprehensive e-Banking Fraud Prevention Measures in the Telecommunication Networks' through the opinions of relevant authorities.

The second quarter of 2013, text messages with caller ID having been changed will be blocked in the delivery process by the telecommunications operator and further, a system to notify the fact that the message having been blocked to the originator of the text message will be implemented. In addition, from November 2012, if phrases like 'Security Upgrades' is shown which is often cited in phishing, the telecommunications operators will automatically block the text messages, and during the first quarter of 2013, the text messages that are being sent from the web by purporting Caller ID to financial institutions' phone number, etc. will be also blocked from the telecommunication operator in advance. Along with this, the 'Phishing Response Center' will be operating within the National Internet Development Agency of Korea as a dedicated agency to embody these measures and to perform the inspection including the implementation status of the operators.

4. Implementing the Internet Culture Advanced Country

A. Composition of Advanced Culture of Internet Use

1) Deployment of nationwide a 'Beautiful Internet World Campaign'

KCC in conjunction with the Beautiful Internet World Nationwide Council that is participated by the government, public authorities, academia, media, information and communication service providers, and private organizations, carried out the annual campaign for the 'Beautiful World of the Internet' continuously. The Beautiful Internet World Nationwide Council, by expanding the number of participating institutions each year, promoted the various projects for the spread of Internet ethical cultures including the great function of Internet ethics that holds a public competition of excellent internet ethical contents, and awards winners such Mobile App, UCC, slogans, and posters.

In addition, '2012 Lovely Internet World Week Declaration' for the spread of a healthy and safe Internet use culture and for the induction of the nationwide participation, performed a variety of on & offline events such as a beautiful Internet world street campaign, send love PC, on & offline campaign pledge campaign, Golden Bell ethics' class, Internet filial duty album ceremony, sun-pul-dal-gi (good/polite manner of writing replies on the

Internet) Campaign, Internet ethics enhancement seminars, and Internet Ethics interactive content.

2) Promotion of Internet ethics education

Through this, KCC intends to cultivate the student who is the primary user of the Internet through the voluntary learning and experience, with the ability to utilize the Internet from the entry level of the Internet society.

In 2012, KCC conducted experience educations for 3,160 students at 120 schools in the nation's primary, middle, and high schools that can learn about the Internet security, characteristics of social media, and desirable replies' cultural.

Along with this, it carried out teacher training, school inspector training, and principal training for the expansion of Internet ethics training base and for the development of professionals. From the Internet Ethics Training Information Service (www.nethics.kr), education materials were distributed in the form of lesson plan so that the voluntary training was enabled utilizing the school hours in each school.

As the Internet usage of the young people has been increased, it has been operating the infant media experience classroom for the formulation of the right Internet usage habits of preschoolers from 2011. Other than that, to cultivate the Internet ethics and the right utilization of the Internet of young people with disabilities, it operated Internet literacy

education for youth with disabilities. In addition, it also provided the self-diagnostic services of Internet ethics that facilitate self-checks of the Internet ethics over the Internet and depending on the results, it can be provided with customized training services. At the same time, along with the expansion and penetration of smart phones and the increased demand for mobile services, Internet ethics' self-diagnosed Mobile App (App) has been developed.

3) Promotion of Internet Ethics logo / character

KCC, together with the Korea Internet & Security Agency (KISA), developed Internet ethics logo 'To-Dak-E' and the character 'Welly' with the subject of familiar image to the people, as the part of making beautiful Internet world project, and has been promoting a variety of activities to reach citizens in a friendly manner.

In order to increase awareness of Internet ethics, the Internet Code of Ethical Practice posters were distributed for youth. In the month of June 2012 when there was a week of Making Beautiful Internet World campaign, Internet Ethics were promoted intensively, through a variety of media such as major buses in Seoul, metro, terrestrial & cable TV, radio, newspapers, and etc.

In addition, in cooperation with the media, it is in the forefront of the Internet ethics campaign such as 'the last day of each month is

the day to erase the malicious comments’, ‘U Talk Concert’, and ‘making beautiful Internet world cheering video with stars’.

4) Activities of the Korea Internet Dream Team

KCC, in association with the Korea Internet & Security Agency (KISA), encouraged youth to participate (16 locations nationwide, 20 schools) in this movement through the regional ceremony of dream teams, so that they can be the protagonist for leading and enabling a sound Internet culture through the Dream Korea Internet Team participated by the elementary and junior high school students nationwide.

B. Enhance Blocking of Illegal / Harmful Information Distribution

1) Prevent the distribution of harmful information

The prevention of distributing harmful information to youth system is operating to protect youth from harmful information and to foster a healthy Internet usage environment by building obscene videos’ database for the distribution of obscene videos via file-sharing sites such as P2P / Webhard, and etc.

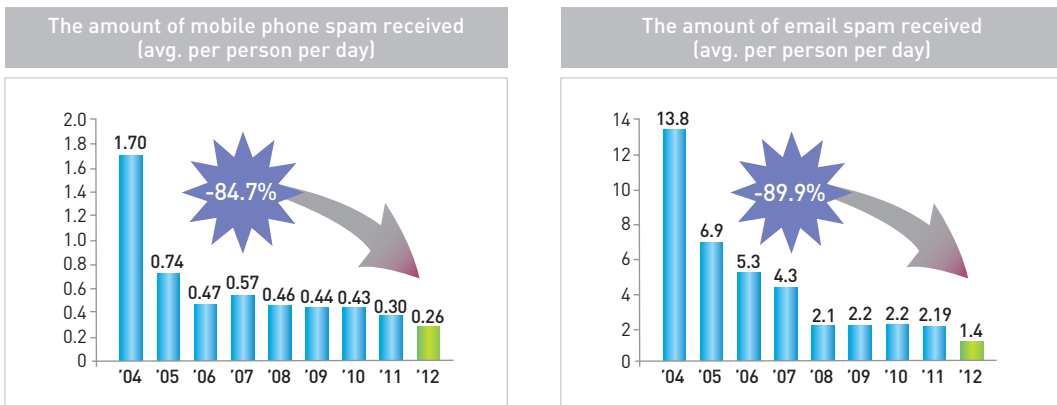
In order to induce the voluntary participation of the file-sharing site operators, the provision of procedures for filtering modules was prepared in May 2012, the ‘Prevention

of the Flow of Harmful Information System-related Operators Conference’ was held for site operators. On the other hand, for a wider use for obscene videos DB, the way to diffuse the module had been reorganized from the filtering module provision for the file-sharing sites to video DB provision for the filtering S/W operators. From this, as the participation of filtering S/W operators for blocking obscene videos became possible, it is expected that a range of pornography blocking effects can be magnified not only users using file-sharing sites but also, the general users using the pornography filtering S / W.

2) Spam reduction and response system enhancement

While KCC has continuously deployed the improvement of systems for the reduction of spam, development and dissemination of anti-spam technologies and strong crackdown on the illegal spam senders, it strengthens the self-regulation of operators, and through the anti-spam efforts focusing on proactive measures, the amount of spam received per capita has decreased by 84.7% of mobile phones, and 89.9% of e-mails in 2012 compared to 2004 (See Figure III -12).

[Figure III-12] Trend of the Amount of Spam Received per Capita of Users (daily average)



2012 was going to the starting year of response change from the amount of spam arrived to the final destination to the people (focusing on responding to the stage of origin network that spam having been sent from). Upon the completion of the ‘Spam Status Comprehensive Monitoring System’ that had been promoted since 2011, through blocking and the analysis of spam in an intermediate step that has been sent and delivered to the information and communication services users, it is expected to be an effective and comprehensive response scheme.

Mobile carriers’ expansion of intelligent anti-spam services also contributes directly to relieve the grievances of the people receiving spam.

Other than that, KCC has been suppressed the move of spam to weak regulatory services by placing anti-spam measures to all spamming vulnerable services such as to induce

them to perform anti-spam self-regulations to a similar level to carriers, regarding the web service and Internet phones that text messages in bulk can be transmitted.

In order to prevent spam emails, discussions are in progress how to switch major ISPs and the email sending port 25 that is vulnerable to spammers to an alternate port with the sender authentication, as a first step in the enforcement, it plans to carry out the promotion for mail server operators to provide an alternate port for enhanced security in addition to the current mailings port.

5. Enhanced a Security-based Cyber world

A. Establish a Cyber Security Response System

1) DDoS response and cyber shelter operations

KCC initiated shelter services by building a system for the defense of DDoS attacks. The cyber shelter, through DDoS attacks defense system including 24-hour regular operating room, provides regular defense services for the website that severe damage can be caused by the DDoS attacks.

Since the inception of services, a total of 329 companies used cyber shelter services by 2012, and of these, a total of 223 DDoS attack protection services were provided.

In addition, by the extension of ongoing collaborations with domestic and international DDoS attack response related organizations and companies specializing in information protection, along with pre-emptive and preventive actions against DDoS attacks, it plans to increase the level of security and reliability of Internet convergence services such as future smart work environment and social network services (SNS) by trying to prevent DDoS attacks fundamentally.

2) Enhance the level of security for users and websites

KCC, in collaboration with the Korea Inter-

net & Security Agency (KISA), has been providing the 'Web Check' service in the form of a toolbar that prevents malware infections by providing notice on whether malicious code is hidden in the visiting website, etc. in order to help the users staying safe on the Internet since 2010, and also, to provide a real-time information for security incident-related preventions such as new vulnerabilities and worms & viruses. After going through several updates of the 'Web Check', its capabilities have been enhanced with regards to whether or not being infected with zombie PC and malware detections, and it has consistently provided with security information to help users.

3) Operation of cyber treatment system for the infected PC

The 'Infection PC Cyber Treatment System' was built through the coordination with the Internet Service Provider (ISP), KT, SKB, and Tbroad to treat a PC that having been infected with malicious code, and begun operating in 2011. After then, informed the infection of malicious code to zombie PC users who were exposed to cyber attacks through an Internet pop-up window and disseminated vaccine so to respond promptly to the security incident.

In the year 2012, it informed the infection of PCs not only to zombie PCs attempted DDoS attacks, but also PCs infected with malware via hacked websites, and dissemi-

nated the designated vaccine. Especially, to prevent re-infection of malicious code because of security vulnerability, windows security updates and Adobe Flash Player security vulnerabilities programs, etc. were encouraged to update to the latest.

In addition, malware code samples were collected from the zombie PCs quickly by taking advantage of the treatment system for more efficient security incident responses, and through this, actively utilized to develop the specialized vaccine that can cure the PC infected with the same malware.

Other than this, in 2012, it prepared remedial actions of the zombie PC that was exploited redundantly by using improved statistical functions such as gathering the results of specialized malware vaccine treatment, and through the cooperation with domestic and foreign private companies, by securing more zombie IPs and curing the general public's zombie PCs, it plans to enhance the health and safety of the Internet use environment.

4) The Information Security Management System (ISMS) certification system

KCC, through the Information Security Management System (ISMS) certification system that checks whether the ISMS that has been established and operated by the company is appropriate to legal standards, has contributed to recommend systematic information protection activities of domestic com-

panies, and to prevent damages caused by the leakage of information assets. Through the revision of the 「Law regarding the Promotion of Information and Communication Network Use and Protection of Information」 in 2012, it laid the groundwork for the protection of information safety diagnostic system to be unified with the ISMS certification scheme. Companies that are subject for the existing protection of information safety diagnostic is expected to be converted to ISMS certification compulsorily in 2013. On the other hand, the existing recommendation system is maintained so companies who are not subject for the compulsory scheme can also apply voluntarily and get certified.

5) Information Protection Safety Inspection

The protection of the information safety diagnostic system was promoted through the revision of the 「Law regarding the Promotion of Information and Communication Network Use and Protection of Information」 in July 2004 for minimum information protection measures for the information and communications service providers such as leading information and communications service providers (ISP), integrated information and communication facilities operators (IDC), shopping malls, portals, etc. from cyber infringement and DDoS attacks since 1.25 crisis, and has maintained a proven information protection system for information and

communications service providers to receive a safety diagnosis each year.

As the enactment of the 「Law regarding the Promotion of Information and Communication Network Use and Protection of Information」 after having been passed at the plenary meeting in the National Assembly in December 29, 2011 and published in February 17, the protection of the information safety diagnostic system will be in operation temporarily until February 17, 2013, and will be unified into ISMS certification system from February 18, 2013 onwards.

6) Activation for the use of passwords

As the safe storage of personal information by using encryption technology management became an important issue after the regulatory laws and regulations with regards to the personal information encryption had been enforced in full scale from 2011, the domestic source code and smart phones cryptographic library, implementation of encryption technology guide to support the implementation and the use of cryptographic techniques have been provided (see Table III -39).

[Table III-38] Supply Status of Domestic Cryptographic Library

(unit : case)

Classification	Year 1999~2007	Year 2008	Year 2009	Year 2010	Year 2011	Year 2012	Total
SEED	2,380	645	1,150	1,370	1,995	6,846	14,386
HIGHT	-	-	166	333	103	954	1,556
Cryptographic library for Smart phones	-	-	-	-	669	3,190	3,859
Total	2,380	645	1,316	1,703	2,767	10,990	19,801

In particular, in accordance with the encryption related laws and regulations were enforced to petty private operators who had difficulties in implementing encryption technologies and introducing of solutions, a guide on how to encrypt one's personal information by building-in encryption function supplied as a default to commercial applications such as office and operating system were deployed from the end of 2012.

7) Awareness-raising on Cyber Security

KCC and the Korea Internet & Security Agency (KISA) were trying to convey damages of Internet breaches of and preventive measures clearly, by providing general education programs in the TV broadcasting sector to raise awareness of information protection for the general public. Broadcasting topics, through meetings with broadcasters, were designed to pass messages why informa-

tion protection was necessary for those who were vulnerable to information securities like housewives and children, and also, by giving actual financial and psychological victimization incidents caused by Internet, it drew attention to information protection.

In addition, through the documentary titled ‘Faceless Intruders, Malware’ the risk of malicious code, and precautions in order to prevent damage will be sent out and have it to be utilized as a training material for all levels of government agencies and enterprise’s internal staff.

B. Response on the Mobile Security Threat

1) Enhanced smart phones security

As smart phones play a role of ‘PC in the hand’ such as financial transactions and Internet access, etc., and there are risks more sensitive personal information than a PC such as call history, location, and etc. can be leaked, the smart phones security is growing increasingly important.

Therefore, KCC has been operating the civil and official joint response team for smart phones’ information security since 2010 so that the related organizations such as the government, carrier manufacturers, and vaccine companies can respond quickly in the event of domestic smart phone security incidents. In addition, by disseminating the enhanced version of ‘Self-Checking Smartphone Se-

curity App)’ in 2012 that helps to check and measure the security level of users’ smart phones in order to raise awareness of users’ smart phone security, it has been accelerating the creation of a safer mobile environment.

2) Enhanced WLAN security

As smart phone users have surpassed the 30 million and the use of wireless LAN is rapidly increasing, accordingly, KCC prepared the security measures for more than 80 million wireless routers including wireless router for Internet telephony and private wireless router, etc. and conducted the promotion for the safe use of.

In addition, in order to continuously enhance the wireless LAN security, it produced the importance of the security of the wireless router, how to set up security, and code of practice for wireless LAN security on Webtoon that was easy to understand for everyone and distributed through the ‘Bo-Ho-Na-Ra (protect the country)’ and online news media. Other than this, by establishing a corporative system with the manufacturer of the wireless router, a various WLAN security awareness-raising activities were carried out both on & off lines such as distributing promotional stickers of wireless router’s security practice rules to router buyers (See Table III -40).

[Table III-39] Status of Wireless LAN Security Operations

(unit : piece)

Classification		Commercial wireless LAN AP		AP for Internet telephony		Private wireless LAN AP (Household, corporate)		Total	
		2011	2012	2011	2012	2011	2012	2011	2012
Pieces surveyed		17,106	27,156	14,333	16,333	32,348	38,771	63,787	82,260
Security Application	Y	17,106	27,156	13,799	15,571	16,171	24,397	47,076	67,124
	N	-	-	534	762	16,177	14,374	16,711	15,136
Percentage of security application		100%	100%	96.3%	95.3%	50.0%	62.9%	73.8%	81.6%

※ Source: The Korea Internet & Security Agency (KISA), the 'survey on public wireless LAN security operations'.

C. Enhanced Privacy Protection Measures

1) Reinforcement of personal information protection of corporation's

In accordance with the increasing demand on strengthening the personal information protection system, KCC amended the 「Law regarding the Promotion of Information and Communication Network Use and Protection of Information」 in February 2012 to reinforce the company's obligation on personal information management, and to ensure the user's control of self-information.

In addition, in order to help operators to understand the new system and for a smooth transition, KCC performed awareness-raising activities through the 'revision of the 「Law regarding the Promotion of Information and Communication Network Use and Protection of Information」, a Guidebook on New Systems for the Privacy Protection', the

「Act on Privacy Protection」 commentary for the service providers of information' and supplementary publications of the 'Standard Handbook of the Technical and Managerial Safeguards on Privacy', in parallel with holding company briefing sessions

2) Security incident responses including exposure and disclosure of privacy

KCC, together with the Korea Internet & Security Agency (KISA) adopted and in operation of i-PIN (internet Personal Identification Number) services that are used to replace the social security number in order to resolve the issue of invasion of privacy such as identity theft caused by the excessive use of social security numbers on the Internet. In addition, as a large-scale privacy leakage accidents continue to occur, by establishing the 'Strengthening the Privacy on the Internet', it tried to reinforce the overall privacy protection system of Internet companies for the preven-

tion of recurrence of accidents and prevention of secondary damages. In particular, in order to remove the root cause of the problem of the theft and infringement of social security number, it pursued the laws and institutional policies for the limited use and collection of social security number on the Internet.

To avoid the confusion of operators in accordance with the policy change, by obtaining comments thorough debates with operators and the opening of support center in May 2012, it provided a guidance on how to make a transition such as considerations, in case of limiting the collection and use of social security numbers, and the introduction of alternative means; and by checking operators' status and the use of social security numbers, and either prevent them from collecting social security numbers or switch to i-PIN, it is expected to continue to improve the system so to prevent the collection of social security numbers over the Internet. In addition, it established and has been promoted 'Plans to Improve on Privacy Protection' in August 2012 for the mobile carriers' privacy protection and the prevention of illegal telemarketing (TM).

KCC has been provided a secure server, which is a technology measure for the protection of privacy in the Internet transmission section. More specifically, it has disseminated a secure server for free and conducted technical assistances to petty small and medium companies annually, and for the companies

who have not built a secure server as yet, it makes efforts to disseminate a secure server by giving them a guidance to improve.

In addition, in order to quickly respond to the exposure and disclosure accidents of privacy and to prevent further damages, KCC and the Korea Internet & Security Agency (KISA) are operating a response system on privacy disclosure that quickly finds and deletes personal information exposed on the Internet.

3) Awareness-raising on the privacy protection

In order to prevent the recurrence of the spill of large amounts of personal information and to prevent the secondary damage, KCC pursued educational and promotional activities for the protection of personal information subject for operators and the general public; and focusing on new policies in the revised 'Law regarding the Promotion of Information and Communication Network Use and Protection of Information' in August 2012, it strengthen awareness-raising activities for operators and the general public.

To this end, through the general public campaigns and competitions, it promoted the early establishment of the new system by delivering revised contents of the 'Law regarding the Promotion of Information and Communication Network Use and Protection of Information' and, also attempted to create a users' voluntary culture of privacy.

Also, it strengthened privacy capabilities of operators and voluntary privacy protection activities through the ‘Privacy Protection Managers and Handlers’ Workshop’ and ‘Company Briefing Sessions for the Environment of not Using Social Security Number’, and the operation of online curriculums published on the privacy protection portal.

D. Secure Global Leadership in Cyber Security

1) Strengthen a cooperative system for violation security incidents at home and abroad

KCC and the Korea Internet & Security Agency (KISA) composed the ‘Civil and Official Co-investigation Professional Pool’ in order to strengthen the cooperation and joint response to the domestic Internet breaches, and have established measures to prevent the spread of damage, recovery of security incidents, and prevent recurrence in case of serious breaches of information and communications of service providers in their information network.

In the meantime, KCC has continued activities related to international consultative body with regards to the security incident such as the ‘Forum of Incident Response and Security Teams (FIRST)’, and the ‘Asia Pacific Computer Emergency Response Team (APCERT)’ to strengthen the international cooperation for Internet breaches. Also, as Korea was elected

as Vice-Chair of the Bureau of APCERT in 2012, it established an opportunity to lead international activities. Also, through the MOU with the ‘Romania Security Incident Response Team (CERT-RO)’, we gained a foothold in Europe to expand cooperation as well as, by signing the transient cooperation memorandum of understanding with the ‘Symantec’, a global security company, it strengthened cooperation for responses to the Internet security incident.



Appendix

1. Financial Statements in 2012
2. The List of General Meetings and Agenda Items of KCC in 2012
3. 2012 Monthly Major Achievements
4. Broadcasting and Telecommunications Industry in 2012 by Sector

Appendix

1. Financial Statements in 2012

■ Budget Execution in 2012

[Appendix Table-1] Budget Execution in 2012

(unit : KRW 1mn)

Category		Budget(A)	Real Budget(B)	Actual(C)	Rate of Execution[%] [C/B]
Income	Total	1,161,504	1,161,504	1,149,391	99.0
	General accounting	335,650	335,650	267,913	79.8
	Innovative City Construction special accounting	-	-	-	-
	Broadcasting and Telecommunications Development Fund	825,854	825,854	881,478	106.7
Expenses	Total	1,120,314	1,136,226	1,173,970	103.3
	General accounting	284,395	286,146	279,298	97.6
	Innovative City Construction special accounting	10,065	23,483	13,194	56.2
	Broadcasting and Telecommunications Development Fund	825,854	826,597	881,478	106.6

Notes : The budget execution rate for Innovative City Construction special accounting is low mainly due to the delay in the construction of the new building for the relocation of the National Radio Research Agency to a location outside the capital area (KRW 10,237 million unexecuted → rolled over to the fiscal year 2013).

■ Broadcasting and Telecommunications Development Fund

(1) Assets and Liabilities

[Appendix Table-2] Assets and Liabilities of the Broadcasting and Telecommunications Developing Fund

(unit : KRW 1mn)

Category	FY2012(A)	FY2011(B)	Change(A - B)	
			In amount	In %rate
Assets	646,524	699,119	△52,595	△7.5
Liabilities	380,120	422,445	△42,325	△10.0
Capital	254,738	267,304	△12,566	△4.7

(2) Income and Expenses

[Appendix Table-3] Income and Expenses of the Broadcasting and Telecommunications Developing Fund

(unit : KRW 1mn)

Category	FY2012(A)	FY2011(B)	Change(A - B)	
			In amount	In %rate
Net program costs	445,354	399,001	46,353	11.6
Costs	449,029	414,475	34,554	8.3
Income	436,463	257,666	178,797	69.4
Result	12,566	156,809	△144,243	△92.0

■ Budgets and Expenses by Program

[Appendix Table-4] Budgets and Expenses by Program Fund

(unit : KRW 1mn)

Program	Budget	Expense
Total	1,136,226	1,173,970
[General accounting]		
Paragraph 1000. Acceleration of convergence between broadcasting and telecommunications	1,524	1,524
Paragraph 1200. Improvement of broadcasting infrastructure	15,557	15,557
Paragraph 1300. Infrastructure development for the radio and broadcasting industry	678	577
Paragraph 1500. Expansion of infrastructure for spectrum management and research	23,777	21,844
Paragraph 3100. Upgrading telecommunications services	24,103	24,072
Paragraph 4100. Protection of users and the promotion of fair competition	2,089	2,052
Paragraph 4300. Upgrading network infrastructure	13,509	13,502
Paragraph 4400. Strengthening information protection	53,035	52,996
Paragraph 5100. Strengthening international cooperation in broadcasting and telecommunications	11,726	11,723
Paragraph 7100. Administrative support for broadcasting and telecommunications	140,148	135,451
Sub-total	286,146	279,298
[Innovative City Construction Special Accounting]		
Paragraph 1500. Expansion of infrastructure for spectrum management and research	23,483	13,194
[Broadcasting and Communications Development Fund]		
Paragraph 1100. Acceleration of convergence between broadcasting and telecommunications	73,559	41,185
Paragraph 1400. Infrastructure development for the radio and broadcasting industry	20,756	19,746
Paragraph 1600. Creation of infrastructure for the promotion of broadcasting	118,238	90,514
Paragraph 1700. Creation of infrastructure for the promotion of broadcasting (financing)	17,000	15,631
Paragraph 2100. Improvement of broadcasting infrastructure	64,906	63,699
Paragraph 4200. Protection of users and the promotion of fair competition	21,332	21,329
Paragraph 4400. Advancement of Networks	14,638	14,638
Paragraph 5200. Strengthening international cooperation in broadcasting and telecommunications	2,822	2,814
Paragraph 6100. Infrastructure development for the broadcasting and telecommunications research and development(R&D)	210,548	210,548
Paragraph 7200. Operating costs for the Broadcasting Development Fund	3,754	3,673
Paragraph 9000. Internal transaction expenses	20,000	20,000
Paragraph 9700. Operation of surplus funds	259,044	377,701
Sub-total	826,597	881,478

2. The List of General Meetings and Agenda Items of KCC in 2012

[Appendix Table-5] The List of General Meetings and Agenda Items of KCC in 2012

Session		Date	Type	Item
1st	Documentary resolution	Jan. 4 (Wed)	Voting	• Vote on the application process for the suspension of execution in relation to the disciplinary action regarding the decision of broadcasting deliberation - YTN
			Reporting	• On the 'Regulatory Reform Initiatives in 2012'
2nd		Jan. 16 (Mon)	Voting	• Vote on the administrative disposition of comprehensive cable television operators related to KBS-2TV transmission interruption
3rd		Jan. 20 (Fri)	Voting	• Vote on policy measures for enabling digital broadcasting and termination of analog broadcasting in 2012
			Voting	• Vote on corrective actions for violations of accounting rules for the 2010 sales reports' test results of 15 telecom operators including KT
			Voting	• Vote on the Gwanggaeto Mobile Plan (draft)
			Voting	• Vote on the system improvement (draft) of terrestrial broadcast retransmission
			Voting	• Vote on the appointment of Director of Broadcasting Culture Association to fill the vacancy
			Reporting	• On the assessment results (draft) of the 2012 broadcasting market competition situation
			Reporting	• On the organization plan (draft) for the assessment committee of broadcasting market competition situation
4th	Documentary resolution	Jan. 20 (Fri)	Voting	• Vote on the registration of business to use broadcast channels - KBSN Co. Ltd.
			Voting	• Vote on the permission to change facilities of comprehensive cable television operators - 26 companies including Tbroad Gangseo Broadcast
			Voting	• Vote on approval of foreign capital contribution of Far East Broadcasting Co.
			Voting	• Vote on administrative penalties for operators who violated compulsory notification of change in broadcast organizing director - Cheong-ju Broadcasting Co., Ltd.
			Voting	• Vote on the approval of business charges of Internet multimedia broadcasting business -SK Broadband and LG U+
			Voting	• Vote on the approval of foreign broadcasting retransmission - 2 companies including Trace TV SA
			Voting	• Vote on some amendments of the notice on radio equipment rules and the related agenda
			Voting	• Vote on agreement of appointed committee members of Broadcasting Dispute Resolution Committee
			Voting	• Vote on some amendments regarding the 'Business Process Regulations for Broadcasting and Telecommunications Business Prohibited Acts' (Notice)
			Voting	• Vote on some amendments of the 'Standards regarding Calculation Methods and etc. of Universal Service Loss Compensation' (Notice)

Session	Date	Type	Item
5th	Feb. 1 (Wed)	Voting	• Vote on corrective commands for telecommunications billing service providers who delay merger reports - Korea Cyber-Payment Co., Ltd.
		Voting	• Vote on the application process for the suspension of execution for disposal of broadcasting deliberations related sanctions - Korea Broadcasting Corporation
		Voting	• Vote on some amendments about the 'Telecommunications Number Management By laws' and the Administrative areas by coverage' (Notice)
		Voting	• Vote on the enforcement plan (draft) of Broadcasting and Telecommunications R & D in 2012
		Reporting	• On the organization and operating plan (draft) of Digital Conversion Promote Auditors
		Reporting	• On some amendments about the 'National Development Fund Contributions Levied and Charged' (Notice)
		Reporting	• On some amendments about the 'Enforcement Decree of the Broadcasting Act'
6th	Feb. 3 (Fri)	Reporting	• On matters related to the assessment of broadcasting market competition situation in 2010
		Voting	• Vote on system improvement (draft) of terrestrial broadcast re-transmission
		Reporting	• On the policy plan (draft) of relay cable broadcasting (RO)
		Reporting	• On amendments to 'Tips and evaluation criteria of telecommunications carrier license application' (Notice)
7th	Feb.15 (Wed)	Reporting	• On the direction of supporting small and medium broadcast since the legislation of Media Rep
		Voting	• Vote on some amendments about 'Rules on sponsorship notices'
		Voting	• Vote on the re-approval of news operators using broadcast channel - YTN
		Voting	• Vote on the registration of business to use broadcast channels - MBN Media Co., Ltd.
		Reporting	• On the promotion plan of 'Global Start-up Program' in 2012
8th	Documentary resolution Feb.17 (Fri)	Reporting	• On the Smart TV services restricted access of KT
		Voting	• Vote on the approval of cable broadcasting charges - 40 companies including Tbroad Kang-seo
		Voting	• Vote on the permission to change facilities of comprehensive cable television operators - 3 companies including Silla Cable TV Co., Ltd.
		Voting	• Vote on the batch revision of administrative regulations for the maintenance of civil office.
		Voting	• Vote on amendments of the 'Notice regarding the organization of broadcast programs'
		Voting	• Vote on the permission of common carrier shareholding or change approvals of comprehensive cable television operators - CMB Daejeon Broadcasting Co., Ltd. acquisition of shares of CMB Daegu Susung Broadcasting
8th	Documentary resolution Feb.17 (Fri)	Voting	• Vote on the permission of common carrier shareholding or change approvals of comprehensive cable television operators - CMB Daejeon Broadcasting Co., Ltd. acquisition of shares of CMB Daegu Susung Broadcasting
		Voting	• Vote on permission for common carriers' satellite mobile communications takeover - AP satellite communications Co., Ltd. takeover of AP satellite system Co., Ltd.

Session	Date	Type	Item
9th	Feb. 22 (Wed)	Voting	• Vote on the appointment of directors to fill a vacancy for the Korea Educational Broadcasting System (EBS)
		Voting	• Vote on some amendments of 'Matter regarding the National Development Fund contributions levied and imposed' (Notice)
		Voting	• Vote on the re-licensing of carriers using broadcast channels - CJ O Shopping and GS Home Shopping
		Reporting	• On the 'composition measures (draft) of the 3 new growths of IT convergence ecosystem'
		Reporting	• On the verification mechanism established to investigate the viewership share
		Reporting	• On the development plan (draft) of the combined influence Index between medium
10th	Documentary resolution March. 6 (Tue)	Voting	• Vote on the registration of business to use broadcast channels - KMH Co., Ltd.
		Voting	• Vote on approvals for the retransmission of foreign broadcasts of the Internet multimedia broadcasting - CCTV
		Voting	• Vote on some amendments of 800/900MHz band wireless equipment rules (Notice)
		Reporting	• On some amendments of 'Enforcement Decree of the Framework Act on the development of broadcasting and telecommunications'
		Reporting	• On some amendments to 'Application procedures and methods of households that want to receive supports in accordance to the transition to digital broadcasting'
11th	March. 6 (Tue)	Voting	• Vote on the re-authorization of comprehensive cable television operators - 35 companies including Tbroad Dobong Kangbuk Broadcast Co., Ltd
		Voting	• Vote on administrative penalties for broadcasters who are in violation of change report for the Terms of Use
		Reporting	• On the enactment of the 'Enforcement Decree of the Act on broadcast advertising sales representatives'
12th	March. 16 (Fri)	Voting	• Vote on the frequency re-allocation for the Mobile internet (WIB) use
		Voting	• Vote on the new permit of location information providers - 10 corporations including Insoles lines Co., Ltd.
		Reporting	• On some amendments to the 'Criteria regarding calculation methods of the universal service loss compensation' (Notice)
		Reporting	• On some amendments to the 'Enforcement Decree of the Act on Promotion of Information and Communications Network Utilization and Information Protection, etc.'
13th	Documentary resolution March. 22 (Thu)	Voting	• Vote on the registration of business to use broadcast channels - 2 companies including CU Media Co., Ltd.
		Voting	• Vote on some revision of the KCC's Regulations related to the implementation of the Telecommunications Business Act
		Voting	• Vote on administrative penalties for common carriers that are in violation of the conditions of the permit and corrective instruction - 4 corporations including Damyang Cable Broadcast Co., Ltd.
14th	March. 23 (Fri)	Voting	• Vote on some amendments of 'Matter regarding the National Development Fund contributions levied and imposed' (Notice)
		Voting	• Vote on the enactment for the Regulatory of the operation of Officers Recommendation Committee of the Korea Broadcasting Advertising Corporation

Session		Date	Type	Item
			Voting	• Vote on appeals for the 'Y su 24' of YTN
			Voting	• Vote on appeals for the 'VJ commando' of the Korea Broadcasting System (KBS)
			Reporting	• Matters pertaining to the composition plan (draft) of assessment committee for the broadcasting market competition situation
15th	Documentary resolution	March. 27 (Tue)	Voting	• Vote on lawmakers' requirements of Article Submission
16th		March. 29 (Thu)	Voting	• Vote on the '2012-2013 provision of specification plan (draft) of universal service providers'
			Voting	• Vote on the enactment of the 'Enforcement Decree of the Act on Broadcast Advertising Sales Representatives'
			Voting	• Vote on corrective actions for infringement of user interests in relation to the combination of products of KT's Olleh TV SkyLife
			Reporting	• On the comprehensive plan (draft) for enabling re-sale of mobile communications services
			Reporting	• Some revisions of the 'Enforcement Decree of the Broadcasting Act'
			Reporting	• Some revisions of the 'Notice regarding the organization of broadcasting programs'
			Reporting	• On the 'strategy for the activation of broadcasting and telecommunications' small and medium venture companies' ecosystem'
			Reporting	• On the Enactments (Presidential Directive) of the 'Regulations on the Preparatory Committee and the Task Force to prepare for the 2014 International Telecommunication Union Plenipotentiary Conference'
			Reporting	• Some amendments on the 'Enforcement Decree of the Act regarding the protection and use of location information', etc.
17th	Documentary resolution	April. 2 (Mon)	Voting	• Vote on the permission to change the broadcasting facilities of comprehensive cable television operators - five companies including Daegu cable TV Co., Ltd.
18th	Documentary resolution	April. 4 (Wed)	Voting	• Vote on the application process to stop the enforcement of broadcasting deliberations related sanctions - CBS Christian Broadcasting
19th	Documentary resolution	April. 4 (Wed)	Voting	• Vote on the enactment of the 'Enforcement Decree of the Act on Broadcast Advertising Sales Representatives'
20th		April. 10 (Tue)	Voting	• Vote on administrative penalties for operators who are in violations with the privacy legislation - 13 operators including Ticket Monster Co., Ltd.
			Reporting	• Matters relating to the enactment of the 'Standards regarding the provision of relay service using a communication facility' (Notice)
			Reporting	• On the preparation status on the distribution of the mobile handset payment system
			Reporting	• Some revisions of and matters related to the enactment Notice of the 'Enforcement Decree of the Broadcasting Act'
			Reporting	• Some revisions of the 'Enforcement Decree of the Wireless Telegraphy'
			Reporting	• On ways to improve certification assembled PC
			Reporting	• Some revisions of the 'Act on the Broadcasting and Telecommunications Development Framework'

Session	Date	Type	Item
21th Documentary resolution	April. 13 (Fri)	Voting	• Vote on some amendments of the 'Standards regarding Calculation Methods and etc. of Universal Service Loss Compensation' (Notice)
		Voting	• Vote on the licensing of interconnection agreements of telecommunications equipment
		Voting	• Vote on some amendments to the 'Application procedures and methods of households that want to receive supports in accordance to the transition to digital broadcasting' (Notice)
		Voting	• Vote on the appointment of members of the evaluation committee of the broadcasting market competition situation
22th Documentary resolution	April (Wed)	Voting	• Vote on the election of the Secretary-General of Tae-in Cooperation Center
23th	April. 27 (Fri)	Voting	• On the Enactments (Presidential Directive) of the 'Regulations on the Preparatory Committee and the Task Force to prepare for the 2014 International Telecommunication Union Plenipotentiary Conference'
		Voting	• Vote on the change plan (draft) of DTV channels relocation
		Reporting	• Some revisions on 'Rules on the operation and development of local broadcast committee'
		Reporting	• On the composition and organization plan for the assessment committee of broadcasting market competition situation
		Reporting	• Enactments on the 'Notice on the basis of the overage rates' (Notice)
		Reporting	• Matters on policy measures related to mobile communications resale market entry of carriers' affiliated companies.
24th Documentary resolution	April. 30 (Mon)	Reporting	• Some revisions of the 'standards for the implementation of number portability of mobile phone services' (Notice)
		Voting	• Vote on the approval of cable broadcasting charges - 45 companies including C & M Kyunggi Cable TV
		Voting	• Vote on the approval of cable broadcasting facilities' changes - 6 companies, including Hyundai HCN Chungbuk broadcasting
		Voting	• Vote on the approval of business charges of Internet Multimedia Broadcasting - SK Broadband and LG U+
		Voting	• Vote on the approval of Internet Multimedia Broadcasting Business Content - TV Flea Market Co., Ltd.
25th	May. 4 (Fri)	Voting	• Vote on approvals of the abolition of the telecommunications business - 3 corporations including Dongseo Digital Network Co., Ltd.
		Voting	• Vote on corrective actions for high-speed Internet users interest infringement related to restricted access of Samsung Smart TV service of KT
26th Documentary resolution	May. 15 (Tue)	Reporting	• Matters on policy measures related to mobile communications resale market entry of carriers' affiliated companies.
		Voting	• Vote on administrative penalties for operators who violated compulsory notification of change in Broadcast organizing director - Munwha Broadcasting Co., Ltd.
		Voting	• Vote on the 'Basic plan of 2012 terrestrial, terrestrial DMB broadcasting business reauthorization
		Voting	• Appointed with the consent of Media diversity committee members

	Session	Date	Type	Item
27th		May. 18 (Fri)	Voting	• Vote on the revitalization of e-commerce on the linked TV
			Voting	• Vote on the revision of the 'Standard on the provision conditions such as equipment and the cost calculation'
			Voting	• Vote on some amendments on the 'Enforcement Decree of the Act regarding the Protection and Use of Location Information', etc.
			Voting	• Vote on some amendments to the 'Enforcement Decree of the Act on Promotion of Information and Communications Network Utilization and Information Protection, etc.
			Voting	• Vote on the corrective action for infringement of user interests regarding high-speed Internet access related prizes of KT, SK Broadband and LG U +
			Reporting	• Matters regarding the enactment and amendment of the Notice in accordance with the revised Information Network Act
			Reporting	• Guidelines (draft) on the pay-TV market operators to use broadcast channels broadcast programs.
28th	Documentary resolution	May. 21 (Mon)	Voting	• Vote on the permission of common carriers' shareholding and the permission on the changes of comprehensive cable television operators - Four affiliates acquisition of shares such as CJ Hello Vision Co., Ltd., CJ Hello Vision and YoungDong Broadcasting Co., Ltd.
			Reporting	• Matters related to the promotion of batch re-legislative for the 18th National Assembly's disposal legislation
			Reporting	• Matters on policy measures for the young people's hope on the creation of work
			Reporting	• Some revisions on the 'Enforcement decree of the Act on information and communication work'
29th	Documentary resolution	May. 22 (Tue)	Voting	• Vote on the application process for the suspension of execution in relation to the disciplinary action regarding the decision of broadcasting deliberation - The Korea Broadcasting Corporation
30th		May. 30 (Wed)	Voting	• Vote on amendments to 'Tips and evaluation criteria of telecommunications carrier license application' (Notice)
			Voting	• Vote on some revisions of the 'Enforcement Decree of the Broadcasting Act'
			Voting	• Vote on the assessment plan (draft) of the 2012 broadcasting market competition situation
			Voting	• Vote on the approval of operation plan for the terrestrial broadcast retransmission of satellite operators
			Reporting	• Matters concerning the enactment of 'guidelines of communication for the handicapped' for ensuring the access rights to communication services of visually and hearing impaired people
			Reporting	• Matters concerning the enactment of permission, change authorization, re-authorization of procedures and criteria of broadcast advertising sales agencies' (Notice)
31th	Documentary resolution	June. 4 (Mon)	Voting	• Vote on the registration of business to use broadcast channels - A client entertainment Co., Ltd.
			Voting	• Vote on the approval of foreign broadcasting retransmission - 2 companies including NBA properties. Inc
			Voting	• Vote on the enactment of the 'organization and operation plan (draft) for the assessment committee of broadcasting market competition situation'
			Voting	• Vote on the lawmakers' requirements of Article Submission

Session	Date	Type	Item
32th	June. 7 (Thu)	Reporting	• Matters concerning the enactment of the 'Detailed criteria on fines in accordance with the Act on broadcast advertising sales representative' (Notice)
		Reporting	• Matters concerning some revisions of rules and notice of the KCC's related to public channels
		Voting	• Vote on the change approval for the practical owner of the management control of comprehensive cable television operators and the reigns of governance of common carriers - Hyundai HCN Co., LTD's management of the Korea cable TV Pohang Broadcast Co., Ltd.
		Voting	• On the disposition of administration of comprehensive cable television operators - Youngseo Broadcasting Co., Ltd., CCS Choongbuk Broadcast Co., Ltd.
		Voting	• Vote on appeals of 'Kim Mi - Hwa's Yeorubun (Hello, everybody!) Part 1' of CBS Christian broadcast
		Reporting	• Notice enactments for specifying the range of communication facilities of urban planning
33th	June. 14 (Thu)	Reporting	• Some revisions of the "Broadcasting and Communications R & D Management Regulations" (Notice)
		Voting	• Vote on the request on the proposal of requirements of the 2013 budget and fund development planning
		Voting	• Vote on some religions of the 'Development of the Enforcement Decree of the Framework Act on Broadcasting and Communications'
		Voting	• Vote on administrative penalties of operators who are in violation of privacy protection - Nexon Korea Co., Ltd.
		Voting	• Vote on administrative penalties of operators who are in violation of privacy protection - Yoelshimhee Communications Co., LTD.
34th	June. 21 (Thu)	Reporting	• Enactment on the 'Notice on the accounting adjustment criteria of the broadcast advertising sales agency businesses' (Notice)
		Voting	• Vote on administrative penalties for violations of laws on the location information protection in relation to the provision of private location information of SK Telecom, KT and LG U+
		Voting	• Vote on some revisions of the 'Enforcement Decree of Information and Communication Works Business Act' matters relating to the enactment of "Laws on the development of cloud computing and the protection of users"
		Reporting	• Matters on the Revitalization of Big Data
35th	Documentary resolution June. 26 (Tue)	Reporting	• Matters regarding the basic plan to raise the promotion of life radio industry
		Voting	• Vote on the approval of cable broadcasting charge - 35 companies including CJ Hello Vision
		Voting	• Vote on the permission to change facilities of comprehensive cable television operators - 16 companies including CNM Co., Ltd.
		Voting	• Vote on some revisions of rules and notice of the KCC's related to Public channels
		Voting	• Vote on the 'Standards regarding transit services using communication equipment' (Notice)
		Voting	• Vote on the enactment of the 'standards on the Notice of the over-age rates, etc.' (Notice)
		Voting	• Vote on some revisions of the 'Standards on the implementation of number portability of local telephone service, etc.' (Notice)
35th	Documentary resolution June. 26 (Tue)	Voting	• Vote on the promotion of batch re-legislative for the 18th National Assembly's disposal legislation

Session		Date	Type	Item
36th		June. 28 (Thu)	Voting	• Vote on the planning of senior executives of the Korea Broadcasting System (KBS), the Broadcasting Cultural Association and the Korean Educational Broadcasting Corporation
			Voting	• Vote on the approval of operation plan for the terrestrial broadcast retransmission of satellite operators - KT's SkyLife
			Voting	• Some revisions of the "Broadcasting and Communications R & D Management Regulations" (Notice)
			Reporting	• Matters concerning the enactment of "Guidelines to prevent faking the Caller ID" to prevent from the damage of voice phishing
37th		July. 5 (Thu)	Voting	• On some amendments about the "Enforcement Decree of the Broadcasting Act"
			Voting	• Vote on the calculation for share of viewers of year 2011 broadcasters
			Reporting	• On closure of Satellite mobile multimedia broadcasting business - SK Telink
			Reporting	• Enactment of the "Notice on combined sales of broadcast advertising support"
38th	Documentary resolution	July. 10 (Tue)	Voting	• Vote on changes on the registration of Use of broadcast channels- 7 Channels such as 5 Comedy TV companies including CU Media Co., Ltd.
			Voting	• Vote on amendments of the "Notice regarding the organization of broadcast programs"
			Voting	• Vote on some revisions of "Rules on the operation and development of local broadcast committee"
39th		July. 12 (Thu)	Voting	• Vote on the change approval of the most liquid-founder of comprehensive cable operators - CNM Ulsan Cable TV Co., Ltd.
			Voting	• Vote on specifying the circulation certification authority of daily newspapers
			Reporting	• Some amendments on the "Enforcement Decree of the Act regarding the Protection and Use of Location Information", etc.
			Reporting	• On the promotion plan for the diffusion of the next generation of web standard HTML5'
40th		July. 18 (Wed)	Voting	• Vote on the selection of candidates for the director of Broadcasting Cultural Association and recommendation related to the director of Korea Broadcasting System (KBS)
			Voting	• Vote on the re-authorization of the comprehensive cable television operators - 31 companies including CJ Hello Vision Daegu Susung Broadcast Co., Ltd.
41th	Documentary resolution	July. 19 (Thu)	Voting	• Vote on the appointment to fill a vacancy committee member for the Protection of Viewers Rights Committee
			Voting	• Vote on sanctions of executory operators of signed agreement on individual household for the organization receiving contract
			Voting	• Vote on the registration and registration of change and approval of Internet multimedia broadcasting - the 3 companies in Money Two Data Broadcast Co., Ltd.
			Voting	• Voting on the enactment of authorization, change of authorization and re-authorization of "Broadcast advertising sales representative operators" (Notice)

Session		Date	Type	Item
			Voting	• Voting on administrative penalties for operators who are in violations with the privacy legislation - 106 companies including Ticket Choice
			Reporting	• Matters regarding the promotion on the designation of screening of the identification agency reported.
			Reporting	• Matters relating to the enactments and revisions of false notice according to the Act on revised Information Network
42th		July. 27 (Fri)	Voting	• Matters regarding the appointment of directors of the Broadcasting Cultural Association and the recommendations of the directors of Korea Broadcasting System (KBS)
43th	Documentary resolution	August. 1 (Wed)	Voting	• Vote on the approval of cable broadcasting charges - 52 companies including CJ Hello Vision
			Voting	• Vote on the permission to change facilities of comprehensive cable television operators - 18 companies including CJ Hello Vision
			Voting	• Vote on the approval of charges for the KT Skylife
			Voting	• Vote on the registration and change of registration using the broadcast channels - 2 companies including Shinwoo Communication Co., Ltd.
			Voting	• Voting on the permission of Common carriers' merger and permission to change of comprehensive cable television operators - Tbroad Nakdong Broadcast Co., Ltd.'s merger of Dongseo Digital Broadcast Voting on the enactment and revisions in accordance with the revision of Acts on Information Network
			Voting	• Matters concerning the enactment of the 'Detailed criteria on fines in accordance with the Act on broadcast advertising sales representative' (Notice)
			Voting	• Voting on appeals of 'Korea News 9' of the Korea Broadcasting Corporation
			Voting	• Voting on ways to improve the policies on the termination of terrestrial analog TV broadcasts
			Voting	• Vote on the needs of Management plan change (draft) in Broadcasting and Communications Development Fund in 2012
44th	Documentary resolution	August. 3 (Fri)	Voting	• Vote on the processing of application for the suspension for the enforcement of broadcasting deliberation - Woori Home Shopping Co., Ltd.
45th	Documentary resolution	August. 21 (Tue)	Voting	• Vote on some revisions of the 'Rules relating to conferences on the Korea Communications Commission'
			Voting	• Vote on the administrative measures about the 'Notice regarding the organization of broadcast programs'
			Voting	• Vote on administrative penalties for operators who are in violation of duty of report on the change of officer in charge of organization of programs - Kyunggi Broadcast Co. Ltd.
			Voting	• Vote on the 2nd Announcement (draft) on the loss compensation according to the 470 to 806 MHz frequency band relocation
			Voting	• Vote on the permission of common carriers' shareholding - Science and Technology of the Mutual Fund's shareholding of Daehan Rich Co., Ltd.
46th		August. 22 (Wed)	Voting	• Voting on the permission of broadcast advertising sales agent

Session	Date	Type	Item
47th Documentary resolution	August. 30 (Thu)	Voting	• Voting on the interconnection agreements for the licensing of telecommunications equipment
		Voting	• Voting on the agreement of broadcast members appointed of the Evaluation Committee
		Voting	• Voting on the assessment committee member to fill a vacancy of the broadcasting market competition situation
		Voting	• Voting on the enactment of the 'procedures and methods of the welfare of persons with disabilities' (Notice)
		Reporting	• Matters concerning some revisions of the 'Accounting separation standards of telecommunications business'
		Reporting	• On some revisions to 'Rules on the radio equipment for broadcasting work' (Notice)
48th	August. 31 (Fri)	Voting	• On approval of MBC network support plans for the Promotion of the Korea Broadcasting Advertising Corporation
		Voting	• On the new permit of location information providers - 8 corporations including Insung Data Co., Ltd.
		Voting	• Matters regarding the expansion on the agenda subject to written resolution
		Voting	• For the selection of the president, director(s) and candidate(s) of the Korean Educational Broadcasting Corporation
		Reporting	• Matters in relation to the amendments of the 'Information and Communication Works Business Act'
		Reporting	• On the action plan according to the termination of 700MHz bands' wireless microphone
49th	September. 5 (Wed)	Voting	• On the enactment of the 'support Notice on the combined sales of broadcast advertising
		Voting	• On the approval of offshore broadcasting retransmission of terrestrial broadcasting for broadcasting providers of the Internet Multimedia Broadcasting - KT, SKG, and LG U+.
50th	September. 7 (Fri)	Voting	• Matters regarding the deregulation on Terrestrial TV broadcasting operation time
		Voting	• On the basic plan of 2013 public channel selection and recognized welfare channels of persons with disabilities
		Reporting	• On the follow-up of DCS service of KT Skylife
51th	September. 13 (Thu)	Voting	• Some amendments on the 'Enforcement Decree of the Act regarding the Protection and Use of Location Information', etc.
		Voting	• On the election of director(s) and auditor(s) of the Korean Educational Broadcasting Corporation
		Reporting	• On the follow-up of DCS service of KT Skylife
52th Documentary resolution	September. 14 (Fri)	Voting	• Registration of the business using broadcast channels and on the change of registration - 6 companies including Hyundai Media
		Voting	• Permission on the takeover of telecommunications business (high-speed Internet) access -Mujin ENM Co., Ltd.'s takeover of high speed internet business of Sulsung broadcast Co., Ltd.
		Voting	• Some revision on the 'Accounting adjustment criteria of the broadcast advertising sales agency' (Notice)
		Reporting	• Some amendments on the (Notice) of publication standards on the corrective order based facts'

Session	Date	Type	Item
53th	September. 20 (Thu)	Voting	• Of corrective actions for violations of prohibited acts on sales related to digital conversion of comprehensive cable broadcasters
		Voting	• Matters on the selection of vice-chairman of the Korea Communications Commission
		Reporting	• Established the mobile phone use guidelines for children and adolescents
		Reporting	• Some amendments of the 'Broadcasting and Communications Development Act'
54th	Documentary resolution September. 24 (Mon)	Voting	• On the administration disposition of operators for the violation of duty to report on the change of representatives - 2 companies in C & M Gangnam Cable TV
		Voting	• On the approval of cable broadcasting charge - 2 companies including the Daegu Cable Broadcasting Co., Ltd.
		Voting	• Vote on the permission to change facilities of comprehensive cable television operators - 25 companies in C & M Co., Ltd.
		Voting	• On the permission to change of comprehensive cable television operators - Keumkang Broadcasting Co., Ltd.'s merger with Kunsan cable television Ltd.
		Voting	• Matters regarding the agreement on the committee member appointed of the universal viewers' guaranteed committee
		Voting	• On the consent of committee members to fill a vacancy of the Broadcast Evaluation Committee
		Voting	• On the some amendment of the 'Standards for the implementation of number portability of mobile phone services' (Notice)
		Voting	• On the enactments and amendments of Notice for specifying the range of 'telecommunication facilities' of urban planning facility
		Voting	• Matters on interconnection agreements of telecommunication facilities
		Reporting	• Some amendments about the 'Enforcement Decree of the Act on Internet Address Resources'
55th	September. 5 (Fri)	Voting	• Vote on some amendment of the notice on radio equipment rules and the related matters
		Voting	• Regarding the appointment of an auditor for the Korea Broadcasting Corporation
		Reporting	• Matters concerning eradication measures of electronic financial fraud (Phishing) for the protection of users of telecommunication networks
56th	Documentary resolution October. 10 (Wed)	Voting	• On the change of Commissioner of the Broadcasting and Communications Development Fund Council
		Voting	• On the revision of the batch of review for the administrative rules deadline, etc.
		Voting	• On the approval of the Internet multimedia broadcasting retransmission of foreign broadcasts - 2 companies including High TV, inc,
		Voting	• On the approval of business charges of Internet Multimedia Broadcasting - KT, SKB, and LG U+
57th	October. 19 (Fri)	Voting	• Permission on the shareholding of common carriers - KT's shareholding of Ton Telecom Co., Ltd.
		Voting	• On some revisions of the information and Communication Works Business Act on broadcast deliberation according to judgment of unconstitutionality- Elle TV Korea Co., Ltd.
		Voting	• Improve the status and details of the plan on poor reception / reception environment of digital broadcasting
		Reporting	• On the direction of activation policies for the Pay-TV switch to digital

Session	Date	Type	Item
58th Documentary resolution	October. 26 (Fri)	Voting	• Vote on the approval of cable broadcasting charges -50 companies including Kangwon Broadcast Co., Ltd.
		Voting	• Vote on the registration and registration of change and approval of Internet multimedia broadcasting - 3 companies including Wise-peer Co., Ltd.
		Voting	• Vote on approval of foreign capital contribution of Far East Broadcasting Co.
		Voting	• Vote on appeals for the 'line treatment high sugar contained orange' of Woori Home Shopping Co., Ltd.
		Voting	• Vote on the application process for the suspension of execution for disposal of broadcasting deliberations related sanctions - Korea Broadcasting Corporation
		Voting	• Some revision on the (Notice) 'Rules for radio equipment' and the 'Table of Frequency Allocations of the Republic of Korea'
59th	October. 30 (Tue)	Voting	• Regarding the corrective order for the broadcasters who are in violation of conditions for the re-permit - OBS Kyungin TV Co., Ltd.
		Voting	• Vote on the change approval for the practical owner of the management control of comprehensive cable television operators and the reigns of governance of common carriers - CCS Chungbuk Broadcasting Co., Ltd.'s management of Youngseo Broadcast Co., Ltd.
		Voting	• On the changes in the conditions of the re-permit for the terrestrial operators mobile multimedia broadcasting (DMB) - 4 companies including Kwangju Munwha Broadcasting Co., Ltd.
		Reporting	• Regarding the confirmation of revision (draft) for the '2012 assessment for the broadcasting market competition situation'
60th	November. 7 (Wed)	Voting	• On the basic plan of 2013 public channel selection and recognized welfare channels of persons with disabilities
61th Documentary resolution	November. 9 (Fri)	Voting	• Vote on the registration and registration of change and approval of Internet multimedia broadcasting - 3 companies including CMBC
		Voting	• Vote on the approval of charges for the KT Skylife
		Voting	• Vote on the application process for the suspension of execution in relation to the disciplinary action regarding the decision of broadcasting deliberation - Munhwa Broadcasting Co., Ltd.
		Voting	• Enactment on the 'Notice on the accounting adjustment criteria of the broadcast advertising sales agency businesses' (Notice)
		Reporting	• Matters on some revisions on the 'standard for the calculation for share of viewers and etc.' (Notice)
62th	November. 20 (Tue)	Voting	• Vote on the frequency allocation plan for the mobile Internet (WiBro)
		Voting	• Vote on the amendment of the (Notice) of the 'Technical standards regarding cable television equipments'
		Voting	• On some revisions of the Information and Communication Works Business Act on broadcast deliberation according to judgment of unconstitutionality - Munwha Broadcasting Co., Ltd.
		Voting	• Vote on the results of broadcast evaluation in 2012
		Voting	• Vote on the permission to establish the corporation to provide some of telecommunications services and permission to change the provision of Internet multimedia broadcasting businesses - KT's establishment of KTSet Co., Ltd.

Session	Date	Type	Item
63th Documentary resolution	November. 23 (Fri)	Voting	• Vote on the amendment on 'the Broadcast Communications Development Act'
		Voting	• Vote for the selection of candidates for president of the Korea Educational Broadcasting Corporation
		Reporting	• Vote on the amendment on the 'Telecommunications number management Bylaws' (Notice)
		Voting	• Vote on the approval of cable broadcasting charge - 27 companies including Hyundai HCN
		Voting	• Vote on the permission to change the facility of comprehensive cable TV broadcasters - 92 companies including Tbroad Kangseo Broadcasting
		Voting	• Vote on the permission of interconnection agreements of telecommunication facilities.
		Voting	• Vote on the amendment on the 'Publish of the fact that the corrective order been received' (Notice)
		Voting	• On the application process, the enforced maintenance on sanctions of broadcasting deliberation - Korean Educational Broadcasting Corporation
64th	November. 27 (Tue)	Voting	• Vote on the election of president for the Korea Educational Broadcasting Corporation
65th	November. 29 (Thu)	Voting	• Vote on the relicensing of terrestrial broadcasters in 2012
		Voting	• Vote on the relicensing of terrestrial mobile multimedia broadcasting operators in 2012
		Voting	• Voting on the permission of changes for the corporation merger of comprehensive cable TV operators and permission on the corporate merger of common carriers - JCL Ulsan Broadcasting Co., Ltd, merged with C&M Ulsan Cable TV Co., Ltd.
		Voting	• Vote on the permission change of corporation merger and the change approval of the most liquid-founder of comprehensive cable operators and permission on the shareholding of common carriers - Mergers of C&M Co., Ltd. , Korea Wired Media Co., Ltd. , and Digital Media Net Co.. Ltd.
		Voting	• Vote on the amendment on the 'Table of Frequency Allocations of the Republic of Korea' and 'Rules for radio equipment' (Notice) in accordance with the results of WRC-12 and termination of use of the 700MHz band wireless microphone
		Voting	• Vote on the amendment on the 'Telecommunications services subject for the permission of Terms and Conditions and common carriers' (Notice)
		Voting	• Vote on some amendments (Notice) on the Enforcement Decree of 'Telecommunications Business Act'
		Voting	• Vote on some amendments on the 'Interconnection standards of telecommunication facilities' (Notice) according to the calculation on the interconnection fee of 2012-2013
		Reporting	• Vote on the amendment on the 'Table of Frequency Allocations of the Republic of Korea' and 'Rules for radio equipment' (Notice)
		Reporting	• Vote on the amendment on the 'Telecommunications Business Act'
		Reporting	• On the enactment of the 'Standards on rational utilization and management. Of networks and transparency of traffic management'

Session	Date	Type	Item
66th	December. 13 (Thu)	Voting	• Vote on corrective actions for violations of accounting rules in test results of 2011 fiscal year sales report of 15 telecommunications operators such as KT
		Voting	• Vote on administrative penalties for the violation of privacy protection law of the Korea Educational Broadcasting Corporation
		Voting	• Vote on administrative penalties for the violation of privacy protection law of KT
		Reporting	• Matters related to the basic plan for the cosmic radio disaster management
67th	Documentary resolution December. 14 (Fri)	Voting	• Approval on the retransmission of Internet multimedia broadcasting of foreign broadcasts - Discovery Networks Asia-Pacific Pte, Ltd
		Voting	• Vote on some amendments on the 'Standards regarding the market share calculation'
		Voting	• Vote on the registration and change of registration on business using broadcast channels - 3 companies including CJ Systems Co., Ltd.
		Voting	• On the administration disposition of operators for the violation of duty to report on the change of representatives - 5 companies including Hao TV Co., Ltd.
		Voting	• The basic plan (draft) of reauthorization for the cable broadcasting business in 2013
68th	December. 17 (Mon)	Voting	• Administrative penalties for user protection violations of telecommunications billing service providers vote on some amendments 'on the range of work engaged in the radio station workers'
		Voting	• Detailed action plan (plan) of Channel Relocation of Terrestrial Digital Broadcasting Station
		Voting	• Vote on the basic plan (draft) of permit examination of telecommunications businesses (WiBro)
		Voting	• Vote on the appointment of an auditor of the Korea Broadcasting Corporation
		Reporting	• On the development plan of the Community Media Center
		Reporting	• Matters on the Revitalization of the future Internet utilizing the research and test the network (KOREA / TEIN)
69th	December. 20 (Thu)	Voting	• On the enactment of the 'Notice regarding the Configuration and Operation of the Broadcast Advertising Balance Development Council'
		Voting	• For the re-permission of terrestrial mobile multimedia broadcasting operators in 2012 - Chuncheon Culture Broadcasting Co., Ltd.
		Reporting	• On the enactment of the product standards for the small and medium TV Home Shopping
		Reporting	• On the results of the development of combined impact factor between media'
		Reporting	• Matters related to the results of assessment on the broadcasting market competitive situation in 2012
		Reporting	• On some revisions on the 'Standards regarding the calculation method for the compensation of loss of the universal service and the appropriate number for public telephones

Session	Date	Type	Item
70th	December. 24 (Mon)	Voting	• Vote on corrective actions for infringement of user interests in relation to the subsidies on mobile phone handsets of SK Telecom, KT and LG U+
		Reporting	• On some amendments about the 'National Development Fund Contributions Levied and Charged' (Notice)
		Reporting	• On the assessment of content production capabilities of broadcasters subject to registration
		Reporting	• On the promotion plan of frequency re-allocation for the Mobile Internet
71th	Documentary resolution December. 26 (Wed)	Voting	• All of amendments to the 'rules on radio equipment' (Notice)
		Voting	• On the appeal on the 'KBS News Plaza' of the Korea Broadcasting Corporation
		Voting	• Vote on the appeal of election broadcasting of the 'MBC News Desk' of Munwha Broadcasting Co., Ltd.
		Voting	• Vote on the permission of common carrier shareholding or the change approval of the most liquid-founder of comprehensive cable TV operators - Hwan-Oh Lee's acquisition of shareholding of Keumkang Broadcast Co., Ltd.
		Voting	• Vote on the permission to establish the corporation of common carriers and permission to change and permission to approval on comprehensive cable TV operators - the establishment of Tbroad Jeonju Broadcasting Co., Ltd. of Tbroad Holdings Co., Ltd.; Tbroad Jeonju Broadcasting Co., Ltd's shareholding (largest shareholder) of Tbroad Gangseo Broadccasting Co., Ltd and Tbroad Jeonju Broadcasting Co., Ltd's practical ownership of Tbroad Dobong-Kangbuk Broadcasting Co., Ltd.
72th	December. 28 (Fri)	Voting	• Vote on the designation of self-identification agencies of mobile carriers - SK Telecom, KT and LGU+
		Voting	• Vote on the comprehensive plan (draft) of the '2014 ITU Plenipotentiary Conference'
		Voting	• Vote on the re-licensing of terrestrial mobile multimedia broadcasting operators in 2012 - Chuncheon Culture Broadcasting Co., Ltd.
		Voting	• System of improvement (draft) of the terrestrial broadcast retransmission

3. 2012 Monthly Major Achievements

[Appendix Table - 6] 2012 Monthly Major Achievements

● January 2012

Date	Event(s)
January 10	Chung-sik Kim, a Standing Commissioner participated in the 'CES 2012'
January 10	Held the 'Agreement ceremony for the Development of Internet Start-ups and Support for Developers'
January 16	Prepared and conducted the 'Cloud Services Certification'
January 17	Promulgated amendments of the Broadcasting Act for the activation of the domestic animation production
January 17	Announced plans to approvals and permits of 2012 location information providers
January 18	Finalized international 4G domestic technology standards
January 19	The '2012 New Year's Ceremony for personnel engaged in broadcasting and telecommunications'
January 19	The 4 ITU-R domestic experts advanced to Vice-Chairmanship
January 20	Voted on the 'Mobile Gwanggaeto Plan'
January 20	Support the activation of M / W industries through deregulation
January 26	Organized and discussed the 'Network Neutrality Policy Advisory Committee' in earnest
January 30	Launched the 'HTML5 activated Leaders Camp'
January 30	Significant improvement of broadcasting environment for the visual and hearing impaired people
January 31	Public hearings held for the 'Composition of the 3 New Growths Convergence Ecosystem'

| Held the 'Agreement Ceremony for the Development of Internet Start-ups and Support for Developers'



| Launched the 'HTML5 Activated Leaders Camp'



● February 2012

Date	Event(s)
February 2	Held the '2012 Broadcasting and Telecommunications Industry Outlook Conference'
February 6	Mun-seok Yang, a Standing Commissioner, cooperation on Information Protection with Vietnam
February 6	Vice Chairman Sang-gyu Hong interviewed with the Governor of the Organization for International Broadcasting and Communication (IIC)
February 7	Held the 2012 Oceania broadcasting content showcase
February 9	The 3 broadcasters - the Korean Drama Publisher Association, agreed to establish win-win-based allocation of indirect advertising revenue
February 9	Legislation of Media Rep passed the National Assembly
February 16	Held the briefing on the introduction of acts prohibited on broadcasting markets
February 18	Successful finish of the World Radio Communication Conference (WRC 12)
February 22	Laid the 3 new growths ecosystem of mobile, home, and outdoor in earnest 'for securing the future of global IT initiative'
February 23	Chung-sik Kim, a Standing Commissioner held meetings with MVN CFO
February 23	Started NFC-based mobile payments services nationwide
February 27	Held the '2012 privacy protection officers and handlers' workshop'
February 27	Mun-seok Yang, a Standing Commissioner participated in the Spain 'MWC 2012'
February 27	Initiated activities for the 'Digital conversion's promotion team paying a visit '
February 28	450 minutes free Internet phone calls for the recipient of basic livelihood and a 50% reduction in call charges for the handicapped and men of national merit
February 28	Recommendations on privacy compliance and on giving the user's choice related to Google's privacy policy changes

| Held the '2012 Broadcasting and Telecommunications Industry Outlook Conference'



| Chung-sik Kim, a Standing Commissioner Held Meetings with MVN CFO



● March 2012

Date	Event(s)
March 2	Opening of full-fledged cosmic radio waves' environment forecast era
March 6	Promoted the enactment of Enforcement Decree of Media Rep
March 9	Held Chairman, Gye-cheol Lee's inauguration
March 15	Chairman, Gye-cheol Lee held meetings with the head of broadcasting related association
March 19	Awards ceremony held for the '2012 Korea Communications Commission (KCC)'s Broadcasting Grand Prize'
March 21	Held the 'Joint Groundbreaking Ceremony for the City of Kwangju and Jeollanamdo-joint Innovation'
March 26	Chairman, Gye-cheol Lee's first step, to Guro Digital Valley, the Korea's growth engine
March 28	Operators' conference held for the enhancement of Web hard
March 29	Lead in the seven ICT new industries' overseas expansion
March 29	Prepared a comprehensive plan for the activation of mobile telecommunications resale business [MVNO]

| Awards Ceremony Held for the '2012 Korea Communications Commission (KCC)'s Broadcasting Grand Prize



| Held the 'Joint Groundbreaking Ceremony for the City of Kwangju and Jeollanamdo-joint Innovation'



● April 2012

Date	Event(s)
April 1	Yong-seop Shin, a Standing Commissioner participated in ' MPTV 2012', France
April 3	Started the world's first terrestrial high-definition 3D pilot broadcasting
April 5	Held the 'Policy debaters regarding the collection and restrictions on the use of social security number'
April 5	Held the 'Launching ceremony for the 3rd Korea Internet Dream Team'
April 9	Held the inauguration ceremony for the 'Global K-Start ups program 2012'
April 16	Vice chairman, Seong-gyu Hong visited the 'NAB Show 2012'
April 16	Chairman, Gye-cheol Lee held the luncheon meeting with major Internet companies
April 17	Launched the 'Korean Internet Governance Council'
April 18	Development of note kits for the Internet ethics training of elementary, middle school and high school students for the activation of Internet ethics training
April 26	Chairman, Gye-cheol Lee visited the digital broadcast maintenance and vendor display companies

| Launching Ceremony for the 3rd Korea Internet Dream Team



| Luncheon Meeting with Major Internet Companies



● May 2012

Date	Event(s)
May 1	Implementation of global mobile phone handsets' payout
May 2	DTV co-donation of 'The KCC and Jeollabuk-do NS Shopping', Jeonbuk region's social welfare facilities
May 2	Launched the 'LBS win-win strategy forum'
May 7	Promotion of smart work demonstration projects for the IT underprivileged
May 12	Reinforcement of Privacy and IPTV broadcasting cooperation between South Korea - New Zealand
May 12	Vice chairman, Seong-gyu Hong had bilateral talks with Laos' Minister of Telecommunications and Post Commission
May 12	Signed a MOU with Indonesian Telecommunications Information Technology
May 15	Held the '2012 International Broadcasting and Telecommunications Conference'
May 15	Held the '2012 World Broadcasting and Telecommunications Ministers' Meeting'
May 15	Held 'the 19th Korea Multimedia Technology Awards'
May 16	Mun-seok Yang, a Standing Commissioner discussed on the cooperative measures with the Commissioner of Information and Communication Technologies in Mongolia in the field of ICT
May 16	Presented a blueprint for the 'Future development of ICT convergence'
May 17	Held the 'Future Internet Conference 2012'
May 17	Launched the ' Research forum on the legislation maintenance of privacy protection'
May 22	Promotion on the cultivation of CIS broadcasting and telecommunications markets
May 23	Launched the Korea Broadcasting Advertising Promotion Corporation
May 30	Ceremony held 'the Korea's 30th anniversary of the Internet'

| The 19th Korea Multimedia Technology Awards



| Ceremony on the Korea's 30th Anniversary of the Internet



● June 2012

Date	Event(s)
June 4	Chung-sik Kim, a Standing Commissioner participated in the 1st ICT INDABA International Meeting
June 6	Chung-sik Kim, a Standing Commissioner promoted the ICT Academy of Foreign Languages
June 8	Held the 'IT Sharing Campaign Event'
June 11	Held the proclamation ceremony for the 'Week of Making the Beautiful Internet World in 2012'
June 13	Held the briefing for the Basic Plans of ITU Plenipotentiary Conference
June 19	Held 'Team meetings of consumer groups'
June 20	Proclaimed 'the Integrity KCC'
June 26	Held the broadcasting contents' showcases in London, England
June 26	Participated in the new broadcast contents' transaction market (NATPE Budapest 2012) in Hungary
June 26	Held the 'Green ICT Forum Inaugural Meeting'
June 28	The regulations issued and appointed on the Preparatory Planning TF for the Preparatory Commission for the Plenipotentiary Conference of 2014 International Telecommunications
June 28	Chairman, Gye-cheol Lee had bilateral talks the Minister of National Telecommunications of Vietnam

| Held the Proclamation Ceremony for the 'Week of Making the Beautiful Internet world in 2012'



| Held the Briefing for the Basic Plans of ITU Plenipotentiary Conference



● July 2012

Date	Event(s)
July 1	Enforced eradication measures of Voice Phishing faking the telephone number
July 4	Chairman Gye-cheol Lee held the CEO Conference on Information Security Industries
July 4	Held awards ceremony of the '2012 Contest on Audience Participated Programs'
July 4	Korean delegations to attend the ITU Board of Directors in 2012
July 11	Held a joint interagency event for 'The 1st Information Protection Day Ceremony'
July 11	Held the 'International Information Security Conference' for the month of Information Security
July 12	Announcement of the 'Promotion plan for the diffusion of the next generation of web standard HTML5'
July 12	Held the CEO invitation-privacy strategy meetings
July 13	Launched the 'Representatives meeting of Broadcasting and Telecommunications' Policy Customers'
July 16	Chairman Gye-cheol Lee strengthened the Broadcasting and Telecommunications Cooperation with Uruguay
July 19	Opened the 'TV App Innovation Center'
July 25	Official launch of oneM2M, International Standardization Cooperation in the field of M2M
July 27	Recommended the 9 Directors of Broadcasting Media's, Auditor and 11 Directors of KBS

| CEO Conference on Information Security Industries



| Representatives Meeting of Broadcasting and Telecommunications Policy Customers



● August 2012

Date	Event(s)
August 1	A sequential shutdown by region on the terrestrial analog TV broadcasting
August 2	Held the 'Smart Cloud Show 2012'
August 6	Chairman, Gye-cheol Lee had bilateral talks with the Ambassador of the U.S. Department of State
August 7	Opening of 'the 9th APFC Information and Communication Ministers' Meeting'
August 8	Selected /Awards of best practices on the complaints system and service improvement in 2012
August 9	Improvement on mobile carriers' privacy protection system
August 16	Held the ' Inaugural Meeting of Big Data Forum'
August 22	Selected new licensed corporation of the broadcast advertising sales agency business
August 24	Vice chairman, Seong-gyu Hong discussed the direction of development of ICT with the United States' Cisco Vice President
August 30	Held the 'EMC KOREA 2012'
August 31	Laid policy measures in accordance with the termination of use for 700MHz band frequencies for wireless microphone

| Opening 'the 9th APFC Information and Communication Ministers' Meeting'



| Vice Chairman Seong-gyu Hong Discussed the Direction of Development of ICT with the United States' Cisco Vice President



● September 2012

Date	Event(s)
September 1	Promotion of the 'Internet in the stewardship' campaign in 2012'
September 3	The 9th appointment of KBS Board of Directors
September 3	The 2nd Overseas Korean Broadcasters Convention
September 5	Enactment of the 'Notice on combined sales of broadcast advertising support'
September 7	Permit the autonomous operation of terrestrial TV broadcasting hours
September 10	Signed a MOU for the successful preparation of the 19th ITU Plenipotentiary Conference
September 13	Held the 'Global Future Internet Summit 2012'
September 13	Appointment of the 9 directors and an auditor of the Korean Educational Broadcasting System (EBS)
September 17	Enactment on the 'Notice on the accounting adjustment criteria of the broadcast advertising sales agency businesses
September 17	Appointment conferred to the 5th EBS Board of Directors
September 18	Legislation on the carrier's voice phishing protection obligations, pass the State Council
September 18	Opened the 'Future Internet Support Center'
September 20	Held the '2012 Korea Mobile Advertising Awards'
September 20	Established the mobile phone use guidelines for children and adolescents
September 24	Held 'The Clouds 2012' event
September 27	Held the 'Agreement ceremony of the DTV donation project for the digital transition of elderly people living alone'
September 31	Performed the telecommunications fee reduction in special disaster areas

| The 2nd Overseas Korean Broadcasters Convention



| The Agreement Ceremony of the DTV Donation Project for the Digital Transition of Elderly People Living Alone



● October 2012

Date	Event(s)
October 8	Held 'the 4th of Broadcasting and Telecommunications users week' events
October 10	Held the 'Digital TV donation for the handicapped' event
October 11	Published the 'Smart Work Disabled Accessibility Guidebook'
October 11	Korea, the world's No. 1 in the ICT infrastructure sector
October 12	Chairman Gye-cheol Lee interview with the CEO of British (the Broadcasting and Telecommunications Regulatory Agency) Ofcom
October 17	Global K-2012 start-up, held the excellence start-up awards
October 18	National standard-setting for NFC-based services
October 19	Laid the policy directions to enable pay TV digital switchover
October 22	Yong-seop Shin, a Standing Commissioner interviewed with the European Electronic Communications (BEREC) and the official regulatory bodies
October 25	Held the '2012 Act play festival'
October 25	Training of smart TV app development experts in earnest
October 26	Performed the demonstration of terrestrial broadcasting high-definition 3D across the country
October 30	Held the CEO conference of designated testing agencies in broadcasting and telecommunications sectors
October 30	Supported the ICT SMEs for the market expansion in Southeast Asia
October 30	Held the inauguration ceremony of the preparatory TF for the 2014 ITU Plenipotentiary Conference

| Held 'the 4th of Broadcasting and Telecommunications Users Week' Events



| The Inauguration Ceremony of the Preparatory TF for the 2014 ITU Plenipotentiary Conference



● November 2012

Date	Event(s)
November 1	Held 'the 7th Republic of Korea's Internet Grand Awards'
November 2	Selected new tasks of the world's first international standard of Privacy Management System (PMS)
November 2	Signed a MOU between the KCC - App Center Campaign Headquarters - Google for the development of Internet start-ups
November 6	Granted certification to excellence Cloud Service SLAs
November 7	Public forum held for the broadcasting system study group
November 9	The KCC selected best practice, the best organization for the improvement on administrative complaints in 2012
November 12	Service sessions held for K-global start-ups in Silicon Valley, London, UK, and United States
November 15	Dae-hee Kim, a Standing Commissioner attended the ASEAN Broadcasting and Telecommunications Ministers' Meeting
November 20	Dispatched the international ICT standardization Olympic delegation
November 20	Opened assessment results of the '2012 Public broadcasting'
November 22	Laid strengthen measures on privacy protection of the Internet phone
November 22	Leap to the best institution in the KCC's Government Affairs Committee evaluation
November 26	Held the '2012 Radio Broadcasting Communications Industry Promotion Week' event
November 27	Appointed Mr. Yong-Sub Shin, as the president of Korea Educational Broadcasting System (EBS)
November 27	Held the 'Broadcasting and Telecommunications R & D Future Trends 2012' Conference
November 27	Held the KCC's 'Sharing of Gimjang Kim chi (freshly made Kim chi for the preparation of winter) of Love' event

| The '2012 Radio Broadcasting Communications Industry Promotion Week' event



| The 'Broadcasting and Telecommunications R & D Future Trends 2012' Conference



● December 2012

Date	Event(s)
December 3	Opening of pilot services of the 6 new broadcasting and telecommunications convergence
December 3	Held the opening ceremony of Giga Internet commercial services in the city of Sejong
December 4	Achieve the best scores in the KCC officials' intellectual competition
December 5	Held the 'Internet of Things Seminar' events
December 5	'Confirmed as a very good agency in the civil service's satisfaction rating in the 2012'
December 6	Held the 'International 3D festival 2012'
December 6	'the 1st TV App Innovation Grand Award'
December 10	Held 'the 1st Aerial Equipment Policy Council'
December 11	Prepared guidelines for the adoption of private sector cloud
December 12	Held the 'Great ceremony of 2012 Internet Ethics' for a beautiful internet world
December 17	Awards on 'the 11th information protection grand prize for the year 2012'
December 17	Appointed the auditor of Korea Broadcasting System (KBS)
December 20	Held the '2012 assessment meeting for the broadcasting market competition situation'
December 21	Held 'the 1st Preparatory Committee Meeting for the 2014 ITU Plenipotentiary Conference'
December 23	Held the 'Viva LBS Festival'
December 31	Enactment for the guidelines on small PP broadcast advertising fees payment deadline

| 'the 1st TV App Innovation Grand Award'

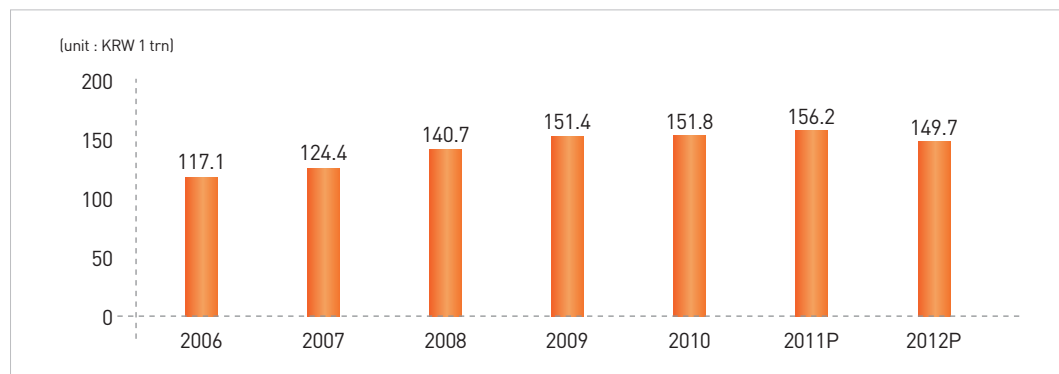


| Awards on 'the 11th Information Protection Grand Prize for the Year 2012'

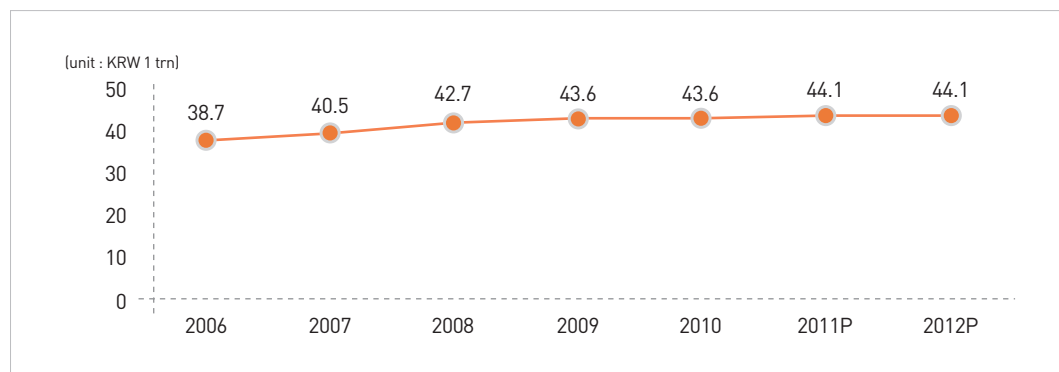


4. Broadcasting and Telecommunications Industry in 2012 by Sector

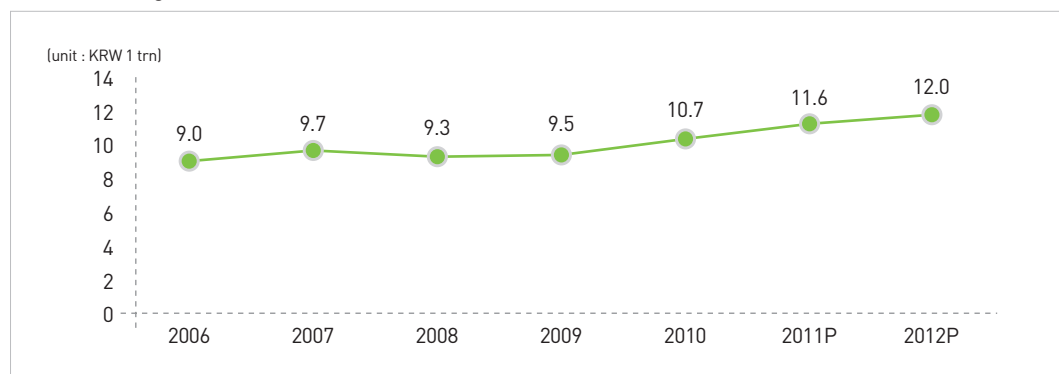
| Total Production of the Broadcasting and Communications Industry



| Telecom Service Sales

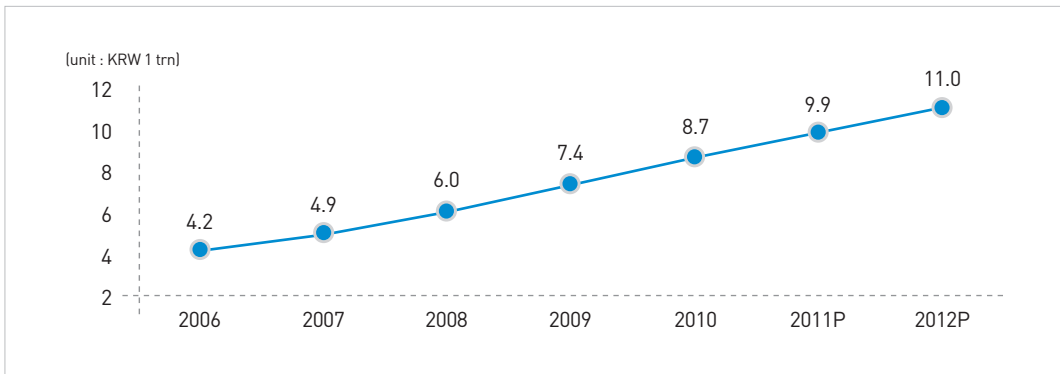


| Broadcasting Service Sales

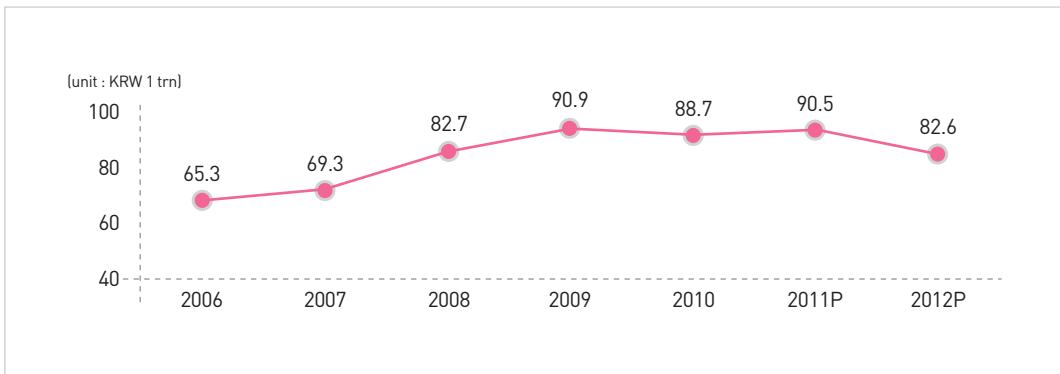


※ The above information on the current status of the broadcasting and communications industry by sector was taken from the 'Statistical Yearbook of the Broadcasting and Communications Industry (2012)' published by the Korea Association for ICT Promotion (KAIT).

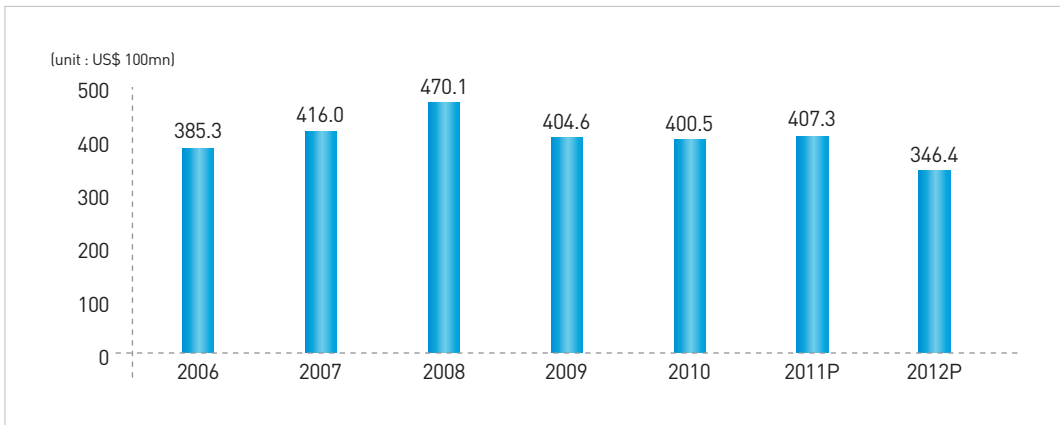
| Converged Digital Media Service Sales



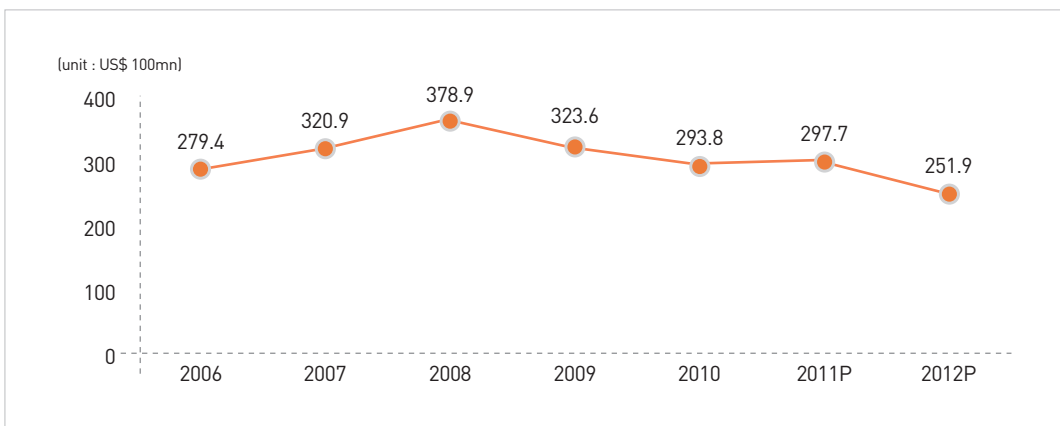
| Broadcasting and Telecommunications Device Sales



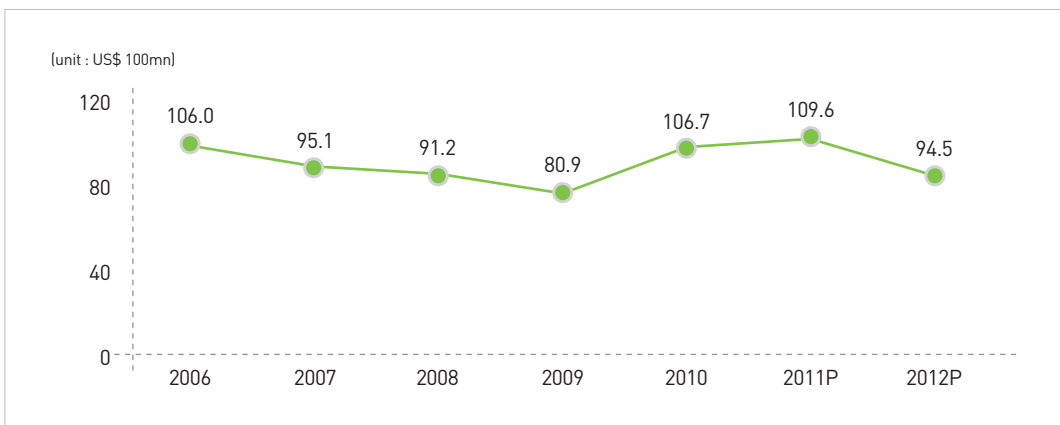
Total Broadcasting and Telecommunications Device Exports



Telecommunications Device Exports



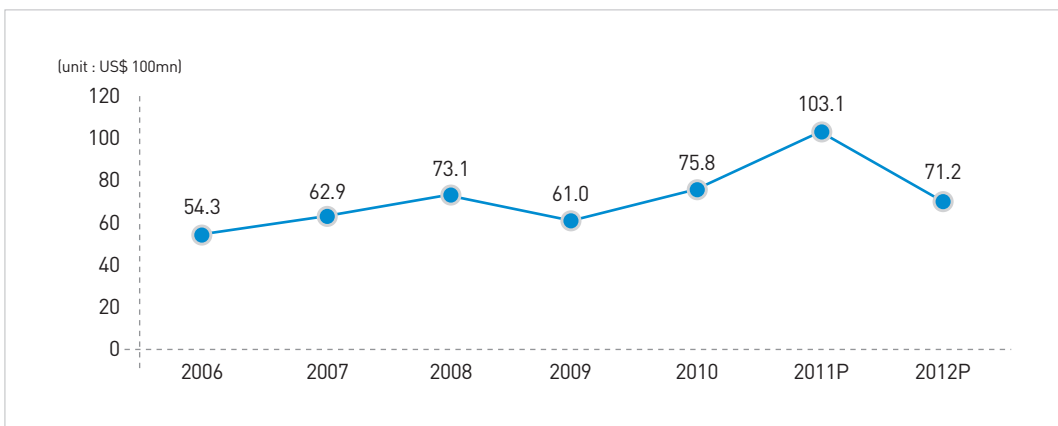
Broadcasting Device Exports



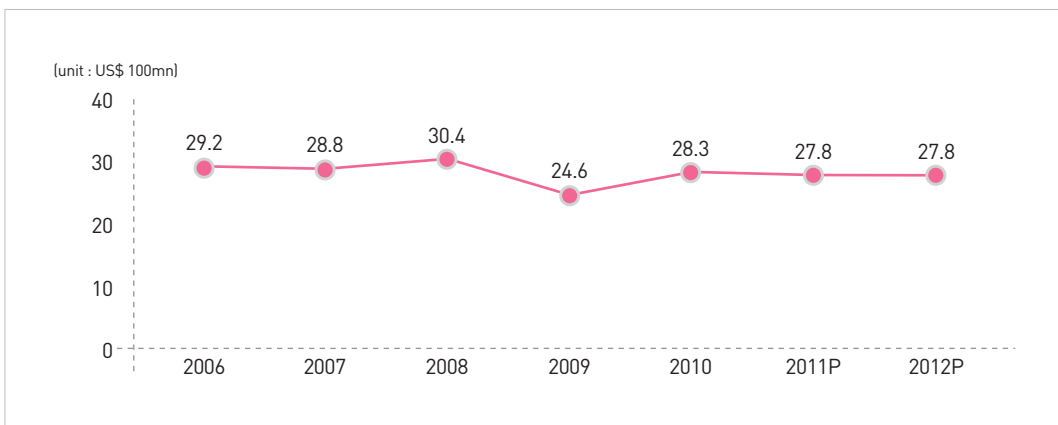
Broadcasting and Telecommunications Device Imports



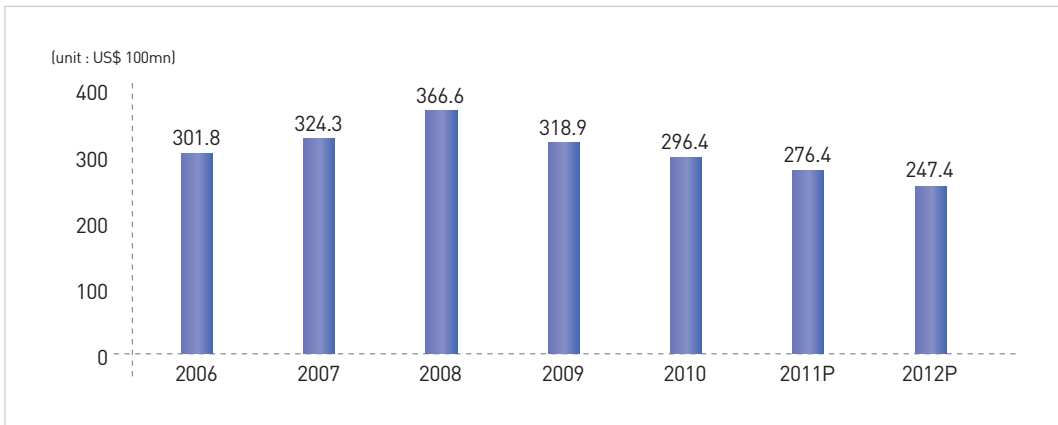
Telecommunications Device Imports



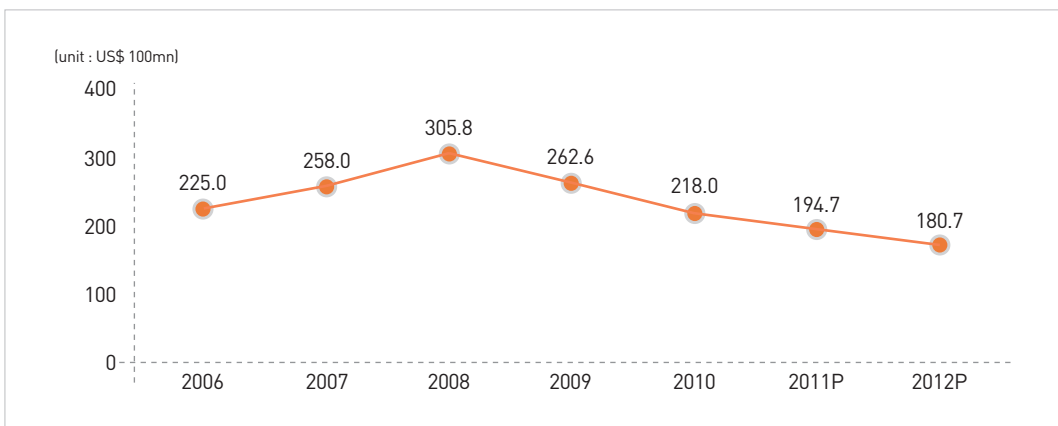
Broadcasting Device Imports



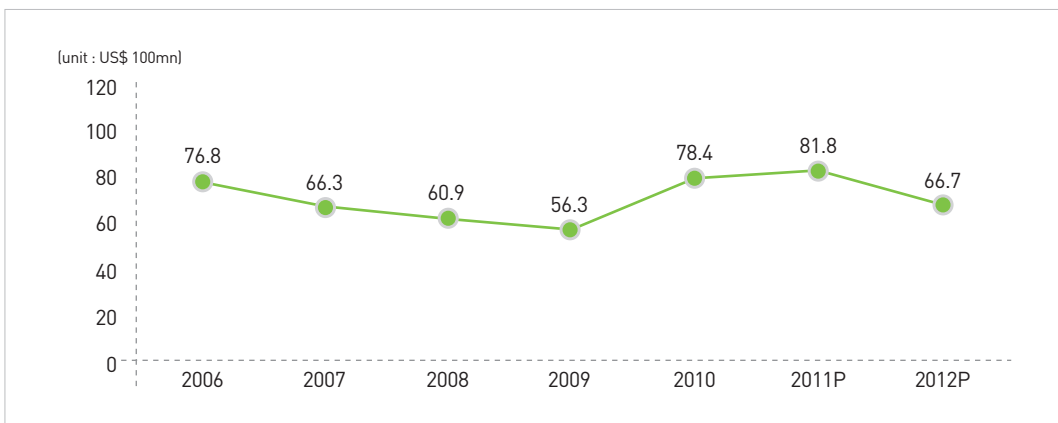
Broadcasting and Telecommunications Device Trade Balance



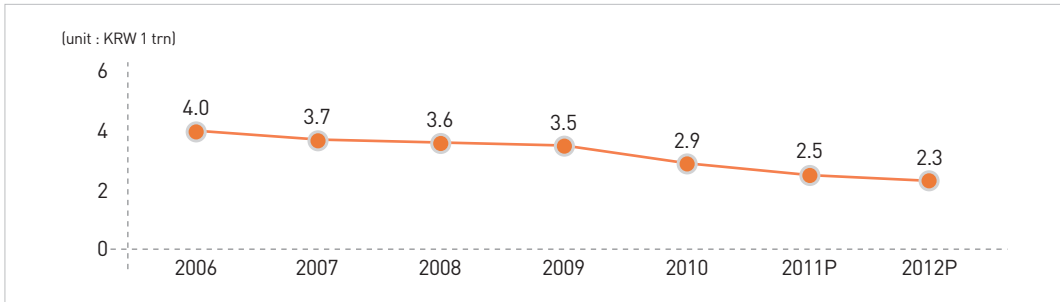
Telecommunications Device Trade Balance



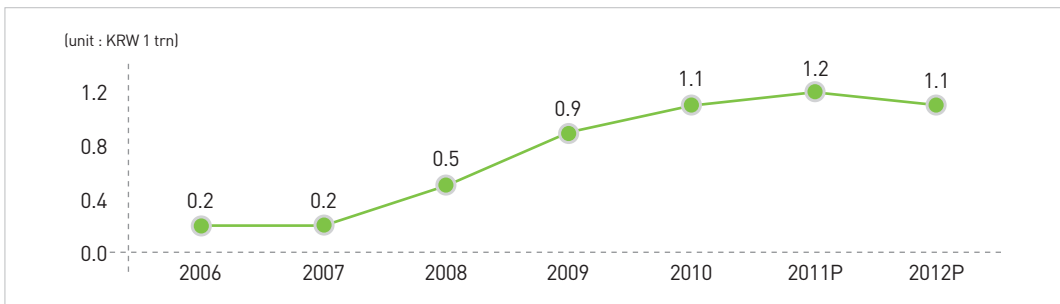
Broadcasting Device Trade Balance



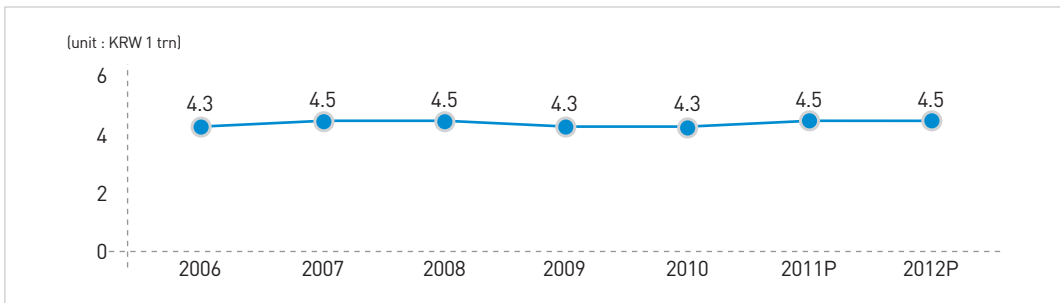
Local Telephone Service Revenue



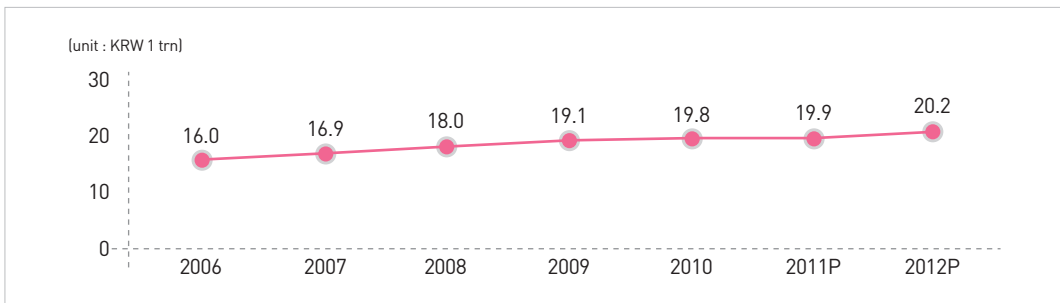
Internet Telephone Service Revenue



Broadband Internet Access Service Revenue

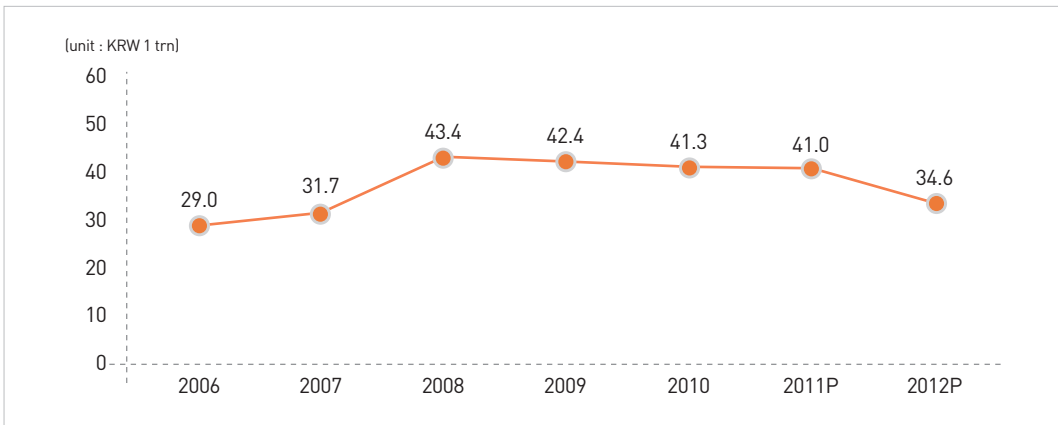


Mobile Service Revenue

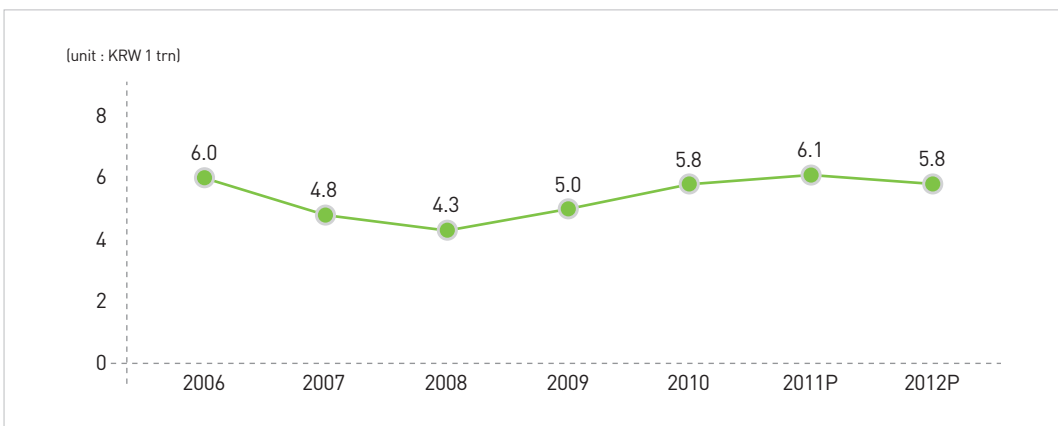


※ The wireless network connection charge has been excluded from mobile service revenue

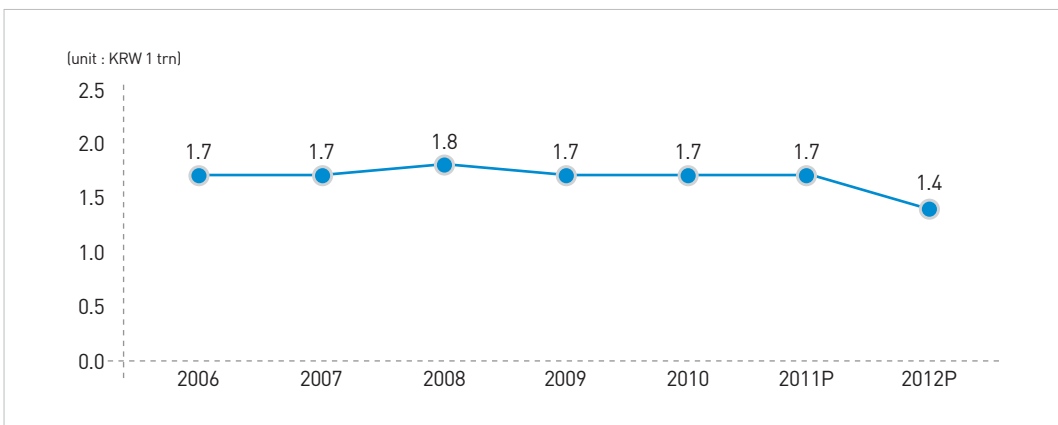
Portable Device Sales



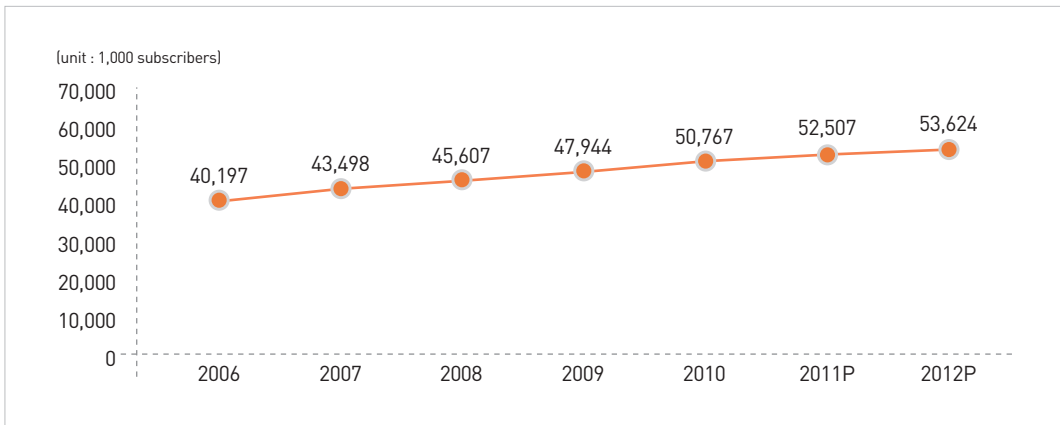
DTV Sales



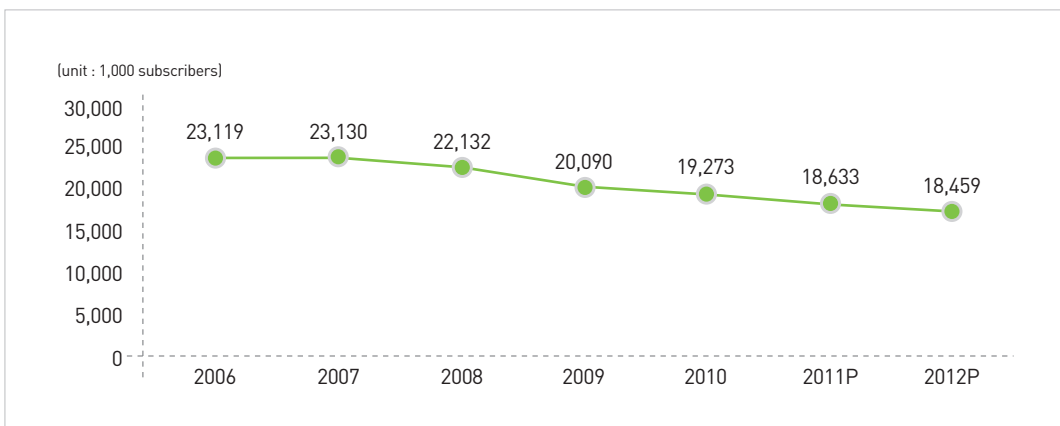
Set-top Box Sales



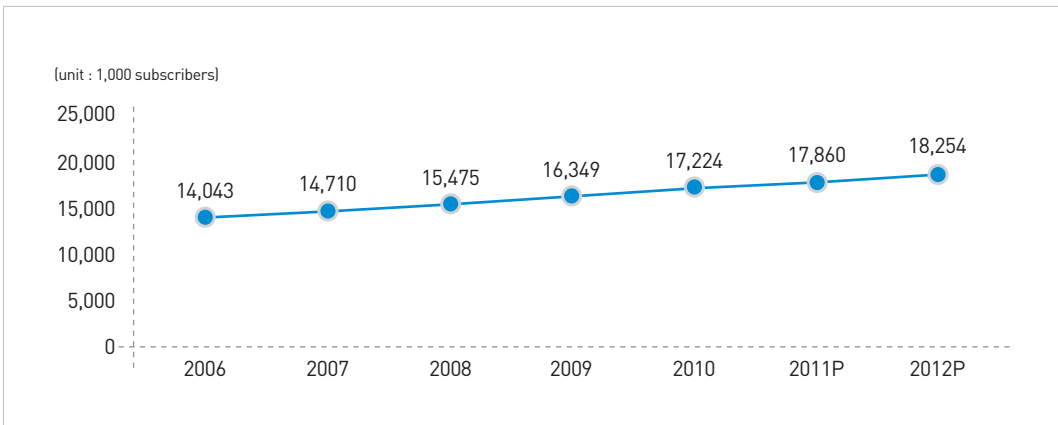
| Number of Mobile Subscribers



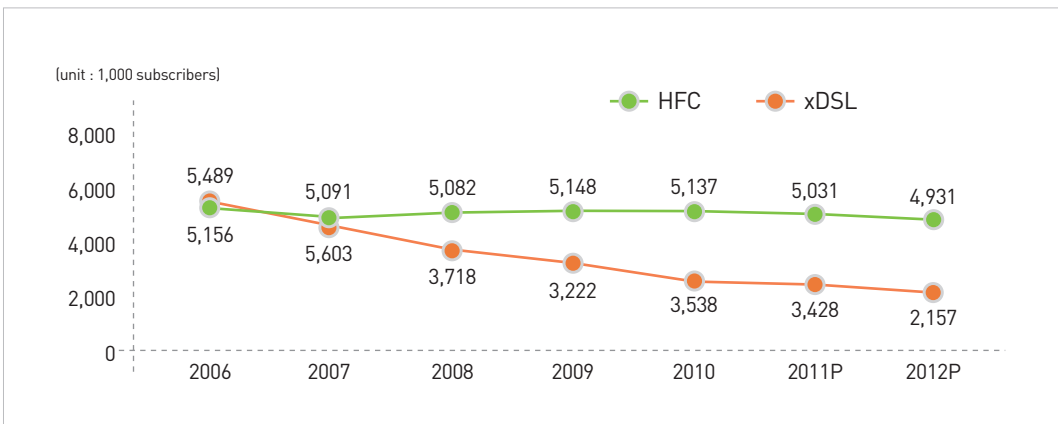
| Number of Local Telephone Subscribers



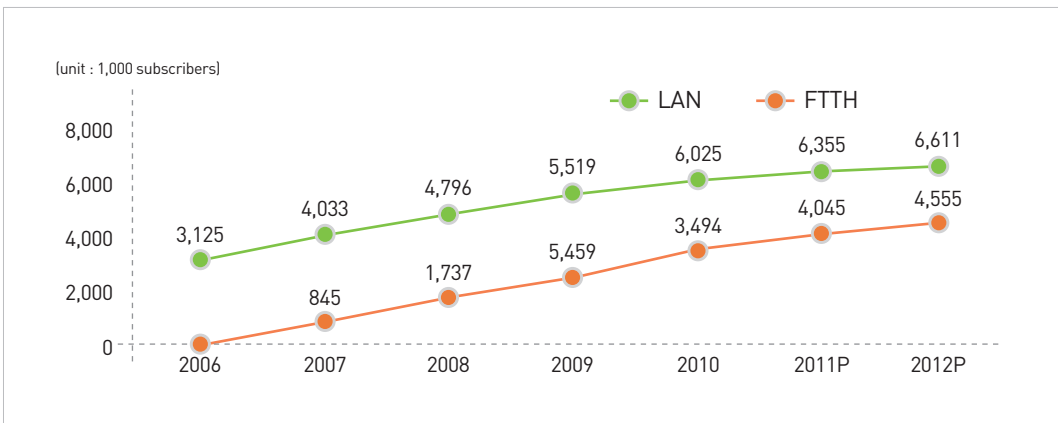
| Number of Broadband Internet Subscribers



| Number of Broadband Internet (xDSL, HFC) Subscribers



| Number of Broadband Internet (LAN, FTTH) Subscribers



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