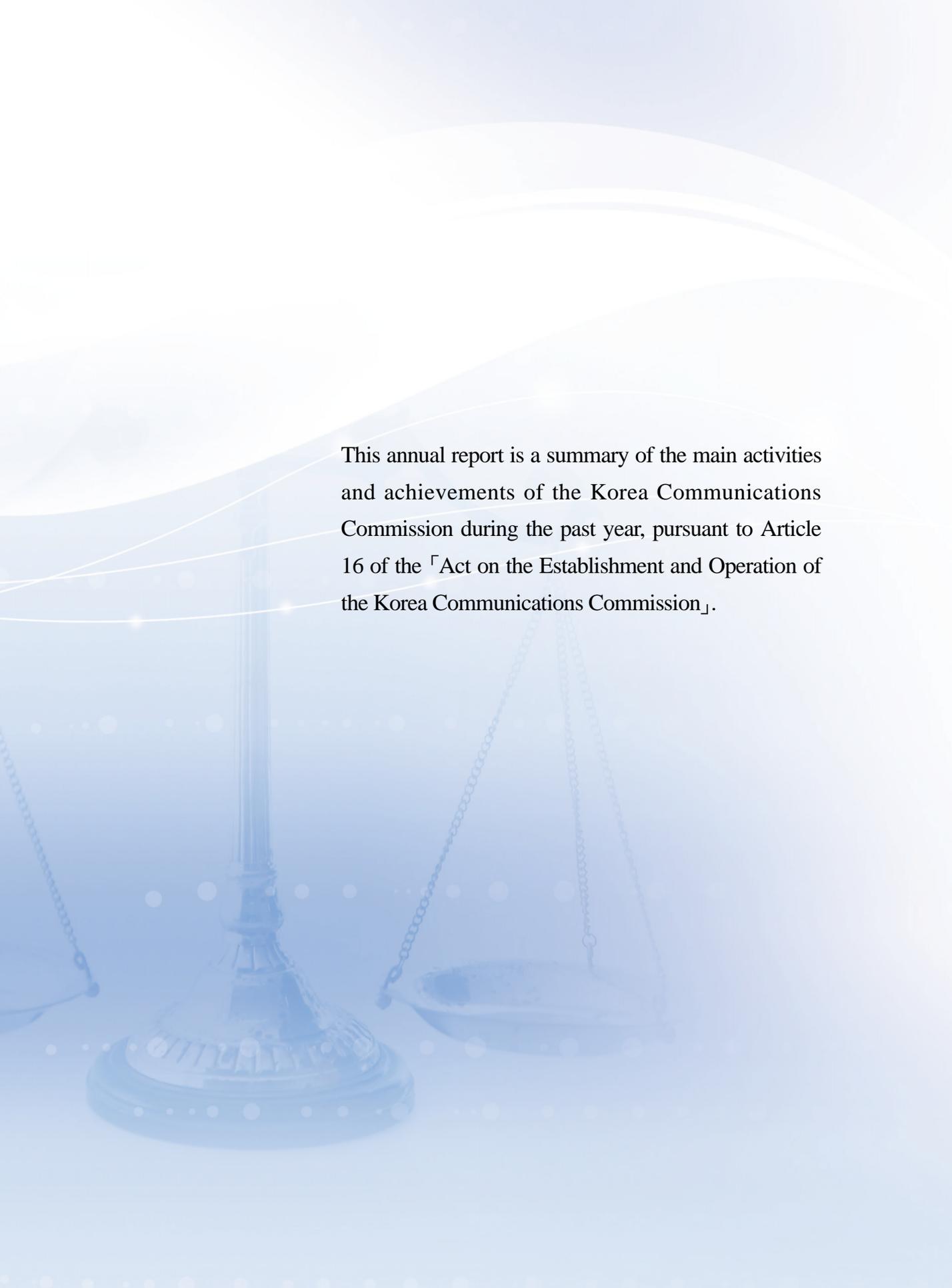


ANNUAL REPORT 2011

**KOREA  
COMMUNICATIONS  
COMMISSION**







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



The Korea Communications Commission(KCC), launched amid the flow of the times with high expectations for and interest in the convergence of broadcasting and telecommunications, successfully completed its inaugural three-year mission and started afresh on its the Second Term Commission of development in March 2011.

In 2011, the number of smartphone users in Korea exceeded the 20-million-mark, and the 4G LTE commercial service was launched, indicating that Korea had stepped into the full-fledged smart age. The number of subscribers to the IPTV service, a typical convergence between broadcasting and telecommunications, exceeded 4.5 million, contributing to the growth of the local paid broadcasting market. To augment media diversity and ensure shared growth among all the parties concerned, the KCC approved the launch of general broadcasting channels and specialized news channels and home shopping channels devoted to small and medium businesses.

The year 2012 will become a crucial year for Korea in that whether it can place itself in a key player position in the smart age or not will be determined during this one year. The broadcasting and telecommunications service is expected to move beyond a mere means of communication towards a general culture service platform for diverse social cultural conveniences, and the smart technology revolution sparked by smartphones and tablet PCs is most likely to expand into smart televisions as the global competition to seize the leadership in the smart economy grows ever more intense.

The future global 'smart hegemony' will rest upon who can create a smart ecosystem converging smart contents, platforms, networks and devices in a creative way. I am certain that Korea will emerge as a smart powerhouse equipped with the world's top competitiveness in broadcasting and telecommunications, provided that Korea copes with the challenging global environment by using its converged cutting-edge technological prowess, human resources, creativity, and innovative capacity against the backdrop of its successful experiences in building up the world's top competitive networking.

This annual report looks at the traces of the efforts of the Second Term Commission to transform Korea into a smart powerhouse in line with the with the policy directions of the KCC and the basic broadcasting and telecommunications plans, including the KCC's major achievements in 2011. I would like to conclude by assuring you that the KCC will continue to take the leading role in establishing a globally competitive smart ecosystem in Korea and realizing a "Smart Korea enjoyed by all its Citizens."

Thank you for your continuing interest and encouragement.

March 2012

**Kye-Cheol Lee**

Chairman

Korea Communications Commission



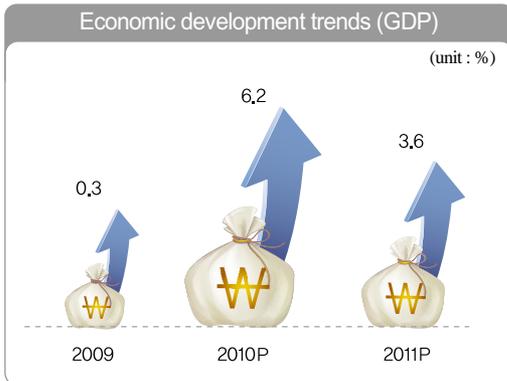
# Broadcasting and Telecommunications Policy Accomplishments in Graphs



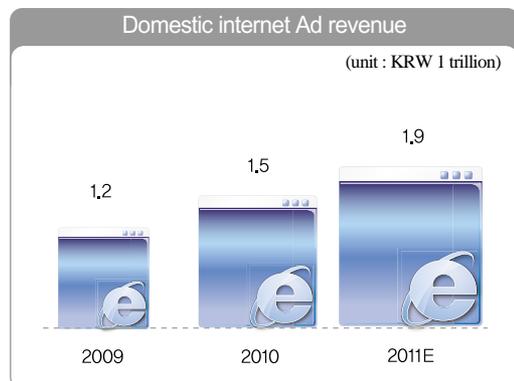
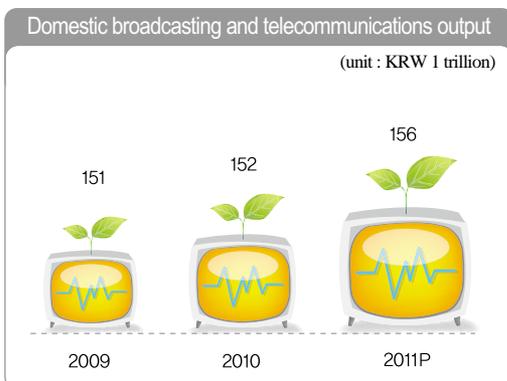
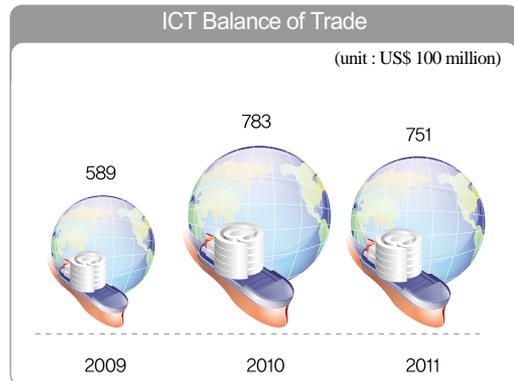
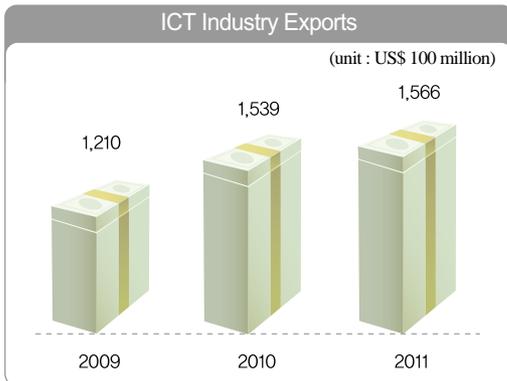
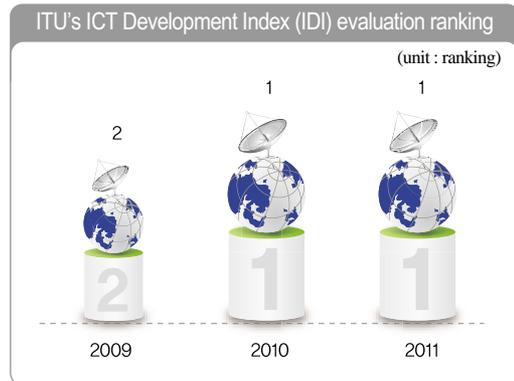


## ■ The broadcasting and telecommunications industry is making continuous contributions to the growth of the national economy.

o The broadcasting and telecommunications sector continues to grow in terms of ICT industry exports and broadcasting and telecommunications output. Korea's ICT development index, as gauged by an international organization, ITU was ranked no. 1 for the second consecutive year in 2011.



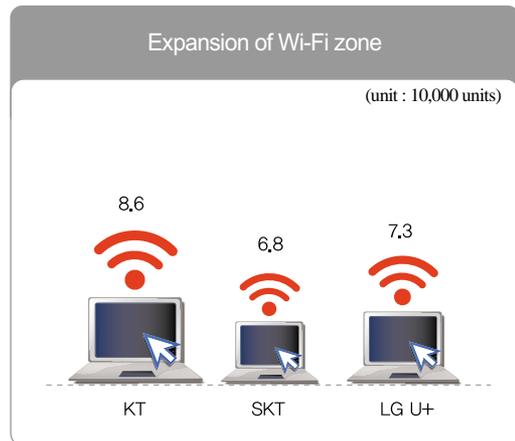
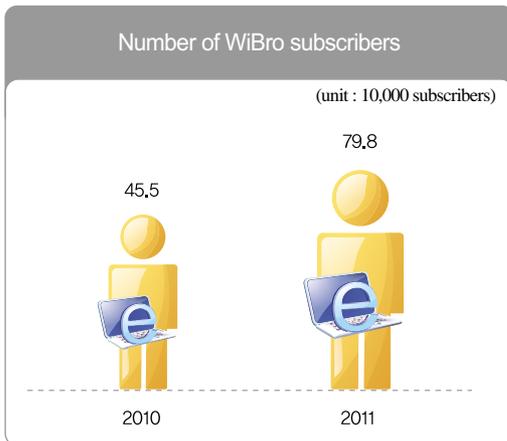
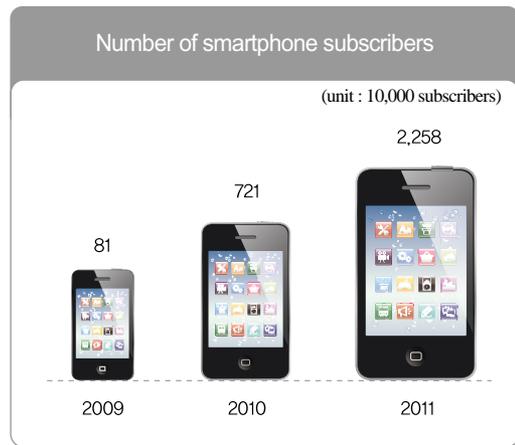
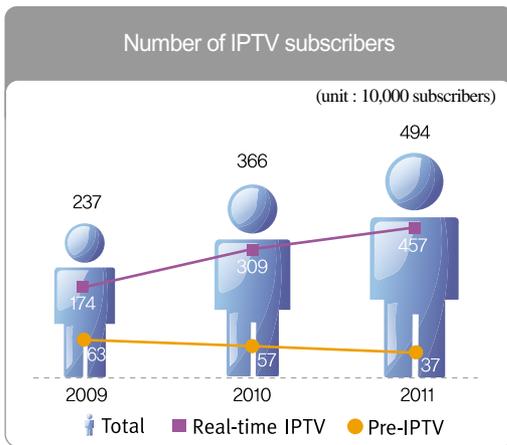
※ P : Preliminary figures subject to Change depending on the availability of the exact figures later on



※ E : Estimated Value of parameters based on prediction Values

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

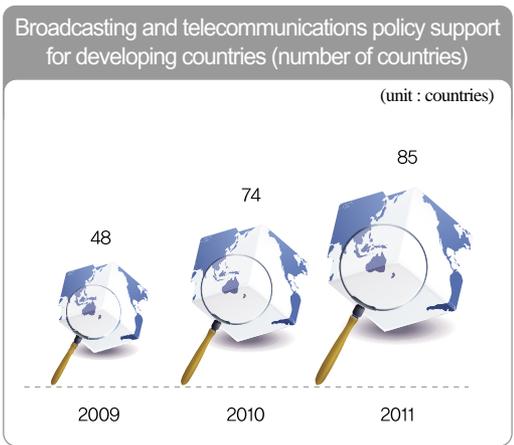
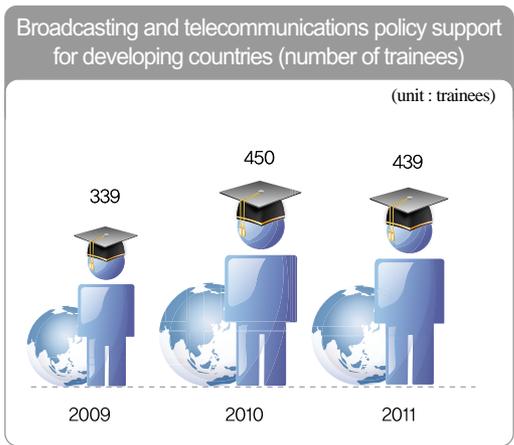
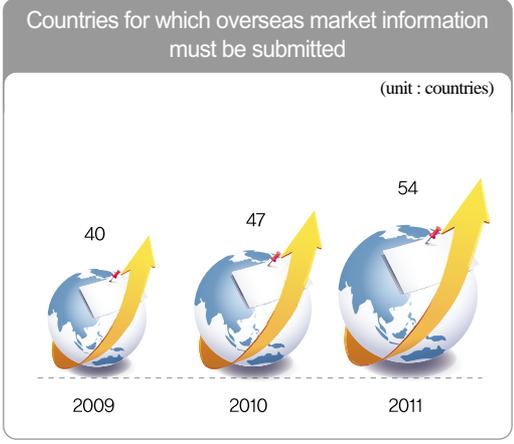
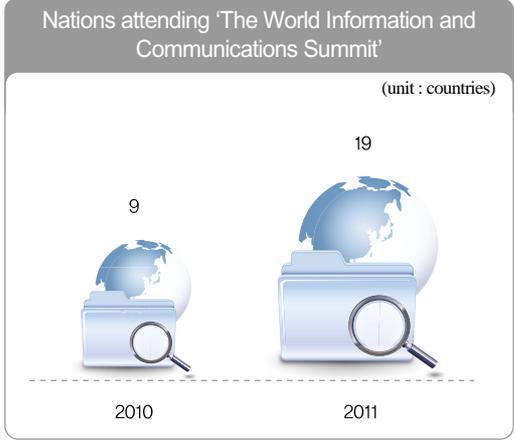
- o Today, three years after its commercial launch, IPTV has a subscriber base of 4.57 million people. The number of smartphone users increased by a whopping 213 percent in just one year (2011) to 22.58 million.
- o The number of WiBro subscribers increased by 75.4% to 798,000 in 2011. Wi-Fi zones continued to expand in 2011, improving the smooth wireless telecommunications environment.



Note : As of December 2011; KT and SKT in terms of zone numbers and LG U+ in Wi-Fi AP numbers

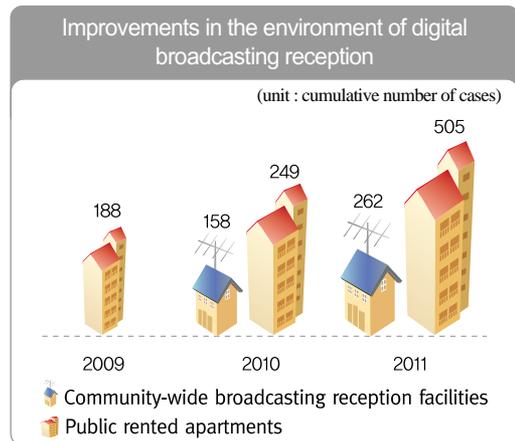
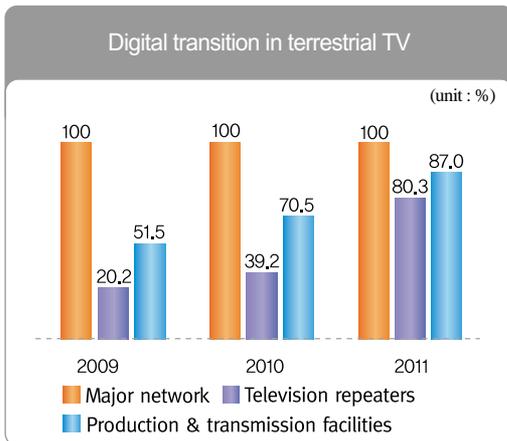
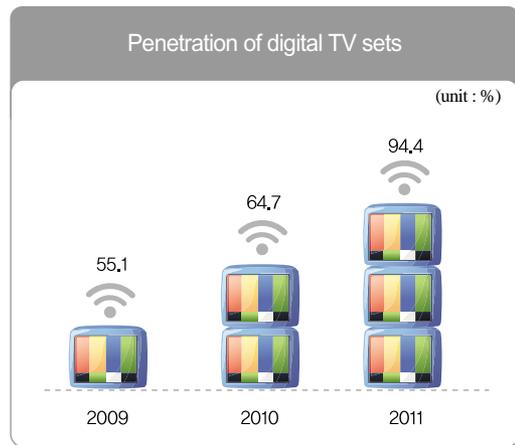
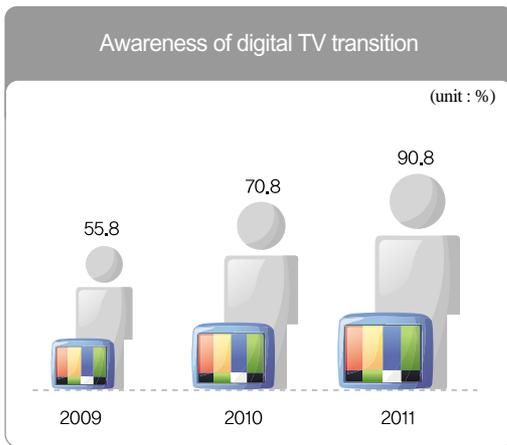
■ The Korea Communications Commission(hereinafter the ‘KCC’) strengthened the base for overseas expansion of local companies to enable them to take the lead in developing the environment for the global broadcasting and telecommunications market.

- o In 2011, nineteen countries were invited to the annual ‘The World Information and Communications Summit’ for enhanced international cooperation at the governmental level. The number of countries for which overseas market information must be submitted for overseas advance was raised from 47 to 54.
- o The KCC upgraded Korea’s status as a global leader in broadcasting and telecommunications by continuously expanding the number of invited countries that are eligible for Korea's broadcasting and telecommunications policy support for developing countries.



■ To ensure a smooth transition to digital TV, active information efforts were coupled with comprehensive support measures.

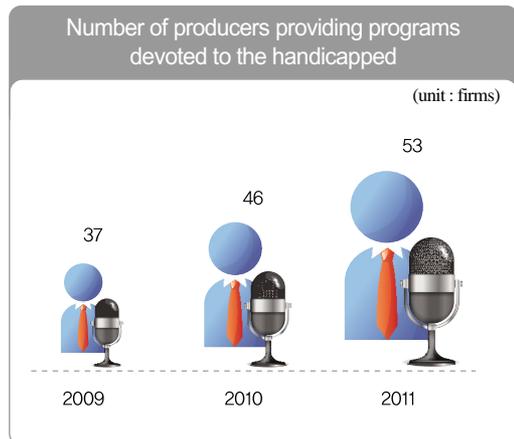
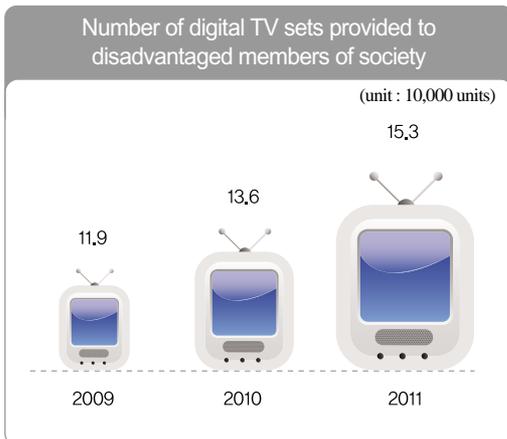
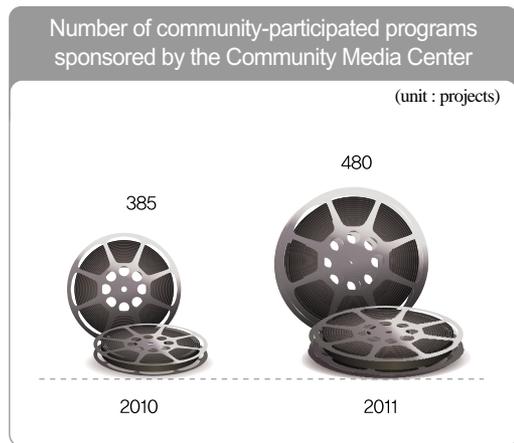
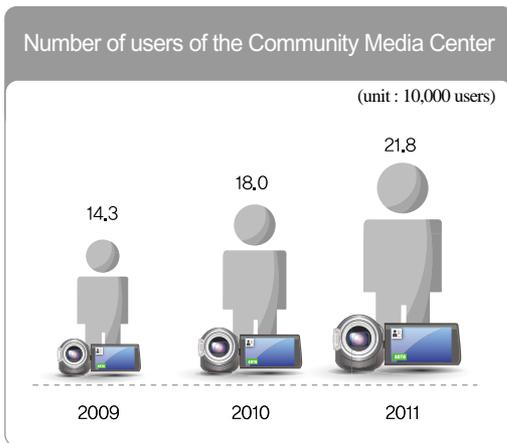
- o Public awareness of digital TV transition increased from 55.8% in 2009 to 90.8% in 2011, and the rate of penetration of DTV-ready TV sets rose from 55.1% to 94.4% over the same period.
- o The KCC continues to expand the country's infrastructure for digital broadcasting to enable every Korean citizen to enjoy high-quality digital broadcasting, by seeking continuous improvements in the environment for digital broadcasting reception.



Note : Digitization records of public rented apartments and community-wide broadcasting reception facilities

■ Access to broadcasting among the more disadvantaged segments of society has also been improved, thereby contributing to the welfare of Korean viewers as a whole.

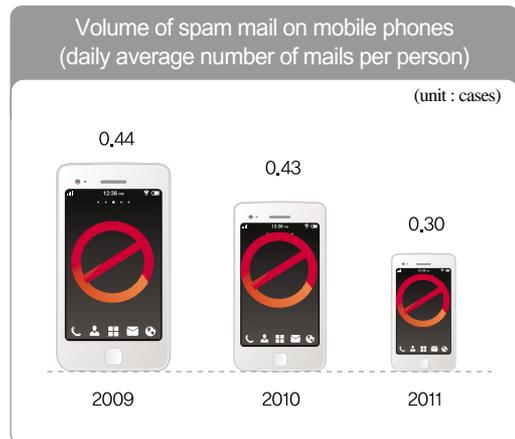
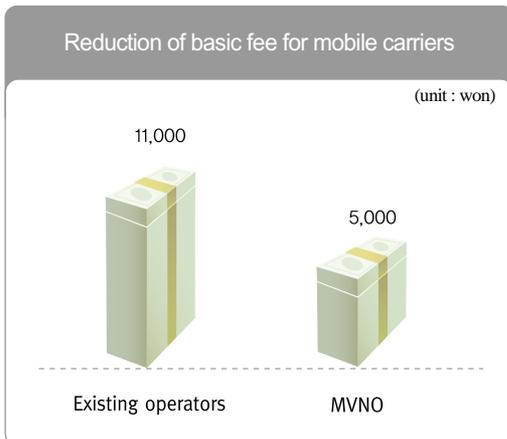
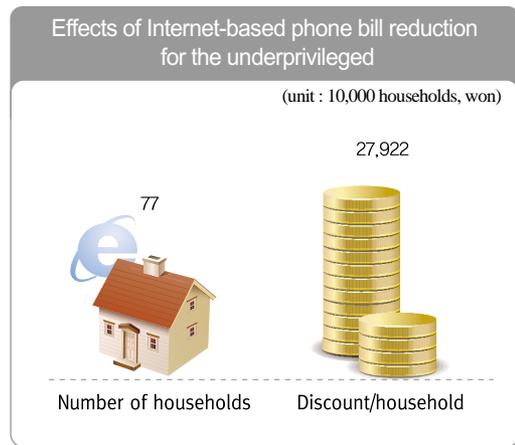
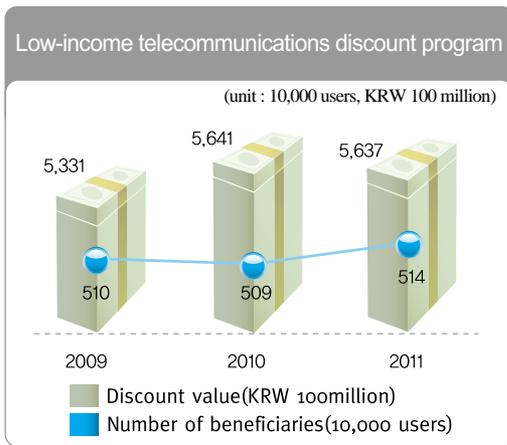
- o The number of users of the Community Media Center rose steadily to reach some 218,000 people in 2011, and the number of community-participated programs produced under the Community Media Center grew from 385 to 480.
- o The number of digital TV sets supplied to disadvantaged groups, meanwhile, reached a cumulative total of 153,000 units at the end of 2011. The number of producers providing programs devoted to the handicapped increased to 53 in 2011.



Note : Units of TV sets represent the cumulative total.

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

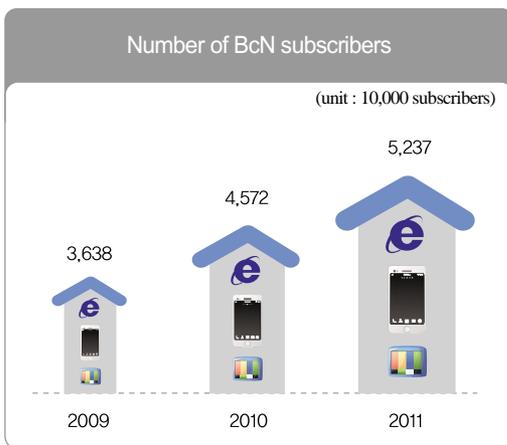
- o The KCC contributed to stabilizing the low-income household economy: The number of low-income users benefiting from the telecommunications discount program rose by 50,000 to 5.14 million people; and, among VoIP service users, 770,000 households were included in the bracket, receiving a reduction of 27,922 won per household.
- o The volume of mobile spam mail was reduced by 30.2% compared to one year earlier, or by 0.3 spam mails per person a day.



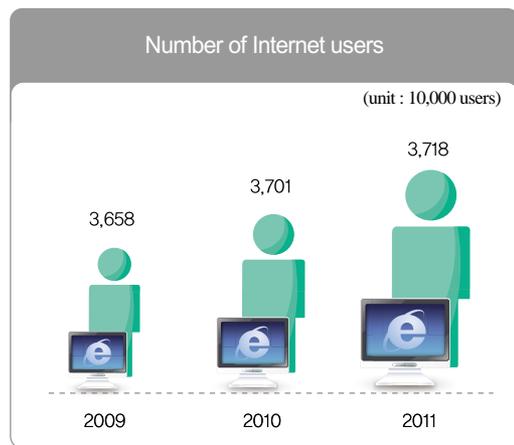
Note : The MVNO basic fee is the average of the two mobile carriers.

■ The rate of BcN penetration increased, and broadcasting and telecommunications networks were upgraded nationwide to improve, among other factors, the quality of Internet access.

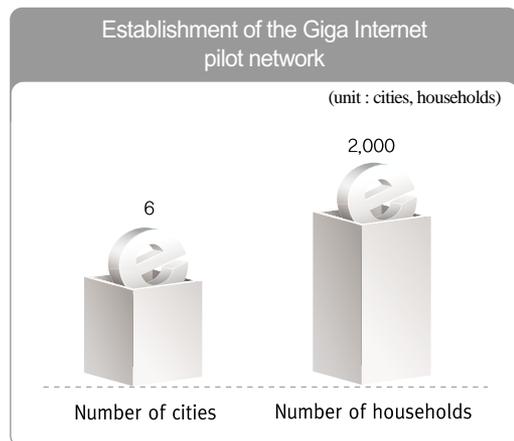
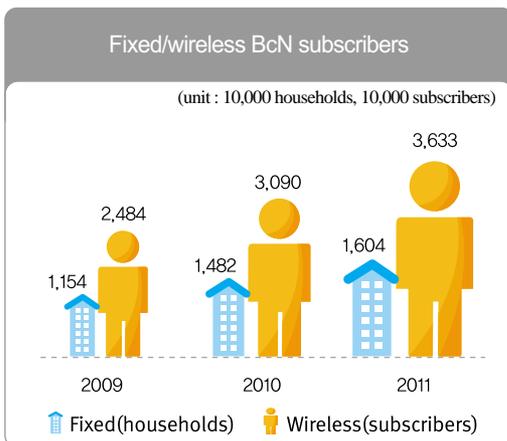
- o The KCC sought continuous expansion of the broadcasting and telecommunications networks, with the rate of BcN penetration reaching 52.37 million people (fixed : 16.04 million households, wireless : 36.33 million households).
- o The number of Internet users, currently standing at 37.18 million people, is rising steadily each year. The KCC laid the foundations for sophisticated broadcasting and telecommunications networks through the establishment of the Giga internet pilot network.



Note : BcN(Broadband Convergence Network)

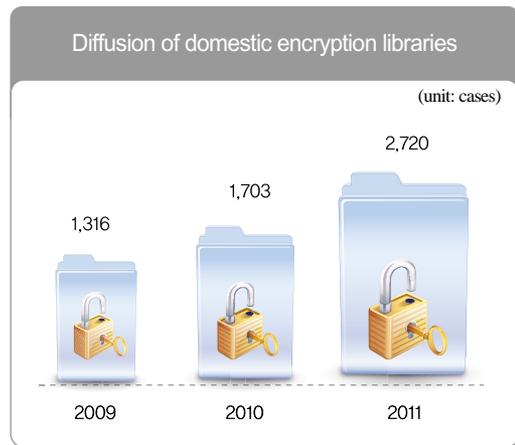
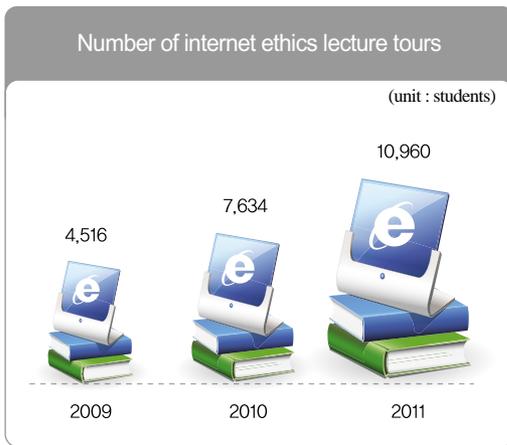


Note : Korea Internet and Security Agency

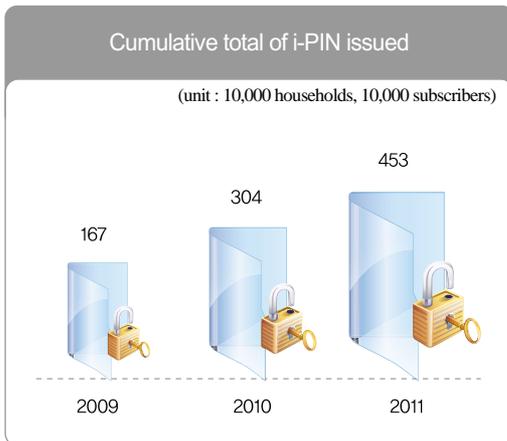


## ■ Active efforts were made to create a wholesome Internet and telecommunications environment adapted for the future society.

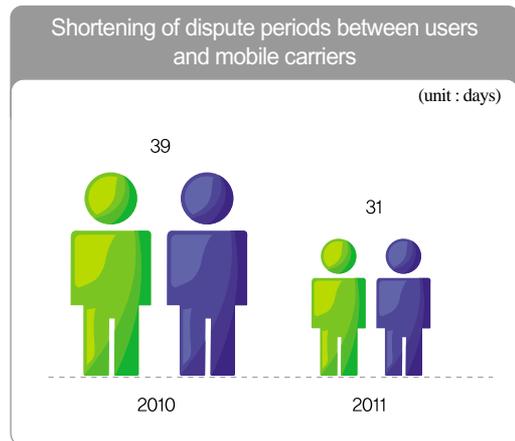
- o The number of internet ethics lecture tours dedicated to spreading ethical behavior on the internet rose steadily. The KCC also expanded the diffusion of domestic encryption libraries.
- o The number of i-PINs issued increased by 1.49 million to 4.53 million in 2011. The amount of time taken to settle a dispute related to broadcasting and telecommunications dropped from 39 to 31 days, representing an 8-day reduction in just one year.



Note : The total of SEED, HIGHT and smartphone encryption libraries



Note : Korea Internet and Security Agency



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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

### A. Global Macroeconomic Trends

The global economy in 2011 experienced a slowdown in growth as the Euro Zone showed signs of an economic downturn, recording GDP (Gross Domestic Product) growth of 3.8%. Non-OECD countries, particularly emerging economies, showed steady growth, but the growth trend slowed somewhat with a subsequent easing of inflationary pressure. OECD countries, meanwhile, saw their economic growth disrupted by the financial crisis, and high unemployment persists in many parts of the bloc. The OECD (Organization for Economic Cooperation and Development) predicted in May 2011 that global economic growth would reach 4.2% in 2011, but the forecast was adjusted to 0.4% lower in

November 2011 (See Table I-1). The OECD forecast an even lower global economic growth rate for 2012, at an average of 3.4%. They presumed, rather pessimistically, that the deep economic downturn in the Euro Zone would result in a serious economic recession in the global economy. However, they did not rule out the possibility that a solution could be found and that the market across the globe would subsequently recover its vitality.

For Korea, the OECD forecast (November 2011) an economic growth rate of 3.7% for 2011 and of 3.8% for 2012. Korea suffered a lackluster economic performance in 2011, largely due to decreases in global trade and domestic corporate investments. However, Korea is expected to start to recover its sturdy economic growth rate in 2012 in line with an improved global trade environment, and should enjoy an annual growth rate in excess of 4% in 2013. (See Table I-1.)

&lt;Table I - 1&gt; GDP Growth Forecast for Major Advanced Nations

(unit : %)

Classification	Forecast released in May 2011		Forecast released in November 2011		
	2011E	2012E	2011E	2012E	2013E
World	4.2	4.6	3.8	3.4	4.3
OECD countries	2.3	2.8	1.9	1.6	2.3
U.S.A	2.6	3.1	1.7	2.0	2.5
Euro area	2.0	2.0	1.6	0.2	1.4
Japan	△0.9	2.2	△0.3	2.0	1.6
Korea	4.6	4.5	3.7	3.8	4.3

E : Estimated value of parameters based on prediction values

Source : OECD Economic Outlook(2011. 11), OECD(data modified by KAIT)

## B. Trends in the World Broadcasting Market

PricewaterhouseCoopers (2011) estimated the value of the world media market at US\$ 414.9 billion in 2010, and predicted that it would grow at a compound average annual rate of about 6.8% in upcoming years, with its value hitting US\$ 566.6 billion in 2015. The expansion is largely attributable to increased TV viewing and economic recovery, which in turn will lead to the expansion of the advertisement market (increased online TV advertising expenses and mobile TV advertisement). (See Table I-2)

Traditional broadcasting accounted for approximately 97.3% of all broadcasting in 2011, and the figure is expected to decline to 95.5% by 2015.

Online and mobile broadcasting were estimated to represent 2.7%, or US\$ 11.9 billion, of total broadcasting revenue in 2011, and are expected to grow to 4.5%, or US\$ 25.3 billion, by 2015.

Such a gradual increase in the proportion of online and mobile broadcasts is considered to be the result of the anticipated high growth in OTT (Over-The-Top), mobile TVs and VODs. (See Table I-2)

&lt;Table I - 2&gt; Scale of the Global Broadcasting Market

Classification	(unit : US\$ 100mn, %)							
	2009	2010E	2011E	2012E	2013E	2014E	2015E	CAGR (2011-2015)
Global broadcasting market	3,860	4,149	4,363	4,717	4,992	5,393	5,666	6.8%
Traditional broadcasting	3,777	4,051	4,244	4,570	4,813	5,178	5,413	6.3%
Online/mobile broadcasting	83	98	119	147	179	215	253	20.8%
Proportion of traditional broadcasting	97.8%	97.6%	97.3%	96.9%	96.4%	96.0%	95.5%	-
Proportion of online/mobile broadcasting	2.2%	2.4%	2.7%	3.1%	3.6%	4.0%	4.5%	-
Yearly growth rate (%) of the global broadcasting market	-1.2%	7.5%	5.2%	8.1%	5.8%	8.1%	5.1%	-

E : Estimates

Note : Broadcasting includes terrestrial TV, cable TV, satellite broadcasting, IPTV, PPV, radio broadcasting, and online and mobile broadcasting.

Sources : Global Entertainment and Media Outlook, 2011-2015, and PricewaterhouseCoopers, 2011 (data modified by KAIT).

It is expected that the TV advertising market will reach US\$ 232.7 billion in 2015, at an compound annual growth rate of 7.3%, due to the diffusion of HD(high-definition) TV and multi-channel platforms. (See Table I-3)

Such growth is attributable to the online availability of TV (North America/Europe/Middle East/Africa) and an increase in online TV viewing (Asia-Pacific region), leading to increased streaming in all areas, which will in turn further activate the online TV advertising market.

Also, the increased diffusion of smartphones and tablet PCs and the launch of apps for mobile TVs on these mobile devices are expected to increase the use of, and

consequently the volume of advertising on, mobile TVs.

Television advertising consists of broadcast TV advertising and online & mobile TV advertising.

In 2011, television commercials generated US\$ 171 billion in revenues. Multi-channel television advertising, meanwhile, is expected to record US\$ 67.6 billion in 2015, showing an compound annual growth rate of 8.8%.

Online and mobile TV advertising posted US\$ 4.5 billion in revenues in 2011. Mobile TV ads are anticipated to grow at an compound annual growth rate of 34% until 2015, when their annual revenue is expected to be around US\$ 2.9 billion. (See Table I-3)

<Table I - 3> Global TV Advertising Market in Media

(unit : US\$ 100mn, %)

Classification	2009	2010E	2011E	2012E	2013E	2014E	2015E	CAGR (2011-2015)
Broadcast TV Ads	1,513	1,662	1,710	1,873	1,954	2,154	2,219	6.7%
Multi-channel TV Ads	407	451	482	531	576	634	676	8.8%
Terrestrial TV Ads	1,029	1,128	1,142	1,252	1,285	1,423	1,442	6.0%
Others	77	83	86	90	93	98	101	4.4%
Online & Mobile Ads	28	36	45	57	73	91	108	25.2%
Mobile TV Ads	5	7	9	13	18	23	29	34.0%
Online TV Ads	22	29	35	44	55	67	79	22.6%
Total	1,541	1,698	1,754	1,930	2,026	2,245	2,327	7.3%

E : Estimates

Source : Global entertainment and media outlook, 2011~2015, and PricewaterhouseCoopers, 2011 (data modified by KAIT).

Note : There is a slight discrepancy in the total figures due to rounding off.

Geographically speaking, North America is the largest TV advertising market in the world, with revenues of US\$ 74.7 billion in 2011 (US\$ 72 billion for broadcast TV and US\$ 2.7

billion for online and mobile), followed by the Asia-Pacific region, Europe/the Middle East/Africa and Latin America in that order. (See Table I-4)

<Table I - 4> Global TV Advertising Market by Region

(unit : US\$ 100mn, %)

Classification	2009	2010E	2011E	2012E	2013E	2014E	2015E	CAGR (2011-2015)	
Broadcast TV Ads	North America	652	722	720	798	801	874	886	5.3%
	Europe/M. East/Africa	375	403	424	453	478	513	538	6.1%
	Asia-Pacific	371	402	418	458	497	546	583	8.7%
	Latin America	116	135	147	165	178	221	212	9.6%
	Total	1,513	1,662	1,710	1,873	1,954	2,154	2,219	6.7%
Online & Mobile TV Ads	North America	17	21	27	33	41	49	57	20.5%
	Europe/M. East/Africa	3	4	5	7	10	14	17	35.8%
	Asia-Pacific	8	10	12	16	21	26	32	27.8%
	Latin America	0.1	0.4	0.5	0.8	1.1	1.8	2.1	41.4%
	Total	28	36	45	57	73	91	108	24.8%

E : Estimates

Source : Global Entertainment and Media Outlook, 2011~2015, and PricewaterhouseCoopers, 2011 (Data modified by KAIT)

Note : There is a slight discrepancy in the total figures due to rounding off.

## C. Trends in the World Telecommunications Market

The world telecommunications market in 2011 was characterized by the rapid growth of mobile broadband spurred by the spread of smartphones, tablet PCs and applications.

According to a Gartner report, the revenue of the world telecommunications service market

stood at US\$ 1,656.7 billion in 2011, and is estimated at US\$ 1,702 billion in 2012, showing a 2.7% increase over the previous period. The world telecommunications service market is expected to continuously grow in the coming years, at an average annual rate of 2.8%, to reach a value of US\$ 1,852.7 billion in 2015. (See Table I-5)

<Table I - 5> World Telecommunications Market

Classification	(unit : US\$ 100mn, %)							
	2009	2010	2011E	2012E	2013E	2014E	2015E	CAGR (2011~2015)
World telecommunications service	15,317	15,965	16,567	17,020	17,534	18,073	18,527	2.8%
World IT industry	32,237	34,064	35,982	37,588	39,320	41,125	43,008	4.6%
Telecommunications service growth	-3.0%	4.2%	3.8%	2.7%	3.0%	3.1%	2.5%	-
Telecommunications service in the IT industry	47.5%	46.9%	46.0%	45.3%	44.6%	43.9%	43.1%	-

E : Estimates

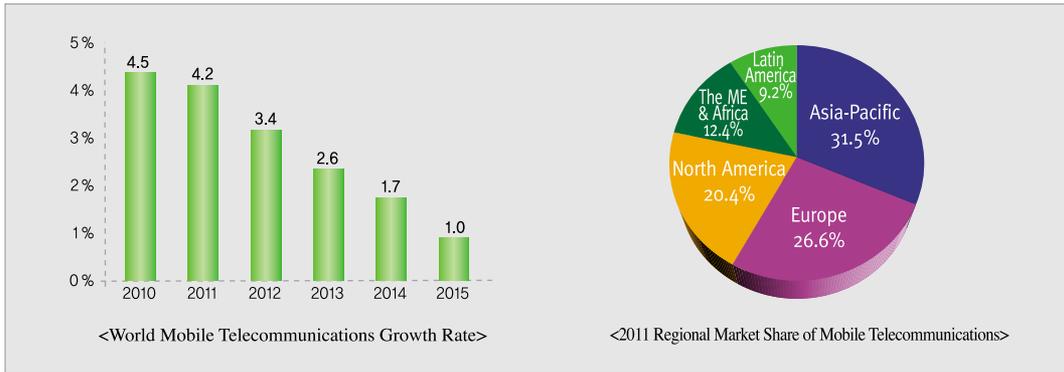
Source : Gartner, 2011 (data modified by KAIT)

The mobile telecommunications market grew by 4.5% in 2010 due to the economic recovery; however, the growth trend is expected to be adjusted downwardly after 2011. The Asia-Pacific region, the most populous area in the world, currently has a 31.5% market share of the global mobile telecommunications

market.(See Figure I-1)

The mobile telecommunications market in 2011 was estimated at US\$ 953.9 billion, and is expected to exceed US\$ 1,040 billion by 2015, at an compound annual growth rate of 2.2%. (See Table I-6)

<Figure I - 1> World Mobile Telecommunications Service Growth Rate and Regional Market Shares



<Table I - 6> Trends of the Regional Market Shares of Mobile Telecommunications

(unit : US\$ 100mn, %)

Classification	2009	2010	2011E	2012E	2013E	2014E	2015E	CAGR (2011~2015)
North America	1,834	1,885	1,942	2,009	2,071	2,124	2,166	2.8%
Latin America	768	827	879	903	924	932	940	1.7%
Europe	2,533	2,516	2,535	2,554	2,560	2,553	2,543	0.1%
Asia-Pacific	2,641	2,828	3,002	3,137	3,250	3,322	3,347	2.8%
ME/Africa	980	1,095	1,181	1,261	1,319	1,365	1,404	4.4%
Total	8,756	9,151	9,539	9,864	10,124	10,296	10,400	2.2%

E : Estimates

Source : OVUM, 2011 (data modified by KAIT)

The number of mobile phone subscribers in the world is estimated at 5.4 billion and is expected to reach 7.2 billion by 2015 at an compound annual growth rate of 7.2%.

Approximately 1.5 billion mobile phones

were churned out in 2011 and 474.65 million smartphones were produced in the year. However, the latter figure is anticipated to jump to an annual output of about 1 billion by 2015. (See Table I-7)

<Table I - 7> Global Trends of Mobile Phones

(unit : 1,000 people, 1,000 units, %)

Classification	2009	2010	2011E	2012E	2013E	2014E	2015E	CAGR (2011~2015)
Mobile phone subscribers	4,223,082	4,853,458	5,442,700	5,907,595	6,347,515	6,790,300	7,192,140	7.2%
Mobile phone output	1,246,864	1,378,451	1,492,060	1,546,428	1,620,902	1,700,991	1,773,314	4.4%
Smartphone output	198,665	277,222	474,651	647,144	794,943	925,038	1,041,993	21.7%

E : Estimates

Source : Yano Research Institute, Japan, December 2011 (data modified by KAIT)

## 2. The Broadcasting and Telecommunications Policy Environment of Korea

In 2011, Korea achieved constant growth in the field of broadcasting and telecommunications, primarily due to the continuous diffusion of new services and devices such as Twitter, Facebook, smartphones and tablet PCs. The emergence of smartphones combined with various apps has contributed to the growth of the wireless data market, giving the telecommunications industry an opportunity to leap forward at a time when it was experiencing a prolonged spell of stalled growth because of market saturation. Also, the launch of general broadcasting channels in broadcasting and the start of the LTE service in communications are expected to help consolidate the foundations for another takeoff in the industry.

Amid the rapidly-evolving broadcasting and telecommunications environment, the broadcasting and telecommunications policies of Korea are aimed at fostering industrial evolution and growth through such measures as 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 telecommunications users' welfare and Information Protection.

The smart revolution sparked by the emergence of the smartphone is expected to spread further through such various devices and services as social communication, smart work, M2M communications and cloud computing. These developments in turn will not only help enterprises to improve their productivity but also the entire country to move into a smart age.

### A. Trends of the Domestic Economy and Broadcasting and Telecommunications

The growth rate of the Korean economy plunged to 0.3% in 2009 due to the impact of the global financial crisis. It began to show signs of recovery towards the end of 2009, and went on to achieve a growth rate of 3.6%, or KRW 1,080 trillion in GDP, in 2011. (See Table I-8)

However, in 2012, the Korean economy is expected to grow a bit less than in 2011 according to estimates released by major institutions at home and abroad because of the continuing economic downturns in the United States and Europe.

&lt;Table I - 8&gt; Trends of Korea's GDP Growth

(unit : KRW 1bn, %)

Classification	2007	2008	2009	2010P	2011P	Average (2007~2011)
GDP (actual, KRW 1bn)	956,515	978,499	981,625	1,042,111	1,079,627	1,007,675
GDP growth (actual, %)	5.1	2.3	0.3	6.2	3.6	3.5

P : Preliminary figures subject to change depending on the availability of the exact figures later on.

Source : Bank of Korea (data modified by KAIT)

Korea is estimated to have achieved an annual growth rate of 3.4% in broadcasting and telecommunications, or 156 trillion won, in terms of the sector's output, in 2011.

Of the various sectors in broadcasting and telecommunications, converged services are

expected to record the fastest growth rate of 17% a year (2008 to 2012). In the hardware sector, the annual output of domestic communications equipment and devices is estimated to have posted 75 trillion won in 2011. (See Table I-9)

&lt;Table I - 9&gt; Output of Korea's Broadcasting and Telecommunications

(unit : KRW 1bn)

Classification	2008	2009	2010	2011P	2012E	CAGR (2008~2012)
Broadcasting and Telecommunications Industry	140,730	151,432	151,774	156,161	160,974	3.4%
Broadcasting and Telecommunications	57,991	60,503	63,043	65,622	68,641	4.3%
Telecom Service	42,662	43,598	43,636	44,092	44,736	1.2%
Broadcasting Service	9,288	9,519	10,738	11,622	12,645	8.0%
Broadcasting and Telecommunications Convergence Services	6,042	7,386	8,669	9,908	11,260	17.0%
Broadcasting and Telecommunications Equip and Devices	82,739	90,929	88,731	90,539	92,332	2.7%
Communications Devices	69,846	76,839	73,218	74,591	75,719	2.0%
Broadcasting Equipment	12,894	14,090	15,513	15,948	16,614	6.4%

P : Preliminary figures

E : Estimates

Sources : KAIT (~2011) &amp; KISDI (2012) (data modified by KAIT)

The number of Korea's mobile phone subscribers was reported to have reached 52.51 million in 2011, and is expected to increase by 2.32 million to 54.83 million in 2012.

In 2012, the number of 4G subscribers is anticipated to skyrocket to 13.5 million, as a great many 2G and 3G service subscribers will

likely shift to the 4G LTE (Long Term Evolution) service.

Of the 52.51 million mobile phone subscribers recorded in 2011, the number of smartphone users stood at 22.58 million, or 43%. The figure is expected to grow to 34.8 million, or 54.1%, in 2012.

However, the annual Sales in 2012 is expected to decline a little despite an increase in mobile phone subscriptions. (See Table I-10)

<Table I -10> Domestic Mobile Phone Subscriptions and Sales

Classification	(unit : 10,000 people, KRW 100mn)				
	2009	2010	2011	2012E	Growth in 2012
Number of mobile phone subscribers	4,794	5,077	5,251	5,483	4.4%
• 2G	2,318	2,022	1,582	1,136	-28.2%
• 3G	2,476	3,055	3,550	2,997	-15.6%
• 4G	-	-	119	1,350	1,034.5%
Sales	191,456	198,221	199,032	191,998	-3.5%
Number of smartphone subscribers	81	721	2,258	3,480	54.1%

E : Estimates

Note : The Sales does not include the wireless network charge.

Sources : KCC, KAIT (~2011), KT Economics & Management Research Lab (2012) (data modified by KAIT)

The IPTV service in Korea saw a sharp increase in growth in 2011 due to aggressive marketing by the country's three telecom firms, recording 603.3 billion won in Sales and 4.94 million subscribers.

The year 2012 is anticipated to see relatively slower growth rate in terms of the number of

subscribers.

In 2011, the growth rate of Sales exceeded that of subscribers, primarily due to the activation of VOD PPV (Pay Per View) and a subsequent increase in the ARPU (Average Revenue Per User). (See Table I-11)

<Table I -11> Korea's IPTV Subscribers and Sales

Classification	(unit : 10,000 people, KRW 100mn)					
	2008	2009	2010	2011P	2012E	Growth Rate in 2012
Subscribers	159	237	366	494	571	15.6%
Sales	1,140	2,448	4,043	6,033	7,684	27.4%

P : Preliminary figures

E : Estimates

Sources : KAIT (~2011) KT Economics & Management Lab (2012) (data modified by KAIT)

The number of Korea's pay TV subscribers stood at 19.42 million in 2011 and is expected to increase by 2.2% to 19.84 million in 2012.

Meanwhile, the number of satellite broadcasting subscribers has been increasing

steadily, while the whole pay TV service Sales has been shrinking gradually owing to negative growth in the system operator sector. The reasons for the downward trend in the cable broadcasting service are the increasing demand

for IPTV or satellite broadcasting and its declining competitiveness in the area of bundled services, which stems from its

lackluster performance in the competition for high-speed Internet. (See Table I-12)

<Table I - 12> Korea's Pay TV Subscribers and Sales

(unit : 10,000 people, KRW 100mn)

Classification	2009	2010	2011P	2012E	Growth rate in 2012
Subscribers	1,969	1,972	1,942	1,984	2.2%
• Cable	1,523	1,504	1,498	1,452	-3.1%
• Satellite	446	468	444	532	19.8%
Sales	23,006	24,107	24,337	24,828	2.0%
• Cable	18,168	19,378	19,441	17,956	-7.6%
• Satellite	4,838	4,729	4,896	6,872	40.4%

P : Preliminary figures E : Estimates

Note : Satellite broadcasting includes ordinary satellite broadcasting and satellite DMB.

Sources : KAIT, The IR(Investor Relations) data released by the relevant companies and the KT Economy & Management Research Lab (data modified by KAIT)

In the area of Internet advertising, mobile ad revenue began to rise sharply in 2011, posting an annual Sales of almost 1.9 trillion won. This figure is anticipated to grow to about 2.2 trillion won in 2012, at an annual growth rate

of 17.1%.

The remarkable increase forecast in 2012 is largely attributable to the predicted increase in mobile advertising on smartphones, as was the case in the preceding year. (See Table I-13)

<Table I - 13> Korea's Internet Advertising Sales

(unit : KRW 100mn)

Classification	2009	2010	2011E	2012E	Growth rate in 2012
Internet Ads	12,430	15,470	18,979	22,216	17.1%
• Search Ads	8,287	10,313	12,986	14,489	11.6%
• Display Ads	4,143	5,157	5,993	7,727	28.9%

E : Estimates

Sources : KT Economy and Management Research Lab and IRs released by the relevant companies.

Korea recorded an annual export of US\$ 156.6 billion in ICT goods and services in 2011, after suffering a negative growth rate in 2009 due to the global economic downturn, and showing strong signs of recovery in 2010. Exports by the ICT industry represented 28.2% of the nation's total exports in 2011, while imports accounted for 15.5% of the country's

total import volume.

In terms of trade balance, the ICT industry recorded a trade surplus of US\$ 75.1 billion in 2011. Given the overall trade surplus of US\$ 30.8 billion in the same year, the contribution of the industry to the nation's trade balance is abundantly clear. (See Table I-14)

&lt;Table I - 14&gt; ICT Exports and Imports

(unit : US\$ 100mn, %)

Classification	Year	2006	2007	2008	2009	2010	2011
Exports	Total Exports	3,255	3,715	4,220	3,635	4,664	5,552
	ICT Exports	1,191	1,301	1,312	1,210	1,539	1,566
	ICT's share of total exports	36.6%	35.0%	31.1%	33.3%	33.0%	28.2%
Imports	Total Imports	3,094	3,569	4,353	3,231	4,252	5,244
	ICT Imports	647	697	735	620	756	815
	ICT's share of total imports	20.9%	19.5%	16.9%	19.2%	17.8%	15.5%
Overall Trade Surplus		161	146	-133	405	412	308
ICT Trade Surplus		544	604	576	589	783	751

Note : The ICT industry, as defined by the Bank Korea, Includes both ICT device manufacturing (office, computing and accounting machinery and semiconductors and telecommunications devices) and ICT services (telecommunications, broadcasting, software and computerrelated services).

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

## B. Changes in the Broadcasting and Telecommunications Policy Environment

The year 2011 opened up an era of big data in Korea as smart devices such as smartphones and tablet PCs continued to spread while individualized or small group centered media like blogs and social networking services consolidated their positions as new types of communication media and new channels of value creation.

In view of these changes, Korea will need to make further investments in new networks to meet the rapidly increasing traffic demand, while securing additional frequencies will be even more important.

In terms of the content market, the competition to develop contents that meet consumer needs and to take the marketing initiative in the sector is expected to become

ever fiercer.

The biggest change in the establishment of the smart environment is the emergence of open mobile ecosystem.

Such a new environment has led the transition from a struggle for existence to co-evolution and cooperative competition.

Also, as the domestic mobile telecom market was rapidly reorganized into a mobile ecosystem led by global superpowers like Apple and Google, such units as terminals, operating systems, platforms, contents and applications, too, had to make the transition from a walled garden value chain into an open mobile ecosystem.

The year 2011 in Korea was also characterized by the integration of traditional media like newspapers, broadcasts and Internet with SNS, smartphones, tablet PCs and smart TVs and the subsequent expansion of user participation.

As temporal and spatial barriers disappear, exchanges are becoming increasingly active among those with common social interests; furthermore, in line with the dissolution of boundaries and entry barriers between organizations, cooperative work based on participation and collective intelligence has been activated.

The changes in the life pattern of smart service users provoked by smart technology innovations have led to the advent of a new era of smart life.

The latest life style (dubbed 'Life 3.0') is always connected and mobile, constituting a new phenomenon made possible by the diffusion of smart terminals. Life 3.0 goes far beyond the concerns of Life Style 2.0 covering one's health, wellbeing and appearance. It puts a focus on relationships and induces people to begin reconstituting their own world starting with themselves.

While smart networking continues to gain momentum, the domestic market has become a competition arena for five majors, namely, Google, Apple, NHN, Daum and Samsung.

New foundations for value creation are being laid by the smart services they are providing to the public and private sectors through their smart infrastructure.

The current smart economic society may be characterized according to the following three factors:

First, the shift to an advanced economy centered around the soft economy (knowledge and service industry);

Second, the transfer to a high-value-added economy society centered around knowledge, cultural contents and service industries;

Third, the provision of optimized services to individuals on the basis of evolved ICT and the subsequent laying of the foundations to create new values through innovations across all socioeconomic areas.

In conclusion, in the smart socioeconomic environment, individuals can engage anytime, anywhere in communications about politics, economy, society, culture - you name it - and easily participate in interactions with a host of other individuals.

# II

## The Launch of the Second Term Commission and its Policy Directions

1. The Launch of the Second Term Commission
2. Policy Directions of the Second Term Commission
3. Accomplishments of the First Term Commission





## II The Launch of the Second Term Commission and its Policy Directions

### 1. The Launch of the Second Term Commission

#### A. The Current Standing Commissioners of the Second Term Commission

<Figure II - 1> The Current Standing Commissioners of the Second Term Commission (as of March 2012)



#### Kye-Cheol Lee, Chairman

Lee graduated from Korea University with a B.L. in Law (1965), passed the public administration examinations (5th), and entered the Postal Service Ministry(1967). During his time at the Ministry he was promoted to chief of the Gyeongbuk Regional Communications Office (1983), head of Planning and Management (1991), and Assistant Minister of Information and Communications (1994). Thereafter, he was appointed as president of Korea Telecom Corporation (1996), chairman of the Korea Telecommunications Operators Association (2000), president of the Korea Information Security Agency (2002), and president of the Korea Communications Agency (2007). Since March 2012, he has been serving as chairman of the Second Term Commission of the KCC (Korea Communications Commission).



#### Sung-Kyu Hong, Vice-Chairman

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 director of the Politics and Culture Office (1992), as executive director of the News and Policy Planning Department (1999) and as head of the Special Mission Bureau (2002). He served as vice-president at TU Media Corp. (2004) while teaching at Chung-Ang University as a professor of mass communication (2007). He has been serving as vice-chairman of the Second Term Commission of the KCC since March 2011.



#### Choong-Seek Kim, Commissioner

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 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). He has been serving as a standing commissioner at the Second Term Commission of the KCC since March 2011.



### Yong-Sup Shin, Commissioner

Shin graduated from Yonsei University with a B.S. in Electronic Engineering (1981), an M.S. in Radio Engineering (2000), and a Ph.D. in Electrical and Electronic Engineering (2006). He passed the state technology examination (16th) and began to work at the Ministry of Information and Communication (1981). He served as director-general of the National Radio Research Agency (2000) and chief of the Chungcheong Communications Office (2002). He was appointed director-general of the Telecommunications Policy Bureau of the KCC (2008) and assistant chairman of the Communications Convergence Policy Office (2010). He has been serving as a standing commissioner of the Second Term Commission of the KCC since March 2011.



### 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), secretary-general of the People's Coalition for Media Reform (2006), director for planning, Korean Association for Broadcasting and Telecommunication Studies (2007), and director at the Institute for Public Media (2008). He served as a standing commissioner of the KCC (July 2010 ~ March 2011) and has been serving as a standing commissioner of the Second Term Commission of the KCC since March 2011.

## B. Significance of the Launch of the Second Term Commission

The Korea Communications Commission was established in 2008 as a collegial body directly reporting to the President of the Republic of Korea, with the aim of responding proactively to the phenomenon of convergence between broadcasting and telecommunications, which was progressing rapidly due to the development of digital technology, to name but one factor, and of ensuring that the benefits of convergence would be shared by the entire population.

During the three years from March 2008 to March 2011, the First Term Commission made active efforts to deal with the convergence of broadcasting and telecommunications, guarantee the freedom of broadcasting and its

public nature and public interest, and ensure balanced growth between broadcasting and telecommunications so as to strengthen the international competitiveness of both fields in Korea. The First Term Commission achieved remarkable results concerning the activation of broadcasting and telecommunications convergent services, the transfer to digital broadcasting, the creation of an environment for fair competition in the broadcasting and telecommunications market, and the promotion of overseas expansion, thereby upgrading the status of the local broadcasting and telecommunications industry.

The Second Term Commission of the KCC will inherit such policy directions and work to further expand the achievements of the First Term Commission, while implementing new tasks in line with the changes that are occurring

in the broadcasting and telecommunications market.

The policy focus of the First Term Commission was the ‘convergence’ of various technologies and services. The Second Term Commission will shift its focus to the main themes of ‘smart’ and ‘smart society’ and establish and implement new policies to actively address the challenges and opportunities presented by the new era.

The Second Term Commission will also pay particular attention to sharing the benefits of broadcasting and telecommunications, in particular, and information technology, in general, with the socially disadvantaged. It will take a leading role in helping Korea to make a smooth transition from IT powerhouse to smart advanced country.

## 2. Policy Directions of the Second Term Commission

The Second Term Commission has presented Korea’s transformation into ‘a world-class broadcasting and telecommunications country’ and ‘smart Korea enjoyed by all its citizens.’ The KCC has set its policy objectives as ‘the realization of an advanced broadcasting and telecommunications country where everyone is happy’ and ‘the consolidation of competitiveness in the broadcasting and telecommunications

industry.’

In order for Korea to position itself as an advanced smart country based on its current status as an IT powerhouse in the world, and to share the benefits of broadcasting and telecommunications with every member of its society, the KCC has selected the following as its core priority tasks: ① realization of a global ICT hub in Korea; ② creation of a smart ecosystem and new industries; ③ realization of advanced digital broadcasting; ④ enhancement of broadcasting and telecommunications users’ welfare and Information Protection.

### A. Realization of a Global ICT Hub in Korea

The Second Term Commission is set to provide Giga Internet service by the end of 2012 through an enhanced wire-based network and commercialize 10Gbps, which is 100 times faster than the currently available service, by 2020. The KCC will also pursue increased investments in LTE and expanded use of WiBro, namely, the Wireless Broadband Internet. It will help Korea establish the best networked community in the world by promoting remarkable developments in future network technologies such as FTTH (Fiber To The Home) and the next generation of mobile telecommunications technologies.

Also, the KCC is committed to expanding

the country's radio wave territory significantly through its 'Mobile Gwanggaeto Plan' devoted to discovering the 700MHz radio wave, i.e., about twice as strong as the current 270MHz wave on which the three major local mobile carriers run at the moment.

## B. Creation of a Smart Ecosystem and New Industries

The KCC is committed to providing active support for measures leading to the activation of the seven smart services, including cloud, M2M communications, NFC (Near Field Communication), smart TV, T-Commerce, LBS (Location Based Service) and 3D broadcasting, which will bring about revolutionary changes in work and play in human society.

Notably, the KCC will actively support one-person start-ups and venture businesses in the field of broadcasting - including mobile apps, broadcasting and telecommunications contents and smart advertising - and will offer such businesses R&D funds for the purpose of enhancing their technological prowess. Through the establishment of new technology test beds, the KCC will help promote a second venture boom in the country.

Moreover, the KCC will promote competition in the broadcasting and telecommunications service market with the aim of helping the population enjoy more varied contents and

more convenient services. The KCC will also set about reshuffling the relevant legal system to bring about a virtuous cycle between C(Contents), P(Platform), N(Network) and T(Terminal) and a sound ecosystem in the industry.

## C. Realization of Advanced Digital Broadcasting

In order to enhance the competitiveness of the local broadcasting industry, a transfer to horizontal legislation will be sought. Pre-regulation will be minimized. The current 「Broadcasting Act」 will be upgraded to Integrated Broadcasting Act, a framework act on broadcasting, with the aim of paving the way for global media groups to emerge in Korea.

The KCC will evaluate the overall competence of terrestrial program providers, promote competition in the production of high-quality contents, support the expansion of infrastructure for program production by PPs and broadcasters and, finally, help the overseas distribution of local broadcasting contents more actively.

Furthermore, the KCC will complete the digitalization of broadcasting facilities by June 2012 in preparation for the planned termination of analog broadcasting across the country on December 31, 2012. The KCC will endeavor to eliminate fringe areas in rural, mountainous or

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remote areas, continue to support the socially disadvantaged, and raise the dignity of local broadcasting programs with the purpose of developing KBS and EBS into world-class public broadcasters.

#### **D. Enhancement of Broadcasting and Telecommunications Users' welfare and Information Protection**

The KCC is committed to promoting a reduction in telecommunications fees by allowing the establishment of a fourth mobile communications service providers and the activation of MVNO services. It will improve the distribution structure of mobile handsets through the introduction of a blacklist system and upgraded transparency of the circulation market. The KCC will spare no effort to reduce the price of terminals and the burden of low-income households by promoting accelerated competition among suppliers.

The KCC will develop various UI(User Interface) technologies so that the disabled and the elderly can use broadcasting and

telecommunications services more conveniently. Through improvements in the universal service system, the KCC will ensure that everybody is able to enjoy major sporting events like the Olympic Games and the FIFA World Cup without having to pay any additional fees. To foster citizens equipped with a sound internet culture, the KCC will offer a variety of Internet utilization education programs adapted to the life cycles of diverse social groups, including children, teenagers, adults, the disabled and senior citizens, along with Internet ethics education tailored to each age group. The KCC will do its best to block illegal and socially detrimental information sites.

To sum up, the Second Term Commission of the KCC will play a leading role in ensuring that Korea secures the world's strongest competitiveness in broadcasting and telecommunications and that every Korean shares the benefits of broadcasting and telecommunications that a smart advanced Korea can offer.

### 3. Accomplishments of the First Term Commission

#### A. Standing Commissioners of the First Term Commission

<Figure II- 2> Standing Commissioners of the First Term Commission (as of March 2008)



##### See-Joong Choi, Chairman

Choi graduated from Seoul National University with a B.A. in Political Science(1963). He served at DongA Ilbo as director of politics and as an editorial writer (1988) and as vice-executive director of the editorial department (1993). He was appointed president of Gallup Korea (1994). He served as a member of the advisory committee for the 17th presidential inauguration preparation committee (2007). He served as the first term chairman of the KCC (March 2008 ~ March 2011) and as the second term chairman of the same organization (March 2011 ~ February 2012).



##### Do-Kyun Song, Vice-Chairman

Song graduated from Hankuk University of Foreign studies with a B.A. in Spanish (1971). He served at SBS (Seoul Broadcasting System) as executive director of the news and policy planning department (1992) and later as its president (1999). He was appointed vice-chairman of the Korean Broadcasters Association (2001). He was named a chair-professor of information and broadcasting at Sookmyung Women's University (2005). He served at the KCC as the first term vice-chairman (March 2008 ~ September 2009) and thereafter as a standing commissioner (September 2009 ~ March 2011).



##### kyung-Ja Lee, Commissioner

Lee graduated from Sookmyung Women's University with a B.A. in English Literature (1967). She obtained an M.A. at the State University of Pennsylvania (1972) and a Ph.D. in Journalism at Southern Illinois University (1977). She was appointed a professor of communication at Kyung Hee University (1977) and promoted to dean of the Graduate School of Journalism and Communication (1995). She was named president of the Korea Broadcasting Promotion Agency (1999). She served at the KCC as one of the 1st term standing commissioners (March 2008 ~ September 2009) and thereafter as vice-chairman (September 2009 ~ March 2011).



##### Tae-Gun Hyung, Commissioner

Hyung graduated from Sungkyunkwan University with a B.A. in Economics (1979). He obtained an M.A. at the State University of New York (1990) and an honorary doctoral degree in business management at Dongyang University (2011). He served at the Ministry of Information and Communication as chief of the Gyeongbuk Regional Communications Office (2000), as a comptroller (2003), as an officer of international cooperation (2004), as director of The Ministry of Information and Communication (2005), and as a standing commissioner of the Communication Council (2006). He served at the KCC as a standing commissioner (March 2008 ~ March 2011).



##### Byeong-Gi Lee, Commissioner

Lee graduated from Seoul National University with a BS in Electronic Engineering (1974). He obtained a master's degree at Kyungpook National University (1979) and a Ph.D. at UCLA, USA (1982). He was appointed a professor of electrical engineering at Seoul National university (1986) and director of the Institute of New Media and Communications at the same university (2000). He worked as a councilor for the Presidential Advisory Council on Science & Technology (2006) and as a policy councilor for the Ministry of Justice (2007). He served at the KCC as a standing commissioner (March 2008 ~ March 2010).

## B. Major Policy Achievements of the First Term Commission

The three years of the First Term Commission of the KCC was a period when the environmental and institutional foundations were laid down for a successful convergence of broadcasting and telecommunications in Korea. The KCC did its best to cope with the rapid changes taking place in the IT industry and the media environment all around the world. The major achievements of the KCC are as follows:

### 1) Activation of Broadcasting and Telecommunications Convergent Services and Conversion to Digital Broadcasting

In the area of IPTV, a representative service of the convergence of broadcasting and telecommunications, the KCC completed the enactment of various decrees including the enforcement decree of the 「Internet Multimedia Broadcast Services Act」 after reaching a compromise between the interests of broadcasting and telecommunications. The KCC also concluded an agreement on the terrestrial re-transmission of IPTV, issued permits for new IPTV providers, and carried out a pilot IPTV service before the launch of the full-scale IPTV commercial service in November 2008.

The KCC made various efforts to help IPTV establish itself in the market, and IPTV

associations, companies, and local governments have come together to install and operate IPTV education facilities at local childcare centers for children of low-income families in 2010

Also, the KCC completed its revision of the relevant legislation required for the conversion to digital broadcasting (April 2009). The KCC finalized the digital conversion basic plan (June 2009) and the digital conversion implementation plan (December 2009), thus laying the foundations for the conversion to full-scale digital broadcasting.

The KCC implemented digital conversion pilot projects in Uljin-gun, Gangjin-gun, Danyang-gun and Jeju-do in order to help accelerate the pace of conversion (from September 2010). The KCC made all-out efforts to promote digital broadcasting, including PR campaigns, supply diffusion model digital TVs, and support disadvantaged members of society so that the entire population can enjoy digital broadcasting.

### 2) Promotion of Policies Aimed at Expanding Users' Interests

The KCC significantly reduced mobile telecommunications fees (September 2009) by applying 'a charge-per-second system' (March 2010), significantly lowering mobile telephone subscription fees (20~27%) and wireless data and pre-paid telephone charges (15.5~23%).

In order to support people on low incomes,

the disabled, and veterans, the KCC increased the discount rate from 35% to 50% for people in the lowest income bracket and to 35% for those in the second lowest group.

It also allowed users to retain the same home telephone numbers upon subscribing to the Internet telephone service, eased the telephone number change procedures required when changing mobile carriers, and began a new service allowing users to easily check dormant mobile phones that continue to incur telephone charges. For 3G, the KCC introduced an open USIM system that allows users to use another mobile communications service providers' handset with the replacement of the USIM only (July 2008).

Taking the 7.7 DDoS attack in July 2009 as an opportunity for reform, the KCC announced 'Comprehensive National Cyber Crisis Response Measures' in collaboration with the entire cabinet. (September 2009)

It reduced mobile phone and e-mail spam mail significantly by having mobile carriers share information about malicious spammers and people with low credit ratings in order to limit approval of their applications for mobile phone subscription.

### 3) Creation of a Competitive Environment and Deregulation of Broadcasting and Telecommunications Market

The KCC submitted a bill for the 「Framework Act on broadcasting communications

Development」 to the National Assembly (December 2008) calling for systematic preparation for the convergence of broadcasting and telecommunications. Furthermore, it designated the broadcasting and telecommunications convergent industry as one of the seventeen national engines for future growth (January 2009) and worked out detailed implementation plans.

It revised the enforcement decree of the 「Broadcasting Act」 in December 2008 to allow big businesses with capital of up to KRW10 trillion to operate a terrestrial broadcaster, a general broadcaster or a 24-hour news broadcaster. In addition, it alleviated the restrictions imposed on system operators' cross-ownership. All those measures were aimed at developing broadcasting and enhancing competitiveness. The KCC encouraged more external production of broadcasting programs, recording a 4.9% increase in 2010 compared to 2009, or KRW 12.7 billion in that one year. By conducting annual evaluations of terrestrial broadcasters, system operators and satellite broadcasters, the KCC contributed to the qualitative development of broadcasting programs in Korea.

The KCC selected and voted on general broadcasters and a 24-hour news broadcaster on December 31, 2010 in a bid to increase the number of competitive broadcasting channels.

Like terrestrial broadcasters, including KBS

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and MBC, general broadcasting channels can broadcast in all areas of programming including news, education, entertainment and drama, and are accessible through cable subscription just like 24-hour news channels.

It is expected that the launch of new broadcasting channels will help foster local media enterprises' development into global powerhouses through enhanced competition in the global broadcasting market.

#### 4) Policies to Promote Overseas Expansion and Upgrade the Status of Korea's Broadcasting and Telecommunications

The KCC hosted the OECD Ministerial Meeting on the Future of the Internet Economy in June 2008, which adopted the Seoul Declaration on the Future of the Internet Economy.

The KCC also contributed to increasing the exports of WiBro, DMB, IPTV and broadcasting contents, where Korea has a competitive edge, through overseas roadshows,

governmental consulting support, and broadcasting content showcases.

By playing a more dynamic part in the activities of international organizations such as the ITU, OECD and APEC, more Koreans have advanced into the leadership of such organizations.

This in turn has helped Korea pave the way toward the internationalization of its broadcasting and telecommunications environment.

The distribution of local broadcasting and telecommunications technologies in overseas markets gained momentum, too. One example is the pilot T-DMB service in Vietnam and Norway.

The KCC endeavored to share the Korean-type ICT policies by training officials from developing countries on an invitational basis, providing policy counseling and increasing the availability of its ODA (Official Development Assistance).



# III

## Policy Goals of the Korea Communications Commission

1. Overview
2. Major Accomplishments in 2010
3. Major Policy Goals for 2011





# III 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 the 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 telecommunications industries; protect rights and interests of the public; and contribute to enhancing the welfare of the public through independent operation of the KCC.

The 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 procompetition policies for the broadcasting and telecommunications market; upgrading broadcasting and telecommunications networks; preventing undesirable effects of broadcasting and telecommunications; establishing policies for protecting broadcasting and telecommunications users; and investigating unfair practices by broadcasting and telecommunications businesses and mediating industry disputes and business-consumer disputes.

The 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 Korea<sup>1)</sup>. The standing members deliberate and vote on important issues related to broadcasting and telecommunications and the operation of the KCC.

There are sixteen laws that are directly and indirectly related to the 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 Broadcasting Communications Development」
- 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 III- 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"> <li>• Legal basis for the establishment of the Korea Communications Commission, composition and organization structure thereof</li> <li>• Responsibilities of the Korea Communications Commission; its method of operation; establishment of a deliberation committee</li> </ul>	Feb. 29, 2008	Enacted
		Feb. 22, 2012	Amended
Framework Act on Broadcasting Communications Development	<ul style="list-style-type: none"> <li>• Basic directions and plans for broadcasting and telecommunications policy</li> <li>• Promotion of broadcasting and telecommunications; establishment of technical standards; disaster management; establishment of the Broadcasting and Telecommunications Development Fund</li> </ul>	Mar. 22, 2010	Enacted
		Feb. 22, 2012	Amended
Internet Multimedia Broadcast Services Act	<ul style="list-style-type: none"> <li>• Classification of internet multimedia businesses (IPTV service providers, content providers)</li> <li>• Market entry restrictions, service zones and ownership restrictions</li> </ul>	Jan. 17, 2008	Enacted
		Jul. 14, 2011	Amended
Broadcasting Act	<ul style="list-style-type: none"> <li>• Freedom of broadcast programming; public responsibility of broadcasting</li> <li>• Licensing, re-licensing, approval and re-approval of broadcasting businesses</li> </ul>	Jan. 12, 2000	Enacted
		Feb. 22, 2012	Amended
Korea Educational Broadcasting System Act	<ul style="list-style-type: none"> <li>• Capital of the Korea Educational Broadcasting System and capital contributions</li> <li>• Appointment of board members; creation of a board of directors</li> </ul>	Jan. 12, 2000	Enacted
		Mar. 22, 2010	Amended

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.

Law	Description	Dates Enacted and Amended	
Foundation for Broadcast Culture Act	<ul style="list-style-type: none"> <li>• Establishment of a board of trustees for the Foundation for Broadcast Culture</li> <li>• Legal basis for the establishment of the Broadcast Culture Promotion Fund</li> </ul>	Dec. 26, 1988 Feb. 29, 2008	Enacted Amended
Act on Broadcast Advertising Agency etc.	<ul style="list-style-type: none"> <li>• Sales of broadcast advertising</li> <li>• Support measures for small and medium broadcasters etc.</li> </ul>	Feb. 22, 2012	Enacted
Special Act on the Digital Transition of Terrestrial TV Broadcasting and the Activation of Digital Broadcasting	<ul style="list-style-type: none"> <li>• Phase-out date for analog TV broadcasting</li> <li>• Measures to ensure low-income viewers' access to DTV</li> </ul>	Mar. 28, 2008 Apr. 22, 2009	Enacted Amended
Radio Waves Act	<ul style="list-style-type: none"> <li>• Procedures for the allocation, assignment, retrieval and re-allocation of frequency spectrum resources</li> <li>• Procedures for licensing, inspecting and using radio stations</li> </ul>	Dec. 30, 1961 Aug. 04, 2011	Enacted Amended
Framework Act on Telecommunications	<ul style="list-style-type: none"> <li>• Technical standards for telecommunications equipment and facilities</li> <li>• Management of accidents and disasters disrupting telecommunications</li> </ul>	Dec. 30, 1983 Feb. 22, 2012	Enacted Amended
Telecommunications Business Act	<ul style="list-style-type: none"> <li>• Classification of telecommunications services and service providers, market entry rules, pro-competition measures and mechanisms to ensure fair competition</li> <li>• Telecommunications user protection system</li> </ul>	Dec. 30, 1983 Jan. 17, 2012	Enacted Amended
Protection of Communications Secrets Act	<ul style="list-style-type: none"> <li>• Procedures for communications interception and accessing communications data</li> <li>• Telecommunications operators' duty to cooperate to ensure the secrecy of communications</li> </ul>	Dec. 27, 1993 Nov. 02, 2009	Enacted Amended
Act on Promotion of Information and Communications Network Utilization and Information Protection, etc.	<ul style="list-style-type: none"> <li>• Restrictions on the collection and use of internet users' personal information</li> <li>• Requirement to use real name for internet bulletin board users and ban on the transmission of illegal spam messages</li> </ul>	May 12, 1986 Feb. 17, 2012	Enacted Amended
Internet Address Resources Act	<ul style="list-style-type: none"> <li>• Use and management of internet address resources</li> <li>• Establishment and operation of the internet dispute conciliation committee</li> </ul>	Jan. 29, 2004 Jun. 09, 2009	Enacted Amended
Information and Communications Construction Business Act	<ul style="list-style-type: none"> <li>• Registration of construction businesses; technical standards for construction design</li> <li>• Restrictions on the scope and number of contracts granted to single constructors and restrictions on subcontracting</li> </ul>	Jan. 22, 1971 Jan. 17, 2012	Enacted Amended
Act on the Protection, Use, etc. of Location Information	<ul style="list-style-type: none"> <li>• Classification of location information businesses; market entry rules</li> <li>• Rules on the use of personal location information by emergency rescue organizations</li> </ul>	Jan. 27, 2005 Mar. 30, 2011	Enacted Amended

\* As of March 2012

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 KCC (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 telecommunications;
2. Issues related to licensing, re-licensing, approving and registering broadcasters, including revocation of licenses or cancellation of any approval granted;
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 telecommunications 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;
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 telecommunications research and support
13. Issues related to the processing of viewer complaints, protection of broadcasting and telecommunications users and ensuring their welfare;
14. Issues related to the establishment, management and operation of broadcasting and telecommunications funds;
15. Issues related to international cooperation and trade in broadcasting and tele-

- 
- communications;
16. Issues related to North-South Korea cooperation and exchange in broadcasting and telecommunications;
  17. Issues related to the planning and execution of the KCC's budget;
  18. Issues related to developing and submitting legislative proposals including amendment and repeal proposals, relevant to the KCC's areas of responsibility and enacting, revising and repealing the KCC's internal bylaws and regulations; and
  19. Other issues delegated to the KCC under this Law or other laws for its deliberation.

The KCC reshuffled its organization on August 19, 2011, establishing new departments, changing the names of some departments, and rearranging the duties of some departments, in order to deal with increasing incidence of internet security breaches and potential broadcasting and telecommunications disruptions due to sunspot activities (as of August 2011) and to improve the work efficiency of the KCC and its affiliate agencies.

Notably, through the reorganization, the KCC established Network Information Protection Team in the KCC and Korean Space Weather Center under Radio Research Agency. Also, the KCC changed the name of Radio

Research Agency to National Radio Research Agency.

The newly established Network Information Protection Team is an expansion, with more personnel, of a task force team run by Network Planning and Protection Division. The establishment of a new permanent organization was necessary because of an increasing incidence of internet security breaches, which were becoming increasingly malicious, organized and large-scale and serious mobile security threats in line with an explosive increase of mobile devices among the public.

The newly established Korean Space Weather Center is tasked with observation of changes in cosmic radio waves caused by solar activities and issuing forecasts and alerts about disturbances in broadcasting and telecommunications. The center also develops cosmic radio waves forecast models, train cosmic radio waves specialists and conducts researches to develop solar observation satellites.

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

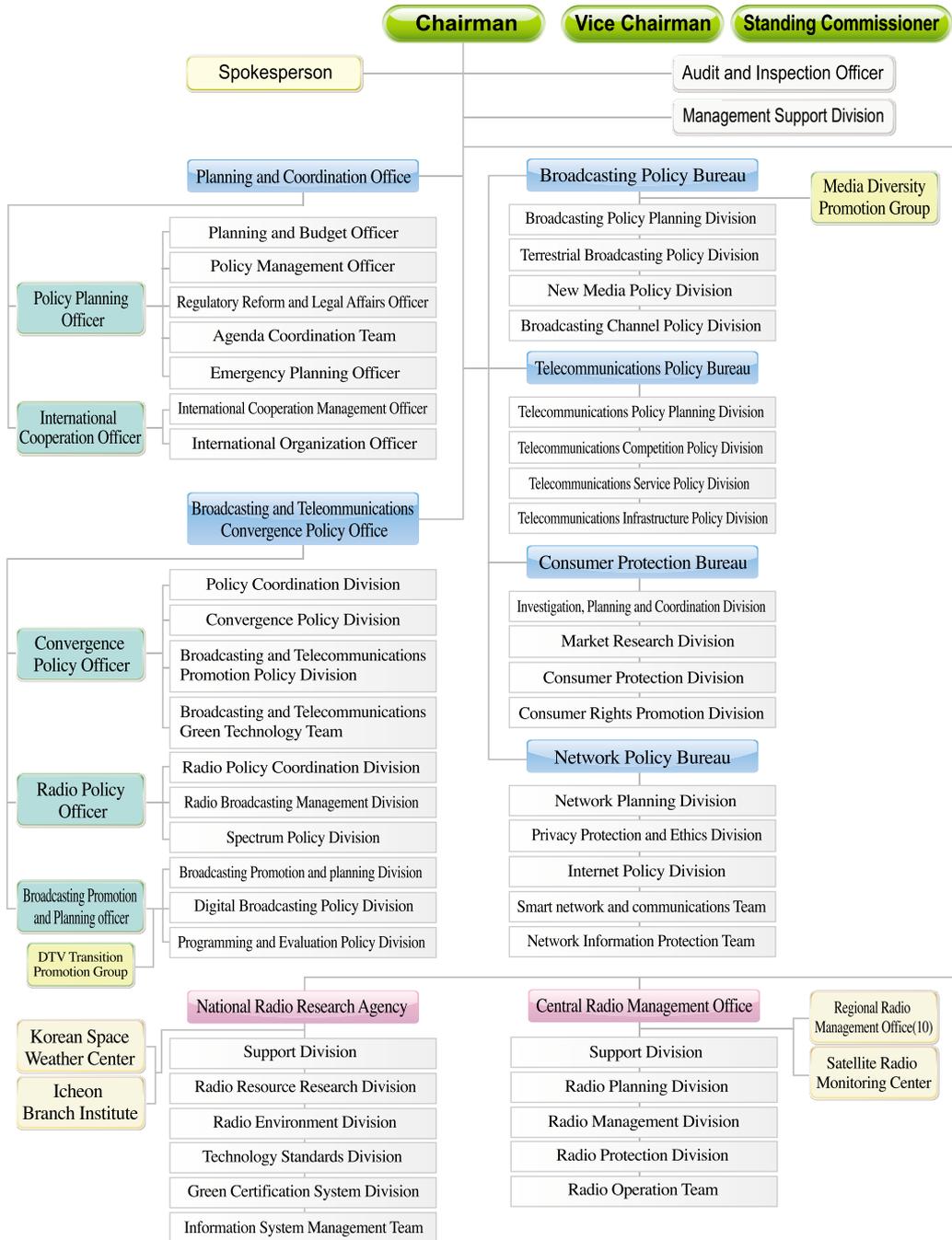
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The KCC also changed the name of Radio Research Agency to National Radio Research Agency to reflect its increased status conducting researches of the impact of electromagnetic waves on human bodies, preparing standards for the broadcasting and telecommunications sector and administering

testing and certification of broadcasting and telecommunications equipment and devices.

Following the overhaul, the KCC's organization comprises two offices, four bureaus, six chief officers, 32 departments and four teams, as shown in the chart below.

<Figure III- 1> Organization Chart of the KCC



The units shaded yellow are temporary units.

<Table III - 2> Divisions and Sections of the Korea Communications Commission and Their Duties and Responsibilities

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

		Duties and Responsibilities	
Broadcasting and Communications Convergence Policy Office	Radio Policy Officer	Radio Policy Coordination Division	<ul style="list-style-type: none"> <li>• Establishment of basic plans for spectrum promotion and policies related to spectrum assignment and auctioning</li> <li>• Spectrum use and spectrum fee-related policy development, surveillance of spectrum and security activities for the broadcasting and telecommunications field</li> </ul>
		Radio Broadcasting Management Division	<ul style="list-style-type: none"> <li>• Policy development in the areas of fair use of spectrum and viewing support technology for hearing-impaired viewers</li> <li>• Radio station-licensing and inspection policies and broadcasting and telecommunications and information device certification policy</li> </ul>
		Spectrum Policy Division	<ul style="list-style-type: none"> <li>• Developing policies to promote the efficient use of spectrum resources</li> <li>• Development of spectrum resource use technology plans, assignment of satellite spectrum and international registration</li> </ul>
	Broadcasting Promotion and Planning Officer	Broadcasting Promotion and Planning Division	<ul style="list-style-type: none"> <li>• Policy measures for guaranteeing universal access to broadcasting and protecting viewers' rights</li> <li>• Comprehensive policymaking responsibility for broadcast advertising</li> </ul>
		Digital Broadcasting Policy Division	<ul style="list-style-type: none"> <li>• Policy development in the areas of DTV reception environment and DTV transition</li> <li>• Policy undertakings to provide TV services to remote areas with limited access to broadcasting</li> </ul>
		Programming and Evaluation Policy Division	<ul style="list-style-type: none"> <li>• Policy development in TV programming,</li> <li>• Basic plans for TV program evaluation and review and rule-making related to the programming of externally-produced programs</li> </ul>
Broadcasting Policy Bureau	Broadcasting Policy Planning Division	<ul style="list-style-type: none"> <li>• Comprehensively responsible for broadcasting service policy</li> <li>• Medium and long-term broadcasting plans and public TV policy</li> </ul>	
	Terrestrial Broadcasting Policy Division	<ul style="list-style-type: none"> <li>• Terrestrial TV policy and local TV development policy</li> <li>• Policy related to licensing and re-licensing of terrestrial broadcasters and other approval processes</li> </ul>	
	New Media Policy Division	<ul style="list-style-type: none"> <li>• Basic planning for new media and cable TV services</li> <li>• Policy related to licensing and re-licensing of system operators</li> </ul>	
	Broadcasting Channel Policy Division	<ul style="list-style-type: none"> <li>• Policy for the promotion of projects involving the use of broadcasting channels</li> <li>• Policy for ensuring equal access to TV/ broadcasting content</li> </ul>	
Telecommunications Policy Bureau	Telecommunications Policy Planning Division	<ul style="list-style-type: none"> <li>• Comprehensively responsible for telecommunications service policy</li> <li>• Medium and long-term policy related to the telecom industry and the promotion of WiBro</li> </ul>	
	Telecommunications Competition Policy Division	<ul style="list-style-type: none"> <li>• Medium and long-term competition promotion policy for the telecommunications market</li> <li>• Policy related to licensing and merging of common carriers and the telecom resale scheme</li> </ul>	
	Telecommunications Service Policy Division	<ul style="list-style-type: none"> <li>• Policy-making and improvement measures related to mobile handset subsidy programs</li> <li>• Telecom user research and analysis and regulations related to use of telecom services</li> </ul>	
	Telecommunications Infrastructure Policy Division	<ul style="list-style-type: none"> <li>• Management of overall telecommunications resources</li> <li>• Establishment, management and maintenance of telecom facilities</li> </ul>	
Consumer Protection Bureau	Investigation, Planning and Coordination Division	<ul style="list-style-type: none"> <li>• broadcasting and telecommunications market research policy and medium and long-term policy on dispute resolution procedures and systems</li> <li>• Creation and operation of a broadcasting dispute conciliation committee and legal advisory committees</li> </ul>	
	Market Research Division	<ul style="list-style-type: none"> <li>• Investigation of unlawful, unfair or irregular business practices and issuance of corrective action orders</li> <li>• Policy related to auditing the accounting practices of broadcasting and telecommunications companies</li> </ul>	

		Duties and Responsibilities
Consumer Protection Bureau	Consumer Protection Division	<ul style="list-style-type: none"> <li>• Policy for the protection of broadcasting and telecommunications users</li> <li>• Regulatory improvement to increase the welfare of telecom users and make the use of telecom services easier and more convenient</li> </ul>
	Consumer Rights Promotion Division	<ul style="list-style-type: none"> <li>• Supervision of the creation and operation of viewers committees</li> <li>• Programming management for viewer-produced programs and viewer-participated programs and support for disadvantaged populations to improve their access to broadcasting</li> </ul>
Network Policy Bureau	Network Planning Division	<ul style="list-style-type: none"> <li>• Policy development for upgrading, and ensuring the safety and reliability of broadcasting and telecommunications networks</li> <li>• Ensuring interoperability between broadcasting and telecommunications networks and their standardization</li> </ul>
	Privacy Protection and Ethics Division	<ul style="list-style-type: none"> <li>• 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</li> <li>• Policy related to licensing and re-licensing of location information service providers and internet ethics</li> </ul>
	Internet Policy Division	<ul style="list-style-type: none"> <li>• Expansion of internet use infrastructure and the promotion of internet use</li> <li>• Development and standardization of internet address resources</li> </ul>
	Smart network and communications Team	<ul style="list-style-type: none"> <li>• Promotion of new internet business models such as machine-to-machine communications and cloud services</li> <li>• Development of smart work infrastructure and the promotion of smart work</li> </ul>
	Network Information Protection Team	<ul style="list-style-type: none"> <li>• Formulation of comprehensive plans to secure the safety and reliability of broadcasting and telecommunications networks</li> <li>• Establishment of response systems to intrusions to broadcasting and telecommunication networks and the issuing of forecasts and alerts</li> </ul>
Spokesperson		<ul style="list-style-type: none"> <li>• Public communication on key policy undertakings and support for press briefing</li> <li>• Analysis, evaluation of, and response to, media reports</li> <li>• 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)</li> </ul>
Audit and Inspection Officer		<ul style="list-style-type: none"> <li>• Audit of the Commission and its affiliated organizations</li> <li>• 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</li> </ul>
Management Support Division		<ul style="list-style-type: none"> <li>• Personnel management, including reward and discipline, training and the management of employee history</li> <li>• Policy support to the Commission, ceremony and event management, building and security management</li> </ul>

Public agencies under the jurisdiction of the KCC include Korea Communications Agency (KCA) and Korea Internet and Security Agency (KISA). Major organizations related to the KCC include Korea Broadcasting System(KBS), Korea Educational Broad-

casting System(EBS) and Foundation for Broadcast Culture.

The legal bases, purposes and major functions of the institutions and organizations are shown in tables belows.

In 2011, the Commission's budget expen-

&lt;Table III - 3&gt; 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 Communication 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 and Security Agency (KISA)	Director	Jong-ryeol Suh	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.

Note: The information on KCA is current as of March 21, 2011.

&lt;Table III- 4&gt; Organizations related to the Korea Communications Commission

Name of Organization	Title of the Head of Organization	Head of Organization	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	Duk-hoon Kwak	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.

ditures amounted to 865.3 billion won, which breaks down by funding source, to 305 billion won for the general account, 15.8 billion won for the Innovative City Construction special account, and 544.5 billion won for the funds. By field, the amount breaks down to 324.4 billion won for culture and tourism and 540.9

billion won for communications. By function, the amount breaks down to 94.7 billion won for wage and compensation, 15.8 billion won for basic expenses, 656.4 billion for project costs, 50 billion won for internal transactions and 48.4 billion won for financing. For details, see table III-5 below.

<Table III - 5> Korea Communications Commission's Budget in 2011

(unit : KRW 100mn)

		2010	2011	Change	% change
Total <Budget + Fund Appropriations>		8,388	8,653	265	3.2%
By Funding Source	□ Budget	3,321	3,208	△113	△3.4%
	• General accounting	3,256	3,050	△206	△6.3%
	• Innovative City Development special accounting	65	158	93	143.1%
	□ Fund appropriations	5,067	5,445	378	7.5%
	• Broadcasting and Telecommunications Development Fund	5,067	5,445	378	7.5%
By Field	□ Telecom	5,726	5,409	317	5.5%
	□ Culture and tourism	2,662	3,244	582	21.9%
	□ Wage and compensation	907	947	40	4.4%
	□ Basic expenses	152	158	6	3.9%
	□ Project costs	6,698	6,564	134	2.0%
	• Acceleration of broadcasting and telecommunications convergence and digital transition	1,132	1,364	232	20.5%
	• Improvement of the quality of broadcasting and telecommunications services and the promotion of their use	984	975	9	0.9%
	• Upgrading network infrastructure and strengthening information protection	1,248	900	348	27.9%
	• Protection of users' rights and the creation of a fair competition environment	231	232	1	0.4%
	• Development of infrastructure for radio and broadcasting industry and support for overseas expansion	774	764	10	1.3%
By Expense Category	• R&D of broadcasting and telecommunications and building the base of promotion	2,050	1,993	57	2.8%
	• Other administrative support	279	336	572	0.4%
	□ Internal transactions (transfers between accounts and between funds, etc.)	500	500	-	-
	□ Financing (using surplus funds from the Broadcasting Development Fund)	131	484	353	269.5%

Note 1 : Korea Broadcasting Development Fund was created in January 2011 according to the enactment of Framework Act on Broadcasting Communications Development on March 22, 2010. The fund covers the undertakings of the KCC previously supported by Broadcasting Development Fund and Information and Communications Fund separately under the jurisdiction of the Ministry of Knowledge and Economy.

Note 2 : Changes and % changes from the corresponding data in 2010.

In 2011, the KCC promoted legislation in such areas as the easing of broadcasting and telecommunications service use, the protection

of personal information, the spectrum management, the countermeasures against cosmic radio disasters, the improvement of

licensing and closure procedures for carriers, the permission of indirect advertising in broadcasting programs and the pre arrange-

ment and pre-announcement of broadcasters of international events of national interest.

<Table III - 6> The Status of KCC Efforts for Legislation in 2011

Law	Date submitted to the legislature	Highlights
Act on the Protection, Use, etc. of Location Information	Apr. 29. 2011 (submission to the subcommittee of the responsible parliamentary committee)	<ul style="list-style-type: none"> <li>• Exemption from obligations for the businesses that do not deal in personal location information to get permission etc.</li> <li>• Revision of the clauses requiring immediate notification upon providing location information</li> </ul>
Radio Waves Act	Dec. 2. 2011 (submission to the subcommittee of the responsible parliamentary committee)	<ul style="list-style-type: none"> <li>• Improvement of management of public frequencies reserved for national security and diplomacy</li> <li>• Establishment of countermeasures against cosmic radio wave disasters</li> <li>• Establishment of Korea Radio Wave Culture Foundation</li> </ul>
Telecommunications Business Act	Dec. 12. 2011 (submission to the subcommittee of the responsible parliamentary committee)	<ul style="list-style-type: none"> <li>• Improvement of licensing procedures for common carriers and the establishment of evaluation criteria for their partial/entire business closure.</li> <li>• Blocking forged telephone numbers and obligating display of international telephone caller information</li> <li>• Introduction of the evaluation system of user protection</li> </ul>
Broadcasting Act	Dec. 27. 2011 (submission scheduled)	<ul style="list-style-type: none"> <li>• Introduction of the concept of external producers in Broadcasting Act and allowing indirect advertising by the producers</li> <li>• Pre-confirmation and announcement of the broadcasters that will transmit events of national interest, like the Olympics and World Cup</li> </ul>

Also, the KCC chose and promoted 41 legislative improvement tasks in 2011 in the

areas of broadcasting, telecommunications, network and radio waves.

<Table III - 7> Regulatory Reforms in 2011

	Project	Status (as of the end of Jan. 2012)
Broadcasting	1 Revision of evaluation criteria and procedures for the licensing and re-licensing of broadcasting businesses	Enactment of Notice underway
	2 Reduction of the burden of contributions to the fund by small and medium terrestrial broadcasters	Notice amended
	3 Improvement of calculation criteria for domestically produced broadcasting programs	Notice amended
	4 Expansion of right to access to broadcasting by the disabled	Enactment of guidelines completed
	5 Abolishment of approval requirement for regional re-transmission of terrestrial broadcasting programs by satellite broadcasters	Amendment of the enforcement decree underway
	6 Improvement of calculation criteria for program use by businesses using broadcasting channels	Enactment of payment criteria completed
	7 Expansion of the limits of subtitle notice approval	Enforcement decree enacted
	8 Specific description of the events of national interest	Amendment of the notice underway
	9 Reduction of documentation required of foreign capital investors	Amendment of the notice underway
Telecommunications	10 Improvement of the system for broadcasting and telecommunications-related dispute resolutions	Enforcement decree enacted
	11 Preparation of calculation criteria for MVNO data whole prices	Enactment of guidelines completed
	12 Alleviation of burdens of value-added common carriers in their report obligations about the transfer, merger and inheritance of their business	Amendment bill pending in the National Assembly
	13 Simplification of the procedures of telecom fee reduction for those in the second lowest income bracket	Reforms of a reduction system completed
	14 Alleviation of registration standards for technical staff working for special category telecommunications operators with no facilities	Enforcement decree enacted
	15 Permission of linking of the U-City proprietary network to public sector networks	Notice amended
	16 Improvement of calculation method for loss compensation for broadcasting businesses	Notice amended
	17 Improvement of the environment for mobile contents profit and loss distribution	Revision of guidelines completed
	18 Revision of legal provisions about penalty for bundled service contract breach	Amendment of the notice underway
	19 Preparation of preexamination procedures about prohibited things in broadcasting and telecommunications	Notice issued
	20 Alleviation of reporting obligation about agreements on facility interconnection etc.	Amendment bill pending in the National Assembly
	21 Clarification of responsibility exemptions of mobile carriers for authorized retail stores' violations	Notice issued
	22 Alleviation of penalties levied against violations of telecom business laws	Notice amended

	Project	Status (as of the end of Jan. 2012)	
Network	23	Improvement of career recognition system for information and technology experts	Notice amended
	24	Improvement of registration procedures for foreign IT businesses	Notice amended
	25	Rationalization of qualifications for two-year college graduate information protection technicians	Enforcement decree enacted
	26	Elimination of reporting time limit for use agreements and changes thereof by location information businesses	Amendment of the enforcement decree underway
	27	Alleviation of regulation on the logs and their custody period for location information businesses	Guidelines revised
	28	Exemption from responsibility for permission application and reporting by businesses not dealing in individual location information yet	Amendment bill pending in the National Assembly
	29	Alleviation of the obligation to report the individual location information immediately	Amendment bill pending in the National Assembly
	30	Preparation of regulations to protect personal information for SNS businessmen and users	Enactment of regulations completed
	31	Preparation of criteria for distribution of sound Internet advertising	Preparation of a guidebook completed
	32	Preparation of criteria for information protection for activation of smart work	Enactment of guidelines completed
	33	Introduction of penalties that can be levied as a substitute for business suspension of information & telecommunication businesses	Amendment of the enforcement decree underway Radio Waves
Radio Waves	34	Reduction & exemption of radio station's radio wave use fee in areas of special disasters	Notice issued
	35	Exemption of regular inspections of radio stations in special disaster areas	Revision under way
	36	Alleviation of technical standards for industrial magnetic field induction wireless devices	Notice amended
	37	Switch from permission to report obligations about the installation of super mini earth stations	Enactment of notice under way
	38	Alleviation of regulations about radio operators in qualifications and allocation criteria	Amendment of the notice underway
	39	Improvement of loss compensation application methods in case of frequency withdrawal or re-allocation	Amendment of the enforcement decree underway
	40	Clarification of calculation method of loss compensation in case of frequency withdrawal or re-allocation	Amendment of the enforcement decree underway
	41	Clarification of application procedures and evaluation criteria for frequency allocation and re-allocation	Notice issued

## 2. Major Accomplishments in 2010

### A. Spread and Promotion of Digital Convergence

In 2010, the KCC secured 「Framework Act on Broadcasting Communications Development」 and broadcasting and telecommunications Development Fund (implemented in 2011). Through these, the KCC was able to pave the way for a financial foundation compatible to the broadcasting and telecommunications convergent environment. The KCC worked out ‘The Top Ten Strategies for Future broadcasting and telecommunications Service’(in May 2010) to promote the creation of new markets and consolidate the global competitiveness of local industries.

Following the launch of full-scale IPTV services, the KCC promoted huge tailored public services in the areas of education, defense and transport, recording 3.09 million IPTV real-time subscribers in December 2010. The KCC developed convergent service models in a variety of fields through public-private collaboration and provided high quality broadcasting and telecommunications convergent contents via various pilot projects.

The KCC also laid down the foundation for a virtuous cycle of growth in broadcasting and telecommunications market. It promoted the construction of Digital Broadcasting Contents Support Center, to be completed in 2012, a

facility to produce and transmit contents, and creating a fund to invest in promising broadcasting and telecommunications contents through a public-private sector joint investment.

The digital conversion pilot projects were successfully carried out in Uljin, Gyeongbuk (September 2010), Gangjin, Jeonnam (October 2010) and Danyang, Chungbuk (November 2010).

To protect the social disadvantaged from being isolated from the benefits of digital conversion, the KCC revised the relevant law and secured their universal rights to view digital broadcasts.

To create an environment for broadcasting and telecommunications companies to advance into overseas markets, the KCC promoted high level talks between government officials in charge of broadcasting and telecommunications, execution of MOUs between governments, international roadshows and showcases, The World Information and Communications Summit, and the international broadcasting and telecommunications conference associated with G-20 Seoul Summit. The KCC succeeded in bringing the 2014 ITU Plenipotentiary Conference to Korea.

The KCC also successfully promoted the reduction of greenhouse gas emissions in the field of broadcasting and telecommunications by setting specific goals and preparing detailed plans to deal with climate change aggravated

by the emissions of greenhouse gases. The KCC reduced the gas emissions by 25,000 TOE through a continuous management of its reduction goals.

## B. Establishment of Advanced Broadcasting adapted for a Global Era

Through the selection of general broadcasting and specialized news PPs, viewers' choice and welfare have been expanded and an opportunity has been provided to reflect more diverse information and public opinions on broadcasting.

A virtuous cycle is set in the paid broadcasting market. The competitiveness of paid broadcasting industry has been improved. The contents industry including external program production is faced with a rare opportunity to get energized.

Through the enactment of a notice about the programming rate of high definition digital broadcasting and the enhanced publicity about conversion to digital broadcasting, both the recognition about the swift to digital and the digital TV distribution rate improved compared to the previous year.

For development of broadcasting advertising market, virtual and indirect advertising has been approved along with advertising in the middle of programs. The restriction on the number of spot advertisement has been lifted.

Meanwhile, a post-ratings-control system (to prevent a monopoly situation by a given broadcaster) has been instituted as a supplementary measure for the relaxed regulation of cross-management of broadcasting and newspaper businesses.

The KCC revised 「Broadcasting Act」 to improve the review process of broadcast advertisements and empowered broadcasters in programming through improvements in the related legislation.

The KCC revised 「Enforcement Decree of Broadcasting Act」 so that economic punishment like penalty can be imposed on programs with coarse language and indecent contents.

In regards to 「Telecommunications Business Act」, the KCC added some specific examples of prohibitions in wholesale provision compensation and mobile contents profit distribution together with samples of corrective action orders. Improvements have also been made to broadcasting and telecommunications bundled service products along with the enactment of SO-PP contents transactions guidelines. A fair trade environment in broadcasting has been created.

Given the competition in the paid television market, the conversion to digital and the development of contents industry, the KCC brushed up many regulations and policies. The competitiveness of local broadcasting industry has been enhanced through such improvements in various regulations and systems.

### C. Enhanced User Convenience and Activated Competition in Telecommunications Market

In ITU-R WP5D conference, the two next generation mobile telecom(4G) technologies that Korea suggested, namely WiBro-Evolution and LTE-Advanced, passed the pre-qualification stage. By allocating 800/900MHz and 2.1GHz frequency in time, the KCC has created an environment where Korea can cope with increasing wireless traffic and introduce 4G mobile telecom service early.

The KCC revised 「Telecommunications Business Act」, opening the way to a rapid launch of discount schemes and more fierce fee competition among operators. The KCC adopted an MVNO scheme so those without frequency or facilities could enter the market.

The KCC allowed the transfer of Internet telephone numbers between mobile carriers and shortened the transfer period from five days to one day. The KCC also instituted a 010-number integration policy. It worked out policies to deal with complaints stemming from USIM change, too.

Through the change of the basic charging unit for mobile telephone call from 10 seconds to one second, users have been able to save 600 won a month on average. Users have also been able to save their mobile phone bills through across-the-board free display of callers' information on hand sets, improvement in

Silver Charges and reduction of wireless data charges.

The KCC launched a trial broadcast of high definition 3DTV, for the first time in the world (October 2010) offering the local public an opportunity to experience cutting edge broadcasting technology.

During the G-20 Summit, the KCC had a 3DTV broadcast pavilion set up at the venue so that the entire could confirm the excellence of Korea's 3DTV technology.

### D. Creation of Safe and Healthy Broadcasting and Telecommunications Utilization Environment

The KCC established test beds in preparation for the provision of future broadcasting and telecommunications convergent services along with Giga Internet pilot network which is about ten times faster than traditional Internet network.

The KCC is now providing additional high quality large volume broadcasting and telecommunications convergent services like 3DTV to 1,621 households.

Through the expansion of BcN to rural areas, the KCC made it possible for anyone in the country to enjoy sophisticated broadcasting and convergent services.

Through the pilot project for an efficient collection of weather information in an M2M environment by Korea Meteorological

Administration, the KCC secured a new M2M business model that can be spread across the entire country and figured out an environment conducive to an M2M service.

The KCC also created a test environment for the development of new business models using cloud service while developing relevant technologies in collaboration with mobile carriers.

The KCC reshuffled Korea Internet Security Center and staffed the center with a sufficient number of specialists to enhance the country's capacity to counter cyber attacks including DDos.

The KCC increased the number of local webster that have to be checked for malicious codes from 200,000 to a million.

The KCC reduced the number of mobile and spam mails by constantly checking illegal spam mails, which are becoming increasingly canny, and developing and distributing Real-time Blocking List (RBL) that can block mobile phone spam mails real time.

The KCC established future Internet promotion strategies consisting of the provision of innovative future service and the creation of the optimum wired and wireless network.

The KCC also endeavored to enhance the welfare of the public by laying the foundation for a new Internet address resource (the introduction of national domain in Hangul and the transfer to IPv6).

The KCC established Communi-cations User

Protection Center to support broadcasting and telecommunications user protection policies, improve the users' convenience and contribute to the creation of a sound broadcasting and telecommunications culture.

The KCC established 'Mobile Phone After-sales Service Guidelines' and 'Bundled Service Sales Guidelines'. It also took corrective actions about the restrictions of USIM transfer and got mobile phone bills described in detail.

The KCC supported 3,528 view-produced programs broadcast in 61 broadcasters, which helped participants better understand the media. Also, through the operation of Community Media Centers, the KCC helped regional residents realize their broadcasting ambitions and in particular encouraged the socially disadvantaged to come forward and participate in the production of broadcasting programs. The KCC supported a total of KRW 30.3 billion won for the handicapped to help with their production of programs and the production of special programs including those with captions, sign languages and descriptive video service not to mention the provision of broadcast receivers devoted to their needs.

### 3. Major Policy Goals for 2011

The KCC set up 'Smart Korea enjoyed by all its Citizens' as its vision in the so-called smart age, in which such notions as the media fusion,

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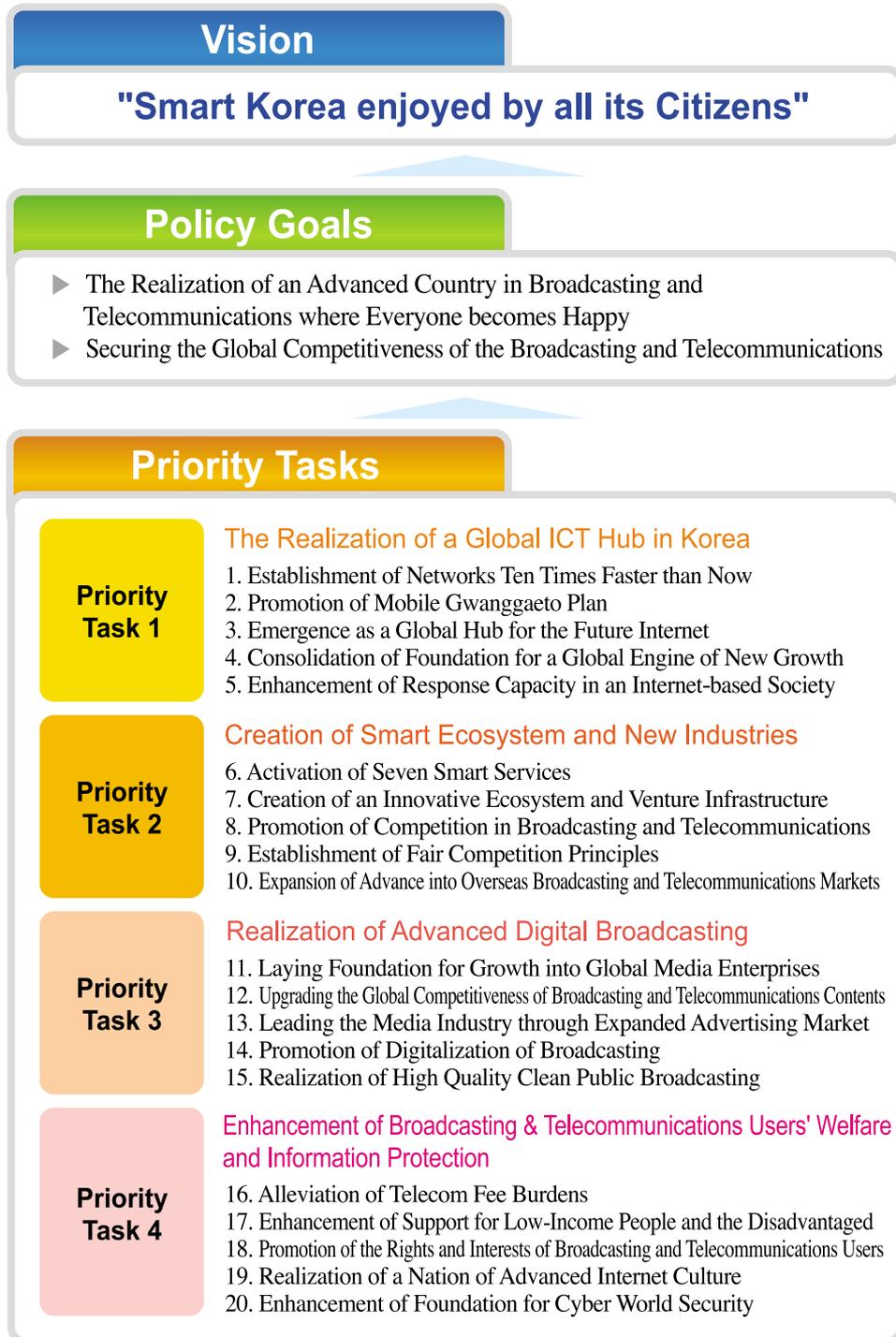
the media big bang and the ecosystem competition led by global IT companies and the word contents all emerge as the core factors in today's national and corporate competitiveness.

The Second Term Commission of the KCC was launched against such a backdrop: a global competition in the entire ICT ecosystem getting fierce sparked by the advent of a full-scale smart age. As broadcasting and telecommunications take on a central role in today's people's lives, a harmonious

development of broadcasting and telecommunications is necessary between their public and commercial interests.

Thus as its four major policy directions for 2011, the KCC chose the following: 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 telecommunications users' welfare and information protection

<Figure III - 2> Visions and Policy Goals





# IV

## Performance of the Broadcasting and Telecommunications Policy in 2011

1. Realization of a Global ICT Hub in Korea
2. Creation of a Smart Ecosystem and New Industries
3. Realization of Advanced Digital Broadcasting
4. Enhancement of Broadcasting and Telecommunications Users' Welfare and Information Protection





## IV

Performance of the Broadcasting and  
Telecommunications Policy in 2011

## 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 uBcN (Ultra  
Broadband Convergence Network)

In connection with the enhancement of networks, the KCC has diffused services of ultra-broadband wireless network (HSDPA, WiBro, or Wi-Fi) via the infrastructure provided for new commercial convergence services by deploying BcN (Broadband Convergence Network), which is fifty times faster than the broadband information network

deployed since 2004. The KCC has exerted best efforts to deploy and facilitate the active use of nationwide ultra broadband wireless networks, including the financial support for the deployment of public broadband network introduced in 2011, deployment of BcN in remote rural areas to ensure a balanced distribution of nationwide broadband network, inspection of network deployment performance status, and demonstrations of uBcN performance. Thus, the number of BcN subscriptions reached 52,370,000 (16,040,000 wired network subscribers and 36,330,000 wireless network subscribers) as of December 2011, considerably exceeding the 2011 target of 45 million by 7,370,000 (16.4%).

&lt;Table IV-1&gt; Yearly Performance of BcN Deployment

(Unit: 10,000 won)

Classification	2007	2008	2009	2010	2011
Fixed (households)	701	939	1,154	1,482	1,604
Wireless (subscribers)	563	1,547	2,484	3,090	3,633
Total	1,264	2,486	3,638	4,572	5,237

## 2) Giga Internet service infrastructure

To address the rapidly growing volume of data traffic, the KCC presented national-level visions and strategies aimed at enhancing the network by developing the Plan for the Commercial Giga Internet Service in June 2011. To that end, the KCC held a conference among stakeholders and a consultative meeting on the enhancement of broadcasting and telecommunications networks while operating the FN2020 Forum and a consultative body for the promotion of smart networks. Furthermore, the KCC newly developed such services as Giga-class N-Screen and wireless home services. In November 2011, the Giga internet pilot network was deployed in six major cities of Seoul, Busan, Gwangju, Daejeon, Gyeonggi, and Daegu. The infrastructure required for the commercial Giga internet service was also developed by providing the service to 2,000 households.

### B. Deployment of Next-generation Mobile Telecommunications Networks

The KCC generated an environment conducive to the enhancing of the mobile telecommunications network with WiBro, LTE

and so forth so that an inexpensive quality data service could be provided to consumers while promoting large-capacity wireless data services. WiBro service providers deployed the WiBro service network in 82 major cities and towns and along major express highways throughout the country with an investment of KRW 1,920.5 billion (KRW 1,090.8 billion by KT and KRW 829.7 billion by SKT). The KCC physically inspected the WiBro network deployed by the operators in the first half of 2011. As of the end of 2011, the number of WiBro service subscribers had increased by 75.4% to 798,000, representing an increase of 455,000 over the same period of the preceding year, thus indicating that WiBro service is growing steadily. SKT and LG U+ started the commercial LTE service in July 2011. The three mobile phone service providers are now expanding their coverage as the number of users has increased significantly of late. As of the end of February 2012, the three major mobile service providers, SKT, LG U+, and KT had 1,290,000, 1,150,000, and 230,000 subscribers respectively. The total number of subscribers will grow further still once nationwide networks are deployed.

&lt;Table IV- 2&gt; Yearly Plan for LTE Deployment

Classification	SKT	KT	LG U+
2011	27 cities across the country	-	82 cities across the country
2012	84 cities across the country (March)	(First half) Seoul and six metropolitan cities (Latter half) 84 cities across the country	Nationwide network (March)
2013	-	Nationwide network	-

※ 82 cities in 2011 increased to 84 cities in 2012 because of reorganization of administrative zones.

### C. Extension and Improvement of Wi-Fi Service Conditions

In January 2011, the KCC published guidelines on the installation of Wi-Fi AP and the setting of channels to minimize Wi-Fi noise and interference. It also made efforts to improve Wi-Fi service conditions by adjusting AP channels into channels with lower levels of noise or interference, while adjusting the distance or location of Wi-Fi APs so as to minimize Wi-Fi AP noise and interference among mobile telecommunications service providers. Meanwhile, in July 2011, the KCC and telecommunications service providers agreed to the joint deployment and utilization of Wi-Fi zones in such widely-ranging public spaces as airports, railway stations, inter-city bus terminals or civil service rooms at government offices, in order to minimize redundant deployment and to utilize radio frequency resources more efficiently. They also plan to jointly deploy Wi-Fi service in 1,000 or more zones by the first half of 2012 based on on-site inspections of newly deployed public spaces.

## 2. Development and Provision of Radio Wave Resources

### A. Timely Provision of Radio Frequency Bands

#### 1) Reallocation of radio frequency bands whose service maturity expires in June 2011

The government planned the reallocation of radio frequency bands for nine different services that were allocated among the existing service providers - including mobile phone (PCS or cellular), TRS, wireless data, call and satellite - as their service period was due to expire at the end of June 2011. In March 2011, sixteen out of the twenty-five service providers that were eligible filed their application for reallocation with the government. Thirteen service providers were selected for reallocation as they obtained scores in excess of the established criteria in the reallocation review, while the other three service providers were not reassigned as they failed to obtain the base scores. The government strives to ensure that radio wave resources are exploited most

efficiently by encouraging their service growth through reallocation.

## 2) Auction sale of mobile phone radio frequency bands

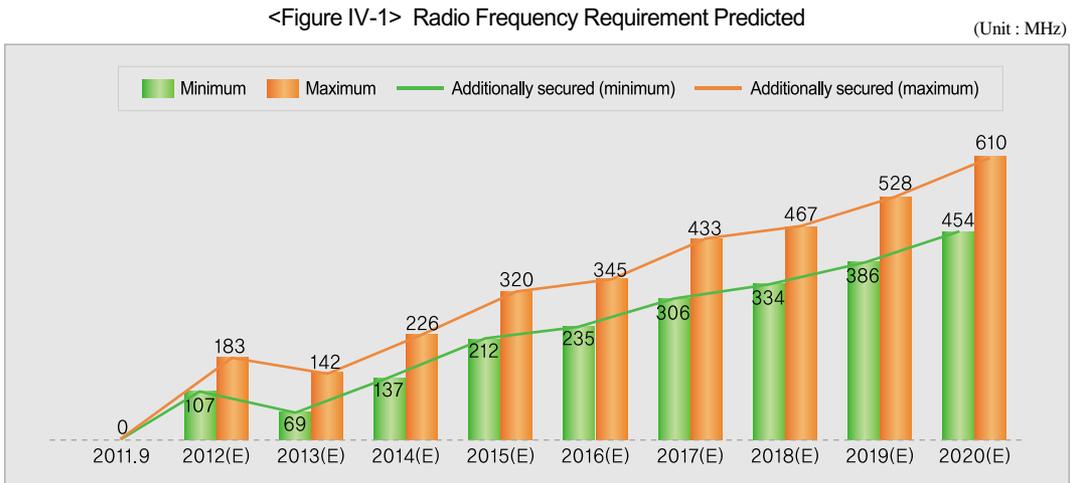
The radio frequency allocation system ('auction system' hereinafter) was introduced just as the 「Radio Waves Act」 amendment of January 2011 entered into force, with the very first auction being conducted in August 2011. The KCC performed simultaneous ascending bid auctions for total 50MHz bandwidth of 800MHz and 1.8/2.1GHz range, which could be secured in the short term. The three main mobile phone service providers (KT, LG U+, and SKT) bid for the radio frequency bands. LG U+ won 20MHz in the 2.1GHz range for KRW 445.5 billion, the lowest bid price. For the range of 800MHz and 1.8GHz, SKT and KT competed. KT won the 800MHz range for KRW 261 billion while SKT won 1.8GHz range for KRW 995 billion.

As the 50MHz bandwidth was allocated through the auction, the shortage of radio frequency bands will end in order to promote the introduction of such new services as LTE,

while a fair competitive environment will be generated among the service providers to resolve the problem of radio frequency monopoly. It is believed that the newly implemented auction system of radio frequency bands will effectively realize market-based radio frequency control in Korea.

## B. Establishment of Mobile Gwang-gaeto Plan

The KCC estimated the growth in mobile traffic volume and the required quantity of radio frequencies as mobile traffic was growing rapidly. The projection revealed that mobile data traffic in 2010 would grow by 11 to 13 times over 2011 in view of the future requirements of smartphones, tablet PCs, smart TVs, M2M communications and WiBro services. The estimation was based on the traffic growth trend whereby an additional 450~610MHz of radio frequency would be required by 2020 in view of the total 320MHz allocated to mobile telecommunications service providers (as the end of 2011) inclusive of WiBro requirements.



Source : Research outcome of “Methods for Computing and Supplying Radio Frequency Required for BcN” (KIEES, 2011)

To address the future demand for radio frequency, the KCC published its Mobile Gwanggaeto Plan to gradually secure additional radio frequency bands over 600MHz by 2020.

The specific means for securing additional radio frequency bands by band are as follows: It was decided, on the basis of a demand survey and discussion meetings, that 40MHz out of 108MHz width of 700MHz range was to be allocated to mobile telecommunication services. It was further decided that future usage plans should be developed for the remaining bands by inclusively considering the growth trend in each area.

150MHz width of 1.8GHz range is allocated across the world for use by mobile telecommunication services. However, only 80MHz width is allocated to mobile telecommunication services in Korea while the

remaining 70MHz is used for government or public applications in certain regions only. There are plans to secure an additional 70MHz width for mobile communication services under the provision that it does not affect existing applications.

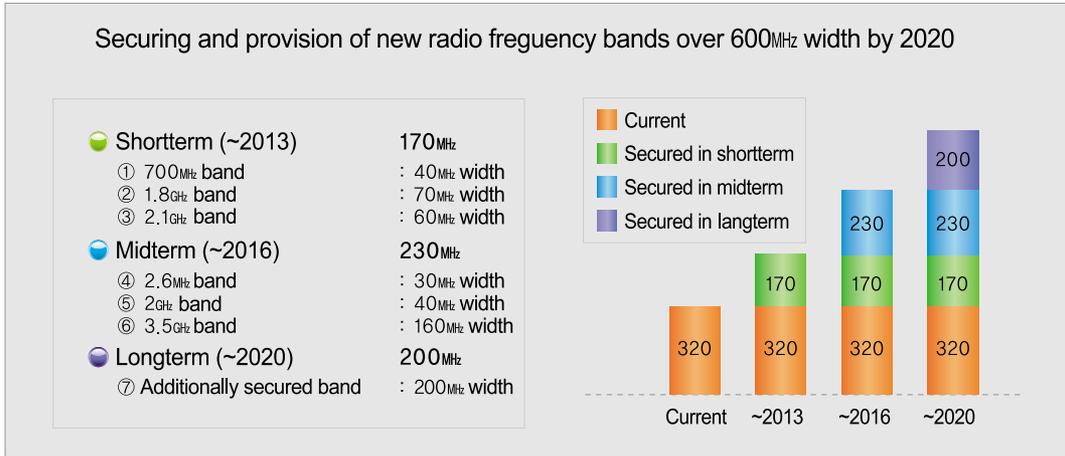
There are also plans to actively promote the development of a single standard for the 2.1GHz satellite IMT band by 2013 based on cooperation with domestic and global vendors, and to secure 230MHz width of 2GHz, 2.6GHz and 3.5GHz bands by 2016 by considering interference adjustment with neighboring countries and global trends in commercial services.

The planned provision of additional radio frequency bands under the ‘Mobile Gwanggaeto Plan’ will make a significant contribution to generating an ecosystem for diverse contents and media services while promoting

competition among wide broadband services and enhancing the quality of telecommuni-

cation services and user convenience.

<Figure IV-2> Plan to Secure Radio Frequency for Mobile BcN



### C. Efficient Use of Public Radio Frequency Bands

As the volume of mobile traffic increased, it was suggested that the public radio frequency bands should be used more efficiently. Thus, the KCC developed procedures for examining approval of the use of radio frequency bands by strengthening systems for examining and analyzing bands for which service has been approved. As means to practice such

procedures, a review committee was organized to approve applications for the use of radio frequency bands. Furthermore, the KCC plans to have the 「Radio Waves Act」 amended to improve the system for approving the use of radio frequency bands, including the issuance of use approval certificates, and re-approval or revised use approval of frequency bands so that idle or unapproved or unlicensed public frequency bands may be controlled under thorough follow-up administration.

<Table IV- 3> Matters for Improvement of System for Approving Radio Frequency Use

Classification	Key details
Before amended	Request for radio frequency allocation → Review of radio frequency availability → Approval of radio frequency use → Opening and operation of radio stations → Renewed approval of radio frequency allocation
After amended	Definition of radio frequency allocation → Application (letter) for approval of service → Issuance of radio frequency allocation certificate → Submission of test certificates → Opening and operation of radio stations → Renewed or revised approval of radio frequency allocation → Suspension or cancellation of approval of radio station operation

The KCC has allowed the sharing of 1.8GHz bands exclusively used for public applications with private sector services only. The KCC also promotes the development of sharing technologies in order to steadily increase sharing with the private sector, as radio frequency band provision by recollection or reallocation is limited amid circumstances where demand concentrates on superior bands because of the characteristics of radio frequency.

#### D. Utilization of Idle TV bands

Idle TV bands (white space) refer 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: 54~698MHz, total 300MHz). 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, the KCC explored diverse service models, including those for Wi-Fi and regional information services, as a result of a survey on demand for frequency use in order to utilize such idle TV bands. The KCC selected two consortia for the pilot test services - Jeju Consortium and NEMA Consortium. The Super Wi-Fi Service (Jeju) and the Underground Disaster Video Service (NEMA)

were launched using idle TV bands for the first time in Korea. On 26 December 2011, the KCC published a finalized basic plan containing specific implementation roadmaps for the utilization of idle TV bands. The KCC plans to start pilot services in 2013 and commercial services in 2014, using idle TV bands, after preparing the necessary technical standards and improving the systems in 2012.

### 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)

In 2011, the KCC supported the deployment and operation of KOREN (KOREa advanced REsearch Network) in order to support the development of next-generation ICT technologies such as the future internet, broadcasting and telecommunications convergence, and smart services, by developing the infrastructure required for international joint research efforts. The KOREN backbone is deployed with 10~20Gbps bandwidth throughout six major cities. A circuit service of up to 10Gbps and a test environment have been provided to a total of fifty-four entities, including universities, research institutes and

businesses. In July 2011, the KCC ‘openly recruited’ research tasks aimed at utilizing the research network in order to help develop network technologies using KOREN. It selected and supported such tasks as ‘research on mobility management technologies in the wire and wireless environment’ and ‘research on technologies capable of providing the virtual network environment’.

### 2) Sponsored cooperation with TEIN

TEIN (Trans-Eurasia Information Network) is a broadband international research network connecting eighteen Asian countries with

thirty-four European countries. Along with Hong Kong and Singapore, Korea participated in the TEIN3 project by deploying a 2.5Gbps circuit section, without any financial support from the EC (European Commission). At the 8th ASEM Summit Meeting held in October 2010, Korea was appointed to administer the TEIN4 international cooperation projects. Approval was granted to set up the TEIN Cooperation Center, an organ that will be responsible for overall TEIN4 operation and management. In August 2011, the KCC incorporated the TEIN Cooperation Center, its subsidiary foundation.

<Figure IV-3> Configuration of Trans Eurasia Information Network (TEIN)



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In January 2011, the KCC also proposed projects for exploring and supporting joint research tasks with Asian countries that participate in TEIN, which connects Asia with Europe, by attending the Korea-ASEAN Telecommunications Minister Meetings.

## B. Competitiveness Enhancement of Smart Internet Technologies

The KCC published the ‘Plan for Internet Development for Future Preparations’ in June 2011 in order to support the deployment of, and technologies for, a safe broadband network that is 100 times faster than the current internet. The KCC has exerted considerable efforts to assist the research and development of technologies for enhancing networks, including the deployment of smart networks and the development of open-collaborative smart internet technologies. Furthermore, the KCC focused on the research and development of future internet technologies that can gradually resolve current problems with internet technologies, including the development of international standards by leading the research on a new internet structure and verifying it after applying it to international testbeds. As a result, the Future Internet Platform (FIRST@ATCA) was deployed on KOREN in June 2011 under the project to deploy a testbed for future Internet service. In December 2011, Korea achieved the commercial application of

WDM-PON technology for the first time in the world by conducting a benchmarking test on the WDM/G-PON hybrid PON system for NW-Telecom, the No. 1 wired network service provider in Russia.

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

### 1) Active conversion to IPv6

The KCC prepared specific programs for introducing IPv6 by publishing the 3rd Basic Plan for the Development and Promotion of the Use and Management of Internet Address Resources in December 2011 in order to address the shortage of IPv4 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, the KCC plans to designate the following three major tasks: preparation of the IPv6 infrastructure for future internet service; deployment of comprehensive systems for providing IPv6 service information and enhancing perception of IPv6 in different sectors; and provision of technical support to small businesses in order to steadily implement area-based public relations, develop the workforce, and provide consulting services, while promoting preemptive research and switching into applying IPv6 to wireless networks (4G, Super Wi-Fi etc.), M2M communications and smart grids. In particular,

the KCC plans to steadily increase the number of service providers that deploy IPv6, while checking the progress of IPv6 switching in Korea by holding the ‘Korea IPv6 Day’ each year under the leadership of the IPv6 Switching Promotion Council, which consists of key portal operators, ISPs and equipment manufacturers. In addition, the KCC will maintain cooperation systems in order to promote voluntary switching by diverse stakeholders, including periodic checks of performance, including completing the switching of backbone networks in 2013, 100 major sites to switch to IPv6, and promoting the development of IPv6-integrated equipment by manufacturers, in accordance with the plan on promoting the switch to next-generation internet protocol (IPv6) published in 2010.

## 2) Introduction of domain names in Korea

The ICANN (Internet Corporation for Assigned Names and Numbers) Regular Conference held in Seoul in October 2009 adopted a resolution to introduce multi-language National Top Level Domains (nTLD) and started accepting applications from 16 November 2009. The KCC submitted its application to ICANN in May 2010 by deciding on ‘.한국’, which received majority support as the Korean-language national domain name for applying (1st stage) for multi-language National Top Level Domains (nTLD). In November 2011, ICANN finally

adopted ‘.한국’ as the Korean-language national domain name through procedures for verifying the character strings, with the support of stakeholder groups in Korea. In September 2010, ICANN further appointed the Korea Internet & Security Agency (KISA) as the agency responsible for administering the second stage ‘.한국’ domains. In February 2011, KISA obtained the authority to administer ‘.한국’ domains after passing the ICANN assessment.

In May 2011, Korean-language nTLD ‘.한국’ service was initiated. As of December 2011, a total of 210,622 ‘.한국’ domains were registered.

## D. Promotion of Smart Work

### 1) Building the environment for active introduction of smart work

In January 2011, the KCC developed and published the ‘smart work promotions plan’ with a view to assisting the introduction of smart work for 30% of workers by 2015, under the vision of establishing Korea as a global smart power by ensuring a good work-life balance.

In addition, the KCC published the smart work guide book, which is a comprehensive smart work information booklet intended to promote the introduction of smart work systems, and the smart work information protection guidelines with the aim of

minimizing security vulnerabilities or infringements that may arise when introducing and operating the smart work system as part of the tasks practicing the ‘smart work promotions plan’. Further, the KCC promoted the introduction of the smart work system and strove to induce a change in the perception of smart work, by hosting meetings on briefing smart work policies in June 2011; an international smart work conference in September 2011; a seminar on the diffusion of smart work among local cities in Daegu; and SMART! Work & Society 2011 events in December; as well as publishing the bi-weekly ‘Smart Work Newsletter’.

#### 2) Promotion of pilot smart work projects

The KCC implemented pilot projects by classifying ① inexpensive convenient service models and ② active use of collaborative models in order to develop and increase the use of inexpensive high-quality popular models through pilot projects that are specialized in areas with powerful ripple effects. In February 2011, the KCC conducted a demand survey among small and medium-sized businesses, from which requirements and ideas were drawn while exploring areas suitable for pilot projects.

In June 2011, the KCC appointed KT, the Incheon IT Promotion Agency and the Jeju Free International City Development Center jointly with the National Information Society Agency, which is responsible for smart work

pilot projects. The three agencies plan to start a commercial service in 2012 by deploying their respective smart work systems.

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

### A. Development of Next-generation Source Technologies

In 2011, the KCC invested KRW 146 billion in the development of innovative technologies - including high-definition 3DTV, UHDTV, base technologies for next-generation smart TV, M2M communications, LBS technologies, 3-dimension breast cancer diagnosis technologies, wireless power transmission technologies, beyond 4G innovative mobile phone technologies, and source technologies for future internet services with the aim of creating diverse promising services for the future. The KCC also promoted the development of base technologies for green growth, the prevention of ICT dysfunctions, and the resolution of social issues using broadcasting and telecommunication services, such as secure social backbone networks.

In January 2011, the KCC demonstrated the world’s first LTE-Advanced technologies for 4th-generation mobile telecommunication services; diverse mobile telecommunication

services, including the evolved Multimedia Broadcast and Multicast Service (eMBMS) and personal broadcasting services that require broadband upload; high-definition video calls, and technologies that enable uninterrupted viewing of full 3D HD video images in a moving car using 4G mobile communication technologies.

In addition, the World Athletics Championships in Daegu in August 2011 were broadcast live on terrestrial Full HD 3DTV in the world's first trial broadcast. The event was also broadcast on Sky Life channels in real time via the Cheollian satellite. The KCC also helped develop base technologies for systems enabling the easy diagnosis of cancer in 5mm resolution and the viewing of LED signboards and notebook PCs without a power cable. It also assisted in the development of Soc video coding chips that can be mounted on open IPTV platforms and set-top boxes to support diverse convergent services.

In June 2011, packet-optic combined transmission network technologies were initially applied to 'KOREN' to facilitate the quantitative expansion of networks in preparation for the anticipated heavy growth of convergent/combined services and internet traffic. In September 2011, the Telecommunications Technology Association (TTA) conducted benchmark testing on a commercial anti-DDoS device (Safezone-xDDoS), applying it to network interoperation sections

after its development.

In connection with information security solutions, 10G-class real-time DDoS attack detection/countering systems were commercially applied by LG CNS, and, in August 2011, technology transfer was completed for a server-based DDoS attack detection/countering system (Secure-NIC).

## B. Strengthening of Global Standards Competitiveness

In February 2011, the KCC developed the '2011 plan for broadcasting and telecommunications R&D', which includes plans for promoting R&D projects for selecting tasks for new technology development and standardization in areas of broadcasting and telecommunications.

Four policy directions were presented with the aim of strengthening the competitiveness of global standards: first, development of a system for establishing national standards in areas of broadcasting and telecommunications; second, active promotion of standards closely related to everyday life; third, reorganization of systems for supporting the development of quality standards; and fourth, enhancement of private-sector standardization capabilities. To that end, the KCC plans to merge or reorganize small forums into large ones by expanding matching participation by business companies, while discontinuing its support for forums in

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which there is scant participation by businesses and which have shown only a poor performance.

The KCC submitted a contribution to the 4G International Standardization Conference. The KCC is also striving to secure an environment that is advantageous to Korea by reflecting Korea's position and responding to conflicting opinions at the conference. Meanwhile, four international conferences were held in Korea, including the APG-12 5th Conference in September 2011 to lead the adoption of 4G international standards for locally-developed technologies, the 29th CJK Standards Meeting for IMT Standards in September 2011, and the 3GPP2 HoD/SC/OP in Seoul in April 2011.

In June 2011, as part of its efforts to promote international standardization, the KCC adopted the Korea Communications Standard (KCS) concerning the 'arrangement of Korean (Hangeul) characters on telephone sets' in order to enhance user convenience and promote the application of technologies developed by small or medium-sized businesses by adopting a standard keypad layout for mobile handsets, which thus far has varied greatly from one handset manufacturer to another. The private-sector forum develops a model 'future-oriented keypad layout of Korean characters' and a future-oriented standard keypad layout of Korean characters to establish the suzerain position of the Korean alphabet and promote its internationalization.

Furthermore, the forum also plans to establish an international standard for the layout of Korean characters through the ITU-T and international standardization organizations.

### C. Creating Environment for Green Broadcasting and Telecommunications Services

Under the newly enforced 'Energy Target Management System for Government Agencies', the Korean government set to 15,700 TOE as the target for 2011 in the area of broadcasting and telecommunications. Korean broadcasting and telecommunications service providers were able to save energy over the target by making active efforts to accomplish the energy saving target. Further, they developed models for projecting energy conservation and scenarios for reducing long-term greenhouse gas emissions by surveying and analyzing data on emissions in the broadcasting and telecommunications services sector, in a drive to reduce greenhouse gas emissions more effectively and scientifically.

Meanwhile, in May 2011, the government greatly increased the areas of green technology assessment from 19 to 192 by amending its public notice on Green Certification, which was introduced in 2010 in order to promote its enforcement. The number of cases of Green Certification recorded in 2011 showed an increase of 83% (6→11 cases) over the

preceding year.

In addition, the KCC developed standards for low-carbon environmental assessment in the area of green broadcasting and telecommunications, for the assessment and improvement of the Green Data Center, and for the reuse of rare metals in broadcasting and telecommunications appliances and equipment. It also actively staged standardization activities at home and abroad, including those for standardization by ITU-T SG5 (Environment and Climate Change). The KCC contributed to Korea's progress toward becoming an advanced green country by jointly holding the International Green ICT Symposium with the ITU in September 2011, and with over 200 representatives from 34 countries participating in the ITU-T SG5 international meetings held in Korea. On the other hand, the KCC promoted remote education and medicine pilot services using multimedia devices such as smartphones, while developing core technologies for highly efficient and low-power broadcasting and telecommunications services in order to develop the foundation for green broadcasting and telecommunications services. Thus, diverse technology development projects were promoted to realize low-carbon green services based on convergent broadcasting and telecommunications technologies, including support for the development and diffusion of technologies enabling remote work through pilot projects for

the Smart Mobile Office (SMO), while establishing the infrastructure for Cloud Service, including the supply of SLA for deployment in Cloud Service in September 2011 and the development of the Cloud Certification System in December 2011.

#### D. Diffusion of Broadcasting and Telecommunications Convergence Services

In 2011, the KCC promoted the diffusion of services designed to enhance life convenience through the smart utilization of public information as means of promoting new convergent broadcasting and telecommunications services. First, it promoted diverse pilot projects to enable the use of public information closely related to the public's everyday life by combining terminals and services. The services are provided to 29,300 military barracks and 60,000 school classes. Thus far, there have been around 330,000 downloads of CCTV traffic information and SNS highway map applications and some 96,000 downloads of mountain climbing information.

Traffic information captured by 144 CCTV cameras belonging to the Seoul Metropolitan Facilities Management Corporation is provided through KT, SKB, LGU+, Daum and Naver. Customized traffic information combining CCTV images from 500 cameras belonging to the Korea Highway Corporation is also

provided, along with SNS traffic information. Citizens can obtain eight different certificates and 280 other government documents as well as counseling on civic issues through the IPTV video service, without having to visit the relevant government offices in person.

Second, diverse services were implemented to promote the active use of public information for providing information and functions. The KCC emphasized the interacting roles of services by combining them with technologies that have ripple effects on the market, including high-definition video call, N-Screen, and SNS technologies. The video services made it possible to issue documents remotely as well as encouraging students' desire to learn. The new types of services realized by TV images include remote document issuance

services, legal counseling, agricultural consultation, and community services for multi-cultural families. Changes were induced in education modes by utilizing television sets or tablet PCs, including the strengthening of remote learning, and the provision of participative or interactive education services. Examples of projects that have led to the verification or commercial implementation of new technologies include the IPTV multi-angle service introduced in 2008, by which KT provided commercial live broadcasting of professional baseball games in 2010. SKB and KT plan to launch the commercial service of high-definition video calls, which was promoted in 2010. In 2011, LG U+ started the Shoot & Play service using a browser-based 3-Screen service promoted in 2010.

<Figure IV-4> New Interactive Broadcasting and Telecommunications Convergence Services



KT Multi-Angle Pro Baseball Relay  
Broadcasting



SKB Seoul City Government  
Video Civic Service



LG U+ Shoot & Play Service

## E. Support for Active Growth of Radio Industries

To support the active growth of radio

broadcasting industries, the KCC carried out projects to support small and medium-sized businesses, including the provision of information on industry status at home and

abroad, and support to production of trial product samples with specialized consulting service. First, the KCC pursued the commercial production and active development of technologies developed by small and medium businesses equipped with new superior technologies by providing them with funds for trial sample production. The KCC selected and supported fourteen products, including European-style, ultra-thin, flat antennae for receiving multiple satellite signals. It also held informal meetings in order to learn about the difficulties faced by radio broadcasting businesses. Further, it provided consultation in nineteen separate cases, including ‘programs for proactively protecting technologies under development’, by forming five expert consultation groups dedicated to the five fields in which small and medium businesses most often encounter difficulties, namely, the legal, accounting, labor, patent and certification fields.

The KCC amended the technical standards in order to help introduction of magnetic-field induced electronic appliances used for anti-burglar systems by shops and stores, and wireless hearing aids for people with impaired hearing.

First, businesses requested that the Standard for Preventing EMI in Information Appliances, which is the current standard for unwanted emission by magnetic-field induced wireless equipment, should be alleviated due to its

ineffectiveness, as it is applied to household appliances, which have a shorter communication distance than industrial appliances. It was also requested that the 7.4~8.7MHz bands be opened to Electronic Article Surveillance (EAS) appliances.

Thus, the KCC expanded the range of standard values (30~230MHz: 40dB  $\mu$ V/m@10m and 230MHz~1GHz: 47 dB  $\mu$ V/m@10m) for unwanted emissions to allow the introduction of magnetic-field-induced wireless appliances for industrial use by alleviating the standards on unwanted emissions of magnetic-field-induced wireless appliances after reviewing the request. Further, the KCC amended the technical standards for magnetic-field-induced RFID, including raising the standard for magnetic-field-induced wireless appliances in the 7.4~8.7MHz bands to 9 dB  $\mu$ V/m@10m (60.5 dB  $\mu$ V/m@10m) by reflecting the international radio frequency control trends and requests by consumers.

Second, the 3,155~3,400KHz’ bands are uniformly allocated to wireless hearing aids around the world pursuant to RR 5.116. It was requested that Korean technical standards be developed for wireless hearing aids as Korea lacked the necessary technical standards. The KCC promoted the active growth of the concerned industries by amending the technical standards to enable the use of magnetic-field-induced wireless hearing aids.

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

### A. Responding to the Influence of Internet on Society

#### 1) Promotion of social platform services

The KCC developed the ‘Strategies for Realizing a Social Platform-Based Network Society for Communication, Creativity and Trust’ in order to promote and support the productive application of social network-based Internet services, as it is leading innovation and changes in all social and economic areas along with the active growth of smartphone and mobile internet services. The strategies were reviewed and approved by the National IT Strategies Committee in May 2011.

Under the vision of ‘Realizing a Social Platform-Based Network Society for Communication, Creativity and Trust’, the KCC presented the three main tasks of ① strengthening the national and social infrastructure for social communication; ② creating the social-economy ecosystem and ③ developing the environment for social trust.

### B. Improvement of the Internet Service Environment

#### 1) Enforcement of ID Verification System

In 2007, the KCC introduced various ID Verification Systems in order to institutionally address the adverse effects or results caused by the rapid growth of the internet service. In January 2009, the KCC had the Enforcement Decree of the Standards for the Selection of Objects Subject to Measures for User Authentication amended in consideration of the fact that malicious comments and other adverse effects or functions attributable to internet user anonymity have appeared on all bulletin boards, irrespective of the service type. The ID Verification System was introduced to information communications service providers that attract 100,000 or more users a day regardless of their service types. According to the amendment, the system was enforced with regard to 146 sites operated by 133 information communications service providers in 2011.

<Table IV-4> Outcome of Disclosure of Websites Subject to User Authentication in 2011

(Unit : each)

Portal	Press/ media	Shopping/ auction	Entertainment	Internet service	Life/ leisure	Banking	Business	Education	Total
13	51	24	22	21	6	4	3	2	146

## 2) Improvement of the usage environment for ActiveX

Korea has implemented many tasks aimed at improving the internet service environment, including the excessive use of ActiveX and old-version Web browsers, though Korea is said to be a leading Internet user power. Thus, the KCC developed and published the ‘Plan for Improving the Internet Service Environment’ in March 2011, with the focus on increasing the application of technologies that can replace ActiveX, promoting the use of diverse Web browsers, and upgrading the Web environment.

Further, in July 2011 the KCC conducted various campaigns in order to improve the user environment for internet services, together with such portal services as Naver, Daum, and Nate, entities such as Microsoft Korea and KISA, and to replace old-version Web browsers and encourage internet users to use multi-modal browsers. In October 2011, the KCC expanded the campaign to users of game service providers (NC Soft and Han Game). It also staged offline campaigns (disseminating circular letters) to 285 organizations, including central and local government agencies and public institutions. As a result, the number of IE6 and other Internet Explorer users decreased significantly.

To effectively implement the plan for improving the internet service environment, the government supported the supply of

technologies capable of replacing ActiveX and the provision of technical education by developing action models for implementing the plan jointly with the private sector. The plan was implemented by inducing the voluntary participation of private sector organizations.

## C. Establishment of Internet Service Principles

### 1) Network neutrality

Conditions in the telecommunication service market have been changing rapidly due to the fast growth of traffic, saturation of the internet access service market, and the emergence of new services along with the recent diffusion of smart appliances. Therefore, balanced policies are required to ensure access to the internet service and to steadily upgrade the information and communication networks. Network neutrality has become the core issue of the debate.

On 26 December 2011, the KCC published ‘Guidelines on Net Neutrality and Internet Traffic Administration,’ which provided the basic rules on net neutrality with a view to creating a fair and open internet service environment and ensuring inclusive sustainable development of the ICT ecosystem, considering the current direction of debate among foreign regulation agencies in the U.S.A and Europe.

<Table IV- 5> Basic Principles of Guidelines for Administering Network Neutrality and Internet Traffic

User rights	<ul style="list-style-type: none"><li>• The internet users are entitled to information concerning internet traffic while allowed to freely use legitimate contents, applications, and appliances or devices unless they cause hazard to services or networks</li></ul>
Transparent administration of internet traffic	<ul style="list-style-type: none"><li>• Internet access service providers should disclose the purpose, scope, conditions, procedures and methods for administering network traffic and should also notify the users of the details or effects of actions taken as required for administering network traffic</li></ul>
Prohibition of blocking	<ul style="list-style-type: none"><li>• Any legitimate contents, applications or appliances or devices should not be blocked unless they cause hazard to services or networks</li></ul>
Prohibition of irrational discrimination	<ul style="list-style-type: none"><li>• Prohibition of irrational discrimination of legitimate contents, applications and services</li></ul>
Rational traffic management	<ul style="list-style-type: none"><li>• Traffic may be managed if required for securing network security and safety, for eliminating temporary overload or network congestion, or under relevant statutes</li></ul>

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## Section 2

# Creation of a Smart Ecosystem and New Industries

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### 1. Promotion of Seven Main Smart Services

#### A. Promotion of Cloud Service

##### 1) Preparation of foundation for strengthening industrial competitiveness of Cloud Service

The KCC published ‘Strategies for Diffusing and Strengthening Competitiveness of Cloud Computing through the Economic Policy Coordination Meeting’ with the Ministry of Public Administration and Security and the Ministry of Knowledge Economy in May 2011.

Through such strategies, the KCC will actively try to remove users’ concerns by improving existing statutes that are incompatible with Cloud Service and by preparing guidelines for certification and service level agreements. The KCC will also plan to help the government actively introduce Cloud Service to enhance the efficiency of the country’s IT infrastructure, save budget funds, and contribute to the creation of a local Cloud Service market.

##### 2) Organization and operation of a Government-wide policy council on Cloud Computing

To help develop local Cloud Service industries, the KCC organized and operated a government-wide Cloud Computing policy council in which three government departments of the KCC, the Ministry of Public Administration and Security, and the Ministry of Knowledge Economy, businesses, universities, and research institutes have participated. By holding a meeting of the Group for Promoting Active Development of Cloud Service in October 2011, the KCC conducted discussions for active development of Cloud Computing Service, including ways to collect opinions on SLA, statutes and institutions, in order to help the public sector introduce and propagate Cloud Service, and to develop an expert workforce for Cloud Service.

In addition, the KCC held Korea-Japan Cloud Computing Policy Talks and a Korea-China-Japan Asia Cloud Computing International Forum in September 2011 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.

##### 3) Cloud Service testbed operated

A Cloud Service testbed was installed at the KISTI Super Computing Center as part of the

‘Government-wide plans for active development of Cloud Computing’ published in December 2009. The KCC urged enhancing of the Cloud Service testbed in 2011 so that small and medium businesses could develop, test or verify Cloud Service models and solutions. The testbed now provides an environment for experiencing Cloud Service with 203 units of x86 servers amounting to 1,624 CPU cores, 181.5 terra bite storage, and 1Gbps dedicated circuits.

## B. Infrastructure Deployed for M2M Communications Service

### 1) Infrastructure deployed to support development of M2M communications

In May 2011, the KCC founded the ‘Comprehensive M2M Communications Support Center’ that can test and verify M2M communications equipment and services in order to deploy the infrastructure to support development of M2M communications service by small venture businesses and to provide a base for industrial development through the supply or diffusion of service models.

The Comprehensive M2M Communications Support Center was founded over a span of five months with a total budget investment of KRW 1.9 billion. It is equipped with various sensors, servers, wired and wireless network equipment, instruments and analysis equipment and monitoring equipment for testing or

verifying M2M communications modules, terminals, platform software and various applied services.

### 2) Environment provided for diffusing M2M communications service

In December 2011, the KCC provided a pilot Smart Farm service that enables remote monitoring of farmers’ cultivation facilities using M2M communications technologies and helps urban residents to return to farming villages.

The service was jointly developed by KT and the city of Gwangyang with support by the KCC. Its commercial service is planned for 2012 after pilot service to 20 farmers who grow tomato or paprika in Jeolla-do and Gyeongsang-do and 130 households who use weekend farms in Gwangyang.

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

In order to secure core technologies for occupying the M2M communications service market, and operate with blue ocean strategy in the future generation communications service market ahead of other countries, the KCC started such tasks as ‘Development of Standard Platform for WiBro/LTE based M2M Communications Terminals’ and ‘Development of Core Technologies for Super Low Power (1nJ/bit, Nano Joule/bit) Communication’ in April 2011. The task of ‘Develop-

ment of Standard Platform for WiBro/LTE based M2M Communications Terminals' is intended to provide standard specifications for platforms for wireless connection, authentication/security, quality assurance, and remote control of M2M communications terminals in a new mobile communications environment. It is also designed to provide tools and testing environments for developing software and hardware that realize such platforms.

The task of 'Development of Core Technologies for Super Low Power (1nJ/bit) Communication' is designed to develop low-power communications technologies that are approximately 50 times better than the current one. It aims to reduce 50nJ/bit power consumed by the current Near Field Communication(NFC) technologies to the level of 1nJ/bit.

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

#### 1) Plan developed to promote NFC-based Mobile Smart Life service

The KCC prepared the 'Plan for Promoting NFC-based Mobile Smart Life service' in March 2011 to expedite development of new industries while promoting NFC service that is emerging as the core of smart mobile business. By establishing a vision of 'Realizing Leading Country of Smart Mobile NFC Service', the

KCC presented nine core tasks in three main areas of ▶ Generation of infrastructure for new Mobile Smart Life service ▶ Promotion of exploration and supply of Mobile Smart Life application services and ▶ Leading markets for next-generation mobile payment and application services.

Further, the KCC organized the 'Grand NFC Korea Alliance,' a consultative body that all NFC stakeholders may participate in, and included specific action plans in the 'Plan for Promoting Mobile Smart Life Service', including programs for expanding the infrastructure.

#### 2) Promotion of NFC-based pilot project

The KCC started diverse NFC-based pilot application services after declaring the 'Myeongdong NFC Zone' in November 2011 together with CEOs of three mobile phone companies, 11 card companies, 3 VAN service providers, and 6 major partner stores, in order to generate an environment for promoting NFC payment and other application services.

Under the 'Myeongdong NFC Zone' pilot service that was provided for roughly three months (November 2011 to February 2012), NFC-based mobile payment equipment was installed at over 200 stores in the Myeongdong area, including coffee shops, convenience stores, fast food restaurants, and cosmetics stores. Anyone could use the pilot service that included mobile payment, coupon down-

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loading and smart ordering with an NFC-mounted handset and mobile credit card.

#### D. Strengthening of the Competitiveness of Smart TV service

To deploy infrastructure for strengthening the competitiveness of smart TV service, in 2011, the KCC developed strategies for the development of smart TV industries, and promoted development of standard technologies for creating a smart TV ecosystem and exploring next-generation service models.

First, in April 2011, the KCC developed ‘Strategies for Developing Smart TV Industries’ jointly with the Ministry of Knowledge Economy, Ministry of Culture, Sports and Tourism, and other related departments, focusing on smart TV technology development and standardization, implementation of pilot projects, deployment of a cooperative ecosystem, development of contents, creation of winning contents, network enhancing and improvement of laws and systems. The ‘Strategies’ were reported to the Economic Policy Coordination Council.

Second, the KCC induced exploration of future policy needs and industry cooperation from the perspective of the entire ecosystem by organizing and operating a forum of those involved in the domestic smart media market in order to develop a sound ecosystem for smart TV service. In March 2011, it prepared a

foundation for cooperation and collaboration by operating a forum consisting of officers of providers of terrestrial public and purchasable broadcast service, and internet, communications services, and businesses manufacturing appliances and experts belonging to concerned institutions.

Third, the KCC continued support for the development of next-generation smart TV models by selecting a consortium participated by broadcasters, communications service providers, appliance manufacturers, and solution providers, in order to expedite development of smart TV services. In February 2011, the KCC conducted a demand survey among concerned businesses. In April 2011, it began a KRW 770 million project supporting the development of smart TV service by selecting three consortiums.

Fourth, the KCC invested KRW 10 billion in projects for technology development and standardization in 2011 for carrying out tasks of developing technologies for voice and movement recognition, search, enhanced broadcasting and N-Screen transmission. In June 2011, the KCC organized and operated the ‘Team for Standardization of Smart TV Technologies’ participated by concerned industries and research institutes, including terrestrial, IPTV and cable broadcasting service providers and appliance manufacturers. It explored 14 candidate standardization tasks and reflected them on a strategic map for TTA

and ICT standardization.

Thanks to such efforts, the percentage of smart TV sets out of the total domestic TV set sales increased from 12.8% in 2010 to 22.7% in 2011. The local manufacturers achieved the No. 1 share of the world smart TV set market, including Samsung that took the No. 1 sales volume and LG that took the No. 2 sales volume of world smart TV sets.

## E. Development of Location Based Service (LBS) Industries

### 1) Development of infrastructure for fostering LBS industries

To foster LBS industries, providing an infrastructure for smart mobile internet service, the KCC founded the LBS Business Support Center in September 2011 that provides legal counseling, permission or declaration support, deployment of industrial statistics systems and support for overseas advancement. In December 2011, the KCC held the ‘Viva! LBS Festival’ that combined the LBS App & Web Idea Competition 2011, policy discussion and strategy conferences in order to have discussions for establishing future industrial strategies and policies while promoting the morale of LBS industry (reserve) workers.

### 2) Improvement of regulation over LBS providers

In January 2011, an amendment bill to the

「Act on the Protection, Use, etc. of Location Information」 to promote domestic LBS industries was introduced, focusing on the alleviation of regulations related to permission, declaration, immediate notice, and penal provisions within the extent that personal privacy is not infringed upon. The amendment bill was submitted to the National Assembly in May 2011 and is now under deliberation.

## F. Promotion of 3D Broadcasting Service

### 1) Terrestrial high-definition 3DTV pilot broadcast

The KCC attempted to secure reliable 3DTV viewing while leading international broadcasting standards and technologies, including starting the world’s first terrestrial HD 3DTV pilot broadcast from October 2010 to December 2011 that enables both HD 3D and 2D broadcasting at the same time (reverse compatibility guaranteed) on existing channels without any additional frequency. It completed verification of technologies related to introducing commercial services in the future while displaying Korea’s advanced broadcasting technologies in the world market through the world’s first 3D live relay broadcasting on terrestrial channels of the World Athletics Championships in Daegu 2011 for three days from August 28 to 30, 2011. The 3D live relay pilot broadcast programs were

viewed at 150 sites in three-dimensional high-definition where a set-top box was installed for receiving 3DTV and HD 3DTV signals. Other households equipped with ordinary DTV could view the programs in HD 2D when they could receive the signals directly through the No. 66

terrestrial channel. Further, the general public was provided with opportunities to view the relay broadcasting at Seoul Station, Gimpo Airport and COEX through satellite Sky Life channel No. 1 and the KBS website relaying Daegu Championship matches.

<Table IV- 6> History of Promotion of HD 3DTV Test Broadcasting Services

29 October 2010	HD 3DTV test broadcasting service started Broadcasting media: four terrestrial, satellite and cable broadcasting (Hyundai Communications & Network, CJ Hello Vision) service broadcasters
August 2011	HD 3D live relay of IAAF World Athletics Championships Daegu 2011
2011 end	Existing 3D trial broadcasting terminated
2012	Scheduled to perform HD 3D trial broadcasting through terrestrial broadcasting channels

## 2) Development of next-generation broadcasting technologies

Thanks to steady investment by the KCC in technology development, the ‘Development of Glassless 3D Technology’ that enables viewing of 3D images without special eyeglasses has been progressing quickly. The KCC focuses on the development of core technologies that affects the competitiveness of next-generation broadcasting services and improvement of environments for contents production. Further, research and development are being carried on for beginning pilot broadcast of glassless HD 3DTV and 4k (3840 × 2160 pixels) UHDTV by 2014.

## 3) Standardization of high-definition 3D broadcasting system

In June 2011, the KCC made a 3DTV NWIP (New Work Item Proposal) for organizing a new SG for establishing a new ATSC (Advanced Television System Committee) standard for the Korean 3D broadcasting system. The proposal was approved by ATSC in July 2011. Based on the ATSC 3DTV NWIP approved in August 2011, the terrestrial 3DTV standardization is actively carried out by organizing a 3DTV SG (Specialist Group). Since the 93rd meeting in July 2010, MPEG has also been under discussion for developing standards for Frame compatible 3DTV broadcasting service signaling.

#### 4) Promotion of 3D services

The KCC enhanced diverse promotional and support activities for developing 3D services. It sponsored symposiums/seminars, exhibitions and other events to help monitor the 3D industry-related technologies and world trends under the slogan ‘See the world through 3D’ by holding the ‘Seoul International 3D Fair’ (at SETEC from January 13 to 16, 2011), the world’s first 3D expo. Additionally, the KCC has operated 3DTV education and experience programs with a 55-inch LED 3DTV set, shutter glass, and polarized glasses at the ‘3DTV Broadcasting Promotion Center’ founded inside Korea Radio Promotion Association (RAPA). It supports the successful pilot broadcast of HD 3DTV (terrestrial, satellite and cable broadcasting) and the early growth of 3DTV broadcasting service in Korea.

## 2. Development of Innovative Ecosystem and Venture Infrastructure

### A. Creation of Innovative Smart Ecosystem

On June 30, 2011, the KCC developed ‘Guidelines for Win-Win Cooperation for Mobile Contents Open Markets’ in order to promote domestic open markets based on quality contents and induce a win-win growth of contents vendors and developers. The

Guidelines hope to induce developers on a fair transaction basis and in a win-win cooperation environment among vendors and developers in the local open-market which has been dominated by Apple and other foreign companies. The Guidelines consist of provisions concerning the basis for developing mobile contents, including pricing of mobile contents, rules for computing fees for open market services, support to developers, and prevention of unfair acts.

### B. Promotion of Venture Business Growth

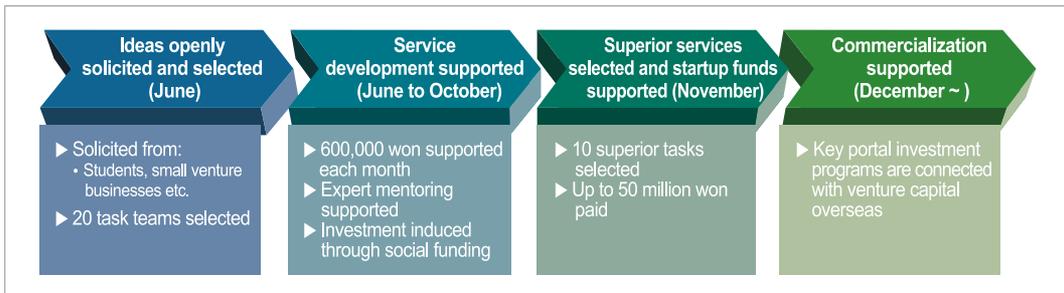
#### 1) Development of Internet Business

##### Startups (IBS)

The KCC operated Internet Business Startup (IBS) programs consisting of the exploration of new Internet services, support to commercial service, and education for using Open Platform (including Open APIs) as part of the efforts for providing a foundation for win-win cooperation between large companies and SMEs, and for development and promotion of promising startups while providing a turning point for reinvigorating the local Internet business that has been stagnant.

In addition, the KCC promoted education on the use of Open Platform (including Open APIs) in order to strengthen capabilities of the developers as demand has grown for internet service developers.

&lt;Figure IV-5&gt; IBS Program Processes



## 2) Centers for supporting development of smart mobile applications

The KCC deployed the Smart Mobile Application Center (SMAC) throughout the country in 2011 in order to reinvigorate domestic mobile internet service business by supporting development of smart mobile applications. The KCC also supported education programs for smart mobile application developers through its website (<http://smac.kr>) for mobile application development.

## C. Enhancement of Venture Business Technologies

The KCC established diverse plans for promoting R&D projects by small and medium businesses in order to enhance technological capabilities of small venture businesses. It also explored new R&D projects by small and medium businesses that the KCC was scheduled to intensively support in 2012. They are largely divided into R&D for developing future innovative broadcasting and tele-

communication technologies, R&D for deploying infrastructure for promoting next-generation mobile telecommunications services, and deployment of platforms for supporting development of next-generation broadcasting and telecommunications technologies.

The KCC plans to explore and support innovative technologies that adopt embodiment, service or application methods different from existing technologies, services and products. These technology development tasks include those for technologies related to super-mini base stations and the development of super-narrow bandwidth digital radio transceivers.

Further, the KCC plans to promote the exploration of business models that can create new markets for next-generation (4G) mobile telecommunications through the development of technologies based on application software for next-generation mobile telecommunication. It also plans to promote development of next-generation convergence infrastructure, including development of compatibility or

interoperability with next-generation mobile telecommunication and with diverse network platforms.

The project for developing technologies for convergent infrastructure will support the development of telecommunications infrastructure technologies that will be a basis for promoting new 4G mobile telecommunications services.

As wireless NFC technologies have emerged as core common technologies that are extensively applied to broadcasting and telecommunications appliances, including smartphone sets, tablet PCs, and navigation devices, the R&D project for deploying platforms to support next-generation broadcasting and telecommunications technologies will support the deployment of testbeds and development of commercial technologies for small venture businesses so that new technologies and services may be developed in the next-generation NFC areas.

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

The KCC made efforts to create an environment for win-win development between large companies and SMEs by supporting win-win cooperation programs with a focus on telecommunications service providers. This was done with a belief that it is essential to the development of ICT ecosystem

that a win-win cooperative environment is created between large companies and SMEs, as competition within existing individual industries have switched to competition among ICT ecosystem.

It also attempted to remove financing difficulties faced by small businesses by investing the Korea IT Fund(KIF) into promising small businesses in IT fields. To that end, the KCC organized 10 additional child funds in 2011 in addition to the 10 KIF child funds organized in 2010. In particular, KIF has contributed to the development of ICT ecosystem as it is mainly invested in mobile IT fields, including mobile contents and smartphone service whose importance is being stressed in the ICT ecosystem.

#### **E. Strengthening Support to Small Businesses through Home Shopping**

In November 2010, the KCC established ‘Policy Directions for Home Shopping to Support Small Businesses’ and helped open hearings on it. In so doing, the KCC systematically prepared the selection of home shopping service providers dedicated to products by small businesses from end of 2010. In January 2011, the KCC collected opinions from various fields on the criteria for selecting home shopping service providers by holding an expert group discussion. Reflecting the opinions, the ‘Committee for Reviewing

Approval of Home Shopping Broadcast Channel Providers Dedicated to Small Businesses' selected Shopping One Co., Ltd. (currently Home and Shopping Co., Ltd.) as a home shopping service operator dedicated to small businesses, on March 9, 2011.

In September 2011, Shopping One Co., Ltd., which was renamed as Home and Shopping Co., Ltd., started a full-scale broadcasting from January 7, 2012 after pilot broadcast for a month from December 1, 2011.

The Korea Federation of Small and Medium Businesses, Small Business Distribution Center, National Federation of Agricultural Cooperatives, and Industrial Bank of Korea participated in Home and Shopping Co., Ltd. as shareholders. To reflect the characteristic features of a home shopping channel dedicated to small businesses, it has supported small businesses in various ways, including organizing 80% of its product portfolio with products by small businesses and minimizing the sales margin.

Small businesses are able to sell their products to 2,063,000 families through Home and Shopping Co., Ltd. using 89 cable channels throughout the country. It will provide

a turning point for generating win-win cooperation and shared growth between large companies and SMEs in home shopping fields as well as the growth of domestic small businesses.

### 3. Promotion of Competition among Broadcasting and Telecommunications Services

#### A. Promotion of Newly Implemented Broadcasting Services and Improvement of Purchasable Broadcast Service Market

##### 1) Introduction of general-broadcasting and specialized-news channels

In December 2010, the KCC selected new broadcasting service providers for general-broadcasting and specialized-news channels in order to help grow the overall size of the local broadcasting service market while increasing users' options to enhance the diversity of broadcasting programs by adding new channels.

<Table IV-7> Status of Newly Licensed General Broadcasting Program Providers and Specialized News Channel Operators

Classification	General broadcasting program providers				News program providers
Corporate name	Chosun Broadcasting Co., Ltd.	JTBC Co., Ltd.	Channel A Co., Ltd.	Maeil Broadcasting Co., Ltd.	Yonhap News TV Co., Ltd.
Channel name	TV Chosun	jTBC	Channel A	MBN	News Y
Largest shareholders	Chosun libo Co., Ltd.,	Joongang Media Network, JMnet	Dong-a Ilbo Co., Ltd.	Maeil Kyongje Shinmun Newspaper	Yonhap News

In 2011, these new channels started regular broadcasting programs in full scale. In particular, the new broadcasting service providers paid in their capital March through May 2011 and all started broadcasting simultaneously on December 1, 2011 after obtaining the final license based on respective resolutions adopted by the KCC. Thus, five new channels (four general-broadcasting channels and one specialized-news channel) newly joined the competitive structure of the local broadcasting market as an addition to the existing broadcasting channels. In the future, the KCC plans to steadily monitor the new broadcasting service providers to assess whether they perform the license conditions in connection with policy objectives. Plans are also underway to carefully examine matters concerning the improvement of systems for general-broadcasting and specialized-news program providers (PP) based on the regulation equity with the existing broadcasting service providers and outcome of assessment of competitive conditions.

## 2) Improvement of contents trading practices between system operators (SO) and program providers (PP)

At present, most program providers are smaller in size than system operators. As many more program providers enter the market for a given number of cable or other broadcasting channels, transaction structures have been

formed where SOs have a position superior over PPs. The differences between interest parties in terms of payment ratio or objects concerning PP program services have been a cause for conflicts in contents transactions.

The KCC improved the criteria for program fees SOs pay to PPs to ensure fair contents fees are paid while generating an environment for fair competition in the purchasable broadcast service.

The KCC checked the payment of PP program fees by 95 SOs in 2010 whose license had been renewed based on their performance in the payment of PP program fees during the period of January 15 to March 31, 2011.

The KCC prepared a draft proposal for improving earnings division criteria between SOs and PPs based on a study performed by KISDI to develop appropriate criteria for payment of program fees.

## B. New and Renewal Licensing of Broadcasting System Operators

In 2011, license renewal was reviewed for four SOs, terrestrial broadcasting stations, six mobile multimedia broadcasting systems, five terrestrial FM radio broadcasting stations and seven community radio stations as their licenses were scheduled to expire in 2011. New licensing was examined for Gwangju FM and Changwon Traffic FM radio stations. The KCC also performed a review for revising licensing

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terms of Changwon MBC and Jinju MBC Co., Ltd. and for applications for approval of change of the largest capital investors by Gyeongin Broadcasting, Gyeonggi Broadcasting and Gwangju Broadcasting Co., Ltd.

In particular, the KCC reflected the listeners' or viewers' opinions on the license renewals of terrestrial and community radio broadcasting stations by giving them four weeks to comment. The applicants were heard for all reviews to verify the application details. In addition, the intentions of the broadcasting stations were verified to enhance the effectiveness of the review procedures.

As to the proposed merger of the regional MBC stations, in-depth opinions were collected through the 'Regional Broadcasting Development Committee' on four occasions from the related agencies and organizations. As to key controversial points raised during the process, recommendations by the 'Regional Broadcasting Development Committee' were reflected.

The renewal and revision of licenses for broadcasting system operators in 2011 features characteristics in which the KCC actively reflected suggestions or recommendations made by academic societies or research institutes.

### C. Support to Sound Growth of IPTV Service

IPTV achieved approximately 4,570,000 users as of December 2011 within three years from the launch of commercial service, successfully settling in the purchasable broadcast service market. Conditions for its steady growth are provided by the promotion of increased investments by service providers in contents or infrastructure, and support for the development of new services and next-generation source technologies.

First, in March 2011, the KCC reviewed the performance of IPTV service providers against 2010 business plans considering diverse aspects, such as the status of network and contents investment, sales and cost. The review revealed that the IPTV service providers invested KRW 1.9 trillion in two years during 2009 and 2010, achieving 103.1% of the planned targets.

Second, the KCC conducted a survey of demand to collect opinions from relevant institutions in April 2011 to support development of models for daily broadcasting and telecommunications convergence services using diverse smart appliances, including IPTV. The KCC also promoted projects supporting such convergence services by selecting four consortiums.

<Table IV- 8> Details of Support to Pilot Broadcasting and Telecommunications Convergence Services

Service name	Participating Organization	Service details
Smart media Community service (Multiple culture)	Incheon ITPA (LG U+)	<ul style="list-style-type: none"> <li>• Multi-culture family HD video reunion service</li> <li>• Remote video education classes provided to multi-culture family housewives and children in cooperation with 50 multi-culture family support centers</li> </ul>
Live Teacher Class	KT (Tongyeong-si, Busan-si, Doosan-Donga, Farms Communication, Smart Education Foundation)	<ul style="list-style-type: none"> <li>• Elementary digital study papers provided through interlinked service between tablet PCs and IPTV</li> <li>- After-school classes provided in TV images through real-time link between appliances</li> </ul>
Smart Farm Life (Agriculture)	KT (Gwangmyeong-si, Telecom Land)	<ul style="list-style-type: none"> <li>• Remote production or cultivation system service using smart appliances</li> <li>• Planning service for farm produce cultivation</li> </ul>
Wanju-gun bundle service (Food)	SKB (Wanju-gun, Sorisol Solution)	<ul style="list-style-type: none"> <li>• Service promoting local food menu</li> </ul>

Third, in 2011, the KCC promoted support for R&D of essential technologies, including open platforms designed to occupy next-generation IPTV technologies and the local and international standardization of the developed technologies with a KRW 12.9 billion budget. The KCC also reviewed the progress of the standardization plans prepared in 2009 by organizing and operating the ‘Team Dedicated to IPTV Standardization’ from January 2011 that is participated by three IPTV service providers, appliance manufacturers, other related businesses and research institutes. In particular, the KCC prepared a core foundation for enhancing the access to broadcasting services by the physically impaired by developing ‘Common Technological Standards of Broadcasting for the Physically Impaired’ which had impeded transmission of purchasable broadcast service for the

physically impaired. Thanks to such efforts, IPTV services secured 4.57 million subscribers as of December 2011, showing a more rapid growth than other purchasable broadcast media, with public services explored and increased investment in contents and facilities though the overall purchasable broadcast market is saturated with over 20 million subscribers. The IPTV service operators greatly contributed to the growth of related industries, by investing a total of KRW 2.2 trillion in two and half years, including KRW 594.6 billion in contents and KRW 1,663.6 billion in facilities.

Further, convergent services satisfying market demands were explored through demand surveys or consultation with expert groups, including those from the central and local governments, public institutions, and business operators. The KCC promoted

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demand in various fields where the technology is applied, including N-Screen and video calls, while helping multicultural families and other disenfranchised individuals and providing more convenience for communities.

#### D. Promotion of Sound Competition in the Telecommunications Service Market

In 2011, the KCC engaged in generating a foundation for promoting reseller mobile telecommunications services in order to help early settlement of the reseller service system introduced in 2010 and to maximize its effects. With the 「Telecommunication Business Act」 enforced on September 23, 2010, enabling the registration of Schedule 4 operators, a total of 30 companies registered themselves as Schedule 4 reseller service providers by December 2011 to enter the mobile telecommunications service market. Three companies, Korea ICT, Korea Cable Telecom and Eyes Vision Co., Ltd., started service from July 2011.

The KCC also organized and operated a dedicated team for ‘Guidelines on Wholesale Mobile Telecommunications Service Provision to Reseller Service Providers’ beginning in January 2011 which is comprised of legal, accounting and technical experts in order to generate an environment where the reseller service providers can do business smoothly.

The KCC also provided a foundation for active implementation of the reseller service system by having SKT develop and apply standard terms in March 2011 for its provision of wholesale service. In July 2011, the KCC enhanced inducement of new service providers into the market by preparing guidelines for the provision of wholesale service so that additional discounts may be provided to service providers beyond a given scale.

#### E. Improvement of Systems for Licensing Common Carriers and M&A

To reduce the burdens of the providers while promoting competition in the telecommunications service market, the KCC prepared plans for improving systems for licensing common carriers and their M&As and submitted to the National Assembly a draft amendment to the 「Telecommunications Business Act」 reflecting such plans on December 12, 2011. The proposed plans for the improvement of systems licensing common carriers provided provisions allowing the KCC to develop basic plans for licensing common carriers, considering the outcome of its assessment of competition in the telecommunications service market and radio frequency use plans. The KCC also removed the problem in which the review schedule is delayed by the disagreement of the time of application for license and for allocation of

frequency bands under the current Act by specifying the time so that those (mobile telecommunications service providers) who desire to operate mobile network services by obtaining a frequency band may submit their application for frequency band allocation along with their application for licensing their mobile network service. Additionally, an improved provision was prepared for M&A of mobile network providers to allow the whole or part of the review processes to be skipped as provided under the Presidential Decree when the merger or acquisition has a negligible impact on the competition in the telecommunications service market, as in the case of small-scale M&As.

## 4. Establishment of Principles of Fair Competition

### A. Establishment of Fair Transaction Order in the Telecommunications Service Market

#### 1) Improvement of systems for correction of unfair acts through an enhanced market monitoring

Unfair acts appear in the markets of mobile phone and broadband internet service markets in which competition is intensified among the service providers, including the inducement of subscribers through illegal acts. Thus, the KCC promoted improvement of the relevant systems

while surveying and analyzing examples of unfair transactions and user damages in the broadcasting and telecommunications service market in order to generate an environment for fair competition and to maximize user benefits.

First, the KCC investigated and took corrective actions on unfair acts through active monitoring of the rapidly changing broadcasting and telecommunications market. Second, the KCC improved the user environment of broadcasting and telecommunications services by providing a foundation for promoting fair competition in the broadcasting market by enacting detailed criteria (draft notice) for acts prohibited in relation to the universal access right.

#### 2) Verification of accounting of telecommunications service providers

The telecommunications accounting system is designed to generate, sort and submit accounting information required for key competition-related policies in the telecommunications service market.

In 2011, the KCC supported the verification of telecommunications service providers' business reports based on accurate accounting information, and the development of telecommunications service policies, including service fees, access charges, MVNO, and facility provision systems, through verification of voice and VoIP volumes. The KCC also

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prepared a foundation for the objective and fair computing of contributions through verification of compensation for universal service losses.

## **B. Strengthening a Foundation for Ex-post Regulations, Including Introduction of Provisions Prohibiting Acts Under the Broadcasting Act**

As the 「Broadcasting Act」 does not have any provisions on acts prohibited between service providers, it has been noted that it lacks in equity among sectors or it has blanks in regulation, though the 「Telecommunications Business Act」 and the 「Internet Multimedia Broadcasting Business Act」 have provisions on acts prohibited between service providers.

Under such circumstances, the KCC provided a basis for ex-post regulation by providing prohibited acts under the 「Broadcasting Act」 and subordinate statutes applicable to the broadcasting service market in order to generate an environment for fair competition in the broadcasting and telecommunications service market. In addition, the KCC pursued diverse policy means for improvement in order to address complexities and diversities of types of unfair acts due to changes in the conditions of the broadcasting and telecommunications service market. It analyzed domestic and overseas trends, secured expert inspectors, and prepared

procedures and guidelines for handling unfair acts.

As a result, the KCC had the 「Broadcasting Act」 amended (promulgated on July 14, 2011, enforced on January 15, 2012) to prepare institutional grounds for the government authority to request submission of information related to prohibited acts and to impose penalties on breaches. The KCC also prepared an amendment to the Enforcement Decree of the 「Broadcasting Act」 to specify the types of prohibited acts, methods for requesting submission of information, and limits of penalties that were delegated under the 「Broadcasting Act」. Further, the KCC prepared key procedures for establishing order for fair competition so that breaches of the provisions concerning prohibited acts may be regulated effectively, including unfair acts or infringement of user benefits by broadcasting service providers, by enacting guidelines for imposing penalties to ensure effective sanctions against breaches of prohibited acts under the 「Broadcasting Act」.

## **C. Augmented Functions for Settling Disputes in Broadcasting and Telecommunications Service Markets**

The KCC improved systems for settling disputes in broadcasting and telecommunications service markets and performed other various activities to address such disputes that

are becoming more complex or diverse in a reasonable and effective manner.

First, to cope with the converging trends of broadcasting and telecommunications, the KCC expanded the scope of broadcasting service disputes subject to mediation in order to enable the settling of disputes between telecommunications service and IPTV service providers. In so doing, the KCC mediated or otherwise settled disputes concerning the re-transmission of programs between KT-Skylife and SBS and disputes concerning the organization of broadcasting channels.

Second, the KCC settled diverse telecommunications service disputes in a speedy and effective manner, that are arising due to changes in the environment, including convergence between broadcasting and telecommunications, reducing the average period required for handling disputes between users and service providers by eight days from 39 days in the preceding year to 31 days.

Third, the KCC attempted to prevent and cope with disputes through diverse field channels by holding quarterly discussion meetings between broadcasting and telecommunications service providers in order to survey the damages or losses inflicted on users. It also published the 'Issue Report on Broadcasting and Telecommunications Disputes' to analyze the overseas trends in broadcasting and telecommunications disputes.

Fourth, quarterly broadcasting and

telecommunications service provider meetings will be held to analyze user complaints through diverse channels. Solutions to disputes are identified and the Broadcasting and Telecommunications Dispute Issues Report is published to analyze trends in international disputes.

## 5. Enhanced Advancement into Overseas Broadcasting and Telecommunications Service Markets

### A. Support to Overseas Advancement of Broadcasting and Telecommunications Services

#### 1) Trends of key broadcasting and telecommunications services

The KCC had established its 2010 strategies for supporting overseas advancement of broadcasting and telecommunications services based on its forecast of the world broadcasting and telecommunications service markets and industry leader opinions with a focus on five strategic items, namely WiBro, DMB, IPTV, broadcasting contents and broadband services. In 2011, it increased the five strategic items into six strategic services in order to cope with changes in global market conditions. The six strategic services include 4G mobile telecommunications (WiBro/LTE), mobile TV

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(DMB/ATSC-MH), Internet TV (IPTV/smart TV), broadcasting (contents and channel services), broadband and infrastructure services (information security/radio frequency control).

## 2) Provision of information and consulting concerning overseas broadcasting and telecommunications services

The KCC supports local businesses and broadcasting and telecommunications services providers to actively adapt to the rapidly changing age of broadcasting and telecommunications convergence services by providing them with information concerning trends in overseas markets, as most of them face difficulties in advancing overseas due to a shortage of information despite a strong desire to advance into these markets. To that end, the KCC provided in-depth information concerning policies and operator movements concerning 10 major broadcasting and telecommunications service items through its system supporting the overseas advancement of local broadcasting and telecommunications service providers called CONEX ([www.conex.or.kr](http://www.conex.or.kr)), including those related to smart 4G, internet-based TV, broadcasting services, and contents in a total of 54 countries consisting of 32 promising countries for advancement and 22 countries whose information is required. The KCC made efforts to enhance user conveniences in providing information services. Further, the KCC also openly

recruited and selected promising small broadcasting and telecommunications services companies with the potential to advance into foreign markets to provide them with information and 1:1 consulting services on overseas advancement, including market trends, regulation systems, patents and buyer information, by organizing an expert pool so that small broadcasting and telecommunications service companies can have consulting services or other support to cope with difficulties in exploring foreign markets.

## 3) Overseas road show held

The KCC has held joint overseas road shows with businesses that desire to advance into overseas markets to expand foundations in target countries by holding forums and demonstration meetings on Korea's premium services and technologies in strategic target countries. In 2011, the KCC promoted the overseas advancement of Korea's technologies and services by holding eight road shows in strategic target countries as the necessity for strategic support for overseas advancement increased especially for 4G, digital broadcasting and broadband services.

## 4) Support for consulting overseas on broadcasting and telecommunications services

The KCC conducted inter-government consulting services to local foreign

governments or businesses that intend to introduce WiBro or other Korean broadcasting and telecommunications services on a total of seven occasions by assisting with their project feasibility study or by providing pilot

programs. Through such feasibility studies and pilot programs, the KCC helped Korean technologies and services to advance into promising foreign markets.

<Table IV-9> 2011 Performance of Overseas Consulting Promotion

Instance	Proposed by	Target countries	Projects	Overseas partners	Project period
1st	EBS	Columbia	(F/S) EBS Model Advancement	Education Ministry, RTVC	4.18~8.17
	A&D ENG	Kyrgyzstan	(F/S) Radio Management System	Communications Office	4.18~8.17
2nd	KT	Mongol	(F/S) Radio Management System	Communications Regulation Committee	7.11~11.10
	DMBro	Mexico	(F/S) T-DMB introduction expedited	National Communications Commission	7.11~11.10
	KCSA	Kazakhstan	(P/P) Cloud education service	Education Ministry, IITU (University)	7.25~12.24
3rd	LG CNS	Indonesia	(F/S) Digital Broadcasting System	TVRI	9.19~12.18
	Snet	Indonesia	(F/S) WiMAX	PT.Internux	9.14~12.20

### 5) Broadcasting contents showcase events

In 2011, the KCC held a total of four ‘Broadcasting Contents Showcase’ events in the CIS, Latin America, the Middle East and Eastern Europe to support exploration of new markets or advancement into foreign markets of Korean broadcasting contents. Previous showcase events were concentrated in China, Japan and Southeast Asia. The activities in 2011 featured support for the exploration of new markets of the CIS, Latin America, the Middle East and Eastern Europe, which have been infertile lands for Korean broadcasting contents.

Key broadcasting service providers

participated in 2011 showcase events, including KBS Media, MBC, SBS Contents Hub, EBS, Arirang TV, YTN and CU Media, contributing to the overseas advancement of Korean broadcasting contents or diffusion of Korean culture and styles through visits to or interviews with local foreign broadcasting stations, showing of broadcasting programs, business meetings, and networking events.

In 2012, the KCC plans to provide active support so that Korean broadcasting contents may advance into foreign markets with a focus on base countries in different continents and cultural regions.

&lt;Table IV- 10&gt; 2011 Performance of Holding Broadcasting Contents Showcase Overseas

Classification	Location	Date	Details	Achievements
CIS Showcase	Kazakhstan, Uzbekistan	5.2~7	<ul style="list-style-type: none"> <li>Participated by KBS Media, MBC, and SBS, total 22 cases of business talks</li> <li>Interview with Kazakh Khabar TV, 31 Channel, Communications and Information Agency of Uzbekistan, NTRC</li> </ul>	<ul style="list-style-type: none"> <li>US\$811,440 worth export discussed</li> <li>- US\$560,000 to Kazakhstan, US\$250,000 to Uzbekistan</li> </ul>
Latin America Showcase	Brazil, Peru, Columbia	8.17~26	<ul style="list-style-type: none"> <li>Participated by KBS Media, MBC, SBS, EBS and Arirang TV, total 72 cases of business talks</li> <li>Interview with Brazil Rede Globo, Rede Record, Peru American TV and Columbia Caracol TV</li> </ul>	<ul style="list-style-type: none"> <li>US\$907,500 worth export discussed</li> <li>- US\$310,000 to Brazil, US\$350,000 to Peru, and US\$240,000 to Columbia</li> </ul>
Middle East Showcase	Turkey, Egypt,UAE	10.26 ~11.4	<ul style="list-style-type: none"> <li>Participated by KBS Media, MBC, SBS, KBSN CU Media and YTN, total 57 cases of business talks</li> <li>Interview with Turkey ATV, Egypt ERTU, UAE MBC</li> </ul>	<ul style="list-style-type: none"> <li>US\$987,600 worth export discussed</li> <li>- US\$550,000 export discussed to Turkey, US\$100,000 to Egypt, and US\$330,000 to UAE</li> </ul>
East Europe Showcase	Romania, Poland	11.27 ~12.3	<ul style="list-style-type: none"> <li>KBS, KBS Media, MBC, SBS</li> <li>Interview with Romania PRO TV, TVR</li> <li>Interview with Poland TVP</li> </ul>	<ul style="list-style-type: none"> <li>US\$515,000 worth export discussed</li> <li>- US\$470,000 export discussed to Romania, US\$40,000 to Poland</li> </ul>

## B. Leading Activities for International ICT Cooperation

### 1) Systems strengthened to respond to agenda of international organizations

The KCC actively participated in discussions by international organizations on policies concerning broadcasting and telecommunications services for enhancing Korea's influence and position in international organizations, generating an environment advantageous for Korean broadcasting and telecommunications technologies and services to advance into foreign markets, and to reflect Korean technologies on future technical standards, including such multilateral international organizations as OECD and ITU, such regional cooperation organizations as

APT, ASEAN, and APEC, and core meetings of such international broadcasting organizations as AIBD.

First, as the host country of the 2008 OECD Seoul Ministerial Meeting, Korea made proposal at the High Level Meeting held at Paris from June 27 to 28 that the next or 2013 High Level Meeting on Internet Economy with the theme of information protection be held in Seoul. Meanwhile, Korea's responsibility is becoming greater along with its position as a key ITU member state. Korea is scheduled to host the next ITU Plenipotentiary Conference, the supreme decision-making organization of ITU, while also having been elected as a member of the ITU Council six times consecutively. The KCC has participated in the development of IT operational and strategic

plans and determination of key policies by attending the ITU Council Meeting from October 11 to 21, 2011 and various working group meetings (February, April, May, June and October).

The KCC attempted to further enhance Korea's position by advancing into the chair group of various international organizations in 2011. Korea was re-elected as vice chair of the 63rd OECD ICCP, and also re-elected as the 2012 vice chair at the 31st Working Party on Information Security and Privacy (WPISP) Meeting (December 1 to 2), the 30th Working Party on Information Economy (WPIE) Meeting (December 7 to 8), and the 46th Working Party on Communication Infrastructures and Services Policy (WPCISP) Meeting (December 5 to 6). Fourteen persons serve as members of the chair group in a total of 21 Study Groups of three ITU sectors of ITU-R, ITU-T and ITU-D.

## 2) Holding and attending international organization meetings

The KCC made efforts to become the host country of the 2014 ITU Plenipotentiary Conference (PP-14) at the ITU Plenipotentiary Conference held in Guadalajara, Mexico in 2010. In 2011, the KCC systematically prepared for a successful PP-14 holding in Korea. As the result, the ITU Council Meeting was held in October 2011 and finalized the host city for PP-14 (Busan) and the schedule

(October 20 to November 7, 2014) through a physical survey of the candidate city by a domestic selection committee (in May) and the ITU Secretariat (in August). The KCC also demonstrated and promoted technologies and services of five major broadcasting and telecommunications services (WiBro, DMB, IPTV, broadband and broadcasting contents) by setting up the Korea Promotion Hall at ITU Telecom World 2011 held in Geneva, Switzerland from October 24 to 27, 2011.

In addition, the KCC successfully held meetings in 2011 as the host state of the APT General Assembly and Management Committee meetings. The KCC participated in policy discussions on information and communications technologies in the Asia and Pacific region by attending the APEC ICT Working Group (March and September 2011), Korea-ASEAN Telecommunications Ministerial Meeting (January and December 2011), and the UN ESCAP General Assembly (May 2011). Based on decisions made at the 2009 APT Management Committee, the 12th APT General Assembly and 35th Management Committee meetings was held in Jeju-do from November 14 to 24, 2011, which was attended by 298 ICT representatives including Ministers and Vice Ministers from 35 members and 2 associate members. Young-Kyu Noh, former Assistant Chairman of the Planning and Coordination Office of the KCC was recommended by Korea as the President

candidate at the APT General Assembly, and was unanimously elected to serve as chair. Presided by President Young-Kyu Noh, the member states adopted the strategic plans for the next three years after reviewing the past three-year APT activities. Readjustments of the unit amount of member contributions and amendment of the APT regulations were also conducted. The 12th APT General Assembly appointed the APT Secretary General and Deputy Secretary General, while also adopting

‘Fellowship Guidelines’ for promoting participation by developing countries in the Management Committee. In addition, through bilateral meetings with the Laos Post and Telecommunications Minister and Nepal Information and Telecommunications Minister, the KCC Chairman discussed ways to solidify cooperative relations in IT fields and to advance into telecommunications development fields.

<Figure IV-6> Attendees to 12th APT General Assembly and 35th Management Committee



Annual Korea-ASEAN Telecommunications Minister Meetings were held twice in 2011. Through the 5th and 6th Korea-ASEAN Telecommunications Minister Meetings, the KCC tried to promote cooperation for the use of infrastructure, for diffusion of new technologies and services, for developing capabilities and for sharing knowledge by adopting ‘Korea-ASEAN ICT Partnership Cooperation Projects’ that are being

implemented from 2012 to 2016, while contributing to the establishment of ICT master plans for jointly promoting the ASEAN community by 2015.

The KCC made efforts to actively contribute to APEC TEL activities for implementing APEC projects while enhancing the national position by promoting Korea’s advanced ICT policies by participating in the 43rd and 44th APEC TEL working groups. By doing so, the

KCC achieved such results of extending the period of the project for preventing adverse effects of ICT and successfully completed APEC seminars on cyber security while widely securing the attention of APEC member entities by introducing Korea's policies on next-generation networks, green ICT policies, and foreign trade policies related to ICT.

Meanwhile, Korea was re-elected unanimously to a two-year term executive director state at the 10th Annual General Assembly of the 2011 Asia-Pacific Institute for Broadcasting Development (AIBD) held in Ulaanbaatar, Mongolia from July 25 to 28, subsequent to the election for the 2009~2011 term. The KCC secured a foundation for increasing overseas advancement while strengthening Korea's position in the Asia and Pacific region by inviting expert personnel to training programs and supporting broadcasting facilities to other AIBD member states by surveying their demand.

### 3) Enhancement of international ICT development index

The KCC made efforts for improving the regulatory environment of broadcasting and telecommunications services and promoting policies for upgrading infrastructures. As a result, Korea placed No. 1 among 152 surveyed countries in the ICT Development Index (IDI) ranking published by ITU on September 15, 2011. The ICT Development Index consists of three parts including accessibility to, usage of and capabilities of ICT. Korea ranked No. 1 in usage, showing the degree of ICT utilization. Korea also showed high results in capabilities (2nd) and accessibility (10th) as well. Korea recorded top best ranks in specific indexes, including the number of households with access to internet service (No. 1), subscribers to wireless broadband service (No. 1) and subscribers to wired broadband service (No. 4).

<Table IV- 11> 2011 Korea's Ranking of Segment Indicators of ITU ICT Development Index (IDI)

Sectors	Segment indicators	Ranking of indicators
ICT accessibility (10th)	① Number of wire telephone lines per 100 persons	4
	② Number of mobile phone subscribers per 100 persons	67
	③ Internet users vs. International Internet bandwidth	70
	④ Ratio of households with computer(s)	17
	⑤ Ratio of households with access to Internet	1
ICT usage (1st)	⑥ Number of Internet subscribers per 100 persons	10
	⑦ Number of fixed broadband subscribers per 100 persons	4
	⑧ Number of wireless broadband subscribers per 100 persons	1
ICT capability (2nd)	⑨ Total ratio of attendance to junior high schools	35
	⑩ Total ratio of attendance to senior high schools	2
	⑪ Ratio of adult literacy	18

#### 4) Increased global cooperation among governments

The KCC held ‘The 7th World Information and Communications Summit’ with ministers and vice ministers from 19 countries at COEX, Seoul on May 11, 2011 to provide opportunities for Korean broadcasting and telecommunications businesses to advance into the overseas market while strengthening international cooperation in broadcasting and telecommunications services and jointly seeking future development directions of the

broadcasting and telecommunications industries with world leaders. In this connection, the International Broadcasting and Telecommunications Conference was also held from May 11 to 12 and the World IT Show from May 11 to 14. Under the theme of ‘Smart Society and Mobile Revolution’, the Ministers Meeting reached a consensus on solidifying the international cooperation system for mobile revolution in preparation for a smart society while discussing policies and visions of participating countries.

<Table IV- 12> Performance of Holding International Broadcasting and Telecommunications Conferences

Year	2008	2009	2010	2011
Event name	Korea Communications Conference 2008	Korea Communications Conference 2009	Korea Communications Conference 2010	Korea Communications Conference 2011
Hosted by	Korea Communications Commission	Korea Communications Commission	Korea Communications Commission	Korea Communications Commission
Sponsored by	Korea Radio Service Promotion Association	KISA (formerly KICA)	KISA	KAIT
Format	Link with World Information and Communications Summit	Held in connection World Information and Communications Summit and World IT Shows (Exhibitions)	Held together with G20 Summit Conference	Held in connection with World Information and Communications Summit and World IT Shows (Exhibitions)
Discussed topics	Realization of convergence · Integrated approach to infrastructure and technical services, contents and themes	Analysis of media convergence age trends and presentation of future business directions and visions	Digital Future of Smart Society	Smart Big Bang ; New Opportunities
Scale				
Number of sessions	11	12	15	10
Attendees	2,023 persons	2,209 persons	2,200 persons	1,441 persons
Satisfaction by attendees	83%	90%	90%	91%

In addition, the 6th KANZ Broadband Summit, Korea-Australia-New Zealand ministerial meeting was held in Hobart,

Australia from April 27 to 29. During the meeting, the KCC held seminars on broadcasting and telecommunications services

and a road show for promoting strategic items to representatives from various countries who participated in the meeting held under the theme of Digital Future.

<Figure IV-7> The 6th KANZ Broadband Summit



Further, the KCC successfully strengthened cooperation in Korea-ASEAN ICT fields and generated a foundation for Korean businesses to advance into Southeast Asian markets through ASEAN TELMIN held in Malaysia. At the CJK Minister Meeting held together with ASEAN TELMIN, See-joong Choi, the KCC Chairman, Si Gwo Hwa, Vice Minister of the Industry and Information Technology, China, and Yamakawa Tetso, Vice Minister of General Affairs, Japan had in-depth discussions on new cooperation areas, including an amendment to the cooperation agreement. Reorganizing the existing eight working groups, they defined six cooperation areas that are operated through a working-level consultative body that oversees all of them.

Further, Korea requested cooperation with

Cloud Service and a joint response to early market occupation by global enterprises, and also proposed inter-government cooperation for existing standardization efforts by the private sector through international conferences and forums.

### 5) Joint overseas production of broadcasting programs

To promote international exchange of Korean broadcasting services and diversify broadcasting programs based on international agreements on cooperation for broadcasting, the KCC supported joint overseas production of four broadcasting programs by four companies in 2011 (“Land of Life Cambodia”, “Europe where Jazz flows, Looking for Yunseon Nah”, “Ginseng Road”, and “Dancing in Asia”).

In so doing, the KCC sought diversification of programs and target countries, improvement of the overseas marketing structure of Korean broadcasting programs, and enhancement of their quality through joint overseas production. Meanwhile, Korea’s joint overseas production of broadcasting programs will be diversified as it is able to jointly produce broadcasting programs with a total of 33 countries, including 27 EU countries, and as Korea-EU FTA went into force on July 1, 2011, four EFTA countries and Singapore, and Cambodia in 2012.

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## 6) Increased cooperative activities with international organizations

The KCC held regional forums for strengthening the ICT workforce in the Asia and Pacific region and regional workshops on information protection and privacy with APCICT, the ICT education institute under the UN. The KCC also paid contributions for the development of broadcasting and telecommunication service workforces in developing countries. Further, the KCC continued consultation with the World Bank from April to December this year to prepare a foundation for overseas advancement by Korean businesses through support to broadcasting and telecommunications service technologies and policies and counseling on information protection in developing countries in cooperation with the World Bank.

In April, the KCC held an expert conference to support the development of new ICT strategies by the World Bank and the ‘Information Protection Workshop in Bangladesh’ in May. In July, the KCC held the ‘Workshop for Introducing Broadband and Promoting e-Government in Morocco’ and provided consulting to government

departments. In November, the KCC held the ‘Workshop for Introducing Broadband and Enhancing Perception of Information Protection in Georgia’, and in December held the ‘Workshop for Broadband and Information Protection in Albania’.

The KCC also promoted cooperation programs with the ITU, including the preparation of roadmaps for diffusing wireless broadband service in developing countries, and workshops and counseling programs to eliminate gaps in standardization. In 2011, the KCC concluded an agreement with the ITU Development Division for promoting cooperative programs for ‘Supporting Development of Comprehensive Wireless Broadband Plans in Africa’. In the standardization areas, the KCC steadily performed cooperation programs with the ITU, including consulting to the Pacific Islands Telecommunications Association (PITA) on standardization to eliminate standardization gaps in developing countries, workshops to eliminate standardization gaps, and questionnaire surveys in developing countries to develop standardization capability measurement indexes.

&lt;Figure IV- 8&gt; Cooperation Programs with International Organizations

Cooperation Programs with World Bank



UN-APCICT Regional Forum



### 7) Eurasia Information Network Cooperation Center opened

As result of continuous efforts, the KCC hosted together with various government ministries, the ‘ASEM Summit Meeting’ in October 2010, which officially approved the KCC to establish a cooperation center in Korea to operate and manage the ‘4th TEIN (Trans-Eurasia Information Network) Cooperation Programs’. Following the official approval in 2010, draft articles of incorporation were adopted by the TEIN3 Technical Committee in Hong Kong in February 2011. The KCC registered and opened the TEIN Cooperation Center Incorporated in August. The Center staffs were hired and Seoul was finally selected for the Center location through an open invitation to local autonomous governments for inducement of the TEIN Cooperation Center.

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

### 1) FTA negotiations

Korea has implemented a strategy of promoting FTA with multiple parties at the same time. A total of eight agreements have been concluded, including the Korea-Chile FTA signed in April 2004. Seven agreements have been enforced and one is waiting for enforcement after being ratified by the National Assembly. Seven other agreements are under negotiation.

To review progress in 2001, the Korea-USA FTA was ratified by the National Assembly in November following re-translation of the agreement texts concerning broadcasting and telecommunications services, re-analysis of economic effects, and promotion of support measures for National Assembly ratification. It is expected that the Korea-USA FTA will go

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into force at the end of March 2012 as its performance issues are under consultation. The Korea-EU FTA went into force provisionally in July following re-translation of the agreement texts and promotion of support measures for National Assembly ratification. The Korea-Peru FTA went into force in August following promotion of support measures for National Assembly ratification. Korea and Australia have so far had FTA negotiations on five occasions. The 6th negotiation is expected to be held in the first half of 2012. Korea and Turkey have so far had FTA negotiations on three occasions. The 4th negotiation is expected to be held in the first half of 2012. Korea and Columbia have so far had FTA negotiations on five occasions. It is expected the two countries will conclude the agreement within 2012.

## 2) WTO negotiations

It is difficult to reach agreement as the WTO Doha Development Agenda (DDA) negotiations are prolonged by its multilateralism principle. The KCC has induced market opening by the target countries by stating Korea's position through the steady monitoring of trends in WTO negotiations and active response to negotiations.

Achievements in 2011 may be summarized as follows: No agreement was reached though Korea participated in negotiations on four occasions in February, June, September and

November, including 'Accession Negotiations', 'ICT Service Trade Principles', 'International Mobile Roaming Rates' and 'Classification System of Telecommunications and Audio-Visual Services'.

Meanwhile, the WTO Secretariat holds review meetings of the Trade Policy Review (TPR) that it periodically prepares depending on the economic size of member states. In the case of Korea, review meetings are held every four years. A review meeting on Korea will be held in 2012. The KCC has actively cooperated with the WTO by faithfully submitting information related to the report preparation in August 2011. The KCC plans to proactively prevent any trade issues by exercising care to have negative information excluded from the report with sufficient explanation on Korea's policies on broadcasting and telecommunications services.

## 3) Consultation on pending trade issues

The KCC explained Korea's position concerning the 'Amendment to the 「Radio Waves Act」', 'Roles of TTA', 'Certification Marks on Broadcasting and Telecommunications Equipment and Supplies', and 'Electrical Safety Tests and Certification' which were raised by the USA in connection with consultation on pending trade issues between Korea and the USA. The KCC also explained Korea's position concerning 'CAS Standardization' and 'EMC related systems'

which were raised by the EU in March and June in preparation for Korea-EU joint committee negotiations.

## D. Increase of Programs for Supporting Developing Countries

### 1) Training of personnel invited from developing countries on broadcasting and telecommunications services

The training of personnel invited from developing countries has marked its 14th year in 2011 starting with the project of training government officials from developing countries belonging to APT in 1998. In 2011, the KCC invited 439 students from 85

countries for 21 training courses it operated, including ones on mobile telecommunications, broadband and digital convergence.

The KCC held local alumni meetings for strengthening networking among those who participated in training (Laos in March and Philippines in April 2011). The KCC also carried out diverse programs for enhancing results of the invitee training programs, including publication of quarterly Webzines. Further, the KCC strengthened functions of managing the trainee database through revision of the Website for invitee training programs so that it could be utilized for overseas advancement by local businesses and inter-government exchange.

<Table IV- 13> Performance of Research Programs for Invited Personnel

Year	2008	2009	2010	2011	Total
Number of countries	74	48	74	85	138
Number of courses	27	23	21	21	273
Number of students	415	339	450	439	4,037
Budget amount in million won	4,000	2,900	2,900	2,450	

### 2) Support of broadcasting equipment to developing countries

The KCC enhanced international exchange and cooperation in broadcasting by donating broadcasting equipment to those developing countries that have signed the FTA or an MOU on cooperation in broadcasting with Korea since 2007. The KCC also provided broadcasting equipment in order to enhance the international influence of Korea's Overseas

Development Assistance programs through humanitarian support of locally produced broadcasting equipment. In the first half of 2011, the KCC donated and deployed antenna systems for disaster broadcasting service in Tonga. A disaster radio broadcasting system is now available throughout the country to provide alerts on earthquakes, volcano eruptions or tsunami. In the latter half, the KCC contributed to the improvement of

broadcasting production conditions in Myanmar by delivering broadcasting equipment to the country, including cameras, encoders, converters and editing equipment.

### 3) Consultation on broadcasting and telecommunications services policies and cooperation programs in developing countries

The KCC provided developing countries with policy consultations customized to beneficiary countries based on the analysis of their broadcasting and telecommunications service status and Korea's experience in developing broadcasting and telecommunications service policies. In particular, the KCC has helped devise development roadmaps or master plans of broadcasting and telecommunication services for beneficiary countries that are suitable to the local environment, by means of analyzing their situation through expert consultation taken place onsite or in Korea where policy makers from these countries were invited on two or three occasions. In order to give actual support in their performance processes, the KCC also carried out programs dispatching experts on a mid-or long-term basis to provide ongoing onsite consultation to the beneficiary governments by dispatching experts of concerned fields for approximately four months.

In 2011, the KCC provided policy consultation to Cambodia on radio frequency

administration, to Uruguay on digital convergence, and to Myanmar on information protection under its program of policy consultation to developing countries. In addition, the KCC dispatched experts to Laos for local consultation on mobile broadband policies, to Ecuador on information security, and Serbia on policies for development of telecommunications infrastructure under its program of dispatching experts of broadcasting and telecommunications services. In particular, the KCC was able to attain such achievements by dispatching experts of information security to Ecuador in 2011 and exporting radio frequency equipment to Laos by Korean businesses as follow-up cooperation of the policy consultation it performed for the two countries in 2010. Such programs for policy consultation and cooperation that supported the development of broadcasting and telecommunications services in developing countries enhanced Korea's position as a leading country in broadcasting and telecommunications.

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

### 1) Project status

The KCC promoted projects for exchange between South and North Korea in broadcasting service fields, including the

‘Gathering for Introducing Broadcasting Programs of South and North Korea’ (in Pyongyang in 2003, at Keumgangsan in 2005), ‘Joint Production of Broadcasting Programs by South and North Korea’ (11 cases from 2005 to 2007), and ‘Support to Relay Broadcasting of International Sports Games by North Korea’ (four times from 2003 to 2006). The KCC also promoted projects for exchange between South and North Korea in telecommunications service fields, including the ‘Provision of Wired Telephone Service in the Keumgangsan region (from November 1998) and at Kaeseong Industrial Park (from December 2005)’, ‘Support for Video Meetings between Families Scattered in South and North Korea (total 557 families from 2005 to 2007)’, ‘South and North Korea IT Academic Events (twice from 2006 to 2007)’ and ‘Education of North Korean IT Personnel (100 persons, three times in 2006).’

However, the direct exchange programs between the two Koreas have stopped because of strained South and North relations. The KCC is studying and exploring cooperation programs between the two Koreas that are possible first through activities by the South-North Korea Broadcasting and Telecommunications Exchange Committee. When the South and North relations improve, the KCC plans to actively promote exchange or cooperation programs based on the outcome of such study or exploration.

## 2) Organization and operation of South and North Korea Broadcasting and Telecommunications Committee

The KCC organized and operated the South and North Korea Broadcasting and Telecommunications Committee in June 2001 to enhance understanding and to form a social and cultural community between South and North Korea. As the 「Framework Act on Broadcasting Communications Development」 went into force in January 2011, the KCC increased the number of members of the South and North Korea Broadcasting and Telecommunications Exchange Promotion Committee by reorganizing the Committee in May 2011.

The KCC held the Exchange Promotion Committee meetings once each quarter (total four times) in 2011 to study and explore programs that are more likely to be realized when the South and North relations improve, through public presentations and discussions, including ‘South and North Exchange Status and Promotion Direction’, ‘Ways for Deploying Mid-and Long-term Telecommunications Infrastructure in North Korea’, and ‘Plans for Promotion of Broadcasting and Telecommunications Exchange between South and North Korea’.

## 3) Operation of South and North Broadcasting and Telecommunications Forum

The KCC held forums comprised with

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experts from industries, government, universities and research institutes once each quarter (total four times). The forum meetings discussed the status of South and North relations and the outcome of research concerning the forecast of exchange and cooperation in broadcasting and telecommunications services on such themes as those on the status and prospect of short-wave broadcasting toward North Korea and the status of accommodation of external media by North Korean residents.

#### 4) Holding South and North Broadcasting and Telecommunications Workshops

The KCC had originally planned to hold the ‘Academic Event on South and North Broadcasting and Telecommunications Exchange and Cooperation’ with North Korean government officials related to broadcasting and telecommunications services, South Korean experts, and academic organizations. However, the KCC held the ‘South and North Broadcasting and Telecommunications Workshop’ participated by South Koreans only in December, as North Koreans were unable to participate. The workshop enhanced the participants’ understanding of Korea’s security status through a tour of DMZ security fields and seminars that discussed the ‘Status and Future Tasks of North Korean Telecommunications Services’ and the ‘Status and Future Tasks of North Korean Broadcasting Services’.

#### 5) Policy Research on South and North Broadcasting and Telecommunications Exchange and Cooperation

The KCC organized the ‘North Korea Telecommunications Network Research Society’ and performed research on a ‘Mid- and Long-term Plan to Deploy Telecommunications Infrastructure in North Korea’ through the Korea Information Society Development Institute. The research will be highly useful in developing future policies on telecommunications exchange and cooperation between South and North Korea as it presents efficient ways to integrate telecommunications infrastructure between the two countries. Further, the KCC had the Korean Society for Journalism & Communication Studies (KSJCS) conduct research on the ‘Status of Use of Broadcasting and Telecommunications Services by Residents in North Korea’ through interviews and questionnaire surveys of those who defected from North Korea and settled in South Korea.

#### F. Promotion of Strengthening Infrastructure for International Cooperation in Broadcasting and Telecommunications Services

##### 1) Project status

The KCC supported cooperation activities and private-sector cooperation using such activities for overseas advancement of

broadcasting and telecommunications services, including exploration of a cooperation agenda through interviews with high-ranking officials of key countries in different regions and international conferences, promotion of cooperation programs, and exchange of key policies. In 2011, the Chairman and executive members of the KCC visited 17 countries on 12 occasions. They supported the promotion of Korean broadcasting and telecommunications service technologies, overseas advancement of Korean businesses and exploration of new markets for broadcasting contents through multilateral cooperation agreements, bilateral talks, and interviews with high-ranking government officials and CEOs of key enterprises.

### 2) Attendance at CES 2011 and visits to global broadcasting and telecommunications enterprises

The KCC surveyed the trends of broadcasting and telecommunications convergence service technologies in 2011 by attending the CES (Consumer Electronics Show) 2011. The KCC also sought domestic countermeasures by visiting world-leading media groups for discussion on development strategies of media industries in response to the age of broadcasting and telecommunications convergence services. The KCC delegation discussed ways to increase overseas

advancement of Korean contents while surveying the latest trends of media and contents industries in America by attending the CES exhibition, holding discussion meetings with Korean businesses that participated in the exhibition, and visiting Korean broadcasting and telecommunications businesses that have advanced into Silicon Valley, including Dream Works and CJ America.

### 3) Attendance at Mobile World Congress (MWC) 2011 and holding discussion meetings

The KCC sought Korea's policy directions while inspecting trends of the development of broadcasting and telecommunications service technologies in 2011 by attending the MWC 2011 that was held in February 2011 and holding discussion meetings together with members of the Committee on Culture, Sports, Tourism, Broadcasting and Telecommunications. The delegation attended pilot demonstrations of LTE services and video information conversion solutions, as well as seeking ways to promote future cooperation through interviews with businesses that participated in the MWC and officers of Telefonica, Spain. The delegation also discussed issues requested by participating businesses for inter-government cooperation and ways to develop telecommunications services through discussion meetings.

#### 4) Attendance to NAB 2011 and operating Korea promotion hall

The KCC promoted the superiority of Korea's broadcasting and telecommunications services and supported overseas advancement of Korean businesses by participating in the NAB (National Association Broadcasters) Show 2011 held in April 2011. The KCC introduced the status and policy directions of Korea's broadcasting and telecommunications service industries by operating the Korea Promotion Hall and holding the 'Korea Day Conference' during the Show. The KCC surveyed the trends of future broadcasting and telecommunications services and discussed ways to increase mutual cooperation by attending the NAB Show and by interviews with representatives from broadcasting and telecommunications service institutions.

<Figure IV-9> NAB Korea Day Conference



#### 5) Promotion of cooperation with the USA in broadcasting and telecommunications services

The KCC dispatched a delegation to the USA, the hub of world ICT developments, in order to collect reference data and information for developing Korea's ICT strategies. By visiting Google and Microsoft that lead the rapidly changing smart mobile age, the delegation was able to survey the USA ICT industry trends and US government's future strategies.

The delegation discussed future policy directions of broadcasting and telecommunications services and ways for mutual cooperation, including policies for Cloud and Internet services through the Policy Round Table with the US FCC. The delegation also surveyed the latest trends of broadcasting and telecommunications services and technologies, such as smart TV and privacy protection, and advertising and operational strategies of global businesses by visiting global media and internet businesses, including Time Warner, Google and e-Bay.

Further, the KCC published a report book and separate annex booklets titled 'Discovering the future of Korean broadcasting and telecommunications services' (subtitle: From Bell Lab to Silicon Valley) that contain reference data surveyed in advance and the outcome of the tour of US institutions and businesses.

<Figure IV-10> Interview with Key ICT Businesses in USA

Google



Microsoft



## 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 the process of streamlining regulations over ownership and management of multiple broadcasting service businesses, the KCC adopted a basic direction of preparing conditions for small and medium broadcasting service providers to secure competitiveness and expertise in the broadcasting market while aggressively abolishing redundant regulations when complementary institutional means are available to generate an environment for fair competition.

As the result of having collected opinions from academia, policy experts and stakeholders, the application of horizontal regulations by the market of broadcasting platforms and contents emerged as priority improvement measures as well as minimization of preemptive rigid regulations over market entry. Accordingly, the KCC decided to promote institutional improvement in the

direction of introducing active individual retroactive regulations, including the approval of change of the largest capital investor of a system operator and acts prohibited of broadcasting service providers, while minimizing regulations over vertical integration. Further, the KCC decided to aggressively abolish less practical regulations by reviewing if the intent at the time when certain regulations were introduced is still appropriate under current circumstances.

The KCC plans to gradually implement these improvement measures by reflecting them on the new amendment proposed to the 「Enforcement Decree of the Broadcasting Act」, an amendment to the Act, and the Integrated Broadcasting Act. First, the KCC held a public hearing to collect information on the current market conditions by broadcasting service providers and opinions on the necessity for improvement of the regulations over ownership and management of multiple services in May and June 2011. Through the public hearing, it was shown that additional complementary considerations are required for the uniqueness of broadcasting services in terms of market conditions rather than a simple shift into a horizontal regulation system.

In the latter half of 2011, the KCC made

preparations to draft the final plans for improving the regulation over ownership and management of multiple broadcasting services reflecting the outcome of the public hearing. Based on the draft plans, the KCC plans to have the 「Enforcement Decree of the Broadcasting Act」 amended within 2012.

## B. Broadcasting Market Competition Assessment

As the competition in the broadcasting market has been intensified by the active growth of broadcasting and telecommunications convergence services, the KCC assessed the competition in the broadcasting market from 2010 as part of its efforts to secure rationality of the competition and regulation policies related to the broadcasting market.

In the ‘2010 assessment of competition in the broadcasting market’ performed in 2011, the competition status was assessed by dividing the broadcasting market inclusive of IPTV into four major unit markets: ▶ ‘Subscriber securing market’ where purchasable broadcasting platform service operators (system operators, satellite broadcasters) recruit viewers, ▶ ‘Broadcasting Channel Transaction Market’ where terrestrial broadcasters and program providers sell their channels to purchasable broadcasting service providers, ▶ ‘Broadcasting program transaction market’ where outsourced producers produce

broadcasting programs to terrestrial broadcasters, and the ‘Broadcasting advertisement market’ where broadcasting service providers sell advertisement time to advertisers.

The assessment revealed that the No. 1 system operator in the purchasable broadcasting service subscriber securing the market occupies more than 50% of subscribers in 66 (70 in 2009) out of 77 broadcasting service zones. It also revealed that the subscriber ratio of satellite and competitive service operators is steadily growing.

It was assessed that the related regulation system needs be improved, as the viewers will ultimately suffer damages if market functions fail to operate properly because of high concentration in both supply (three terrestrial broadcasters) and demand (purchasable broadcasting platform) in the market of terrestrial broadcasting channel re-transmission services.

In the secondary program market of terrestrial broadcasting services, it appears possible for competition to be restricted as the majority of rebroadcast programs of terrestrial broadcasting services are supplied to the subsidiary program providers of the three terrestrial broadcasters. It was revealed that the system must be improved so that the market control of the three terrestrial broadcasters may not spread to the advertisement market.

The KCC published the competition

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assessment outcome on its website. The KCC analyzed that the key competition related issues, to be treated in the ‘2011 assessment of competition in the broadcasting market’ to be performed in 2012, will be ►entry into the general service channel operator market, ►promotion of new types of broadcasting services, and ►assessment of market influence of broadcasting and telecommunications combined products.

### C. Development of Systems for Surveying and Verifying Market Share

To generate an environment suitable to the development of concerned industries while adapting to changes in the media environment, the KCC mitigated the provisions limiting ownership of broadcasting service providers and partially allowed some daily newspaper companies to start broadcasting services through an amendment to the 「Broadcasting Act」 in July 2009. Further, in order to prevent any possible by-effects of the amendment, legal grounds were provided for organization and operation of the ‘Media Diversity Committee’, and regulations limited viewing share ratios.

In order to enhance reliability and quality of the share of audience of the broadcasting service providers in 2011, the survey target panels increased from 3,000 households in

2010 to 3,250 or more in 2011. The minimum analysis unit for the share of audience was reduced from one minute to 30 seconds.

To ensure a share of audience survey appropriate to the environment of multimedia and digital broadcasting services, the KCC improved the quality of survey results through a systematic monitoring of overall survey processes while performing a pilot share of audience survey of mobile media services.

According to the ‘2010 Outcome of Share of Audience Computing of Broadcasting service providers’ published by the KCC in July 2011, Korea Broadcasting System (KBS) share of audience turned out to be 36.2% but it is not subject to the limit of audience share (30%) since it is fully invested by the government. No other operators exceeded the limit of audience share.

On the other hand, the 「Broadcasting Act」 provides that the ‘Inter-media aggregate influence index’ should be developed by the end of 2012 to measure the influence of broadcasting service providers in diverse media markets in an integrated manner.

As certain foreign countries have attempted this index, the KCC examined models for computing the index through empirical surveys by the ‘Media Diversity Committee’, including a questionnaire survey of newspaper and broadcasting experts and general public concerning the media attributes and service patterns. Further, the KCC conducted in-depth

discussions for developing the index by collecting opinions after publishing the outcome of research concerning segment indexes that constitute the inter-media aggregate influence index, including the scope of media types subject to its measurement, index of audience or user share by media, and weighted inter-media index computing models, through workshops, expert forums and seminars.

In such processes, the KCC prepared a foundation for a global cooperation system by sharing the local audience share regulation system and the status of development of the inter-media aggregate influence index while surveying the current audience share regulation in Germany by visiting KEK (Kommission zur Ermittlung der Konzentration im Medienbereich) in July 2011.

#### D. Improvement of System for Broadcasting Program Organization and Assessment

##### 1) Improvement of regulation on program organization with Korea-EU and Korea- USA FTA signed

As the Korea-EU and Korea-USA FTA were signed, the KCC reorganized various regulations on broadcasting program organization in order to establish global standards in broadcasting services.

First, based on the Korea-EU FTA

agreements, the KCC decided that programs jointly produced under the Korea-EU joint production agreements are to be treated as locally produced programs. Further, the KCC also softened the ratio of how one foreign country's programs are organized and the ratio of organization of locally produced films and animation programs broadcast by cable system operators, satellite broadcasters, and program providers according to the Korea-US FTA agreements.

##### 2) Reorganization of standards for distinguishing locally or foreign produced programs

The KCC reorganized the standards for treating broadcasting programs as locally produced, and for distinguishing films and animation programs produced by one foreign country.

According to new standards, programs that are jointly planned and produced with a foreign country are treated as locally produced programs if the local capital investment ratio is 30% or higher based on investment fund sources and the programs win 60% or more (14 points) of the total aggregate scores (22 points) of planning and production element scores.

Further, a new standard was provided for determining the nationality of films or animation programs whose production multiple countries participated in. According to new standards, a program is determined to have

been produced in a country that wins three or more points out of a total of five points for its scenario (1 point), director(1 point), producer (2 points) and hero/character (1 point). The nationality of a program that has been jointly produced by two or more countries is determined based on the nationality of its producer.

In addition, the standard was improved for recognition as locally produced animation programs. According to the amendment, an animation program is determined to have been produced locally if it wins a total of 16 points or more (out of 30 total points) for its planning and production elements while its domestic capital investment ratio is 30% or more.

### 3) Partial amendment to regulations on broadcasting assessment

The KCC reorganized the system for the assessment of broadcasting services by partially amending the Regulations on Broadcasting Assessment, including the provision of standards for the assessment of broadcasting services by new service operators, addition of the assessment item ‘Efforts for Switching to Digital’ to existing assessment items, and provision of standards for ‘Investment in Certified Products’.

First, the amendment newly introduced assessment standards and allocated scores by item in order to assess programs broadcast starting in 2012 by new general broadcasting

program providers. Scores for the assessment of general service programs were allocated as follows: 210 points for contents, 215 points for organization, and 275 points for operation areas (300 points respectively for terrestrial broadcasting).

Meanwhile, to expedite seamless switching to digital broadcasting, a new assessment item of ‘Efforts for Switching to Digital’ was newly inserted and scores were raised differentially depending on service areas. Under the amendment, an additional 100 points were allocated to terrestrial TV service operators (from a total of 900 to 1,000 points) whereas an additional 50 points were allocated to general broadcasting program providers and satellite broadcasters(from a total of 500 to 550 points). It was decided that the new assessment items would be implemented within a given period only-by 2013 for terrestrial TV services and by 2015 for system operators and satellite broadcasters.

Further, the amendment provided standards for ‘Investment in Certified Products’. The assessment item for ‘Investment in Certified Products’ was newly added to assessment items for ‘Efforts for Broadcasting Development/Investment in Broadcasting Technologies,’ under existing operation areas. Five points were allocated to terrestrial TV services and 2/3 of the scores for terrestrial TV services were allocated to other media.

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## 2. Enhancement of Global Competitiveness of Broadcasting and Telecommunications Contents

### A. Support to Foundation for Production of Broadcasting Contents

The KCC made efforts to generate infrastructure for producing quality contents and to enhance competitiveness of contents by deploying a stable infrastructure for production by broadcasting contents developers while actively implementing statutes and policies related to broadcasting and telecommunications contents that were specifically provided under the Measures for Strengthening Industrial Competitiveness of Broadcasting and Telecommunications Contents developed in June 2009 and the Enforcement Decree of the 「Framework Act on Broadcasting Communications Development」 enacted in December 2010. To that end, the KCC promoted the founding of the Support Center for Digital Broadcasting Content and implemented policies for support to contents production.

First, the KCC also 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 of broadcasting contents.

In January 2011, the KCC developed and implemented the ‘Plans for Deploying Broadcasting Infrastructure (Equipment)’ for strengthening links between building and broadcasting equipment construction projects and optimizing broadcasting infrastructure. In February, the KCC selected Daewoo Construction as a turnkey builder of the Support Center. In March, the fast track portion was contracted, and in May, a groundbreaking ceremony was held. In July, a bid notice was published for the project of deploying broadcasting infrastructure. In September, a bidder was selected for priority negotiation. In November and December, the construction design qualification was reviewed and the main construction contract was signed.

Second, the KCC supported the production of quality documentary films, two-way contents, 3D contents and public or public service contents to strengthen the competitiveness of broadcasting contents and to secure diversity. The KCC also attempted to enhance industrial competitiveness of the contents industry and to secure diversity of broadcasting by supporting the production of contents. The KCC induced production of experimental dramas by supporting the production of one-act dramas and contributed to the development of new writers, actors and directors. The KCC also enhanced external competitiveness of contents while strengthening local capabilities for producing contents by supporting

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production of 3D, two-way and other next-generation contents.

Further, the 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. The 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.

## **B. Development of Expert Personnel of Broadcasting and Telecommunications Industries**

In January 2011, the 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 programs include those on common education for such new technologies as smart media and 3D 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.

Based on such programs, the KCC conducted expert education customized to students by developing curricula of courses required for field work and appointing agencies entrusted with the training programs by job category through open recruitment in February 2011. The Korea Producer Education Institute was appointed for producer training, the Korean TV & Radio Writers Association for education of writers, the Korea Broadcasting Reporters Association for education of reporters, and the Korea Broadcasters Association and Korea Cable Engineers Association for education of engineers. The KCC also conducted common education courses essential to the production of broadcasting contents for those who already serve broadcasting services, including planning and marketing of contents, production of 3D images, and post production of smart TV programs.

The KCC contributed to the enhancement of capabilities of the current broadcasting workers for producing broadcasting contents with common courses on new broadcasting technologies and advanced expert education specialized by job category. As the demand for development rapidly grows along with popular use of smartphones, the KCC trained advanced expert personnel for broadcasting and

telecommunications services by developing experts for next-generation mobile services and future growth engine convergence technology areas. By 2011, the KCC trained 2,425 persons for the production of broadcasting contents, exceeding the target of 2,110 by 115%. Further, it provided expert education to small business personnel or other reserve workforce by developing advanced education curricula for such future services as M2M communications, smart TV, future mobile communications and 4G broadcasting. By doing so, the KCC trained 1,160 experts for broadcasting and telecommunications convergent services, exceeding the target of 950 by 122%.

Meanwhile, the KCC promoted the ‘development of experts for broadcasting and telecommunications convergent services’ to train post doctorate or Ph.D. level advanced personnel who will perform exploration of service models and research policies related to broadcasting and telecommunications convergent services while leading the development of broadcasting and telecommunications industries. The KCC contributed to the development of an advanced workforce by supporting the education of post doctorate or Ph.D. level advanced personnel through the Communication Policy Research Center (CPRC) annexed to five graduate schools in the fields of radio frequency, broadcasting and convergent services.

### C. Enhancement of Market Vigor of Broadcasting and Telecommunications Contents

In 2011, the KCC promoted projects for founding the DDS (Digital Contents Distribution System) to reinvigorate the distribution market of broadcasting contents. This project is to install an online distribution system that can efficiently manage, promote and distribute broadcasting contents of program providers or other small-scale broadcasting contents service operators in the digital environment. Key project details promoted in 2011 include the deployment of a global platform, increase of storage devices, and strengthening of publicity and marketing through the Korea Cable TV Broadcasting Association.

To deploy a global platform, the Association developed an updated English-language site required for overseas advancement, improved user interface for enhancing user convenience of overseas service operators, and increased storage capacity along with the growth of digital video contents. The KCC promoted the DDS service through various meetings or consultative bodies inside the Korea Cable TV Broadcasting Association and promoted training by visiting its member companies in order to strengthen publicity. In addition, marketing the DDS Operation Committee was organized with working-level personnel of

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SOs, PPs, production, purchase and technologies of contents to perform such roles of supporting contents supply, information sharing and technical counseling.

To enhance market vigor through upgrading of the global competitiveness of broadcasting and telecommunications contents, the KCC promoted policies of ‘enhancing the image of a leading country of broadcasting and telecommunications services for diffusing new Korean culture’, ‘support to overseas distribution of broadcasting contents’, ‘holding show cases of broadcasting contents’ and ‘joint overseas production of broadcasting programs’. The KCC plans to operate investment funds specialized in mobile and broadcasting contents, seek taxation support for contents, standardize information of broadcasting program production and organization, and operate technical standards for the use of program information and distribution between terrestrial and purchasable broadcasting services.

In addition, the KCC plans to prepare policies for supporting the export of broadcasting contents in order to expand a global base for Korean culture and to expand the interoperation scope between local applications stores and WAC so that contents may be sold through stores of overseas mobile telecommunications service operators participating in WAC as well as stores belonging to local mobile telecommunications service

operators.

#### D. Improvement of Broadcasting Service System for Enhancing Capabilities of Outsourced Producers

The KCC improved the broadcasting service system for enhancing capabilities of outsourced producers.

First, the KCC provided an opportunity for outsourced producers equipped with production capabilities to grow by preparing certification standards considering the degree of element input for production broadcasting programs.

Second, the KCC partly reorganized criteria for computing outsource production cost to induce outsourced culture programs organized during main viewing hours and to enhance the self-help foundation of outsourced producers specialized in non-drama programs.

Third, the KCC promoted active production of broadcasting programs while increasing the self-help foundation of outsourced producers specialized in non-drama programs by helping organize a consultative body between broadcasting service providers and outsourced producers and concluding MOUs for sharing original sources. Further, the KCC protected outsourced producers by preventing default payments by steady monitoring the performance of ‘Payment Guarantee Insurance’ agreed upon by three broadcasting stations and drama producers.

### 3. Driving Media Industries by Growing Advertisement Market

#### A. Introduction of Competition and Enhancement of Efficiency of Broadcasting Advertisement Sales Market

The KCC promoted the introduction of a system for competition for broadcasting advertisements. The KCC actively supported legislation by the National Assembly. The KCC submitted its official position to the National Assembly by preparing comprehensive review opinions through collection of opinions from experts, researchers and stakeholders. Further, the KCC published its recommendations on trading of terrestrial broadcasting advertisements and operated the Broadcasting Advertisement Trading Support Center in order to stabilize the advertisement sales market during the transitory period before legislation.

#### B. Preparation of Means to Support Small or Medium Broadcasting Stations

The KCC promoted the preparation of support means for supporting small or medium religious or regional broadcasting stations whose advertisement sales is feared to decrease when competition is introduced into the broadcasting ad sales market.

In May and June 2011, the KCC held discussion meetings and public hearings on eight occasions to prepare a means for supporting small or medium broadcasting stations. In so doing, the KCC collected opinions from stakeholders and experts. In August 2011, the KCC promoted the preparation of reasonable support means by conducting policy research by external research institutions as to criteria for supporting small or medium broadcasting stations. Supports to small and medium broadcasting stations may be summarized into four segments: ① support of the radio rate of regional network broadcasting stations with requirements or conditions for media lab licensing, ② enactment of public notices supporting combined sales by small and medium broadcasting stations, ③ support to sales of self-advertisement by regional network broadcasting stations, ④ planned reduction of obligation for self-program organization by regional privately owned broadcasting stations, allowing assistance to production by broadcasting stations (in August 2011), and abatement of contribution by small or medium broadcasting stations to the fund.

#### C. Improvement of Regulation over Broadcasting Advertisement (Ad-Prohibited Items)

The KCC promoted the improvement of

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regulation over broadcasting advertisement-prohibited items, including allowing terrestrial TV advertisement of bottled spring water through steady consultation with the Ministry of Environment.

As the result, in December 2011, the Ministry of Environment amended the 「Enforcement Rules for the Act on Control of Potable Water」 that have so far prohibited terrestrial TV advertisement of spring water. Beginning in 2013, all broadcast advertisement of spring water is scheduled to be allowed in full scale.

#### D. Generation of Infrastructure for Smart Advertisement

The KCC performed programs to generate infrastructure for advertisement in the current smart media age. To be specific, the KCC prepared the ‘Strategy for Fostering the Growth of the Broadcast Advertising Industry in the Smart Media Age’ in the first half of 2011 and held the ‘Conference for Promoting Advertisement Market and Strategies for Fostering the Growth of the Broadcast Advertising Industry in the Smart Age’ jointly with industry, academia, research and government agencies.

Based on such strategies, the KCC reported to the President in December 2011 of its plans for generating smart ad ecosystem that contain pilot projects for promoting smart ad growth,

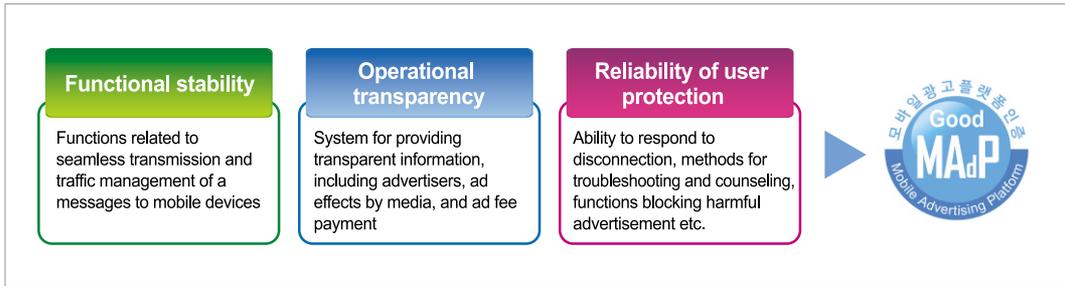
standardization, technology development and development of production facilities and personnel for digital advertisement. The KCC is currently under preparation for development plans of smart ads by sector along with a forecast of advertisement markets by 2015.

#### E. Generation of Infrastructure for Promoting Internet Advertisement Market

##### 1) Development support of new types of internet or mobile advertisement

To provide policy support for active exploration or development of next-generation internet or mobile advertisement business models, the KCC provided a total of five applicant companies including Ad & Tel and Bauhaus Communication, with an opportunity for such field tests as pilot services or measurements of effects of new types of advertisement models by deploying ‘Test Panels for Internet and Mobile Advertisement’ in October 2011. Further, the KCC and the Korea Onlinead Association jointly introduced the Mobile Advertising Platform (MAdP) Certification system in October 2011 in order to secure competitiveness of domestic mobile advertisement platforms while promoting sound growth of mobile advertisement. In December, they certified two platforms of ‘MMAN’ of Mezzo Media and ‘Real Click’ of D&A Soft for the first time.

<Figure IV-11> Criteria for Mobile ad Platform (MApP) Certification



## 2) Advancement of distribution structure or use environment for internet or mobile advertisement

The KCC held the ‘Internet and Mobile Ad Business Network’ and ‘Smart Ad & App Networking Day’ three times in 2011 to provide a win-win and communication forum among internet and mobile ad businesses. Further, the KCC published a guidebook on online advertisement law and institutions in order to jointly provide working-level executives with information on legal institutions with the Korea Onlinead Association in October 2011. The Guidebook analyzes and compiles domestic laws related to online advertisement and provides ► laws commonly applied to internet advertisement, ► laws for respective items of internet advertisement, ► provisions for review of Internet advertisement, and ► detailed rules for review of internet advertisement. Further, the KCC had the ‘Online Advertisement Information Provision Web Service’ published on the website of the Korea Onlinead Association

in November 2011 to provide information on amendments or other revisions to the relevant statutes.

## 4. Promotion of Switching to Digital Broadcasting

### A. Improvement of Environment for Receiving Digital Broadcasting Signals

#### 1) Deployment of environment for transmitting digital broadcasting signals

Thanks to steady inspection and encouragement by the KCC to ensure the terrestrial broadcasting stations complete their switch to digital transmission facilities at an early date, the backbone broadcasting stations completed 100%, auxiliary or secondary broadcasting stations 80.3% and HD production and transmission facilities 87.0% as of the end of 2011. Further, the KCC exerts to expedite digital switching of the transmission

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environment by steadily encouraging digital switching and production of HD programs by auxiliary or secondary broadcasting station.

## 2) Elimination of poor reception of digital broadcasting signals

The KCC promoted programs of eliminating poor reception by diverse methods in order to remove natural fringe zones in island, mountainous or remote rural areas and artificial poor reception caused by high-rise buildings in urban centers. First, the KCC had all terrestrial broadcasting stations participate in the projects for deploying low-output relays that the KCC and KBS jointly promoted.

Further, the KCC replaced analog TV master antennas in rural areas across the country with digital equipment (83 places) and newly installed digital master antennas at 21 places to remove poor reception of new digital signals.

Furthermore, the KCC plans to address the poor reception of new digital signals by concluding a joint project agreement with the Digital Viewing 100% Foundation and SkyLife to lease a free satellite receiver to households that have received analog TV broadcasting signals well but experience poor reception of new digital broadcasting signals (by the end of 2014) because of topographic or technical characteristics.

Lastly, the KCC secured base data for establishing policies for improving transmission and reception environments in remote

islands and prepared a means to eliminate poor reception by conducting the ‘Survey of TV Viewing Environment in Island Areas’.

## 3) Improvement of environment for receiving digital broadcasting signals

The KCC, LH and SH Corporations helped financially needy people residing in public rental apartment houses easily switch to digital broadcasting by supporting the switch of their analog master antenna to digital equipment.

Believing that it is very important to switch master antennas at apartment houses into digital service since they represent approximately 58% of total residential houses in Korea, the KCC surveyed the status of master antennas at 13,000 apartment complexes with 150 households or more throughout the country to utilize the outcome as base data for improving master antennas of private-sector apartment houses. To encourage apartment house residents to switch to digital, the KCC provides information and conducts promotion efforts on the details of government support and legal systems related to inspection and repair of master antennas.

## 4) Implementation of digital switch pilot project

Analog TV broadcasting services ended in Jeju-do on June 29, 2011 following the service termination in Uljin-gun, Gangjin-gun and Danyang-gun in 2010. A total of 217,711

households were affected. Approximately 9.9% or 21,770 households participated in a record-largest pilot project of digital switchover with government support. Further, all but 1.3% of the households in all of Jeju-do has completed switching to digital, with support by digital reception equipment and through promotional activities performed by the KCC before the pilot project began. The remaining households also completed the digital switch with government support during a follow-up action period.

## B. Strengthened Support to Viewers

### 1) Enhancement of perception and supply ratio by strengthening public promotion

The KCC staged promotional activities by visiting people who were not exposed to publicity to expedite or enhance perception or supply ratio of digital switching. The KCC staged diverse publicity activities, including TV Ads or other media and street campaigns toward those who return to their hometowns during holiday seasons (New Year or Chuseok).

### 2) Support for digital switching by low-income families

Pursuant to Article 11-2 of the Enforcement Decree of the 「Special Act on the Digital Transition of Terrestrial TV Broadcasting and

the Activation of Digital Broadcasting」, the KCC supported the households that received analog terrestrial broadcasting signals directly among those belonging to basic livelihood security recipients, second lowest level of income earners, and those that are exempted from TV reception fees (those who had distinguished service to the state or who are vision or hearing impaired). (as of January 12, 2012, support was completed for 34,403 households.

## C. Introduction of Digital Radio Broadcasting Service

Local terrestrial television broadcasting is scheduled to fully switch into digital in 2012. Such diverse media as cable and satellite also are hurrying to switch to digital service. Digital switching of radio broadcasting has been discussed since 1997 and the DAB standard was adopted in 2001 but abolished as the DAB-based DMB service was introduced. From 2004 to 2008, the ‘Team Preparing for Digital Radio (‘Promotion Team’ hereinafter)’ was established, which was comprised of experts from broadcasting stations, industry, university and research institutes. The Promotion Team decided on digital radio broadcasting technical standards that are appropriate to the local conditions through comparative experimental broadcasting of

&lt;Table IV- 14&gt; History of Digital Radio Service Promotion in Korea

1997	'Terrestrial Digital Broadcasting Promotion Council' launched
2001	'Digital Radio Promotion Committee' and 'Digital AM Policy Research Team' founded
2004	'Policy Research Team for Switching to Digital Radio Broadcasting'
2008	'Digital Radio Promotion Preparation Committee' launched
2009	Comparative trial digital radio broadcasting performed (experimental test)
2010	Comparative trial digital radio broadcasting performed (field test)
2011	Analysis of merits and demerits and explanation meetings held on digital radio broadcasting identification technology, services, and economy
2012	Digital radio broadcasting methods selection (scheduled)

different broadcasting methods.

In 2011, the 'Sub-committee for Promoting Introduction of Digital Radio Broadcasting' was organized with industry, university and research institutes, and explanation meetings were held to create a consensus among the stakeholders on the introduction of digital radio broadcasting through comparison and analysis of merits and demerits of broadcasting methods, including their technology, service and economy. The KCC plans to prepare a basic plan to introduce digital radio broadcasting and select digital radio broadcasting methods suitable to the local broadcasting conditions by compiling the discussions up to now.

&lt;Table IV- 15&gt; Digital Radio Frequency Bands

Bands	Frequency	Digital systems
LW, MW, SW	< 300 MHz	DRM
Band I	47~68 MHz	DRM+
Band II	87.5~108 MHz	HD-Radio, DRM+
Band III	174~230MHz(230-240MHz)	DAB,DMB DVB-T
Band IV/V	470~860MHz	DVB-T/H
Band L	1,452~1,492MHz	DAB,DMB Satellite Radio

## D. Development of Broadcasting Equipment Industry

The size of the local broadcasting equipment market is approximately 1.6 trillion won and is growing along with active digital switching and broadcasting and telecommunications convergence. However, it is crucial to enhance technological competitiveness through strategic R&D to grow the market and advance into overseas markets by locally producing reliable broadcasting equipment. It is also necessary to induce quality upgrade by local broadcasting equipment manufacturers through a certification system by deploying infrastructure facilities for testing and certification.

To help develop local broadcasting equipment industry, the KCC had the 'Broadcasting Equipment Testing and Certification Center' develop specifications for newly developed equipment subject to certification and provide testing and certification services. It is expected the

broadcasting equipment market will become active mainly among small and medium businesses as the Broadcasting Equipment Testing and Certification Center obtained the qualification of a testing and research institute under the ‘System for Preferred Purchase of Small or Medium Business Products’. In addition, the Center also performed publicity activities for locally produced broadcasting equipment by having the certified equipment displayed at exhibits at home and abroad.

### 1) Selection of broadcasting equipment subject to certification and increase of specifications development

The KCC has helped the development of testing specifications for broadcasting equipment newly selected as subject to certification each year from 2010 considering the demand of locally produced broadcasting equipment and the status of manufacturers. In 2011, the second year, six additional items were selected for certification and specifications were developed, including 3D monitors, A/V routers, MPEG-2 encoders, DMB and DTV low-output relays, and optic transmission devices.

<Table IV- 16> Performance of Selection of Broadcasting Equipment Subject to Certification and Development of Testing and Certification Specifications

Classification	2010(9 types)	2011(6 types)
Equipment subject to certification Broadcasting equipment	<ul style="list-style-type: none"> <li>• Broadcasting video monitor</li> <li>• Graphic character generator</li> <li>• Video server</li> <li>• Digital broadcasting equipment (4 types)                             <ul style="list-style-type: none"> <li>- Transmitters, relay, modulators, receivers</li> </ul> </li> <li>• H264 encoder</li> <li>• DMB data encoder</li> </ul>	<ul style="list-style-type: none"> <li>• 3D monitor</li> <li>• MPEG-2 encoder</li> <li>• DMB relay</li> <li>• DTV low-output relay</li> <li>• A/V router</li> <li>• Optic transmission devices</li> </ul>

### 2) Testing and certification services provided for certification of broadcasting equipment

The KCC provided testing and certification services based on developed specifications by founding testing and certification facilities by broadcasting equipment subject to certification. As of 2011, 15 items of broadcasting equipment are subject to testing and certification, including broadcasting video

monitors, modulators, and relays. A professional testing and certification service environment is provided with a total of 74 types of testing equipment. As of November 2011, 70 cases of testing and certification services were performed for 167 test items of broadcasting equipment and certification was given to seven manufacturers.

### 3) Strengthening the link between broadcasting equipment users and producers

The KCC periodically held new broadcasting equipment exhibitions that provided a forum for communication between users and producers among local equipment manufacturers who experienced difficulties in marketing, as there were no opportunities for open exhibition. The KCC actively supported overseas publicity and marketing of locally produced broadcasting equipment by having superior local broadcasting equipment participate in local and overseas exhibitions, which obtained domestic certification through the Broadcasting Equipment Testing and Certification Center. As representative examples, the KCC helped locally certified equipment to actively enter local and overseas markets by exhibiting them at largest broadcasting equipment exhibitions at home and abroad, including the Korea International Broadcast, Audio & Light Equipment Show (KOBA from June 14 to 17, 2011) and the International Broadcasting Convention (IBC from September 9 to 13, 2011). In particular, the KCC contributed greatly to having locally certified products recognized as reliable equipment in overseas markets as well. To help select the right products by more equipment users by providing overall information on local produced broadcasting equipment, the KCC

provided information concerning key functions by product, certificates by authorized testing agencies, performance of delivery at home and abroad, and purchase details by preparing an online distribution support system.

In the future, the KCC plans to expand the certification for non-broadcasting equipment that represents 60% or more of the total broadcasting equipment market, including public address broadcasting equipment, speakers and amplifiers as well as equipment used by broadcasting stations. The KCC also plans to promote support to overseas export of all radio broadcasting equipment that have a strong demand in developing countries, including digital broadcasting equipment and radio control systems.

## 5. Realization of Quality, Sound Public Broadcasting Services

### A. Improvement of Financial Resources for Public Broadcasting Services and Enhancement of Public Functions

The KCC attempted to prepare a framework for the development of public broadcasting services by strengthening public responsibility and roles of KBS while improving the financial foundation of public broadcasting services by

readjusting the TV reception fee rate that has been frozen since 1981. Thus, the KCC prepared a proposal for approval of an increased reception fee rate submitted by KBS at the end of 2010 after collecting opinions from stakeholders and experts and review of the outcome by its plenary session. The KCC submitted the proposal to the National Assembly on February 22, 2011 and took follow-up actions for it to be approved.

At the same time, the KCC promoted the improvement of various issues raised by citizens because of deficiencies in the reception fee system, including improvement of the procedure to apply for exemption of reception fees and specifying procedural provisions for advance payment. When the National Assembly approves the proposed increase of reception fee rates, the KCC plans to examine additional actions, including expansion of public responsibilities of public broadcasting services, increase of production costs for broadcasting programs, reduction of advertisement, implementation of additional

self-help efforts, and separate accounting by channel, while having KBS prepare plans for the application of raised reception fees.

In addition, the KCC supports programs for eliminating poor reception zones and for improving reception conditions by KBS, the national backbone broadcasting system, so that all residents may enjoy quality broadcasting services.

In particular, to eliminate poor reception in remote mountainous rural areas that are apt to be left behind in digital switching, the KCC promoted the provision of satellite receptors for eliminating poor reception by concluding joint service agreements with SkyLife and KBS while greatly increasing the target for supply of satellite receptors over 2010. By doing, the KCC prepared a foundation for all the citizens to enjoy quality digital broadcasting services after digital switching while securing digital broadcasting viewing rights for those who have difficulties in voluntarily switching to digital reception and enhancing the public functions of public broadcasting services.

<Table IV- 17> Performance of Promotion of Support to Fringe Elimination

Segment performance indicators	2009 performance	2010 performance	2011 performance
Support to satellite receivers	8,104 households	5,410 households	20,415 households
Support to private-sector apartment houses	130 complexes	218 complexes	288 complexes
Support to fully or semi-detached houses	-	241 cases	1,963 cases

## B. Quality Enhancement of Broadcasting Programs

### 1) Promotion of language purification campaigns

The KCC promoted campaigns for purifying broadcasting language in order to enhance broadcasting service quality and to induce social perception.

The KCC staged the ‘Value of Family’ public advertisement campaign by cooperating with broadcasting stations to generate a broadcasting environment beneficial to purifying language used by youths. The three terrestrial broadcaster provided subtitle notices for purifying broadcasting language during the family month (May) and Korean Alphabet Week (October 9 to 15). Further, they broadcast a program specially organized for the language of youths, called ‘Ambiguous Grey Words Used by Youngsters’.

### 2) Founding of Right Broadcasting Language Award

To generate a broadcasting environment where the right language is used, the KCC added a special prize for ‘Right Broadcasting Language’ to the ‘Broadcasting Grand Prize Awarded by the KCC’ that is awarded each year. The first year’s ‘Right Broadcasting Language’ prize was awarded to the SBS Announcer Team. The SBS Announcer Team has operated the ‘Mobile Korean Language

Class’ for elementary and junior and senior high students jointly with the National Institute of the Korean Language. It has also held the ‘Broadcasting Language Seminar’ each year since 2006.

### 3) Extension of education for purifying broadcasting language

To enhance the perception of broadcasting language among broadcasting personnel, the KCC educated 855 persons in 2010 by providing courses for purifying broadcasting language to broadcasting producers and writers. The number of persons educated increased to 1,220 in 2011.

### 4) Promotion of internal review by broadcasting stations

The KCC promoted internal review systems of broadcasting stations to encourage the right broadcasting language while preventing them from showing provocative, violent or substandard programs.

To that end, the KCC held discussion meetings among CEO group members of broadcasting stations (3 times) and meetings among those who are responsible for organization or review of terrestrial broadcasting programs (11 times). The KCC also published case books of broadcasting program reviews and guidelines for producing cable TV broadcasting programs.

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#### 5) Reinforcement of retroactive review of abusive language or substandard dramas

In addition to such preventive measures, to prevent substandard programs from being broadcast, the KCC also strengthened retroactive sanctions by performing ongoing monitoring and ex-post review, including the imposition of penalties considering the severity of violation.

## Section 4

# Enhancement of Broadcasting and Telecommunications Users' Welfare and Information Protection

### 1. Reduction of Telecommunications Service Fees

#### A. Promotion of Competition in Telecommunications Service Fees

By operating the 'Mobile Virtual Network Operator (MVNO) Team' organized on April 4, 2011, the KCC prepared support packages for promoting MVNO services that were initiated on May 16, 2011. The Team derived agreements by discussing key negotiation issues among service operators, including ► plans for handset supply to MVNOs, ► plans

for providing value-added services, ► facility interoperation between MVNOs and wholesale suppliers, and ► plans for sharing facility installation costs by MVNOs.

The KCC adopted the 'Wholesale Provision Guidelines' on July 20, 2011 after preparing support packages for the early launch of MVNO service in May 2011. By doing so, the KCC established policy means for improving conditions for the MVNO competition following various actions it had so far taken to introduce the MVNO system, including statute amendments and promulgation of public notices.

<Table IV- 18> Key Details of Wholesale Service Guidelines

Classification	Details
Volume discount rate	1% discounted for 200,000 or more subscribers, 6% additional discount for 1.2 million or more subscribers
Data-only MVNO wholesale price	5% additional discount from existing wholesale data service price
Personal consumption	Prohibition of over 20% appointment of officers from the concerned company or affiliated companies(application deferred for one year)
Reseller service	Wholesale service offered to registered MVNOs only, joint responsibility for user protection imposed on wholesale service provider

#### B. Reduction of Telecommunications Service Fees

Telecommunications service price index

declined 2.74%p from 101.14 (2008) to 98.4 (2011) and the weight of consumer telecommunications service bills among total household spending declined 0.63%p from

6.43% (2007) to 5.80% (2011). However, the average monthly telecommunications service bill paid by households increased from KRW

139,000 (2007) to KRW 147,000 (2011) as more expensive smartphones increased and the number and volume of calls also increased.

<Table IV- 19> Trends of Nominal Household Telecommunications Bills  
(Based on Urban Worker Family of Two or More Persons)

(Unit: 1,000 won)

Classification	2007	2008	2009	2010	2011
Expenditure	2,163.6	2,308.5	2,310.3	2,435.1	2,531.4
Telecommunications Expenses	139.1	138.5	136.1	142.5	146.96
Ratio of Telecommunication Expenses	6.43%	6.00%	5.89%	5.85%	5.80%

Source : Statistics Korea

As part of comprehensive measures for stabilizing consumer prices announced on January 13, 2011, the KCC published plans for improving smartphone sets designed for young students or senior citizens and policies for promoting market entry by MVNOs. In addition, the KCC published policy means for

reducing mobile phone bills by operating a telecommunications service rate task force jointly organized with government ministries and private-sector experts, including the Ministry of Strategy and Finance and Fair Trade Commission.

<Table IV- 20> Key Policy Directions of Telecommunications Fee Task Force

- Reduction of Telecommunications Fee: Improvement of smartphone service billing system, gradual reduction of Telecommunications fee rate induced
- Improvement of terminal or handset distribution structure: Payment terms(open distribution system of handset)
- Promotion of competition in telecommunications service market: Support to growth of MVNOs

### C. Inducement of Prepaid Telecommunications Service

The KCC prepared plans for promoting prepaid telecommunications services under consultation with the concerned service

operators (mobile telecommunications service providers and MVNOs) based on opinions collected through a questionnaire survey (in March 2011, KAIT) and the KCC Twitter sites (in July 2011).

&lt;Table IV- 21&gt; Programs for Promoting Prepaid Billing System

Promote competition in prepaid billing market	Generate foundation for fair competition with differentiated strategies between mobile telecommunications service providers and MVNOs
Enhance user convenience of prepaid billing system	Improvement of matters causing user inconvenience, including procedure for subscribing for prepaid billing, recharging methods and places
Expand prepaid billing service	Expand available services, including voice, wireless internet services other than SMS, multimedia messaging services Inducement of diverse billing systems suitable to user demands, including flat prepaid data billing system
Promote prepaid billing system and prevent unfair business activities	Active promotion in diverse methods through cooperation between government and service providers Limitation of excessive marketing expenditure for subscriber performance management by mobile telecommunications service providers Steady monitoring of operations to prevent unfair business activities, including refusal of prepaid phone service

#### D. Improvement of Distribution Structure of Handsets

The KCC decided to introduce a new open handset supply system in May 2012 to enable

consumers to buy their handset and Subscriber Identification Module (USIM) from independent sellers at better prices other than mobile phone company designated sale agents or distributors.

&lt;Table IV-22&gt; Comparison of Mobile Handset USIM Number Administration Methods

Classification	Closed system	Open system
Administration methods	Only handset whose USIM number is registered are allowed to make calls	Only handset that are declared are blocked from calls
Distribution leadership	Mobile service operators	Manufacturers
Implementing countries	Korea, Turkey	USA, Europe, South America etc.

The KCC predicted the production and distribution of inexpensive handsets would be promoted while price competition would be induced as diverse sales channels would appear, including mobile phone service operators' agents, direct sales outlets of handset producers, offline retail and online sales

companies. The KCC also forecasts that telecommunications service bills would be reduced as MVNO service and the prepaid billing system will become active while competition will be induced in pricing and service quality rather than with handsets.

<Figure IV-12> Plans for Improving USIM Management System



### E. Phone Service Number Portability Enhanced

The KCC promoted an increase of phone numbers subject to portability in order to decrease service rates through active competition among the service providers and to enhance service quality and user convenience. The KCC introduced a system for portability of representative phone numbers so that users can enjoy service at lower rates. The KCC also decided to introduce mobile phone number portability among MVNOs in April 2012.

### F. Re-Establishment of Telecommunications Service Fee Concept and Development of Telecommunications Convenience Index

The KCC promoted re-establishment of a new telecommunications service fee concept suitable to environment changes and development of telecommunications convenience indexes by measuring diverse specific benefits, noting that users enjoy diverse

benefits through telecommunications services, including banking, education, entertainment, NS (social relation network service), and BS (location-based services) while telecommunications services have switched from voice to data telecommunications along with diffusion of smartphone services.

A questionnaire research survey performed by KISDI for measuring the benefits of telecommunications services revealed that the monthly benefit of mobile phone service is worth KRW 94,864 per person and that of broadband internet service is worth KRW 134,106 per household. The benefit index was computed by comparing it with the household telecommunications service fee (published by Statistics Korea for 2nd quarter of 2011). The benefit of mobile phone service was 3.12 times the monthly average cost while the benefit of broadband internet service was 6.39 times the monthly average bill amount. As a conclusion, the net aggregate benefit (benefit minus cost) of mobile phone and broadband internet services enjoyed by a household amounted to KRW 177,550 a month on average.

&lt;Table IV-23&gt; Diverse Benefits of Telecommunications Services

Classification	Benefit categories	Classification	Benefit categories
Financing	Banking, stock trading, shopping, e-commerce etc. → Cost saved for searching, education, fees	SNS	Messenger, blogs, micro blogs (Twitter etc.) → Real-time communication and information sharing anytime anywhere
Education	Online or mobile lecture service, e-book etc. → Can attend or read at convenient time and place	LBS	Road information, traffic information, location-based information services etc. → Traffic or life convenience information obtained for surrounding areas
Entertainment	Music, video, TV, game etc. → Easy purchase, storage and hand-carry of desired contents	Electronics Attachment	View or issuance of government documents etc. → Transportation and fee expenses saved
Information	News, life information, knowledge search etc. → Access to desired information anytime anywhere	Voice Call	Voice, video call, and text messages → Basic communication means provided

## G. Joint Deployment of Telecommunications Networks

Common carriers may jointly deploy new telecommunications facilities, including conduits or steel towers or pylons, in newly developed housing zones or large-scale redevelopment zones under Article 63 of the 「Telecommunications Business Act」. In 2011, a total of 17 cases were deployed jointly, saving KRW 4.8 billion in deployment costs.

## 2. Strengthening Support to Low-Income Alienated People

### A. Enhancement of Access to Broadcasting and Telecommunications Services by Disabled People

To ensure access to broadcasting services by vision or hearing impaired people, the KCC is

promoting diverse support policies, including support for the production of programs and provision of television sets for vision or hearing impaired people, including senior citizens with hearing difficulties.

In 2011, the KCC decided to gradually introduce mandatory broadcasting service for the disabled by regional terrestrial broadcasting stations and paid broadcasting service providers (SO, PP, IPTV, and satellite broadcasting service providers) as well as four terrestrial broadcasters (KBS, MBC, SBS, and EBS), by amending the 「Broadcasting Act」 and its subordinate statutes. The KCC promoted diverse policies for enhancing accessibility to broadcasting and telecommunications services by the disabled, including the supply of digital television sets and enhanced network relay services, in preparation for digital switchover.

#### 1) Support to programs for the disabled

The KCC steadily promoted support to production of programs for people with disabilities by broadcasting service providers, including programs with closed captioning, sign language or descriptive video screens, in order to ensure their accessibility to broadcasting services while eliminating

information gaps among those alienated from broadcasting services, including vision or hearing impaired people, in the age of digital broadcasting and smart media services. In particular, the KCC prepared and implemented diverse policy means to effectively support production of programs for the disabled.

<Table IV-24> Detailed Policy Directions for Support to Production of Programs for Disabled Viewers

Classification	Details of promotion efforts
Preparation of project promotion plan and securing transparency	<ul style="list-style-type: none"> <li>• Preparation of project promotion plan and securing transparency</li> <li>• 'Projects for supporting production of disabled person broadcasting programs analyzed'</li> <li>• Open recruitment/review/assessment methods of projects</li> </ul>
Research of advanced country policies concerning media access by disabled persons	<ul style="list-style-type: none"> <li>• Study on the policies related to the production and organization of broadcasting for disabled persons, such as advanced subtitles, sign language and descriptive video screens.</li> </ul>
Analysis of effects of policies for support to broadcasting for disabled persons	<ul style="list-style-type: none"> <li>• One-to-one interview with 400 vision impaired and 300 hearing impaired people and viewing monitoring and phone survey using broadcasting program organization tables</li> </ul>

In 2011 alone, the KCC supported the production of programs for the disabled by total broadcasting service providers, including 44 central and regional terrestrial broadcasting stations (regional stations of KBS and MBC, and commercial broadcasting companies) and three broadcasting service operators specialized in news reporting, government information, and general-programming, and six system operators. As a result, programs with closed captioning broadcast by four major terrestrial broadcasting companies increased to 96.9%. The number of service providers eligible to

support production of programs for the disabled increased from 46 to 53, greatly contributing to accessibility to broadcasting service by vision or hearing impaired people.

## 2) Provision of television sets or other receivers

In order to improve the broadcasting service for vision or hearing impaired people, the KCC actively improved the functions of programs (closed captioning and descriptive video screens) and increased the number of television sets or other receivers provided.

&lt;Table IV-25&gt; Details of Achievement Ratio Computed by Receiving Unit

Classification	TV set with close captioning	TV set with video description
Target achievements	17.7%	11.3%
Achievements	18.9%	11.6%
	Cumulative number of set provided (53,965 set) Number of hearing impaired persons (284,710 persons)	Cumulative number of set provided (30,676 set) Number of vision impaired persons (264,604 persons)
Ratio achieved	107.1%	102.6%

※ Computing formula : Closed captioning 107.1% x 0.5 + Video Description 102.6% x 0.5 = 105.5%

First, the KCC developed a plan for supplying television sets by surveying the data concerning the ‘Statistics of Vision and Hearing Impaired People and Senior Citizens with Hearing Difficulties’ issued by the Ministry of Health and Welfare.

Second, the KCC promoted a simplification of processes for the improvement of receiving unit performance by collecting diverse opinions concerning the improvement of receiving unit performance through the ‘Consultation for Improvement of Broadcasting Receiving Functions’ among industry experts, persons in charge at related agencies and organizations that perform the project.

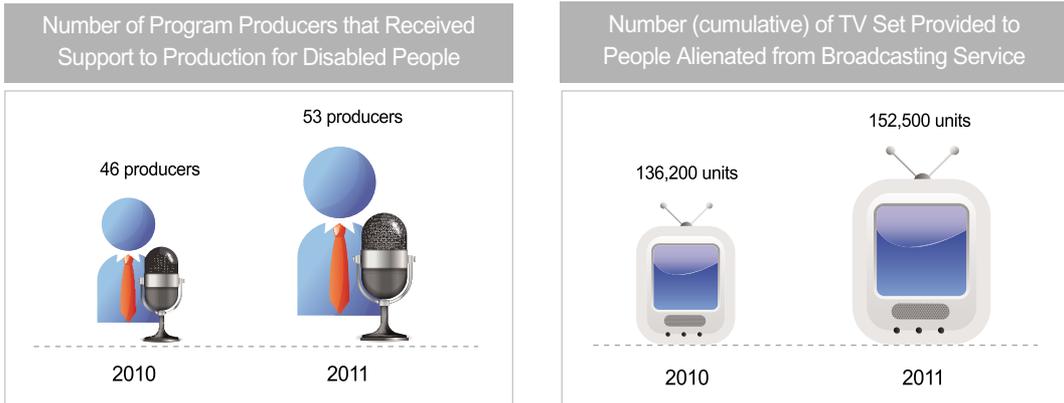
Third, the KCC surveyed difficulties related to the projects for improving broadcasting receiving unit provision by holding the ‘Project Explanation Meeting for Providing Broadcasting Receiver’. This also reflected simplified documents submitted for receivers for senior citizens with hearing difficulties on the plan for their provision. Further, the KCC

conducted written questionnaire surveys of 302 senior citizens with hearing difficulties and 339 vision or hearing impaired people and telephone questionnaire surveys of 308 hearing impaired people. The KCC used the outcome for assessing its project of broadcasting receiver and policy data to improve future projects.

Based on such system improvement, in 2011, the KCC requested the municipal governments and related agencies across the country to cooperate for the provision of receivers to the handicapped on two occasions. The KCC also staged extensive campaigns through popular media, including KBS, MBC, OBS, and SBS.

With such thorough preparation, the KCC supplied a total of 16,300 receivers in 2011, including 9,000 units with closed captioning for hearing impaired people, 4,300 units with video description functions for the vision impaired, and 3,000 units for senior citizens with hearing difficulties. The cumulative total of receivers supplied by 2011 reached 152,500.

<Figure IV-13> Number of Program Producers for Disabled People and Number of TV Set Provided to Alienated People



### 3) Mandatory provision of broadcasting services to the disabled

The KCC made efforts to enhance the effectiveness of policies for supporting broadcasting services to the disabled by enacting on June 30, 2011, ‘Guidelines for broadcasting services to the disabled’ that specify service operators required to provide broadcasting services to the handicapped, programs subject to broadcasting service organized for the disabled, objectives and timing. The KCC held public hearings to reflect market conditions on the guidelines and reflected requests suggested by regional or paid broadcasting service providers for an extension of the period for achieving the target in organizing programs for the disabled.

Further, the KCC prepared a legal and institutional base for strengthening accessibility to broadcasting services by the disabled, including an amendment to the ‘Broadcasting Act’ (promulgated on July 14, 2011), an

amendment to the ‘Enforcement Decree of the Broadcasting Act’ (promulgated on October 15, 2011), and publishing the ‘the Guarantee of Access to Broadcasting for the Handicapped including Programming and Provision of Broadcasts for the Handicapped’ (in December 2011).

In addition, the KCC organized and operated the ‘Council for Promoting Technical Standardization of Broadcasting Services for Disabled People’ to address technical standards related problems by collecting opinions from diverse parties, including organizations of disabled individuals, broadcasting service operators and consumer electronic appliance manufacturers. The KCC enacted Common Technical Standards for Broadcasting Services for Disabled People (TTAK.KO-07.0093: Standards for auxiliary broadcasting services for vision or hearing impaired people) in September 2011 to securing compatibility among platforms.

<Table IV- 26> Detailed Policy Directions for Mandatory Showing Programs for Disabled Viewers

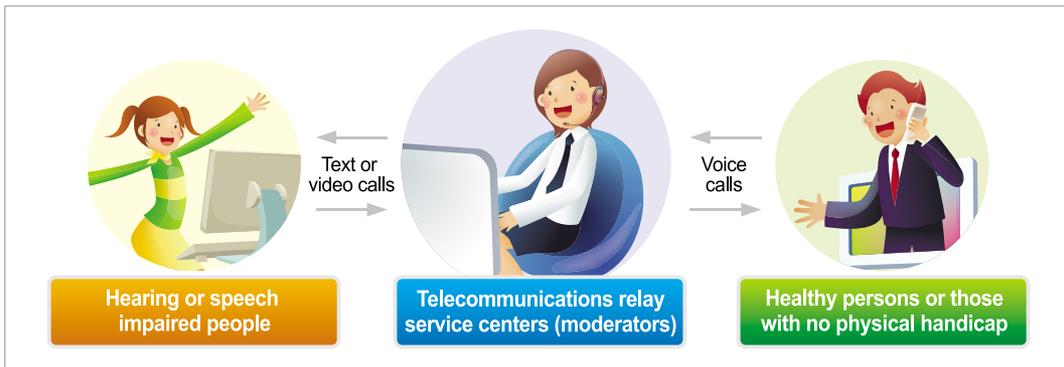
Classification	Details of promotion efforts
Amendment to Broadcasting Act	<ul style="list-style-type: none"> <li>• Programs for disabled people organized by service providers(amendment to the 「Broadcasting Act」 for mandatory provision of closed captioning, sign language, and screen description services, promulgated on 14 July 2011)</li> <li>• Amendment to the 「Enforcement Decree of the Broadcasting Act」 specifying broadcasting service operators and programs liable to provide programs for disabled people on 15 October 2011 and Public notice enacted in December 2011</li> </ul>

4) Support to telecommunications relay services

The KCC improved the institution to establish a telecommunications relay center for efficient relay of telecommunications services for the disabled. To that end, the KCC enacted a public notice for providing telecommuni-

cations relay services. The notice provides that real-time telecommunications relay services should be delivered among the disabled or between the disabled and others, and specified standards for call quality, and requirements for relay engineers in order to support call services for vision or speech impaired people.

<Figure IV-14> Diagram of Telecommunications Relay Services Provided



B. Deployment of Broadband Convergence Network (BcN) in Rural Areas

1) Deployment of rural area network

It is necessary for the government to provide support to small rural villages where service operators are reluctant to invest in networks due to poor profitability, in order to eliminate

gaps in network infrastructure between urban and rural areas and to provide universal broadcasting and telecommunications convergence services. The KCC promoted effective network deployment by maintaining a systematic cooperation system with the central and local governments and service operators. In addition, the KCC promoted policies for providing loans for the deployment of

networks by service operators and imposed obligations for the network deployment to deploy BcN in rural areas across the country.

As of December 2011, BcN has been deployed in 86% of the rural areas and 98% in urban areas.

<Table IV- 27> Comparison of BcN Subscription Ratios between Urban and Rural Areas (Unit: %)

Classification	2007	2008	2009	2010	2011
Rural areas	44	56	63	76	86
Urban areas	61	74	83	90	98

## 2) Development of models for special BcN services in rural areas

The KCC explored and supplied life-oriented service models for rural areas in 2011, including services for remote monitoring of farm products, agricultural technologies, video consulting for education, and environment control in order to improve life quality by enhancing the usage of BcN services in rural areas. To that end, in March 2011, the KCC held a consultative meeting to review life-oriented BcN service models for rural areas and collected opinions from local governments. In September, the KCC explored and developed BcN service models specialized for rural areas.

## C. Strengthening Viewer Welfare and Protection of Rights

### 1) Realization of viewer welfare by operating the Community Media Center

The KCC promoted the deployment of a viewer welfare system through the Community Media Center in addition to active operation of

the center that was founded in Busan and Gwangju in 2011 to protect rights of the viewers in alienated areas. The KCC derived achievements from support to media education and production of broadcasting programs so far implemented by operating diverse planning projects and encouraging participation for senior citizens, disabled people and other alienated people.

Further, the KCC provided an opportunity for enhancing a system for realizing viewer welfare using the Community Media Center as base infrastructure as the 「Broadcasting Act」 was amended to provide grounds for installing or operating the Community Media Center.

### 2) Development of media education system and survey of broadcasting service conditions for alienated people

The KCC exerted to conduct media education through the Community Media Center, and to develop systems and active deployment of infrastructure for media education.

First, the KCC recruited organizations to survey media education and broadcasting

service conditions across the country in order to effectively implement the support projects while reflecting diverse regional demands.

Second, the KCC participated in ‘NAMLE’ international media education conferences to benchmark advanced media education services overseas. The KCC upgraded the international position of its support projects by displaying materials and programs for media education.

Third, the KCC exerted to resolve the regional gap in media education by training media education instructors. The gap is caused by poor infrastructure in areas where the Community Media Center has not yet been founded. In other words, the KCC operated courses for training media education instructors jointly with education or teachers colleges in the areas. A total of 38 instructors completed the course in the Seoul and Daejeon region.

In addition, the KCC surveyed the broadcasting service conditions for alienated people in order to overcome insufficient policy data and attention among outside parties in the rapidly changing broadcasting service environment.

### 3) Enhanced protection of viewer rights and benefits by operating Viewer Rights Protection Committee

Through the 2011 amendment to the 「Broadcasting Act」, the ‘Viewer Complaint Committee’ was renamed to the ‘Viewer Rights Protection Committee’ and the IPTV

service operators were newly included in the service operators subject to review by the KCC. As a follow-up measure, the KCC functions were extensively strengthened by amending the Rules for Organization and Operation of the Viewer Rights Protection Committee on September 9. The Viewer Rights Protection Committee established diverse measures for protecting viewer rights, including preparation of measures for coping with false or exaggerated service in connection with digital switching of cable television and obligation for obtaining consent from individual households for concluding collective reception contracts through inspection of performance of the ‘Guidelines for Purchasable Broadcast Service Agreements’.

Further, the KCC surveyed the fundamental causes for false or exaggerated services in connection with digital switching of cable TV service through a meeting with system operators across the country. The KCC also induced the operators to eliminate viewer complaints by voluntarily developing plans for service improvement.

## D. Strengthening Universal Viewing Rights

The KCC promoted an amendment to the 「Broadcasting Act」 to improve the system for ensuring universal viewer rights. (A bill was submitted to the National Assembly on

December 27, 2011).

Key details of the bill include: First, ‘without paying any additional expenses’ is inserted in the definition of the universal viewer rights to prevent any additional fees from being paid for existing viewing means. It is also provided that the government may designate broadcasting service providers satisfying requirements for the minimum ratio of households able to receive broadcasting signals before approving their application. Lastly, the prohibited acts for universal viewer rights under Article 60-3 of the 「Enforcement Decree of the Broadcasting Act」 are now provided under the Act itself, and a new type of prohibited acts was inserted in connection with the newly inserted provision for a system for advance checking broadcasting service operators that can relay broadcasting signals.

## E. Expansion of Universal Telecommunications Services

On October 24, 2011, the KCC prepared a draft amendment to the 「Enforcement Decree of the Telecommunications Business Act」 for including internet phone service in the category of services whose rate is reduced for alienated people and extending the category of those eligible for abatement of mobile phone bills. Thus, the service bill is now abated for Basic Livelihood Security Recipients, people with disabilities and those who performed

distinguished service for the state. The mobile phone service bill is also abated for recipients of family support allowance and pension for disabled people among those who belong to the next level over the Basic Livelihood Security Recipients. The proposed amendment to the Enforcement Decree will be enforced at the earliest in the first quarter of 2012 when the processes for consultation with concerned ministries and advance notice for legislation are completed and the notices related to rate abatement are amended.

It is scheduled that the internet phone bill will be abated at the level applied to local and long-distance call services of wired telephone service. Basic Livelihood Security Recipients will be exempted from subscription and basic service fees, also being provided with 450 free call minutes. Disabled individuals and those who performed distinguished service for the state will be exempt from 50% of their month call bills.

## 3. Promoting the Rights and Benefits of Telecommunications Service Users

### A. Enhancement of the Right to Know and the Counter-damage Relief System

#### 1) Evaluation of tasks for the protection of telecommunications service users

To settle users' complaints arising during the subscription, use and cancellation of the service as well as evaluate the service provider's complaints, the KCC carried out the Broadcasting and Telecommunications Service User Protection Task Appraisal as a pilot project for eight broadcasting and telecommunications service providers including KT, SKT, SKB, and LG U+ in the telecom business and C&M, T-broad, CJ Hello Vision, KT SkyLife in the paid service sector. Beginning in May 2011, the KCC conducted a two-month-long appraisal which included evaluation by an expert panel comprising consumer groups and external professionals drawn from academic circles. The appraisal was sponsored by the Korea Association for ICT Promotion.

By means of this pilot evaluation project, the KCC has successfully prompted voluntary competition among service providers and suggested to potential broadcasting and telecommunications service providers that specific criteria for service user protection should be included in the list of appraisal, finally contributing to reducing the number of user complaints filed against broadcasting and telecommunications services.

### 2) Improvement of user agreement on mobile phone insurance and preparation of guidelines

Policyholders of mobile phone insurance were not adequately informed of the compensation procedure, required documents, limitations of compensation, etc., but beginning in August 2011, mobile service providers were supposed to provide and explain the details of the insurance policy to its buyers.

In addition, a policyholder can file for compensation over the internet and reserve the registration through ARS by phone. In the past, the service center did not receive requests for compensation, but the KCC corrected this to enable policyholders to file for compensation over the internet at any time and seek compensation by leaving their phone numbers through ARS to oblige the operator return their calls during business hours.

### 3) Amendment of the notification system that includes expected cancellation charge and stipulated time period in phone bills

The KCC amended the 「Detailed prohibition examples in relation to telecom service bills and evaluation criteria」, which currently obligates the service provider to indicate required notices on the phone bill so as to inform users of how much they will be charged, in such a way that all expenses incurred by the user upon cancellation of the service are listed for each item, as well as the first date counted in the stipulated time period and the expiration date.

<Table IV- 28> Key Public Notice Amendment Details of Acts Prohibited Concerning Billing Invoices for Telecommunications Services

- Service-based cancellation charges should be indicated on billing invoices for each month or every three months (Article 3 paragraph 1 subparagraph 3)
- Easy-to-understand plain terms should be used, other guidelines for using agreement expressions for billing invoice preparation (Article 4 paragraph 1)
- Essential notification items should be indicated on invoices for combined products as provided under the notice (Article 5)
- Obligations of telecommunications service operators are provided to enable them to provide special format invoices, including Braille or voice-based invoices to enhance convenience of disabled users(Article 6 paragraph 2)

#### 4) Improvement of mobile phone mileage

To allow more users to receive tangible benefits from the mileage policies provided by the three major mobile providers, the KCC has come up with various approaches to improving the mileage policy, including increase of the number of mileage providers, auto payment of bills, extension of the valid term, and enhancement of notices. These initiatives for the improvement of mileage policies were prompted by the poor use of existing mileage systems.

#### 5) Preparation of solutions for prompting payment of refund deposits

To prompt the payment of refund deposits whose payment has been withheld by wired and wireless service providers, the KCC came up with solutions for improving the related systems through consultation with the service providers. The amount of total refund deposits to be paid stood at KRW 10.7 billion for 1.36 million cases as of the end of December 2011.

<Table IV- 29> Amounts not Refunded by Service Operator

(Unit: 1,000 cases, 100,000,000 won)

Classification	Fixed telecommunications service operators				Wireless telecommunications service operators				Grand total
	KT	SKB	LG U+	Sub-total	SKT	KT	LG U+	Sub-total	
Cases	163	11	26	200	165	44	897	1,106	1,360
Amount	14	10	2	26	46	18	17	81	107

\* As of 2011 December end

The KCC simplified the procedure for searching and requesting payment, and established effective cooperative systems among services for refunding. These measures improved the users' awareness of their non-refunded deposits, which in turn accelerated requests for refund by users, and may continuously reduce the number of delayed

refunds through rate offset systems or donation policies.

#### 6) Improvement of policies for juvenile mobile phone users

To reduce the number of cases of damages incurred by juvenile service users where these members of the young generation's

carelessness lead to overcharges for their service use, the KCC came up with solutions for preventing cases of overcharging, such as extending the application of the wireless service rate to the existing service rate cap system.

Key details of the initiatives for improving the rate system for juveniles include the following: extension of the application of the rate cap system; notification of the use of the collect call service to the user through SMS (the user or his or her legal agent); enhancement of the notice upon transition to a common rate system; and reinforcement of the obligation to notify the user of major items related with billing.

The KCC expected these measures to improve the current system for informing juvenile users of details about the rate system from the stage of subscription, promote predictability of changes in the rate, and, finally, prevent overcharging arising from uninformed and unnecessary use of the service.

#### 7) Improvement of complaint processing performance

The KCC established and implemented comprehensive measures for improving

complaint processing, began running a Broadcasting and Telecommunications Service Complaint Council, and continuously implemented policies for checking conformance with complaint processing, etc.

In 2011, these efforts led to its being ranked 5th (Good) in terms of service performance among all central administrative government agencies, indicating a great leap of 18 places up from 23rd in 2010, based on the survey on processing complaints received by the ‘People’s Sinmungo (under the Anti-Corruption & Civil Rights Commission of Korea) in 2011.

#### 8) Evaluation of telecommunications service quality

The KCC undertook a variety of political initiatives aimed at improving the usage environment of broadcasting and telecommunications service in 2011, a representative case of which is the Broadcasting and Telecommunications Service Quality Appraisal 2010, continuously carried out in conjunction with ‘Smartphone Voice Quality Measurement.’ The findings of the appraisal, announced on April 25, 2011, are as follows:

<Table IV- 30> Successful Call Setup Success Ratio of Smartphones

(Unit: %)

Fixed to fixed	Fixed to smart	Smart to smart			total average
		Average of voice calls	Call only	Data under use	
98.7	98.6	97.6	98.3	97.2	98.0

## B. Improvement of Telecommunications Service Usage Environment

### 1) Operation of ‘Wise User’, a subscriber-only website

Wise User ([www.wiseuser.go.kr](http://www.wiseuser.go.kr)) provides comprehensive information of which users should be aware when subscribing to, using, cancelling, and requesting compensation in each of the eight major broadcasting and telecommunications services including cellular and smartphone, local/long-distance call, high-speed internet, VoIP, IPTV, cable TV, satellite broadcasting, and combined commodities. The site helps the user make reasonable, informed

decisions when faced with certain situations.

### 2) Training on the use of telecommunications services and the prevention of damage

To effectively prevent users from incurring damages as a result of ‘asymmetric information’, the KCC provides training programs on the use of broadcasting and telecommunications services and the prevention of damage. For efficient training, the KCC provides customized education, including custom-tailored materials for each topic and multi-language e-learning textbooks for multicultural families.

<Figure IV-15> e-Learning Textbooks on Use of Broadcasting and Telecommunications Services and Damage Prevention



### 3) Events coordinated by service users

The 3rd broadcasting and telecommunications service users’ event, held in 2011, included a ‘Service Users’ Sharing Session’ where service users could personally participate, as well as many other programs designed to raise awareness of the importance of sound use of communication services and to

stimulate government interest and support.

In particular, the ‘2nd Broadcasting and Telecommunications Users’ Contents Contest’ provided users with the opportunity to share edifying stories about their experience of using the services and any innovative or useful ideas they might have.

#### 4) Service users' future forum

The KCC has been running the 'Users' Future Forum' to listen to users' voice on issues and policies pertaining to broadcasting

and telecommunications services and come up with plausible solutions to users' complaints.

Key details of the 5th-8th User's Future Forums held in 2011 are as follows:

<Table IV- 31> Key Details of 2011 Forum of Future Broadcasting and Telecommunications Service Users

Topic and key details	Date / Location
5th Forum—Programs for improving mobile handset price from user perspective - Plans suggested by panel for improving price structure of mobile handset from user perspective - Programs suggested (by consumer organizations) for reducing handset-price related complaints, damages and claims	2011.03.29 / KAIT
6th Forum—Smart operation programs suggested for mobile phone agents and resellers - Smart operation programs suggested for mobile phone agents and resellers by introducing or operating blacklist system - Key details of guidelines (suggested by a lawyer) for improving problems related to 'Handset loss insurance'	2011.07.05 / KAIT
7th Forum—Proposal for cancellation fee system for broadcasting and telecommunications services and user protection - Status of and improvement programs proposed for disputes related to telecommunications service cancellation fees in Korea (KAIT) - Status of guidelines and problems related to telecommunications service cancellation fees in Korea (consumer organizations)	2011.08.25 / Korea Communications Commission
8th Forum—2012 key telecommunications service issues and demonstration of multiple-culture family education programs - Key cases of damages suffered by users seen in trends of claims related to telecommunications services (Korea Consumer Education Institute) - Telecommunications service issues seen from consumer perspective, Best 5 in 2012 (panel) - Introduction of education contents for preventing damages on people alienated from information service 2011, written (Cyber MBA)	2011.12.08 / KAIT

#### 5) Prevention of illegal use of user's name

To prevent users' names from being illegally used and users from being billed for services they have never used after being subscribed to a service against their will or without their knowledge, the KCC has been running a system designed to prevent the illegal use of names ([www.masfer.or.kr](http://www.masfer.or.kr)) since 2005.

The 'illegal-name-use prevention service,' which is designed to notify a user's subscription to a service through an SMS or e-mail notice, allows the user to inquire about the status of his/her subscription to a telecommunications service provider and the

history of payment he or she has made to the service ([www.msafes.or.kr](http://www.msafes.or.kr)). The service also provides the option that intercepts any attempt to subscribe the user to a service online or through a mobile phone service.

#### 6) Improvement of the ARS service environment

As users continue to complain about the complex menus of ARS used by most people and the long delays in connecting to the operator, the KCC announced the 'ARS Service Improvement Guideline' in November 2011, as part of its 'Life Consensus Policy' to

encourage ARS operators to comply voluntarily with the related requirements.

The guideline includes details on how to improve the operator connecting process; simplification of the service processing procedure and service menus; minimization of service delays; advance notice of charges and easing the burden of cost; minimization of the amount of personal information required to authenticate the user's identity; and service architecture.

To promote the effectiveness of the guideline, the KCC reviewed and assessed conformance to the guideline in 2011, and announced and awarded best ARS service practice cases selected in the assessment.

In 2011, the KCC conducted a poll about self-diagnosis on 305 organizations including 32 in the public sector and 273 in the private sector, combined with a telephone survey using professional agents. The survey provided two system evaluations and ten sets of tests for checking 'how long it takes to get the operator back on the line.'

The result of the evaluation indicated a total average score of 80.3, showing an overall improvement from the result obtained in the previous year (75.6).

### C. Improvement of the Calling line Identification System

To ensure easy access to case report menus

for Voice Phishing victims and improve the ARS menu system, the KCC introduced a financial damage case (Voice Phishing, etc.) report menu provided by ARS through information message.

Meanwhile, the committee, in consideration of the fact that Voice Phishing lines usually originate overseas and pretend to be a public organization such as the post office or the police, reflected in the revised bill for the 「Telecommunications Business Act」 solutions for effectively isolating such fraudulent practices and submitted the proposals to the National Assembly.

### D. Enforcement of User Protection Regulations against Acts by Service Providers Determining User's Benefits

The KCC revised the 「Enforcement Decree of the Telecommunications Business Act」 in such a way that the court can order a service provider to notify a user of any damage he or she has incurred and preserve the relevant materials in the event that such damage has been caused by the provider's deliberately subscribing the user to a service or unfair billing.

In the past, service providers often changed the rate option or additional services without the user's consent, and the user was rarely able to obtain compensation for damages because

he or she was not aware of the existence of such damage or the related data had already been destroyed.

### E. Enforcement of Counter-electromagnetic Wave System

As the use of wireless devices and diverse electronic appliances such as mobile phones has become a daily part of life, people are more concerned about the hazard posed by electromagnetic waves. In particular, the WHO's announcement on May 31, 2011 that these waves may cause cancer has further deepened the public's anxiety. In this regard, the KCC established the 'Comprehensive Solutions for Protecting Humans from Electromagnetic Waves' to alleviate people's

concern and effectively respond to related matters in September 2011.

Key details of this initiative includes a solution for reinforcing human body protection from electromagnetic pulses by extending the application of regulations on electromagnetic pulses - currently applied only to cell phones - to portable wireless devices used near a person (within 20cm). These devices include tablet PCs, laptops, home wireless telephones and walkie-talkies. In addition, the protection criteria, previously limited to the head, were expanded to cover each part of the body including the head, trunk, arms and legs. The KCC allowed electromagnetic pulse measurement values to be posted on the website of the KCC (National Radio Research Agency).

<Table IV- 32> Revised SAR Standards

Frequency	Classification	SAR standards (W/kg)		
		Whole body	Head/torso	Limbs
100kHz~10GHz	General public	0.08	1.6	4
	Service workers	0.4	8	20

Second, the KCC drew up device protection plans. The KCC decided to expand the current regulations on electromagnetic pulse frequency limited to 1GHz or less to 6GHz or below. In addition, arrangements were made for the introduction of an electromagnetic pulse engineering system so that the current per-device certification for electromagnetic pulse acceptability is expanded to include large,

combined equipment and the development of technologies that can help defend physical electromagnetic pulse attacks such as GPS signal disturbance and high-power electromagnetic pulse attacks and related protection standards.

Third, the KCC has prepared research, education and PR materials, and data concerning electromagnetic pulse' impacts on

human bodies. The KCC decided to move from a short-term, one-time research approach on hazards of electromagnetic pulse to a mid- and long-term futuristic approach, promoting research efforts for children, pregnant women and the vulnerable. In particular, it was decided to disclose the results the surveys on the reality of home appliances-something which the general public are most concerned about - that emit electromagnetic pulses, and will establish and promote a “Mobile Phone Use Guideline for Children and Juvenile” campaign. The KCC also decided to establish a ‘Korea Electromagnetic Pulse Research Foundation’ (provisional), which will be in charge of research activities, public education and promotion of the impacts of electromagnetic pulses on the human body, and arbitration between stakeholders upon conflicts.

Finally, the KCC will actively respond to changes in the environment of cosmos around

electromagnetic pulses such as the explosion of sunspot, to protect broadcasting and telecommunications services from external influences. To these ends, the KCC opened the ‘Korean Space Weather Center’ in Hallim-eup, Jeju-si, on Nov 16, 2011, which will be responsible for observation, forecast and warning of against electromagnetic pulse’ activities in space. The center will observe around the clock any changes in the environment around electromagnetic pulses in space in connection with the behavior of the sun to minimize any potential damage in broadcasting and telecommunications infrastructure that may incur as a result of disaster in electromagnetic pulses in space. At the same time, the KCC plans to draw up a counter-electromagnetic pulse disaster manual and establish a cooperation system with and between all government departments

<Figure IV-16> Opening of Jeju Space Radio Center



## F. Safe Watching of 3D Video Materials

### 1) Promotion and improvement of recommendations for safe 3D video watching

As the need to enlighten the public about the safety of watching 3D video images becomes more prominent and the need for guidelines on safe 3D video watching is on the rise, the KCC formed a ‘Safe 3D Video Watching Council’ (hereunder, “the council”) in May 2010 and enacted the ‘Clinical Recommendations for Safe 3D Video Watching (Ver. 1.0)’ (hereunder, “the recommendations”).

The KCC designed PR materials in such a way so that the general public can easily understand the recommendations and watch 3D broadcasting with greater comfort, and

distributed them on and off line through 3D pilot broadcasting.

The KCC also announced the second recommendations (ver. 2.0), which combine data on the binocular parallax’s size, 3D content quality evaluation technologies and methodologies, and findings from clinical experiments and research on physiological impacts. The second version of the recommendations suggest the need for a more specific analysis for 3D content impacts on the human body as obtained through clinical experiments conducted for ordinary people, children, and vulnerable people (with ophthalmological diseases, brain diseases, etc.), so that the public can enjoy 3D contents at ease and the recommendations may contribute to revitalizing the 3DTV industry.

<Table IV- 33> Key Improvement Details of Clinical Recommendations on 3D Image Safety (Ver. 2.0)

Classification	Key details
Recommended for	- Newly added or updated items concerning viewing distance, headache sensitivity, inter-iris distance, cubic screen vision, and age
Recommended for	- Newly added, deleted or updated items concerning visual insomnia sensitivity of juveniles, disorder symptoms of viewers with strabismus/astigmatism/anisometropia/amblyopia, 3D vulnerable viewers, Perkins patients, and viewers with high photosensitivity

### 2) 3D contents production guideline

To help supply high-quality 3DTV content with adequate 3D effects that is comfortable and safe to watch, the KCC formed a ‘3D contents production guideline work group’ comprised of 3D experts in July 2011, and has enacted the ‘3D Contents Production

Guidelines (ver. 1.0)’ (hereinafter, “the guidelines”). The guidelines provide instructions on taking 3D pictures, CG, edition, etc., to ensure distribution of vivid, high-quality 3D content and audience safety. The guidelines include specific definitions of 3D-related terms and requirements for each step of

production including preparation for shooting, shooting and edition.

## 4. Advanced Country with Internet Culture

### A. Creating an Advanced Internet Culture

#### 1) 'A-in-se<sup>2)</sup>' (Beautiful Internet World) Nationwide BIW campaign

The KCC has routinely conducted 'Create Beautiful Internet World' campaigns (55 times in 2010, 65 times in 2011) together with the BIF Council and government agencies (12), academic institutions (3), the press (9), internet business operators (9), private organizations (32) and various other projects for propagating a beautiful internet culture. A variety of programs for propagating a beautiful internet culture have been launched such as the Internet Morality Contest, which collects, through public offering, excellent sources of ethical and promotional content (slogans, posters, CC, etc.).

The KCC also provided a 'Create Beautiful Internet World Weekly Declare Ceremony' and other weekly events in 2011 from September 26 to 30, which was designed to propagate a sound and safe internet culture and encourage the public to join the campaign. During the same period, the KCC planned a variety of events including indabas, online vowing campaigns, the golden bell ethics class, BIW street campaign, PC gifts of love, internet filial duty album presentation ceremony, internet ethics society founding conference and commemoration seminar, and the internet ethics experience school, etc., encouraging juveniles, elderly citizens and the general public to join.

#### 2) Internet ethics education

The KCC provided the 'Internet Ethics Class' combined with after-school classes that was designed to promote awareness of internet ethics, 'Internet Ethics Lecture Tours' (visit training), and the 'Internet Literary Creative Work Study' consisted of experiences outside of school.

<Table IV- 34> 2011 Operational Status of Internet Ethics Classes

Classification	Elementary	Junior high	Senior high	Total
Students (persons)	5,084	2,815	99	7,998
Schools (each)	189	96	6	291

2) 'A-in-se' : Coined name denoting 'Create Beautiful Internet World'

&lt;Table IV- 35&gt; 2011 Operational Status of Internet Ethics Circuit Classes

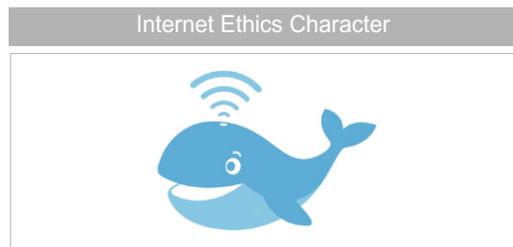
Classification	Seoul area	Chungnam	Chungbuk	Gangwon	Gyeongnam	Gyeongbuk	Jeonnam	Jeonbuk	Jeju	Total
Students (persons)	5,220	612	629	239	1,588	1,163	1,110	337	62	10,960
Schools (each)	28	4	3	2	7	6	7	2	1	60

### 3) Development and publication of internet ethics logos and characters

As part of its effort to create a beautiful internet world jointly with the Korea Internet &

Security Agency (KISA), the KCC launched an internet ethics brand development project to design logos, characters, and jingle songs.

&lt;Figure IV-17&gt; Logo and Character for Internet Ethics



The KCC distributed internet ethics PR materials through theater ads, outdoor electronic displays, YTN and KT olleh TV. In 2012, the KCC will actively use the internet ethics logos and characters in their ‘Create Beautiful Internet World’ campaign and will be developing them as a national brand.

### 4) Activities of Korea Internet Dream Star

The KCC undertook various kinds of activities, jointly with KISA, to guide and boost juveniles into a sound internet culture through the 2nd ‘Internet Dream Star,’ which was joined by elementary and middle school students across the nation. (2010:1st squad joined by 831 → 2011: 2nd squad joined by 2,853) Throughout 2011, the KCC provided a

wide range of events including: the Dream Star launching ceremony, a ‘100-day (from Jun 16 to Sept 23) Good Reply Posting’ campaign, internet ethics work-study, launching a press corps for Dream Star, a ‘Dream Essay Contest,’ and a hazardous material bulletin board (a watchdog) for internet environment improvement activities, production and presentation of a ‘Internet Filial Duty Album.’

## B. Enforcement of Illegal/Pernicious Information Intercepting Activity

### 1) Prevention of circulation of harmful information for juveniles

Under Article 44.7.1 of 「Act on Promotion of Information and Communications Network

Utilization and Information Protection, etc.], no one can distribute illegal or pernicious information on the IT network, and the provider of such information or manager of the bulletin board posting such information, through the deliberation of the KCC to ensure the effectiveness of the above Act, can be denied or ordered to stop. In line with these government policies, the KCC has established a system for monitoring and isolating the circulation of obscene materials by means of domestic web-hard service to promote voluntary regulation among service providers against the distribution of such obscene materials.

Moreover, the KCC drew up bills of existing enforcement decrees and notifications that stipulate the qualifications of secondary communications service providers - of special types such as web-hard and P2P operators - such as business registration procedures and other related detailed criteria; these bills were reviewed and legislated.

Special-type secondary service providers have to ►submit technical working plans for preventing the circulation of obscene materials or illegal writings and for protecting personal information. In addition, such service providers are required to submit ►plans for deploying personnel to monitor the circulation of illegal,

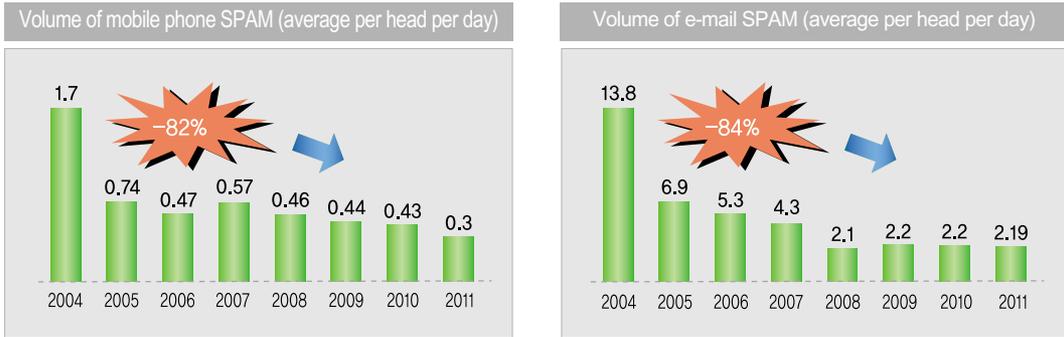
obscene materials and writings 24 hours a day; ►provide a document proving the provider has a starting capital of 300 million; ►and present business plans and user protection plans. Existing special-type secondary service providers such as web-hard or P2P businesses are required to finish the business registration procedure within 6 months from the day the law goes into effect. It is hoped the amended Enforcement Decree will reinforce a web hard service with a sound content platform and pave the way for the co-survival of all hardware, content providers and copyright owners.

## 2) Reducing spam e-mails, text messages and counter-measures

The KCC has continuously made efforts to deliver competent system improvements for the reduction of spam mail and text messages (hereinafter “SPAM”), and development and distribution of illegal SPAM and their senders through aggressive monitoring and crackdown activities, while encouraging communications service providers to voluntarily take preemptive regulation measures. This effort has so far resulted in an 82% decrease in per-capita SPAM reception for mobile phones and an 84% drop for e-mails in 2011, compared with statistics from 2004.

It is estimated that primary contributions to

&lt;Figure IV-18&gt; Trend of Daily SPAM Volume Received per User



the decrease of SPAM in 2011 are, first, the commitment demonstrated by the KCC via pilot measurement of the SPAM distribution status, which were delivered to encourage voluntary regulation of major telecom service providers who provide the sending and receiving routes, as well as the increase of subscribers to SPAM interception services. Starting in 2012, official measurement of the SPAM distribution status for major telecom services will be carried out and the cumulative measurement results for the first and second

half will be made public twice a year.

The intelligent SPAM interception service (free of charge), expanded by major mobile services, has directly contributed to relieving people's concern about SPAM. Beginning in 2010, Korean mobiles services required all juvenile users under 19 subscribe to the intelligent SPAM interception service (free of charge) by July 2011, and since December 2011, new users have subscribed to the same service.

&lt;Table IV- 36&gt; Number of Subscribers to Intelligent SPAM Blocking Service

(Unit: 10,000 persons)

Mobile service operators	SKT	KT	LG U+	Total
Time provided	December 2007	April 2010	January 2010	-
Total users (as of December 2011)	2,655	1,656	939	5,250
Number of service subscribers (against total subscriber)	581 (21.88%)	712 (43.0%)	102 (10.86%)	1,395 (26.57%)

To prevent e-mail accounts from being exposed to SPAM, the KCC has taken measures and enhanced the SPAM isolating functions of portal websites as the first SPAM receiver. The KCC has also prepared

technological counter-measures for isolating SPAM of posting types, other than those sent by cellular phones or e-mail. Starting in 2012, the measures will be provided to small bulletin board operators.

To cope with the increase of social SPAM, the KCC conducted research on messaging techniques for each service (aspects vulnerable to SPAM) and service providers' measures taken against SPAM in 2011, and based on the results, the KCC plans to introduce new counter-measures for social SPAM in 2012.

## 5. Improvement of the Security Foundation of Cyber Space

### A. Establishing a Cyber Security System

#### 1) DDoS counter-measures and cyber shelter

The KCC drew up a plan for establishing a 'DDoS Cyber Shelter' in Sept 2010 to respond quickly to infringement accidents on the internet, procure the required funds, and establish a system capable of minimizing damage by defending DDoS attacks on small and medium businesses, which is in full operation as of now.

Since its launch in 2010, a total of 153 institutions have used the DDoS Cyber Shelter service and of these, 85 cases used the DDoS defense service.

<Table IV- 37> Status of Provision of DDoS Cyber Shelter Service

Classification	2010	2011	Total
Number of service operators using the service	52	101	153
Number of cases DDoSattacks defended	25	60	85

The DDoS attack defense service combined with the treatment and interception service against IP addresses of zombie PCs and attack-commanding servers prevented recurrence of malicious code infections. In particular, we detected 71,508 zombie PCs out of 116,299 sets used in the DDoS attack on Mar 4, 2011 (hereinafter "3.4 DDoS") through the DDoS Cyber Shelter, and about 98,000 zombie PCs were uncovered in 2011.

To minimize damage from DDoS attacks through quick detection and elimination of

DDoS traffic on internet connected network routes, the KCC has been establishing a counter-DDoS system by promoting security awareness among Multiple System Operators (MSO) and ISPs, encouraging them to invest in information protection. As shown in 7.7 DDoS in 2009 and the 3.4 DDoS attack in 2011, considering the ever-increasing need for a quick detection and response to DDoS attacks, the KCC added two ISP · MSO operators in 2011 and will continuously expand and build the counter-measure system until 2015.

&lt;Table IV- 38&gt; Status of DDoS Response System Deployed in Internet Service Sections

Classification	Number of service operators	Name of service operators
2008	3	LG U+, SK Broadband, SK Telecom
2009	4	KT, DreamLine, Sejong Telecom, Onse Telecom
2010	7	SK Telecom, SK Broadband, Dream Line, Sejong Telecom, CJ Hello Vision, T-Broad, HCN
2011	2	C&M, KINX

## 2) Tightening security requirements for websites and users

The KCC has built a website check-up system (MC-Finder) to respond to the distribution of malignant codes through hacked websites, which has examined 1,820,000 domestic websites to detect and eliminate hidden malignant codes. In particular, in 2011, the checking list was expanded to include a total of 11,805 websites. The KCC has supplied, free of charge, ‘Castle’ (web firewall) to block hacking on the internet and ‘Whistle’ (Web Shell detection tool) to detect and eliminate malignant codes, so that the general public can safely run and manage their individual websites.

Beginning in 2010, the KCC opened a web checking tool bar that informs users of the existence of malignant codes hidden in websites it visits and provides information on vulnerable aspects as well as worm and virus related preventive and responsive measures in real time. Upgraded to ver. 3.1 in 2011, the software program will contribute to improving user-oriented security with an improved malignant code detecting capability. To accelerate the spread of the program, the KCC

has continued to publicize the program on the KISA website, banners of major portal websites, and mass media (TV, etc.) with higher ripple effect.

## 3) Cyber treatment system for infected PC

To directly treat PCs infected with malignant codes, the KCC built the ‘Infected PC Cyber Treatment System’ in 2010 and started its full-fledged operation in 2011. This way, the KCC could detect Zombie PCs compromised by DDoS attacks and inform the user of the virus, distributing special vaccines and, eventually, implementing a systematic Zombie PC solution for all users. In particular, the KCC effectively informed the details of infected PC cyber treatment service to internet users (KT, SK Broadband, T-broad) in the nationwide 3.4 DDoS cyber terror and supplied special vaccines for 455 cases. In addition, in collaboration with Microsoft U.S., the KCC conducted intensive treatment for SPAM sending malignant codes, contributing to the decrease of SPAM circulation. In addition, the KCC developed and supplied vaccines for the interception and infection treatment of Zombie PCs used in DDoS attacks on such websites

such as EBS SAT class.

The KCC remotely supported infected PC treatment by using an infected PC treatment system to respond more quickly to an infringement accident, and, for such a purpose, the KCC promptly developed special vaccines that could cure PCs infected with malignant codes.

#### 4) ISMS certification

ISMS (Information Security Management System) Certification, which was enforced in 2002 under the 「Act on Promotion of Information and Communications Network Utilization and Information Protection, etc.」, is a system for determining whether the ISMS, built and run by a company upon a voluntary application for the system, conforms to the legal requirements. This way, the KCC has continuously refreshed the need for establishing an information protection and management system for domestic enterprises and contributed to preventing damage and the

release of information assets.

In 2011, the KCC issued 27 ISMS certifications, a 23% increase from the 22 cases in 2010. This signifies that industries' awareness of ISMS Certification has improved and the sentiment for voluntary acquisition of certifications is settling into society. The amendment of the 「Act on Promotion of Information and Communications Network Utilization and Information Protection, etc.」, enacted in December 2011, has streamlined the information security diagnosis system a level higher into ISMS, which is scheduled to go into effect in February 2013. The KCC also analyzed defects identified annually by certification screening, distributed the list of the most frequently found top ten items along with pertinent measures, so that certified companies could identify repeatedly found vulnerable aspects and take appropriate actions for improvement. In 2011, there were 736 defective cases, for which corrective actions were instructed to be made.

<Table IV-39> Trend of ISMS Certificates Issued

(Unit: %)

Classification	2007	2008	2009	2010	2011
Newly issued certificates	44	56	63	76	86
Cumulative certificates issued	61	74	83	90	98

#### 5) Boosting the use of encryption

The KCC, in cooperation with KISA, developed the Korean encryption solution, 'SEED,' in 1999 and the light encryption, 'HIGHT' and has been participating in many

activities for the expansion of Korean encryption technologies into a variety of IT service areas. In 2011, KCC also jointly distributed the Korean code library for smartphone so that Korean code technology

can be used for document control and mobile payment Apps through optimizing of the code

technology to the smartphone environment.

<Table IV- 40> Status of Korean-Code Library Provision

(단위 : 건)

Classification	2008	2009	2010	2011	Total
SEED	645	1,150	1,370	1,949	5,114
HIGHT	-	166	333	117	616
For smartphone Code or encryption library	-	-	-	654	654
Total	645	1,316	1,703	2,720	6,384

Since 2011 when laws and regulations on encrypting personal information went fully into effect, companies that need to adopt encryption technologies have rapidly increased. By taking into consideration the fact that companies managing a large volume of data are not willing to adopt encryption systems since encryption may deteriorate the operational performance, the KCC developed an encryption technology using a Graphic Process Unit (GPU) for large volumes of data, which is capable of parallel processing, different from a CPU. In addition, as the CPU no longer runs on 32 bit but instead 64 bit, with the advancement of IT technologies, Korean code algorithms show the best performance in a 64 bit environment, so the KCC developed Korean code libraries and plans to distribute them along with existing libraries.

#### 6) Promotion of cyber security awareness

In 2010, the KCC began to participate in activities for promoting the general public's awareness of information security, mainly through TV channels due to the powerful influence of TVs in message delivery and its familiarity to the public.

In 2011, to inform the public about damage from internet infringement accidents and preventive measures, the KCC used terrestrial TV broadcasting service (KBS) and cable TV service (9 channels including YTN, MBN, and Arirang TV) and, for program types, refinement, prearranged news, campaign commercials, documentaries, etc.

<Table IV- 41> 2011 Status of Broadcasting for Enhancing General Public Perception of Information Security or Protection

Classification	Topic delivered	Broadcasting stations	Number of days	Instances or frequency
Documentary	Danger of zombie PCs and prevention measures	KBS, YTN and 4 others	January to July	12 times
Culture information	Security of wireless LAN and smartphone	KBS	September	1 time
Planning news	Workshop for preventing hacking and prevention of malicious code infection through Website	YTN	November, Decemner	2 times
Campaign ad	Practice of adhering to basic rules for information security	KBS, YTN, Arirang TV, Uga TV, Real TV	June to Decemner	703 times

### 7) Diagnosis on information security

The information security diagnosis system was sparked by the 1.25 disaster, which raised a question about the need for a minimum information security measure against DDoS attacks to be taken by ISPs, IDCs, cyber malls, portals, and other IT service providers, and was implemented by the amendment of the 「Act on Promotion of Information and Communications Network Utilization and Information Protection, etc.」 in July 2004. The system has so far contributed significantly to maintaining the security and reliability of IT networks. The KCC has maintained a proven information security system, by making sure IT service providers receive security diagnosis service every year.

In addition, the KCC developed and distributed vulnerability checklists for those on

the security diagnosis list, and provided them with field visiting tech support for the convenience of diagnosis recipients and to avoid year-end concentration. In 2011, these efforts led to an increase of applicants for security diagnosis of 7.4% from 272 companies in 2010, and a rise of information security levels to 98.3% from 39% in 2004 when the system was first introduced.

The amendment of 「Act on Promotion of Information and Communications Network Utilization and Information Protection, etc.」, enacted in December 2011 through a resolution by the National Assembly, provides that the information security diagnosis system will temporarily be implemented until the end of 2012 and will be streamlined into ISMS in February 2013.

<Table IV- 42> Number of Service Operators Subject to Diagnosis of Information Security (Unit: each)

Classification	2005	2006	2007	2008	2009	2010	2011
Key service providers(ISP)	13	12	12	15	15	11	11
IDCs(IDC)	63	69	90	93	102	113	112
Telecom service providers	66	79	105	124	130	148	169
Total	142	160	207	232	247	272	292

## B. Measures against Threats to Mobile Security

### 1) Enhancement of the security of smartphones

The KCC operated a government-private sector joint task force for information security for smartphones to foster a safe mobile environment, prevent mobile infringement accidents and develop counter-technologies. Through this task force, the KCC helped share information on smartphone security issues and came up with solutions for preemptive responses to mobile infringement accidents. In June 2011, the KCC developed the ‘Smartphone Vaccine Guideline,’ which was distributed over a separate mobile web page, so that domestic smartphone users could search and directly install mobile vaccines fit to their own handsets. In addition, in September 2011, the KCC developed the ‘Smartphone Security Self-Check App’ with which the user could check the security level of his or her own smartphone.

In December 2011, the KCC completed the development of malignant behavior detection technologies and prototypes for the Android App that are capable of detecting malignant applications found in the Black and Android Market, misused and compromised as routes for dispersing mobile malignant codes. In 2012, the KCC plans to use the original Android malignant application detection technology to build a system capable of

checking for malignant applications in domestic and overseas black and private markets.

### 2) Security enhancement of wireless LAN

The KCC has carried out PR activities for over 20,000,000 smartphone users in Korea in terms of security measures and safe usage of over 8,000,000 sets of wireless sharers including those for internet telephone and private facilities.

Additionally, the KCC provided guidelines on how to set security for models of each major manufacturer of wireless sharers via a wireless LAN information page on the website of ‘Bohonara’, undertaking activities for promoting awareness about wireless LAN security by making use of mass media. The KCC has also encouraged wireless sharer manufacturers to apply a security arrangement to each model, such as individual password setting and WPA2 option included on top of the security setting menu.

## C. Enhancement of Privacy Protection

### 1) Enterprises’ privacy protection

As the use of personal information reaches far and privacy spill accidents are increasing, enterprises are enforcing privacy protection activities on their own and seeking effective authentication methods provided by third party vendors. To meet these needs, the KCC

introduced the ‘Private Information Management System (PIMS)’ through its resolution (2010-66-273) in 2010.

In 2010, the year when PIMS was established, the KCC devoted itself to supporting enterprises interested in the acquisition of certifications for the establishment of PIMS, through a series of initiatives such as fee and penalty alleviation, training on PIMS establishment and operation procedures and legal requirements for privacy protection and development of PIMS self-diagnosis tools. The KCC issued 10 certifications to enterprises dealing with numerous privacy matters such as telecom service, portals, and cyber malls through its deliberation process.

The KCC also proposed PIMS to the ITU -T the International Organization for Standardization(ISO) and the International Electrotechnical Commission (IEC) to adopt it as a new assignment for research. In the nation, PIMS has already been adopted by the government as a national standard (KCS.KO-12.0001; December 30, 2011), having since secured public confidence by proving its reliability and legitimacy. In particular, since the 「Act on Promotion of Information and Communications Network Utilization and Information Protection, etc.」 has been amended (Article 47.3 added) and legal grounds for PIMS have been constituted, it will hopefully contribute to creating a sentiment where

enterprises voluntarily try to enhance privacy systems.

## 2) Responding to privacy spills or exposure accidents

In cooperation with KISA, the KCC is trying to propagate the use of i-PIN to replace the ‘Resident Registration Number (RRN)’ to solve privacy infringement issues such as using someone else’s name, arising from the overuse of the RRN on the internet. Since 2009, under the 「Act on Promotion of Information and Communications Network Utilization and Information Protection, etc.」, websites have been notified of their requirement to adopt membership authentication means other than RRNs. In 2011, the KCC examined and informed 1,042 websites (in the May 2011 notification) not to use RRNs and to adopt an alternative means of identification.

In addition to this, the KCC has prepared a plan for restricting the collection and use of RRNs and will have the 「Act on Promotion of Information and Communications Network Utilization and Information Protection, etc.」 amended to include the proposals in the same plan as well as some exceptions, and thereby conduct the enactment in August 2012 at the latest. In addition, the KCC introduced ‘Plans for Expanding Availability of Security Server for Privacy Protection’ in September 2006, as part of its effort to supply security servers as technical means for privacy protection along

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data sending routes on the internet, and since then, it has been trying to expand the supply to both public and private sectors. In particular, in 2011, the KCC provided a program where security servers and related supports are supplied free of charge to SMEs.

To effectively respond to privacy spills or exposure accidents and prevent additional damage, the KCC and KISA have been running a counter-privacy spill system which quickly detects and eliminates private information exposed on the internet.

The KCC also provided technical support and onsite service to any enterprise with a lukewarm response in eliminating exposed personal information due to technological limits or lack of manpower, and training on the negative effects of privacy spills for those who lack awareness about the importance of privacy protection. For overseas support, the KCC installed hotlines reaching Taiwan, Hong Kong, Macao, Vietnam, and China where privacy spills are increasing for various reasons including the Korean Wave, making quick requests for elimination of any exposed private information and to share information and issues related with privacy protection.

The KCC drew up ‘Plans for Enhancing Privacy on the Internet,’ designed to fully reinforce privacy protection systems of internet operators and focused on preventing the recurrence of privacy spills or secondary damage resulting from such cases.

### 3) Promotion of awareness about privacy protection

The KCC established the ‘Mid and Long Term Privacy Protection Education & PR Framework’ in July 2011 to allow both service providers and users to be aware of the importance of privacy and to follow related guidelines for themselves. In 2011, based on the framework, the KCC propagated the concept of privacy and protection measures using various kinds of media.

Major activities included the development and training on contents for lecture tour on privacy protection; ‘My Privacy Protection Campaign 2011’ with topics including changing passwords, transition to i-PIN, and management of idle accounts; and a campaign conducted with 3 major telecommunications service providers for returning to the written application for submission to subscribe to a telecommunications service.

In addition, the KCC paved the way for CPOs, privacy managers and internet operators to secure capacity for privacy protection and for voluntary related activities. The KCC also developed privacy related training contents to be used online for each business field such as cyber malls and computer games, to ensure the public receives differentiated privacy education.

## D. Developing Global Leadership in Cyber Security

### 1) Enhancing cooperation for infringement accidents at home and abroad

The KCC has formed a government-private sector joint research panel comprised of experts in each area to enhance cooperation and joint response for infringement accidents on the Internet at home and abroad. In 2011, the KCC organized 4 sub-divisions including the 'Privacy Protection Policy,' 'DDoS,' 'Converged Security,' and 'Forensics' and held a seminar for enforcing experts' response capabilities & active information sharing and the 15th Hacking Prevention Workshop in November 2011, jointly with CONCERT (Computer Emergency Response Team Coordination Center).

The KCC successfully coordinated the APCERT annual conference in March 2011, thanks to its experience from activities in FIRST (Forum of Incident Response and Security Teams), APCERT (Asia-Pacific Computer Emergency Response Team) and other cooperative tasks. In this event, the KCC entered into a memorandum of understanding with IDA (Infocomm Development Authority) in Singapore, Korea-China-Japan CERT (Computer Emergency Reaction Team), and McAfee.

In addition, through the 'College Information Protection Community Support Program,'

launched in 2006, the KCC granted tickets to an overseas conference offered to college student prize winners who took part in the 'information protection practice course - hacking defense contest' for the development of privacy protection experts.

### 2) International cooperation against global cyber threats

The KCC had the opportunity to participate in the 'OECD Internet Economy High-Level Meeting,' held as a post-measure of the 'OECD Ministerial Meeting 2008' in June 2011, as a result of its successful attraction of developing countries' attention to global cyber threats and active participation in international cooperative programs. The 'OECD High-Level Meeting' was arranged to emphasize that the competence of the internet depends on accessibility, openness and users' confidence of in high-speed network and to determine the government's roles and policy-making principles to maintain this, based on the 'Seoul Declaration for the Future of Internet Economy' accepted by the 'OECD Ministerial Meeting' in 2008. In this meeting, the KCC stressed the need for its collaboration with international organizations including the OECD and the need for active response to the cyber security issue going global, and proposed to hold a 'High-Level Meeting for Information Protection.' In the future, the KCC means to coordinate such meetings as the OECD High-

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Level Meeting for Information Protection to continuously promote its cooperation and discussion with the international society on cyber world rules.



# Appendix

1. Financial Statements in 2011
2. The List of General Meetings and Agenda Items of KCC in 2011
3. 2011 Monthly Major Achievements
4. Broadcasting and Telecommunications Industry in 2011 by Sector





# Appendix

## 1. Financial Statements in 2011

### ■ Budget Execution in 2011

<Appendix Table-1> Budget Execution in 2011

(unit : KRW 1mn)

Category	Budget (A)	Real Budget (B)	Actual (C)	Rate of Execution (%) (C/B)	
Income	Total	856,051	856,454	1,140,358	133.1
	General accounting	311,565	311,565	318,123	102.1
	Innovative City Construction special accounting	-	-	-	-
	Broadcasting and Telecommunications Development Fund	544,486	544,889	822,235	150.1
Expenses	Total	865,277	870,317	1,123,164	129.1
	General accounting	305,017	305,017	293,936	96.4
	Innovative City Construction special accounting	15,774	20,411	6,993	34.3
	Broadcasting and Telecommunications Development Fund	544,486	544,889	822,235	150.1

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 (KR 13,418 million unexecuted → rolled over to the fiscal year 2012).

## ■ 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	FY2011(A)	FY2010(B)	Change (A - B)	
			In amount	In %rate
Assets	1,510,105	1,092,326	417,779	38.2
Liabilities	433,103	24,034	409,069	1,702.0
Capital	1,077,002	1,068,292	8,710	0.8

### (2) Income and Expenses

<Appendix Table-3> Income and Expenses of the Broadcasting and Telecommunications Developing Fund (unit : KRW 1mn)

Category	FY2011(A)	FY2010(B)	Change (A - B)	
			In amount	In %rate
Net program costs	559,946	335,521	224,425	66.9
Costs	215,666	121,686	93,980	77.2
Income	542,564	478,106	64,458	13.5
Result	233,048	△20,899	253,947	1,215.1

Note : The results corresponds to net income for the period in corporate accounting, and their amounts are preceded by the symbol △.

## ■ Budgets and Expenses by Program

<Appendix Table-4> Budgets and Expenses by Program

(unit : KRW 1mn)

Program	Budget	Expense
Total	869,914	1,123,164
<General accounting >	305,017	293,936
Paragraph 1000. Acceleration of convergence between broadcasting and telecommunications	1,745	1,745
Paragraph 1200. Improvement of broadcasting infrastructure	14,657	14,657
Paragraph 1300. Infrastructure development for the radio and broadcasting industry	3,920	3,711
Paragraph 1500. Expansion of infrastructure for spectrum management and research	36,715	35,724
Paragraph 3100. Upgrading telecommunications services	23,220	23,159
Paragraph 4100. Protection of users and the promotion of fair competition	2,030	1,989
Paragraph 4300. Upgrading network infrastructure	13,800	13,800
Paragraph 4400. Strengthening information protection	56,237	56,237
Paragraph 5100. Strengthening international cooperation in broadcasting and telecommunications	12,660	12,648
Paragraph 7100. Administrative support for broadcasting and telecommunications	140,033	130,266
< Innovative City Construction Special Accounting >	20,411	6,993
Paragraph 1500. Expansion of infrastructure for spectrum management and research	20,411	6,993
< Broadcasting and Communications Development Fund >	544,486	822,235
Paragraph 1100. Acceleration of convergence between broadcasting and telecommunications	64,926	64,155
Paragraph 1200. Acceleration of convergence between broadcasting and telecommunications(financing)	20,000	20,000
Paragraph 1400. Infrastructure development for the radio and broadcasting industry	4,150	4,150
Paragraph 1600. Creation of infrastructure for the promotion of broadcasting	54,174	54,174
Paragraph 1700. Creation of infrastructure for the promotion of broadcasting (financing)	22,000	21,070
Paragraph 2100. Improvement of broadcasting infrastructure	60,729	59,948
Paragraph 4200. Protection of users and the promotion of fair competition	21,151	21,151
Paragraph 5200. Strengthening international cooperation in broadcasting and telecommunications	3,010	2,935
Paragraph 6100. Infrastructure development for the broadcasting and telecommunications research and development(R&D)	199,327	199,327
Paragraph 7200. Operating costs for the Broadcasting Development Fund	3,181	3,040
Paragraph 9000. Internal transaction expenses	50,000	50,000
Paragraph 9700. Operation of surplus funds	41,838	322,285

## 2. The List of General Meetings and Agenda Items of KCC in 2011

<Appendix Table-5> The List of General Meetings and Agenda Items of KCC in 2011

Session	Date	Type	Item
1st	Jan.6 (Thu)	Voting	Vote on changes proposed to the 'Method and Criteria for Calculating Compensation for Universal Service Loss' (notice)
		Voting	Vote on the enactment of the 'Distribution Rate of Revenues from Radio Frequency Allocation' (notice)
		Reporting	On the 'Influences of Smart TV and Policy Tasks'
		Reporting	On the 'Plans on Promoting Smart Work'
2nd	Jan.19 (Wed)	Voting	Vote on the amendments proposed for the Enforcement Decree of the 'Act on the Protection, Use, etc. of Location Information'
		Voting	Vote on foreign capital investment in FEBC (Far East Broadcasting Co.)
		Voting	Vote on the appointment of a person to fill a vacancy in the Media Diversity Committee
		Voting	Vote on the 'Basic Plan for Surveying Viewing Shares of TV Networks in 2011' (draft)
		Reporting	On detailed evaluation criteria to approve the use of broadcasting channels by home shopping channels dedicated to small and medium businesses
3rd	Jan.21 (Fri)	Voting	Vote on the grouped reviewing of notifications in line with the revision of radio wave laws
		Voting	Vote on the 'Rules on the Operation and Management of the Broadcasting and Telecommunications Development Fund' (notice)
		Voting	Vote on the enactment of 'Rules on Broadcasting and Telecommunications R&D Management' (notice) and by laws
		Reporting	On establishing the Broadcasting infrastructure for the Support Center for Digital Broadcasting content
		Reporting	On the 'Master Plan for Spam Prevention' (draft)
4th documentary resolution	Jan.21 (Fri)	Voting	Vote to approve facility changes of 23 system operators including T-broad Gangseo Broadcasting
		Voting	Vote on the registration of two businesses using broadcasting channels, including CMBC
		Reporting	On the '2011 Regulatory Reform Projects to promote'
5th	Jan.26 (Wed)	Voting	Vote on the licensing of 8 new location information companies including Microsoft Korea
		Voting	Vote on detailed evaluation criteria to approve the use of broadcasting channels by home hopping channels dedicated to small and medium businesses

Session	Date	Type	Item
6th documentary resolution	Jan.31 (Mon)	Voting	Vote on the re-licensing of product distributing businesses using data broadcasting channels-10 companies including GS Home Shopping Inc.
		Voting	Vote on the registration and registration change of four businesses using broadcasting channels, including Stree Co., Ltd.
		Voting	Vote on the request for the suspension of a disposition taken in relation to a broadcasting review (request by KBS (Korea Broadcasting System))
		Voting	Vote on the enactment of 'radio frequency allocation Application Procedures, Methods, etc'
7th	Feb.8 (Tue)	Voting	Vote on the composition of Broadcasting and Telecommunications Development Fund Operation Evaluation Council
		Voting	Vote to change the largest capital investors of system operators-SBC& PCB
		Voting	Vote on submitting opinions about the KBS TV license fee
		Voting	Vote on corrective measures about the infringed benefits of the subscribers of KT, SK Broadband and LG U+
8th documentary resolution	Feb.14 (Mon)	Reporting	On the comprehensive rearrangement of four acts including the Enforcement Decree of the Radio Waves Act
9th	Feb.17 (Thu)	Other	Being briefed on the position of KBS about the proposed increase of the TV license fee
10th	Feb.18 (Fri)	Voting	Vote on the presentation of review results about the increase of the KBS TV license fee
11th	Feb.21 (Mon)	Voting	Vote on corrective measures against the infringed benefits of the subscribers of KT, SK Broadband and LG U+
		Voting	Vote on the implementation plan (draft) for 2011 broadcasting and telecommunications R&D
		Voting	Vote on the division of a corporate body (ns mall)
		Voting	Vote on an appraisal plan regarding the use of broadcasting channels by home shopping channels dedicated to small and medium businesses
		Reporting	On the evaluation results of competition status of the 2009 broadcasting market (draft)
12th documentary resolution	Feb.23 (Wed)	Voting	Vote on the change of the largest capital investor of the product-distributing businesses using data broadcasting channels (I Digital Home Shopping Inc.)
		Voting	Vote on the corporate merger of CJ E&M, etc. (the merger of five companies including CJ E&M and CJ Media)
13th	Feb.24 (Thu)	Voting	Vote on the proposed notice of 'The application procedures and methods to get support in conversion to digital broadcasting'
		Voting	Vote on administrative sanctions for violations of personal information protection laws and regulations

Session	Date	Type	Item	
		Voting	Vote on corrective actions to be imposed on KT and 21 other common carriers for their accounting rule violations found upon the review of their financial reports	
		Voting	Vote to approve the change of the largest capital investors of system operators-GS Gangnam Broadcasting Corporation and GS Ulsan Broadcasting Corporation	
		Voting	Vote on the allocation of radio waves used for radio paging-Seoul Mobile Telecom	
		Voting	Vote on a common carrier and the radio frequency allocation for mobile internet (WiBro) - Korea Mobile Internet Consortium	
14th	documentary resolution	Mar.4 (Fri)	Voting	Vote on the realignment of four laws including the Enforcement Decree of Radio Waves Act
			Voting	Vote on the amendment of 'Intellectual home network facility installation and technical standards' (notice)
15th		Mar.9 (Wed)	Voting	Vote on the selection of businesses using broadcasting channels for home shopping channels dedicated to small and medium businesses
16th	documentary resolution	Mar.11 (Fri)	Voting	Vote on the approval of the amendment of 'Rules on the Domain Name Management'
17th		Mar.21 (Mon)	Voting	Vote on the expansion of cases that can be settled on paper rather than through a physical meeting of persons Vote on the imposition of penalties on the violation of the announcement and reporting obligations about the person in charge of broadcast programming
			Voting	Vote on the corrective measures against the violation of broadcasting hours
			Reporting	On the proposed improvement of the retransmission system of terrestrial broadcasting programs
			Reporting	On the evaluation results of market effects of the OBS rebroadcasting out of its geographical boundaries
			Reporting	On the selection plan of the city to host the International Telecommunication Union Plenipotentiary Conference 2014
18th	documentary resolution	Mar.22 (Tue)	Voting	Vote on tariff filings of 15 system operators (including GS Gangnam Broadcasting)
			Voting	Vote on facility changes of 18 system operators (including Hyundai Communications & Network)
			Voting	Vote on the registration of business using broadcasting channels (two firms including KMH) VotingApproval of the retransmission of foreign broadcasting programs (6 broadcasters including BBC HD)
			Voting	Vote on administrative sanctions imposed on companies violating personal information protection laws and regulations
			Voting	Vote on the amendment of 'the criteria for the establishment of a common broadcast reception facility' (notice)

Session	Date	Type	Item
		Voting	Vote on the amendment of 'the criteria for the registration procedures and qualifications for foreigners participation in information and technology business' (notice)
		Voting	Vote on the amendment of 'the scope of majors required by IT technicians and their career recognition methods' (notice)
		Voting	Vote on the approval of merger and stock acquisition of common carriers and the permission and approval of the change of system operators (the merger of four companies by Qrix Seodaemun and the stock acquisition of C&M Nowon Cable)
		Voting	Vote on the approval of stock acquisition by a common carrier and the change of a C&M-affiliate system operator the acquisition of T-broad Dongdaemun stock by T-broad Hanbit)
19th	Mar.23 (Wed)	Voting	Vote on the Rules on the Levy and Collection of Broadcasting and Telecommunications Development Fund (notice)
		Voting	Vote on the licensing of common carriers (three broadcasters including Hana Broadcasting)
		Voting	Vote on the approval of the stock acquisition of common carriers (the acquisition of Onse Telecom stocks by Sejong Telecom and K-PEF)
		Voting	Vote on the basic plan for the reallocation of the radio waves whose assignment expires in June 2011
		Voting	Vote on the imposition of penalty on the violators of the broadcasting review regulations
		Voting	Vote on the revision of the implementation guidelines of the broadcasting reviews
		Voting	Vote on the retrial of KBS-2TV 'in-Depth 60 Minutes'
		Voting	Vote on the corrective measures against Chuncheon MBC for its violation of re-licensing requirements
		Reporting	On the adoption of the national standards for Hangeul (Korean alphabets) keyboards for mobile devices
		Reporting	On the plans for setting up relay stations of six regional terrestrial DMB operators, including Andong MBC
		Reporting	About the amended provisions of the 'Enforcement Decree of the Broadcasting Act' and the approval of businesses using general broadcasting channels and specialized news channels
20th	Mar.28(Mon)	Voting	Vote on the mutual election of the KCC vice chairman
21st	Mar.30 (Wed)	Voting	Vote on the approval of businesses using general broadcasting channels and specialized news channels
		Voting	Vote on the extension of the license issue application period for general broadcasters

Session	Date	Type	Item	
		Reporting	On the promotion plans to improve the internet use environment	
		Reporting	On the terrestrial DMB policy measures (draft)	
22nd	documentary resolution	Apr.18 (Mon)	Voting	Vote on the agreement of the appointment of members for four legal commissions (four councils including the broadcasting and telecommunications development fund commission)
23rd		Apr.20(Wed)	Voting	Vote on the approval of businesses using general broadcasting channels
24th	documentary resolution	Apr.22 (Fri)	Voting	Vote on the grouped reviewing of, and voting on, amendment proposals to administrative notices related to the 'Telecommunications Business Act'
			Voting	Vote on the revised 'Radio Facility Rules' and other administrative notices
			Voting	Vote on the registration and registration change of four businesses using broadcasting channels (including CMBC)
25th		Apr.25 (Mon)	Voting	Vote on changes proposed to the administrative notice on radio equipment for radio stations that may be opened without reporting to the authority
			Voting	Vote on the corrective measures against KT about its actions detrimental to the users' benefits in relation to its wire telephone fixed fee regime
			Reporting	Vote on amendments proposed for the 'Enforcement Decree of the Act on Promotion of Information and Communications Network Utilization and Information Protection, etc.'
			Reporting	On the establishment of guidelines for broadcasting for the handicapped
			Reporting	On the results of 2010 broadcasting and telecommunications service quality evaluation including the smartphone quality calibration results
26th	documentary resolution	Apr.28 (Thu)	Voting	Vote on the strategies required to realize a social platform-based network of communications, creativity and trust
			Voting	Vote on a request to suspend dispositions taken as part of a broadcasting review (Educational Broadcasting System)
27th		May. 6(Fri)	Voting	Vote on the approval of utilization of general broadcasting channels
28th	documentary resolution	May. 11 (Wed)	Voting	Vote on the strategies to diffuse cloud computing and reinforce local companies' competitiveness
29th	documentary resolution	May. 13 (Fri)	Voting	Vote on the details of tariff approval procedures for internet multimedia broadcasting service providers (SK Broadband) Voting Vote on the registration of a business using broadcasting channels (PH Media)
30th		May. 18 (Wed)	Voting	Vote on the licensing of five new location information companies, including Hyundai Heavy Industries
			Voting	Vote on the corrective measures against SK Telecom and KT for their impairment of customers' profits in relation to their management of customers' payment in arrears
			Voting	Vote on the change in the largest investor in terrestrial broadcasters (Gyeonggi Broadcasting Co., Ltd. & iTV FM)

Session	Date	Type	Item	
		Voting	Vote to change the largest capital investors of system operators (The acquisition of Dongseo Digital Broadcasting Co. stocks by T-broad Nakdong Broadcasting Co., Ltd)	
		Reporting	On the planned evaluation of competition status in the 2010 broadcasting market	
		Reporting	On the proposed amendment of 'Detailed Telecommunications Number Management Rules' and other notices	
31st	documentary resolution	May. 19 (Thu)	Voting	Vote on disciplinary actions against broadcasters failing to comply with the requirement to obtain the consent of each subscriber household for collective reception agreement subscriptions (3 broadcasters including CJ HelloVision Dream city Co., Ltd.)
			Voting	Vote on disciplinary actions on the failure to implement a post service fee payment regime (Korea Cable TV Jeju Broadcasting Co., Ltd.)
			Voting	Vote on the disciplinary actions against three broadcasters including CJ HelloVision Gyeongnam Broadcasting that failed to obtain customers' agreements at the time that the users transfer from a free experience service bracket to a paid-service bracket
32nd	documentary resolution	May. 19 (Thu)	Reporting	On the plan to hear the results of the evaluation meeting about the merger between Changwon MBC and Jinju MBC
33rd		May. 27 (Fri)	Voting	Vote on the '2011 Basic Plan for Re-licensing Terrestrial Mobile Multimedia Broadcasters' (draft)
			Voting	Vote on the 2011 basic plan for re-licensing of system operators
			Reporting	On the payment of SO's PP(Program Provider) program fees
			Reporting	On the notice of the criteria for domestic production of broadcasting programs
34th	documentary resolution	Jun. 3 (Fri)	Voting	Vote on tariff filings of KT Skylife, a system operator
			Voting	Vote on the registration and registration change of businesses using broadcasting channels
			Voting	Vote on the request to retransmit foreign broadcasting programs (of four broadcasters including GMA Pinoy TV)
35th	documentary resolution	Jun. 10 (Fri)	Voting	Vote on the extension of the period to implement the corrective measures in relation to wireless data service provided by SKT, KT and LG U+
36th		Jun. 22 (Wed)	Voting	Vote on the 2012 budget and the response to the request of broadcasting and telecommunications development fund operation plan
			Voting	Vote on the reallocation of radio frequency that expire in June 2011
			Voting	Vote on the allocation of radio frequency for mobile communications
			Voting	Vote on the re-opening of the case on the EBS-TV program 'Only One Earth'
			Voting	Vote on the proposed basic plan for re-licensing of terrestrial and public radio broadcasters for 2011

Session	Date	Type	Item
		Voting	Vote on the approval of home shopping broadcasters using broadcasting channels dedicated to small and medium businesses
37th	Jun. 24 (Fri)	Voting	Vote on the proposed plan to hear the positions of SBS Co., Ltd. and KT Skylife on the discontinuance of satellite HD TV broadcasting in the Metropolitan Seoul Area
		Voting	Vote on the approval of the KT's revocation of PCS business (2G service) Reporting On the resale of SK Telecom's mobile communications services
38th	Jun. 27 (Mon)	Voting	Vote on the permission of telecommunications facility interconnection agreement
		Voting	Vote on the approval of stock possession of common carriers and a change to CATV system operator & program provider (the possession of stocks of T-broad Nowon by T-broad Holdings)
		Voting	Vote on the merger of common carriers, acquisition of stocks and changes to CATV system operators (the merger between CMB Gwangju and CMB Jeonnam and the acquisition of stocks of CMB Gwangju by CMB Holdings)
		Voting	Vote on the license change of a system operator (following the merger between Seogyong Broadcasting and Sancheong Cable Television)
		Voting	Vote on approve tariff filings of 34 system operators, including CJ HelloVision
		Voting	Vote on approve facility changes of 13 C&M-affiliate system operators including CMB Central Multi Broadcasting Co.
		Voting	Vote on the registration and registration change of four businesses using broadcasting channels (including C Channel Broadcasting Co., Ltd.)
		Voting	Vote on the proposed change to the spending plan of the broadcasting and telecommunications fund in 2011
		Voting	Vote on the proposed approval plan for new FM radio broadcasting stations (FEBC Gwangju FM and Changwon TBN FM)
		Voting	Vote on the notice of the criteria for the broadcasting programs produced domestically
		Voting	Vote on the proposed notice about a mutual recognition of appropriateness of broadcasting and telecommunications facilities following the Korea-EU FTA
		Voting	Vote on the partial revocation of common carriers' business (the revocation of the high-speed wireless internet service provided by KT, LG U+ and SK Broadband)
39th	Jun. 29 (Wed)	Voting	Vote on the proposed plan for the development of the internet bracing for the future
40th	Jul. 7 (Thu)	Voting	Vote on amendments proposed for the 'Enforcement Decree of the Broadcasting Act'
		Voting	Vote on the designation of an agency that determines the readership of daily newspapers

Session	Date	Type	Item
		Voting	Vote on hearing the positions of SBS and KT SkyLife on the issue of suspension of terrestrial HD broadcasting and administrative sanctions on them
		Reporting	On the improvements in the system assuring universal viewing rights
		Reporting	On amendments to the Broadcast Act
41st documentary resolution	Jul. 8 (Fri)	Voting	Vote on the revised 'Radio Facility Rules' and other administrative notices
		Voting	Vote on the revised 'Detailed Telecommunications Number Management Rules' and other administrative notices
42nd	Jul. 20 (Wed)	Voting	Vote on the fulfillment of the WiBro service providers' licensing requirements
		Voting	Vote on the establishment of guidelines for wholesale provision
		Voting	Vote on the approval of a change to terrestrial broadcasters (the merger between Changwon MBC and Jinju MBC)
		Reporting	About the major policy directions for the second KCC management
		Reporting	About the amended provisions of 'The Radio Waves Act'
		Reporting	About the final draft for the terrestrial broadcasters' retransmission system
43rd documentary resolution	Jul. 21 (Thu)	Voting	Vote on amendments of 'the exceptions to the use of household telecommunications facility for purposes other than those approved and other administrative notices
		Voting	Vote on the amendments of 'The Treaty for Mutual Recognition of Telecommunications Devices between the Ministry of Information and Communication, Korea and the Ministry of Post & Telecommunication, Vietnam and other administrative notices
		Voting	Vote on tariff filings by 2 system operators including Seogyong Broadcasting
		Voting	Vote to approve facility changes of 5 C&M-affiliate system operators including Seogyong Broadcasting
		Voting	Approval of the retransmission of foreign broadcasting programs by two broadcasters including Eurosport SA
		Voting	Vote on the registration of two businesses using broadcasting channels, including DAEKYO
44th	Jul. 22 (Fri)	Voting	Vote on amendments proposed for the 'Enforcement Decree of the Act on Promotion of Information and Communications Network Utilization and Information Protection, etc.'
		Voting	Vote on the calculation of share of audience for broadcasters in 2010
		Voting	Vote on the approval of the retransmission of OBS programs outside its geographical limits by C&M-affiliate system operators (the Seoul area ? two CMB broadcasters and 12 C&M broadcasters)
		Voting	Vote on the change of the closure date of 24-hour news channels
		Reporting	On the establishment and operation of TEIN cooperation center

Session	Date	Type	Item	
		Reporting	On the full amendment of notice about regional broadcasters' associations	
45th	Aug. 3 (Wed)	Voting	Vote on the administrative actions against the violators of the location information protection act (two companies including Apple Korea)	
46th	Aug. 8 (Mon)	Voting	Vote on the approval of a change to terrestrial broadcasters (the merger of Changwon MBC and Jinju MBC)	
		Reporting	About improvements in telecommunications companies' refunds not implemented	
47th	documentary resolution	Aug. 18 (Thu)	Voting	Vote on changes in the telecommunications facility interconnection agreement
		Voting	Vote on the registration of changes to the businesses using broadcasting channels (four channels including XTM of CJ E&M)	
		Reporting	On amendments proposed for the 'Enforcement Decree of the Broadcasting Act' in relation to broadcasting for the handicapped	
		Reporting	Vote on amendments proposed for the 'Enforcement Decree of the Telecommunications Business Act' in relation to the webhard business registration	
		Reporting	Vote on amendments proposed for the 'Telecommunications Business Act'	
48th	documentary resolution	Aug. 31 (Wed)	Voting	Vote on the registration of two businesses using broadcasting channels, including QQ Talk
		Voting	Vote on changes proposed to the 'Rules on Receiving, Reviewing and Resolving Viewer Complaints'	
		Voting	Vote on the full amendment of the notice to regional broadcasters' representatives	
		Voting	Vote on administrative sanctions against the violator of the obligation to report changes in the person in charge of broadcast programming (Busan E-FM)	
		Voting	Vote on amendments of the technical criteria for system operators' facilities and other notices	
		Voting	Vote to approve members appointed to the Broadcasting Evaluation Committee	
		Voting	Vote on the approval of the acquisition of stocks by common carriers (the acquisition of stocks of Yeongseo Broadcasting Network Co., Ltd. by three companies including CCS Chungbuk Cable TV System)	
		Reporting	On the amendment of Presidential Decree of the Rules on Telecommunications Business Accounting and Reporting	
		Reporting	On the amendment of detailed prohibition examples in relation to telecom service bills and evaluation criteria and other notices	
49th	Sep. 2(Fri)	Voting	Vote on the allocation of radio waves for mobile telecommunications	

Session	Date	Type	Item	
		Voting	Vote on the licensing of two new radio broadcasting stations (FM), including FEBC Gwangju & Changwon Traffic Broadcasting Network	
		Voting	Vote to approve the retransmission of terrestrial HDTV by a satellite broadcaster, namely KT Skylife	
		Voting	Vote on the basic plan to re-approve the businesses using broadcasting channels (three companies including YTN)	
		Voting	Vote on the selection of public-interest channels for 2012	
		Reporting	On 'Market Definition in View of the Evaluation of Competition in the Broadcasting Market' (draft)	
50th	documentary resolution	Sep. 6 (Fri)	Voting	Vote on the request for the suspension of a disposition taken in relation to a broadcasting review (request by OBS)
51st		Sep. 19 (Mon)	Voting	Vote on the comprehensive plan to create a safe radio wave environment
			Voting	Vote on corrective measures against the infringement on users' profits in relation to the payment of cellphone subsidies by SKT, KT and LG U+
			Reporting	On the enactment of the notice of 'Information for Public Interest'
			Reporting	On the closure of KT PCS business (2G service)
52nd	documentary resolution	Sep. 21 (Wed)	Voting	Vote on the request for the suspension of a disposition taken in relation to a broadcasting review (request by MBC Gyeongnam)
			Voting	Vote on the registration and registration change of three businesses using broadcasting channels (six channels including Fairy Land, of three broadcasters including Aronti)
			Voting	Vote on the license change of a system operator (following Gangwon Broadcasting's absorption of Gangwon Networks)
			Reporting	On the promotion of designation of user identification evaluation agencies
53rd		Sep. 28 (Wed)	Voting	Vote on the administrative actions against terrestrial mobile multimedia broadcasting businesses (Chuncheon MBC and Busan MBC)
			Voting	Vote on the '2012 Basic Plan on Re-licensing of System Operators' (draft)
			Voting	Vote on the designation of agencies that can confirm users' identity (three companies including NICE Information Service)
			Voting	Vote on administrative sanctions on violations of personal information protection laws and regulations (21 companies including A&P Financial)
54th	documentary resolution	Oct. 5 (Wed)	Voting	Vote on the amendment of 'the Establishment and Supervision of Non-profit foundations under KCC' and other notices
			Voting	Vote on tariff filings by 40 system operators including T-broad Gangseo
			Voting	Vote to approve facility changes of 4 C&M-affiliate system operators including CJ HelloVSION Daegu-Suseong

Session	Date	Type	Item	
		Voting	Vote on the approval of the acquisition of stocks by a common carrier and the change to system operators (the acquisition of stocks of CMB Daegu Dongbu by CMB Daejeon)	
		Voting	Vote on the registration of an internet multimedia broadcasting content provider (Sky HD)	
		Voting	Vote on the amendment of 1.8/2.1GHz bandwidth wireless facility rules and other notices	
		Voting	Vote on amendments proposed for the 'Enforcement Decree of the Broadcasting Act' in relation to the broadcasting for the handicapped	
55th	documentary	Oct. 12 (Wed)	Voting	Vote on the personnel changes in the broadcasting and telecommunications development fund management commission
			Reporting	On amendments proposed for the 'Enforcement Decree of the Broadcasting Act'
			Reporting	On the revised provisions of the 'Notice on Broadcast Programming, etc.'
56th		Oct. 13 (Thu)	Voting	Vote on the plan to allocate radio waves for mobile Internet (WiBro)
			Voting	Vote on corrective measures against impairment of users' profits by common carriers and special category telecommunications operators in their telephone information service
			Voting	Vote on administrative sanctions against terrestrial mobile multi-media broadcasters (Chuncheon MBC)
			Reporting	On amendments proposed for the 'Enforcement Decree of the Broadcasting Act'
57th		Oct. 19 (Wed)	Voting	Vote on changes to the plan of 2011 broadcasting and telecommunications development fund
			Voting	Vote on the licensing of 6 new location information companies including INNOCEAN Worldwide Corp.
			Voting	Vote on the amended provisions of the 'Enforcement Decree to the Telecommunications Business Act' in relation to the registration of webhard businesses
			Voting	Vote on amendments of the Broadcasting Act
			Voting	Vote on the order requiring corrective measures of a common carrier for its violation of the conditions for its establishment (four businesses including Damyang Cable Broadcasting)
			Voting	Vote on the approval of closure of common carriers (Yeongi Digital Network & Uiryeong Network)
58th	documentary resolution	Oct. 19 (Wed)	Voting	Vote on the registration and registration change of four businesses using five broadcasting channels (including Korea HD Broadcasting Corp.)
			Voting	Vote to approve facility changes of 18 C&M-affiliate system operators including C&M Gyeongdong Cable TV
			Voting	Vote on approve tariff filings submitted by three internet multimedia broadcasting service providers including KT

Session	Date	Type	Item
		Voting	Vote on the approval of the acquisition of stocks of common carriers by an individual (the acquisition of Boseong Cable Network's stocks by Noh Jin)
59th	Oct. 24 (Mon)	Voting	Vote on the conditions for re-licensing approval of terrestrial broadcasters and the plan to implement the recommended measures in 2010
		Voting	Vote on the re-licensing of 4 system operators including C&M Uri Cable TV
		Voting	Vote on disciplinary actions that can be taken against false or exaggerated advertising related to the digital transition
		Voting	Vote on the results of the evaluation of 2011 broadcasting
		Reporting	On the enactment of detailed criteria for prohibited actions in relation to universal viewing rights (notice)
		Reporting	Vote on amendments proposed for the 'Enforcement Decree to the Telecommunications Business Act'
		Reporting	On the measures to promote pre-paid mobile phone services
		Reporting	On the revised provisions of the 'Rules on the Evaluation of Broadcasting'
60th documentary resolution	Oct. 26 (Wed)	Voting	Vote on the request for the suspension of a disposition taken in relation to a broadcasting review (request by KBS)
		Voting	Vote on administrative sanctions on the violators of the obligation to report representatives and the person in charge of broadcast programming (Mapo Community Radio & Bible Community FM)
61st	Nov. 11 (Fri)	Voting	Vote on the 'Basic Plan for Surveying Viewing Shares of TV Networks' (draft) for 2012
		Voting	Vote on the plan to fulfill the conditions and recommendations in relation to the re-licensing of terrestrial broadcasters in 2010
		Voting	Vote on the selection of public-interest channels for 2012
		Voting	Vote on the basic plans for broadcasting and telecommunications
		Voting	Vote on the basic plans for the licensing review of common carriers' (draft)
		Voting	Vote on the amended provisions of the 'Radio Waves Act'
		Voting	Vote on the amendment of 'Technical Standards for the Facilities of System Operators' and other notices
		Voting	Vote on amendments proposed for the 'Enforcement Decree of the Broadcasting Act'
		Voting	On the revised provisions of the 'Notice on Broadcast Programming, etc.'
		Reporting	Vote on improvements of IMEI (International Mobile Equipment Identity)
62nd documentary resolution	Nov. 11 (Fri)	Voting	Vote on the registration and registration change of three businesses using broadcasting channels (including KT Skylife)
		Voting	Vote on the revision of the 'Detailed Categories of Prohibited Practices Related to Billing Telecommunications Services and Review Criteria' (notice)

Session	Date	Type	Item
63rd documentary resolution	Nov.18 (Fri)	Voting	Vote on the enactment of public interest information notice
		Voting	Vote on the retrial of OBS commercials, 'Miller Lite' and 'Captain Morgan'
		Voting	Vote on the retrial of 'The Birth of New Regional MBC' by MBC Gyeongnam
		Voting	Vote on amendments proposed for 「The Telecommunications Business Act」
64th	Nov.23 (Wed)	Voting	Vote on the corrective measures levied on common carriers and special category telecommunications operator for infringement upon users' rights in telephone services
		Voting	Vote on administrative sanctions for violations of personal information protection related laws and regulations
		Voting	Vote on re-licensing of terrestrial radio broadcasters in 2011 (five broadcasters including iTV FM)
		Voting	Vote on the re-licensing of community radio broadcasting in 2011 (seven broadcasters including Gwanak community Radio (Gwanak FM))
		Voting	Vote on the approval of the closure of KT PCS business (2G service)
		Reporting	On the promotion of the relaxation of the regulations about the broadcasting hours by terrestrial television broadcasters
65th documentary resolution	Nov.23 (Wed)	Voting	Vote on the change in registered information of businesses using broadcasting channels (two companies including etomato)
		Voting	Approval of the retransmission of foreign broadcasting programs (three companies including VTV)
		Voting	Vote to approve facility changes of 94 C&M-affiliate system operators including T-broad Gangseo
		Voting	Vote on the registration of internet multimedia broadcasting content providers (six firms including Home & Shopping Co., Ltd.)
		Voting	Vote on the amendment of the Presidential Decree of the Rules on Telecommunications Business Accounting and Reporting
66th documentary resolution	Nov.29 (Tue)	Voting	Vote on the registration of a business using a broadcasting channel (SEDA- Small Enterprise Development Agency)
		Voting	Vote on the corporate merger of GS Home Shopping
		Reporting	On the amendment of 'Detailed Telecom Number Management Rules' and 'Administrative Districts in Telephone Areas' (notice)
67th	Nov.30 (Wed)	Voting	Vote on the expansion of the issues that can be resolved on paper
		Voting	Vote to change the largest capital investors of system operators-KBC
		Voting	Vote on hearing the positions of both parties about the suspension of HD broadcasting by terrestrial broadcasters (terrestrial broadcasters and C&M-affiliate system operators)
		Reporting	On the results of the competition status of the telecommunications market in 2010

Session	Date	Type	Item	
		Reporting	Vote on amendments proposed to the administrative notice 'Conditions for the Supply of Facilities, etc. and Criteria for the Calculation of Fees'	
68th	Dec. 02 (Fri)	Voting	Vote on the corrective measures imposed on terrestrial broadcaster and C&M-affiliate system operators about the suspension of transmission of terrestrial HD broadcasting	
69th	documentary resolution	Dec. 02 (Fri)	Voting	Vote on the levy of penalties for the failure to fulfill disciplinary actions imposed because of violations of broadcasting review regulations (CJ E&M)
			Voting	Vote to approve facility changes of 13 C&M-affiliate system operators including T-broad Dongdaemun
70th	Dec. 05 (Mon)	Voting	Vote on improvements of the approval procedures for changes that occur on C&M-affiliate system operators	
71st	documentary resolution	Dec. 07 (Wed)	Voting	Vote on the data handing-in as requested by members of the National Assembly
72nd	documentary resolution	Dec. 15 (Thu)	Voting	Vote on the registration and registration change of two businesses using broadcasting channels (including STN)
			Voting	Vote on administrative sanctions imposed on the violations of the obligation to report according to the Broadcasting Law (two people including Park Byeong-yun from six companies including NOLL TV)
			Voting	Vote on the approval of the telecommunications facility interconnection agreement
			Voting	Vote on amendments proposed to the administrative notice 'Basic Services and Their Providers Subject to the User Agreement Approval Requirement'
			Reporting	On the plan of awards presentation at 2012 KCC Broadcasting Grand Prize (draft)
73rd		Dec. 16 (Fri)	Voting	Vote on the approval of common carriers(WiBro)
			Voting	Vote on amendments proposed for the 'Enforcement Decree to the Telecommunications Business Act'
			Voting	Vote on the proposals about 'the Guarantee of Access to Broadcasting for the Handicapped including Programming and Provision of Broadcasts for the Handicapped' (notice)
			Voting	Vote on amendments proposed for the 'Enforcement Decree of the Broadcasting Act'
			Voting	Vote on the retrial of 'Ojakgyo Brothers' (KBS)
			Voting	Vote on the re-licensing of a terrestrial mobile multimedia broadcasting service provider (six companies including KBS)
			Reporting	On 'The Detailed Criteria for Imposition of Penalties on Violations of Broadcasting Act' (notice)
			Reporting	On the revised provisions of the 'Notice on Broadcast Programming, etc.'
	Reporting	On the amendment of 'Rules on Reporting Sponsorship'		

Session	Date	Type	Item
74th documentary resolution	Dec. 20 (Thu)	Voting	Vote on the submission of data requested by members of the National Assembly
75th	Dec. 26 (Mon)	Voting	Vote on the issuance of a notice about 'Detailed Prohibitions in relation to Universal Viewing Rights'
		Voting	Vote on setting up basic plans for the development, promotion of use and management of the 3rd internet address resources
		Voting	Vote on the conditions for re-licensing of terrestrial DMB businesses and the changes in corrective measures (Chuncheon MBC)
		Voting	Vote on the improvements in the payment criteria for SO's PP programs
		Voting	Vote on the amendment of 'The Criteria for Protection of the Human Body against Electromagnetic Waves' (notice)
		Voting	Vote on the basic plan and announcement (draft) of loss compensation due to the reallocation of radio waves of 470-806MHz
		Reporting	On the basic plan for the use of TV White Space
		Reporting	Vote on changes proposed to the 'Method and Criteria for Calculating Compensation for Universal Service Loss' (administrative notice)
76th documentary resolution	Dec. 26 (Mon)	Reporting	On the establishment of 'Guideline for the Management of Network Neutrality and the Internet Traffic'
		Voting	Vote on changes proposed to the 'Broadcasting Evaluation Rules'
		Voting	Vote on the agreement of appointment of commission members to Viewer Rights Commission
		Voting	Vote on disciplinary actions against broadcasters failing to comply with the requirement to obtain the consent of subscribers for collective reception agreements subscriptions
77th documentary resolution	Dec. 29 (Thu)	Voting	Vote on the amendment of 'Domain Name Management Rules,' 'Internet Protocol Address Management Rules' and 'Network Identification Number Management Rules'
		Voting	Vote on the revised 'Radio Facility Rules' and other administrative notices
		Voting	Vote on the registration change of Internet multimedia broadcasting content companies (two firms including MBC Plus Media)
77th documentary resolution	Dec. 29 (Thu)	Voting	Vote on tariff filings by 21 system operators including Korea Cable TV GCS
		Voting	Vote on facility changes of a system operators (Korea Cable TV GCS)
		Voting	Vote on 'Detailed Criteria for Penalty Imposition on the Violation of Prohibited Actions prescribed in Broadcasting Law' (notice)
		Voting	Vote on changes in re-licensing terrestrial DMB businesses and corrective measures(Chuncheon MBC)
		Reporting	On the plan to implement 'the simplification of application procedures for mobile phone fee reduction for the second lowest level of income earners

### 3. 2011 Monthly Major Achievements

<Appendix Table-6> 2011 Monthly Major Achievements

● January 2011

Date	Event(s)
Jan. 6	Prepared ways to enhance competitiveness in smart TV services
Jan. 6	Promoted smart work in earnest to become the world's top smart work powerhouse
Jan. 13	Attended the 10 <sup>th</sup> Korea - ASEAN Telecommunications Minister Meetings
Jan. 13	Chairman See-Joong Choi launched on a 'WiBro diplomacy' in Southeast Asia
Jan. 17	The 2011 New Year's Ceremony for personnel engaged in broadcasting and telecommunications
Jan. 18	Prepared and implemented guidelines to minimize Wi-Fi interference
Jan. 20	A conference on the 2011 prospect of the broadcasting and telecommunications industry
Jan. 20	Tae-Gun Hyung, a KCC Standing Commissioner, met with WAC(Wholesale Applications Community) CEO
Jan. 21	Prepared ways to set up broadcasting infrastructure within the Support Center for Digital Broadcasting Content
Jan. 25	Demonstrated the 4G mobile communications system for the first time in the world
Jan. 27	Smart AD & App Networking Day
Jan. 31	Signed an MOU to supply the community child centers, community centers in rural areas and senior citizen centers around the country with diffusion model digital television sets

The 2011 New Year's Ceremony for personnel engaged in broadcasting & telecommunications



The world first demonstration of 4G mobile communications system



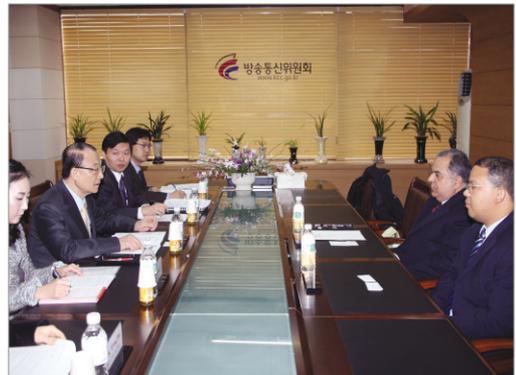
● February 2011

Date	Event(s)
Feb. 9	New Year's conference with internet company CEOs
Feb. 10	Chairman See-Joong Choi met with the minister of communications of the Dominican Republic
Feb. 11	Conference with the representatives of Daegu terrestrial broadcasters
Feb. 11	Conference with the CEOs of broadcasting companies
Feb. 14	Launched a smartphone tariff system exclusively for juveniles to minimize burdens on their parents
Feb. 16	A hearing on ways to register the new national domain (.한국)
Feb. 18	Reviewed and presented the KCC position on the increase of KBS license fee levied on all television sets in Korea
Feb. 21	A seminar on standardization strategies to promote the spread of 3DTV
Feb. 21	Announced the evaluation results of the competition status of the 2009 broadcasting market
Feb. 21	Finalized the working plans for the 2011 broadcasting and telecommunications research and development
Feb. 23	Decided on administrative sanctions on businesses that violated the personal information protection laws and regulations
Feb. 24	Discussed countermeasures against voice fishing (conning) with telecom businesses
Feb. 28	Implemented administrative sanctions on violators of personal information protection laws and regulations

New Year's Conference with Internet Company CEOs



Chairman's Meeting with the Minister of Communications of the Dominican Republic



● March 2011

Date	Event(s)
Mar. 7	2011 Korea Communications Commission Broadcasting Awards
Mar. 7	Tae-Gun Hyung, a KCC standing commissioner, met Malcolm Turnbull, MP, Australia
Mar. 9	Selected the home shopping broadcasters dedicated to small and medium businesses
Mar. 10	Announced alerts about the use of telecom and electronic devices due to the explosion of sunspots
Mar. 15	Implemented fee reduction for special disaster areas
Mar. 15	Issued a protest letter to North Korea regarding GPS interference
Mar. 16	Conducted a survey on TV viewing of the underprivileged in relation to an upcoming complete conversion to digital broadcasting
Mar. 21	Signed an MOU and held a pledge ceremony to install programs that block access to youth detrimental sites
Mar. 23	2011 APCERT(Asia-Pacific Computer Emergency Response Team) General Assembly and Conference
Mar. 23	Finalized the national standards for mobile phone Hangeul(Korean alphabet) keyboards
Mar. 28	Elected Sung-Kyu Hong, a standing commissioner, as the KCC vice chairman
Mar. 30	Opened the mobile contents win-win cooperation report center

2011 Korea Communications Commission Broadcasting Awards



The MOU and Pledge Ceremony to install Programs that Block Access to Youth Detrimental Sites



● April 2011

Date	Event(s)
Apr. 4	Showcased Korea's 3D contents in MIPTV 2011
Apr. 8	Promoted the adoption of a system that anticipates the demand for broadcasting equipment
Apr. 13	Mun-Seok Yang, a KCC standing commissioner, delivered a keynote speech at 2011 NAB (the largest international digital event for audio, video, film, broadcast and communications)
Apr. 14	Completed (on March 10) the fact finding survey of the TV viewing practices among residents in islands across the country
Apr. 18	Launched the service by the Cheollian communications satellite
Apr. 21	Coordination meeting of broadcasting and telecommunications contents between the KCC and the Ministry of Culture, Sports and Tourism
Apr. 21	Submitted applications for the 2014 ITU Plenipotentiary Conference
Apr. 22	The 56 <sup>th</sup> Information and Communications Day Ceremony
Apr. 25	Promoted the pilot project for smart work
Apr. 25	Launched an investigation into Apple's track of users' location information and the use of that information
Apr. 26	Chairman See-Joong Choi visited Australia and two Southeast Asian countries on business
Apr. 28	Chairman See-Joong Choi participated in the meeting of Communications Ministers of Korea, Australia and New Zealand
Apr. 29	A hearing on ways to improve the system of retransmission of terrestrial broadcasters' programs
Apr. 29	Launched a smart media development forum

The 56th Information and Communications Day Ceremony



The coordination meeting of broadcasting and telecommunications contents



## ● May 2011

Date	Event(s)
May 2	Established strategies to promote social platform-based communications, creativity and trust
May 2	Chairman See-Joong Choi met with the Minister of Communications and Information of Indonesia
May 4	Chairman See-Joong Choi met with the chairman of information and communications technology commission of the Philippines
May 10	Chairman See-Joong Choi took part in the ministerial meeting with Brazil's Minister of Communications, Paulo Bernardo da Silva
May 11	The 2011 World Information and Communications Summit, attended by ministers and vice-ministers from 21 countries
May 11	A national cyber safety strategy meeting
May 12	Vice Chairman Sung-Kyu Hong had a meeting with the deputy minister of information and communications of Vietnam
May 13	The inaugural ceremony for the 2 <sup>nd</sup> Korea Internet Dream Star
May 13	Chairman See-Joong Choi met with officials of Rwanda and Uruguay for closer bilateral cooperation
May 13	Vice Chairman Sung-Kyu Hong met with the Minister of Information and Communications of Bhutan
May 23	Launched the Machine to Machine Support Center
May 24	Received the visit of ITU-R satellite experts to the KCC
May 24	Chairman See-Joong Choi met with Ecuador's Minister of Telecommunications and the Information Society
May 25	Launched the Hangul (Korean alphabets) national domain (.한국)
May 26	The Groundbreaking Ceremony for digital broadcasting content support center
May 27	Prepared the criteria for domestically produced broadcasting programs
May 30	Launched the BFC (the broadcasting contents forum)
May 31	A meeting with the representatives of internet portal businesses

The 2011 World Information and Communications Summit



The Groundbreaking Ceremony for the Support center for Digital Broadcasting Content



● June 2011

Date	Event(s)
Jun. 2	Announced the reduction of fees for mobile communications
Jun. 9	Took measures to promote the internet business start-ups in the global market
Jun. 13	Had domestic telecommunications companies and finance(credit card) company CEOs sign an MOU to promote NFC service
Jun. 16	Inaugural general meeting held for Korea Cryptography Forum
Jun. 16	A meeting with the CEOs of small and medium 3D businesses
Jun. 17	Co-promoted of the elimination of fringe areas for digital TV broadcasting with terrestrial broadcasters
Jun. 24	The declaration ceremony and briefing session about the diffusion of Smart Work
Jun. 28	Chairman See-Joong Choi took part in the OECD high-level meeting on the internet economy and promoted bilateral cooperation with Turkey and Iran respectively
Jun. 28	The 3 <sup>rd</sup> meeting of Green Broadcasting and Telecommunications Committee
Jun. 29	Chairman See-Joong Choi delivered a speech emphasizing the role of the Internet at the OECD high-level meeting on the internet economy
Jun. 29	Yong-Sup Shin, a KCC standing commissioner, met with the commissioner of National Telecommunications and Post Commission, France
Jun. 29	Announced the plan to develop the Internet to brace for the future
Jun. 29	Established and announced the guidelines for the broadcast for the handicapped
Jun. 29	Launched a high quality digital broadcasting service in Jeju Province, Korea

Execution of an MOU on the Collaboration for NFC between public and private sectors



Co-Promotion of the elimination of fringe areas for digital TV broadcasting



## ● July 2011

Date	Event(s)
Jul. 5	The he 16 <sup>th</sup> Information Security Symposium
Jul. 8	The 2011 contest for location information app and web ideas
Jul. 13	Signed an MOU with Gyeonggi Province on the conversion to digital technology (the establishment of digital broadcasting conversion support centers in Uijeongbu and Seongnam)
Jul. 14	Launched campaigns to improve the internet usage environment
Jul. 14	A meeting with CEOs of telecommunications businesses
Jul. 15	Donated 191 DTVs to public interest facilities across the country
Jul. 19	Signed an MOU with Laos National Authority of Post and Telecommunications on the establishment of the Korean type mobile radio wave comprehensive monitoring system
Jul. 20	The 2 <sup>nd</sup> Smart AD & App Networking Day
Jul. 20	Presented the blueprint for the 2 <sup>nd</sup> phase of the KCC, namely "Smart Korea enjoyed by all its Citizens"
Jul. 21	A meeting with business representatives about cloud, M2M communications and network equipment
Jul. 21	Chairman See-Joong Choi met with president of turner broadcasting system Asia Pacific Inc.
Jul. 22	A meeting with the CEOs of terrestrial broadcasters
Jul. 26	Dealt with the personal information leakage due to the hacking attack on Cyworld/Nate

A Meeting with CEOs of Telecommunications  
Businesses



A Meeting with the CEOs of Terrestrial  
Broadcasters



● August 2011

Date	Event(s)
Aug. 1	Supported 70,000 underprivileged households in digital conversion in Gyeonggi and Incheon Province
Aug. 3	Demanded corrective actions about the violation of location information protection laws by Apple and Google and imposed penalties on them
Aug. 8	Prepared ways of enhancing personal information protection on the internet
Aug. 10	Encouraged the three major portal sites to clean the blog sphere on their own
Aug. 11	Expanded the smart mobile app development support centers across the nation
Aug. 16	Carried out a national cyber crisis coping exercise
Aug. 18	The inaugural digital broadcasting technology presentation and the exhibition of new products
Aug. 19	Showcased the 2011 broadcasting contents in Latin America
Aug. 22	Started receiving applications for Hangeul national domain (.한국) from the public
Aug. 22	Signed an MOU with Communications Regulatory Commission of Mongolia
Aug. 24	The 6 <sup>th</sup> Conference of Korea-China Directors of Radio Waves
Aug. 27	The 1 <sup>st</sup> University Student Debate sponsored by the KCC
Aug. 28	Live broadcast of IAAF World Championships in Athletics Daegu 2011
Aug. 29	Completed auctions for mobile telecom radio frequency
Aug. 29	Signed an MOU with Gyeongsangbuk-do on the conversion to digital broadcasting
Aug. 30	A hearing on the subject of improvements in the possession and cross-ownership of broadcasting businesses
Aug. 30	Signed an MOU with the city of Daegu on the conversion to digital broadcasting

Supported 70,000 underprivileged households in digital conversion



The 1st University Student Debate sponsored by the KCC



● September 2011

Date	Event(s)
Sep. 2	A conference on the subject of advertising industry development in an smart media era
Sep. 2	Prepared and distributed the use of vaccine programs
Sep. 6	Chairman See-Joong Choi visited the U.S. government agencies and private companies to boost cooperation in broadcasting and telecommunications policies between Korea and the U.S.A
Sep. 7	The 3rd APEC Cyber Security Seminar and organized Smart Cloud Show 2011
Sep. 8	The Smart and Clouds Show 2011
Sep. 8	Chairman See-Joong Choi discussed ways to enhance bilateral collaboration with the U.S. Internet and media companies
Sep. 9	Enhanced cyber threat monitoring and provided free counseling during Chuseok (Korean harvest festival) Holidays
Sep. 15	Korea achieved the number one position in ICT in the world
Sep. 19	The ITU Climate Change Symposium and the United Nations Framework Convention on Climate Change
Sep. 22	The 2011 One-act Play Festival
Sep. 26	The Clouds week 2011
Sep. 26	Developed and distributed self security checker app for smartphones
Sep. 26	Declared the week of a Beautiful Internet World 2011
Sep. 27	A forum to discuss the promotion of the domestic broadcasting equipment industry
Sep. 28	Completed the development of the common technical standards for the broadcasting channels for the handicapped
Sep. 29	A forum on the future of social networks
Sep. 30	Discussed with the Ministry of Culture, Sports and Tourism ways of jointly supporting the promotion of the development of the domestic drama and animation industry

The Chairman visit to National Telecommunications and Information Administration, the U.S.A



ITU Climate Change Symposium



● October 2011

Date	Event(s)
Oct. 1	Enabled military recruits to be exempt from paying any fee for their mobile phones while the phone service was under suspension
Oct. 5	Prepared Cloud SLA guides and personal information protection rules
Oct. 12	Determined the host city and schedules for the 2014 ITU plenipotentiary conference
Oct. 21	Signed an MOU for digital conversion with Gangwon-do
Oct. 24	Expanded the scope of the underprivileged fee reduction and increased the number of people
Oct. 24	Disclosed the results of the 2011 broadcasting evaluation
Oct. 24	Prepared ways of encouraging the use of mobile phone fee prepayment scheme
Oct. 25	Vice Chairman Sung-Kyu Hong met with the president of RTS Television, Serbia
Oct. 27	The 10th Information Security Award 2011
Oct. 27	Announced strategies to set up a win-win development software ecosystem
Oct. 27	Signed an MOU for digital conversion with the city of Gwangju
Oct. 27	A job fair jointly with small and medium mobile service businesses
Oct. 28	Signed an MOU for digital conversion with Jeollanam-do
Oct. 28	The 2011 broadcasting contents showcases in the Middle East countries
Oct. 28	Witnessed the opening of a smartphone era in Korea with more than twenty million smart phone subscribers, about 40% of the entire population
Oct. 31	A ceremony commemorating the 3rd Broadcasting and Telecommunications User Week
Oct. 31	Chairman See-Joong Choi met with Greg Dyke, former director general of BBC

A Ceremony Commemorating the 3rd Broadcasting and Telecommunications User Week



An MOU for Digital Conversion with Gangwon-do



● November 2011

Date	Event(s)
Nov. 1	Launched K-Apps commercial service
Nov. 3	Operated personal information protection class in schools in collaboration with private companies
Nov. 3	Had National Radio Research Agency and Korea Research Institute of Standards and Science sign an MOU for collaboration
Nov. 7	Participated in the meeting between President Myung-Bak Lee and Eric Schmidt, chairman of Google
Nov. 10	Declared Myeongdong as an NFC Zone and held service demonstrations in the area
Nov. 10	Chairman See-Joong Choi visited local broadcasting and telecommunications equipment manufacturers and information security firms and had meetings with them
Nov. 11	Established the basic plan for broadcasting and telecommunications
Nov. 11	Announced a plan to improve IMEI (International Mobile Equipment Identity)
Nov. 14	Selected and appointed the second term project managers of the KCC
Nov. 14	Expanded the support of digital conversion nationwide
Nov. 15	Training sessions in Indonesia on the subject of 'Digital Future and ICT Authentication System' for a closer collaboration in the area of ICT authentication technology between the two countries
Nov. 16	The 12th Asia-Pacific Telecommunity Convention
Nov. 16	Dedicated Korean Space Weather Center & National Radio Research Agency

Myeongdong declared as a NFC Zone



Dedication of National Radio Research Agency, Jeju



● November 2011

Date	Event(s)
Nov. 17	Yong-Sup Shin , a standing commissioner, met with the chairman of Telkom SA, and KCC held a ceremony marking the 2011 Radio Waves Broadcasting Promotion Week
Nov. 21	The ceremony for 2011 Radio Waves Broadcasting Industry Promotion Week
Nov. 21	Chairman See-Joong Choi had an urgent breakfast meeting with the CEOs of the three major terrestrial broadcasters in relation to the terrestrial broadcasting re-licensing negotiations
Nov. 23	Approved, conditionally, the discontinuance of KT PCS business (2G service)
Nov. 25	Dealt with the leak of Nexon customers' personal information
Nov. 29	Showcases of Broadcasting Contents in Eastern Europe 2011
Nov. 29	The 6th Korea Internet Awards ceremony
Nov. 29	The IBS 2011 Market Day
Nov. 30	Announced the results of competition in 2010 telecommunications market

The ceremony for 2011 Radio Waves Broadcasting Industry Promotion Week



The 6th Korea Internet Awards Ceremony



● December 2011

Date	Event(s)
Dec. 5	A discussion to prepare policy directions for network neutrality
Dec. 5	Launched Korea Wireless Power Transmission Forum
Dec. 5	A seminar on the revitalization of communications for the policy development for local broadcasting and telecommunications industries
Dec. 6	A ceremony to mark the third year of IPTV service with its subscribers exceeding 4.4 million
Dec. 7	A conference to reestablish the concept of telecommunications fee and the calculation of telecommunications convenience indexes
Dec. 8	Yong-Sup Shin , a standing commissioner, participated in the 6th Korea - ASEAN Telecommunications Minister Meeting
Dec. 8	The SMART! Work & Society 2011
Dec. 13	The Korea Content Festival 2011
Dec. 15	Launched a pilot project of the 'Da-Arum Service,' namely a new concept TV community service designed for multicultural families in Korea
Dec. 19	The 2011 Disaster Broadcasting Conference

The 3rd IPTV Anniversary Ceremony



The 2011 Disaster Broadcasting Conference



● December 2011

Date	Event(s)
Dec. 19	The 10th Information Security Award 2011
Dec. 23	The 2011 Internet Ethics Grand Contest designed to help to create a beautiful Internet world
Dec. 23	Viva! LBS Festival
Dec. 23	Announced the 3D viewing guidelines and 3D contents production guidelines
Dec. 26	Fixed the basic plan to use White Space
Dec. 26	Determined the compensation to be paid for cable TV contents during 2012 ~ 2013
Dec. 26	Decided on the detailed criteria for violations of rules in the event of disputes over transmission of major sports broadcasts like the Olympics and World cup
Dec. 26	Determined the policy directions toward network neutrality
Dec. 27	Chosen as the best government agency to possess anti disaster/crisis capability
Dec. 29	Presented the 2012 KCC plans to the President, Myung-Bak Lee
Dec. 30	Announced the results of the survey of the smart media utilization

The 10th Information Security Award

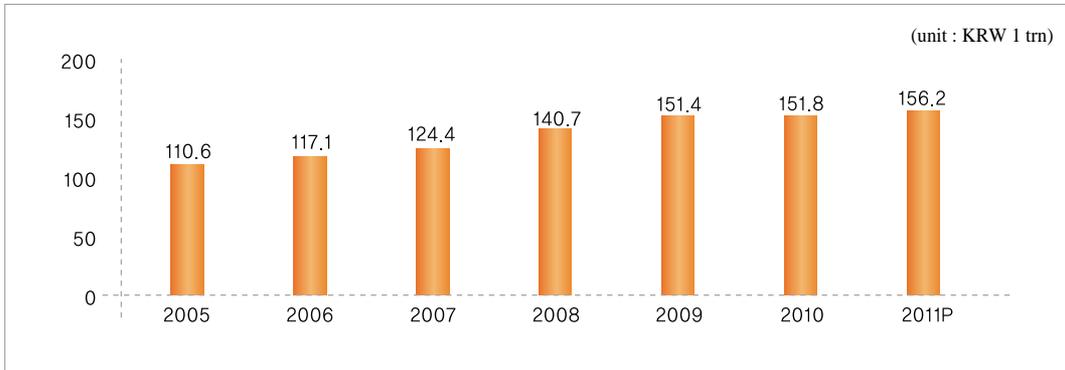


The 2011 Internet Ethics Grand Contest



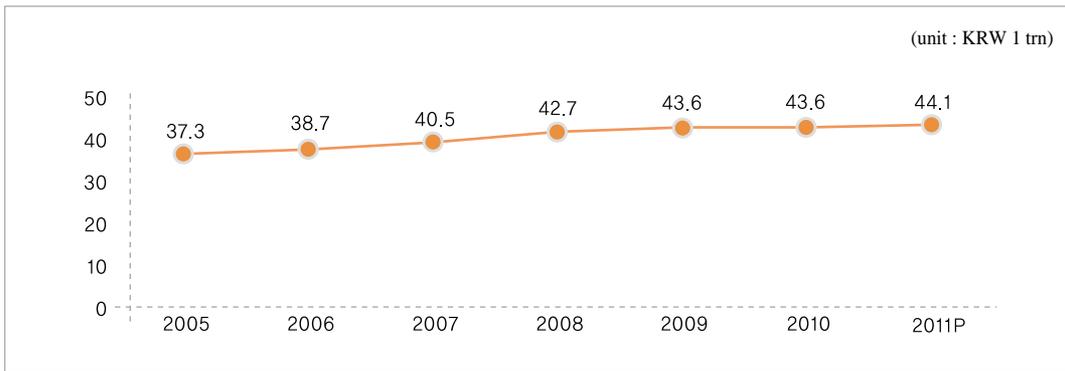
## 4. Broadcasting and Telecommunications Industry in 2011 by Sector

Total Production of the Broadcasting and Telecommunications Industry

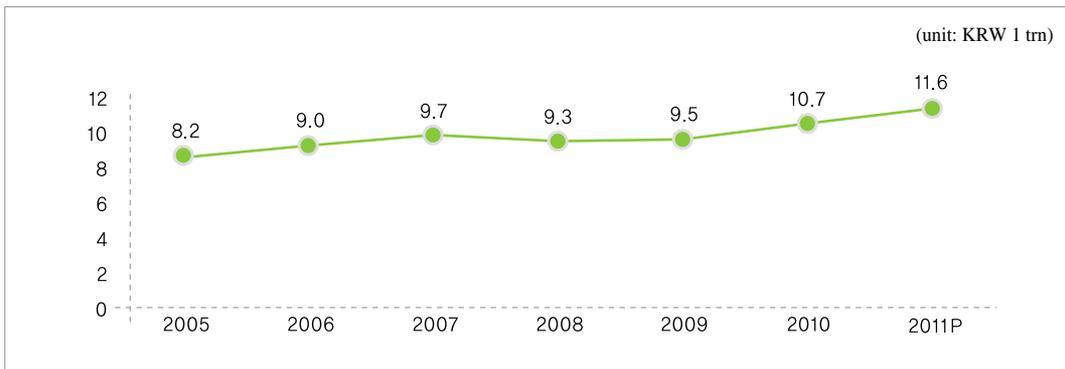


※ P : Preliminary figures subject to change depending on the availability of the exact figures later on.

Telecommunications Service Sales

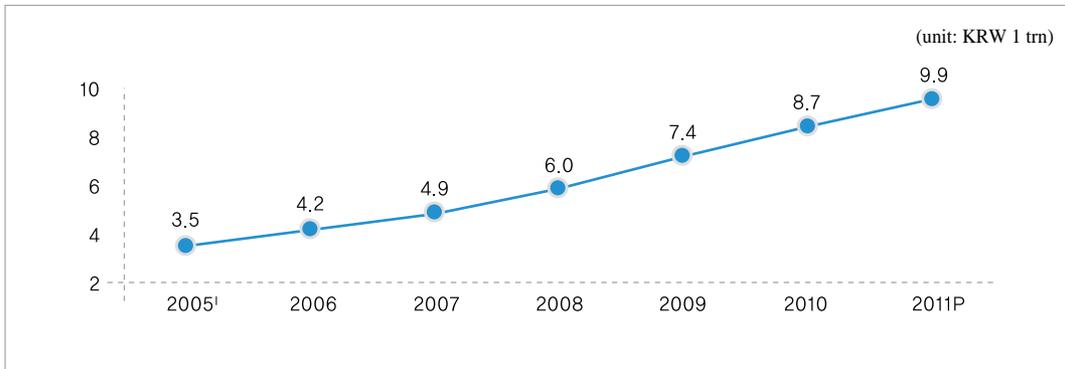


Broadcasting Service Sales

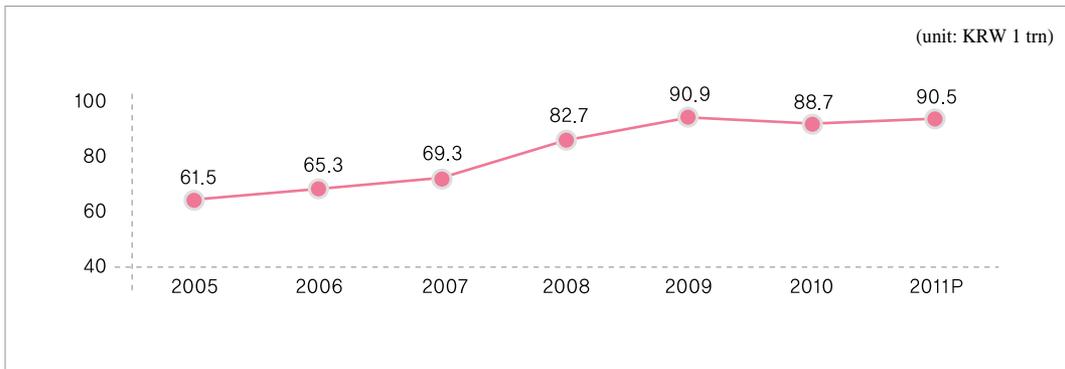


※ The above information on the current status of the broadcasting and telecommunications industry by sector was taken from the 'Statistical Yearbook of the Broadcasting and Telecommunications Industry (2011)' and 'Monthly Broadcasting and Telecommunications Industry Statistics (Dec. 2011),' published by the Korea Association for ICT Promotion (KAIT).

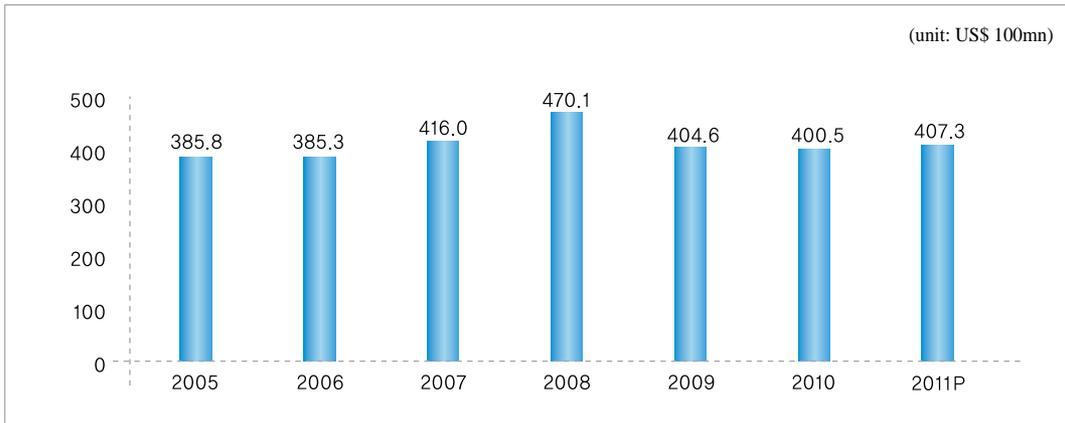
Converged Digital Media Service Sales



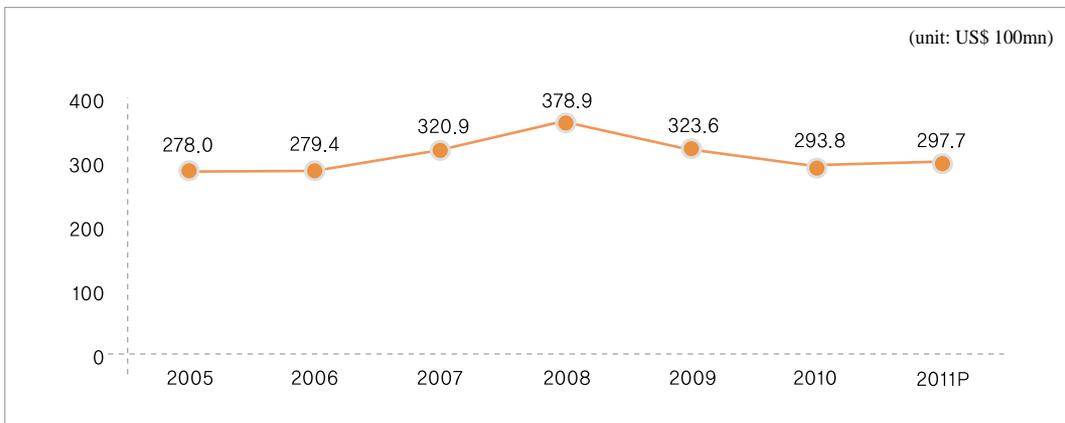
Broadcasting and Telecommunications Device Sales



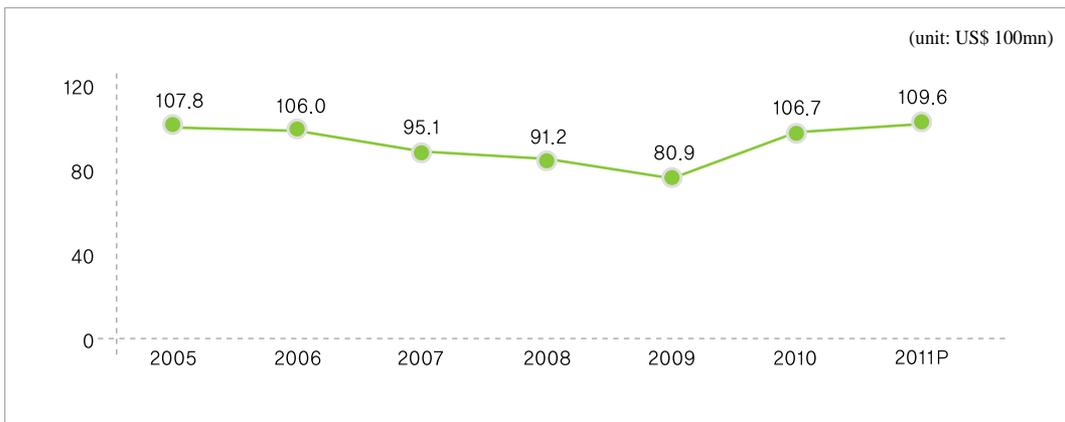
Total Broadcasting and Telecommunications Device Exports



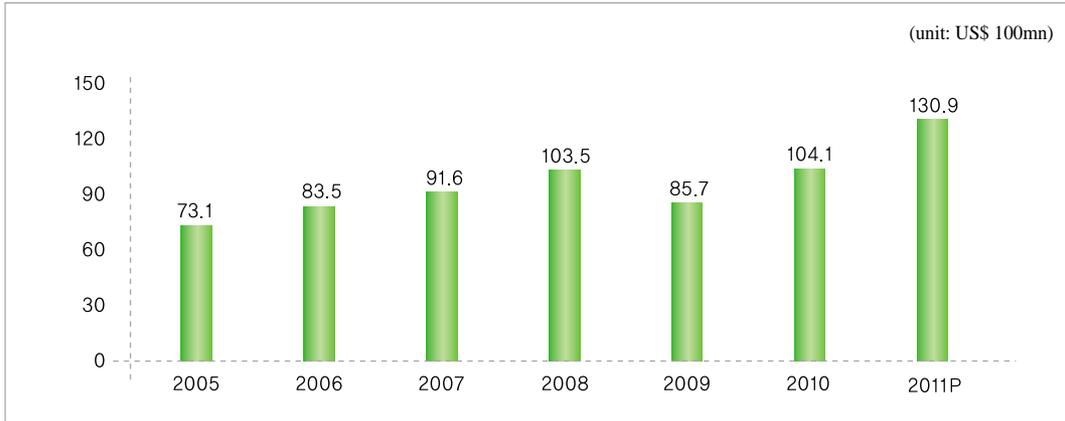
Telecommunications Device Exports



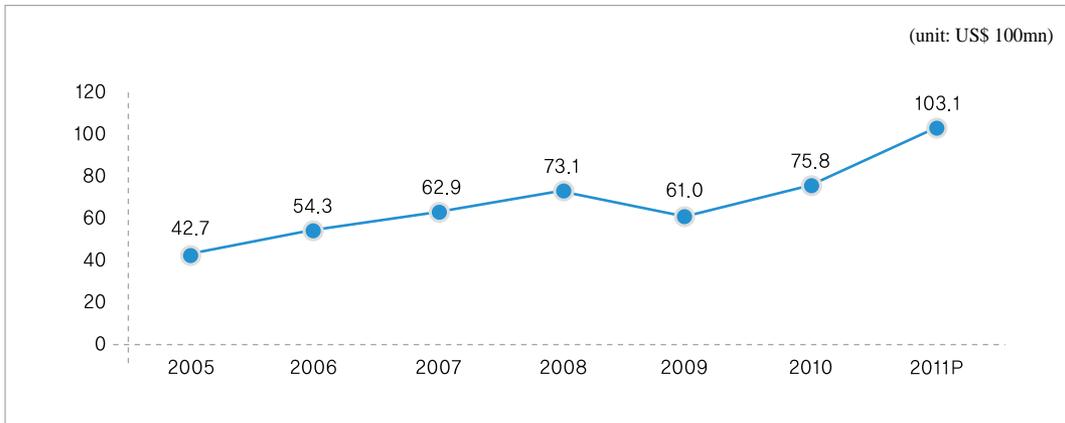
Broadcasting Device Exports



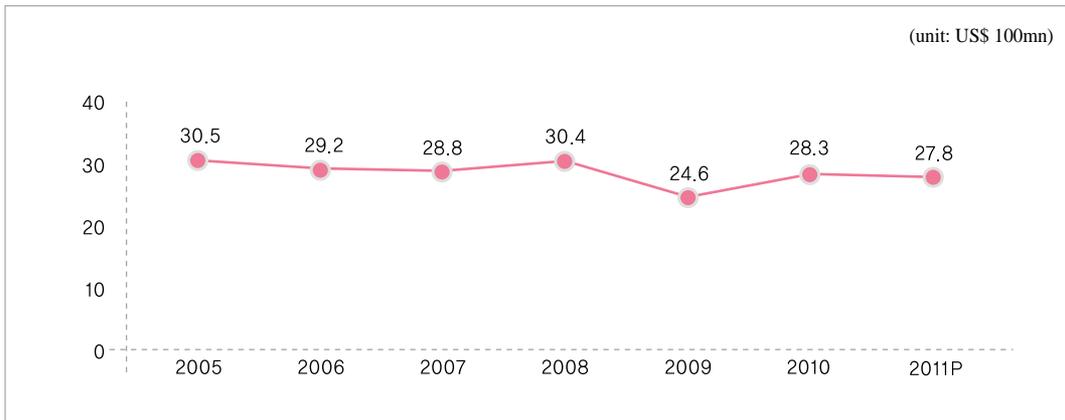
### Broadcasting and Telecommunications Device Imports



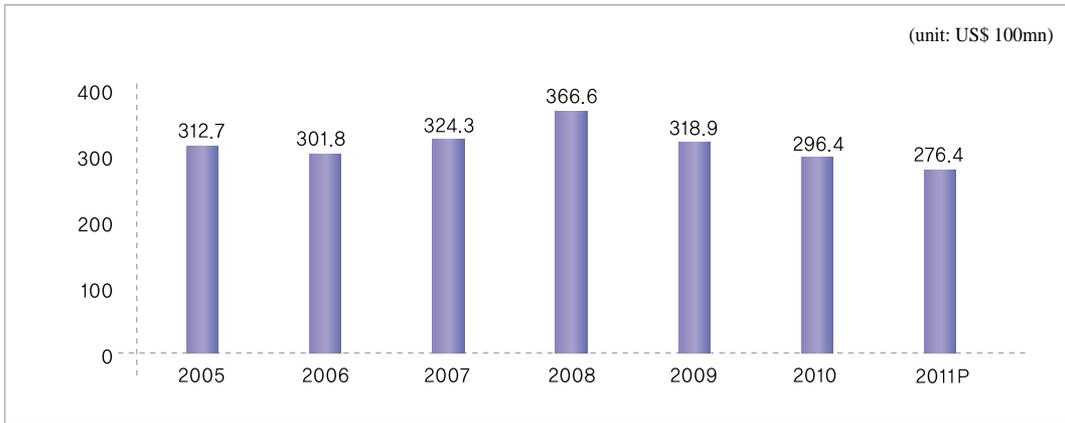
### Telecommunications Device Imports



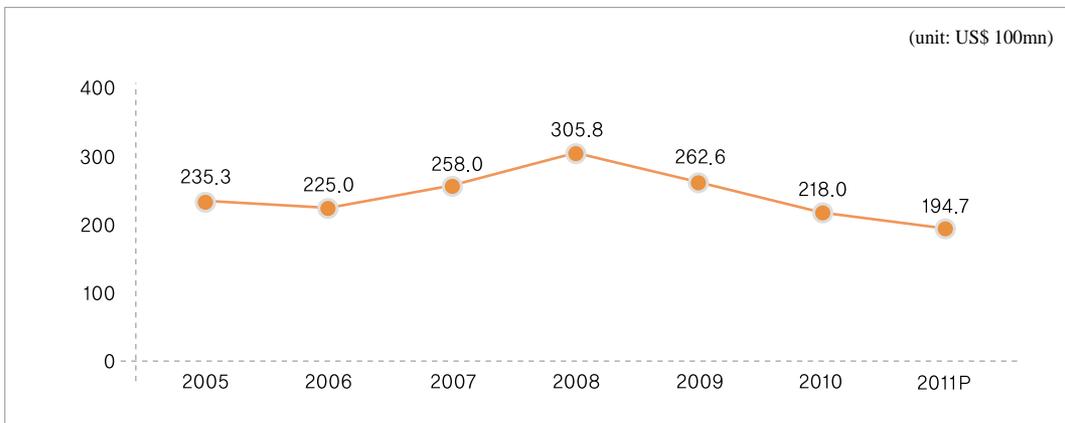
### Broadcasting Device Imports



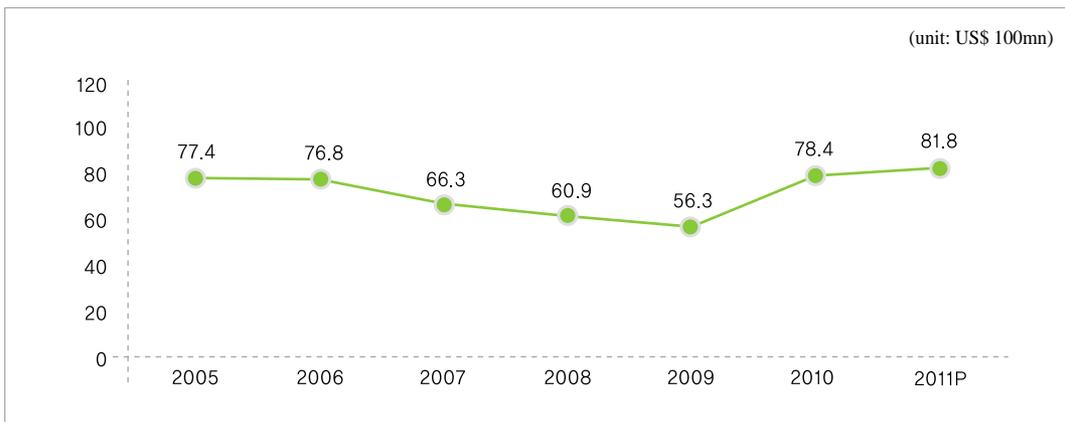
Broadcasting and Telecommunications Device Trade Balance



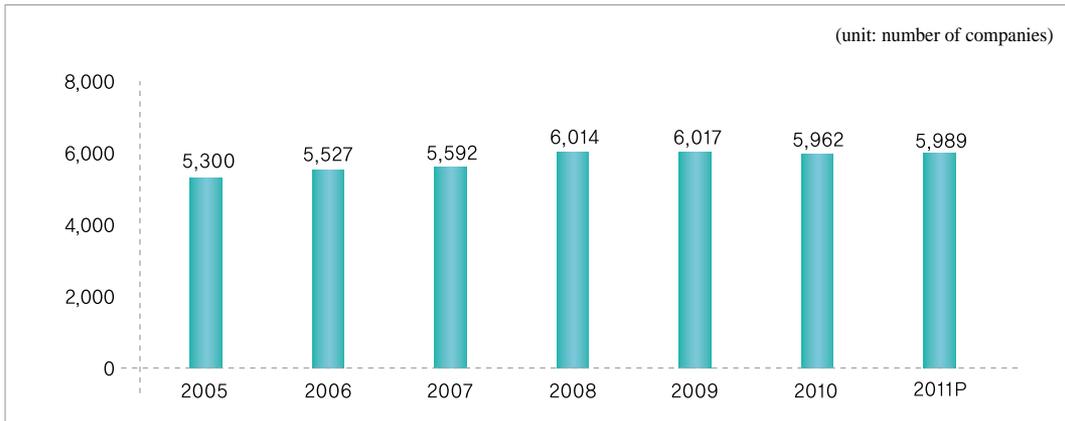
Telecommunications Device Trade Balance



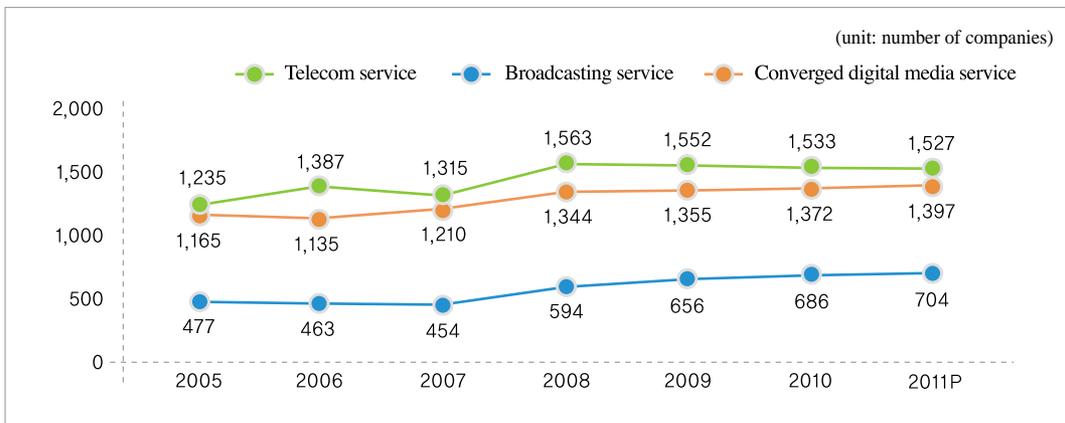
Broadcasting Device Trade Balance



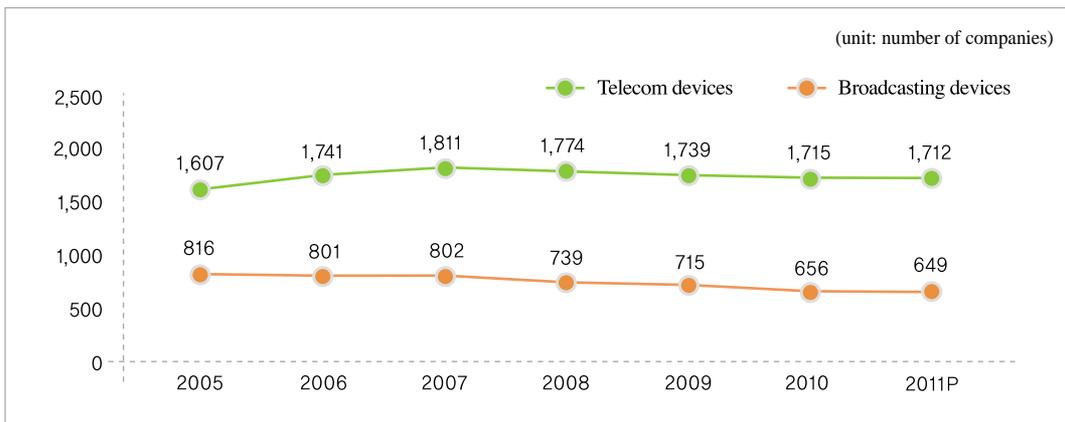
Total Number of Companies in Broadcasting and Telecommunications Industry



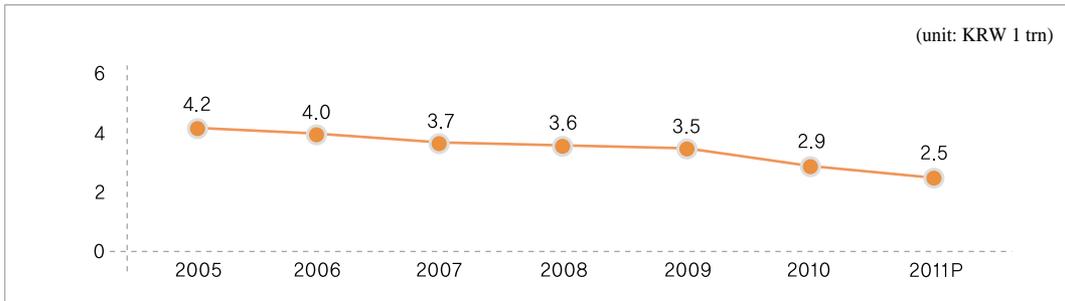
Number of Broadcasting, Telecom and Converged Digital Service Providers



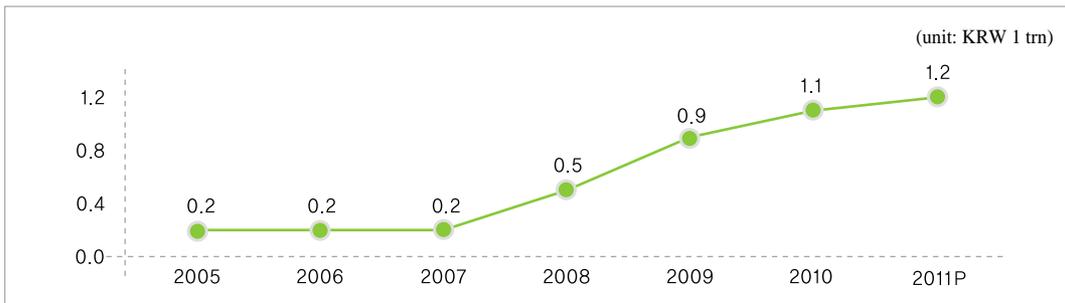
Number of Broadcasting and Telecommunications Device Manufacturers



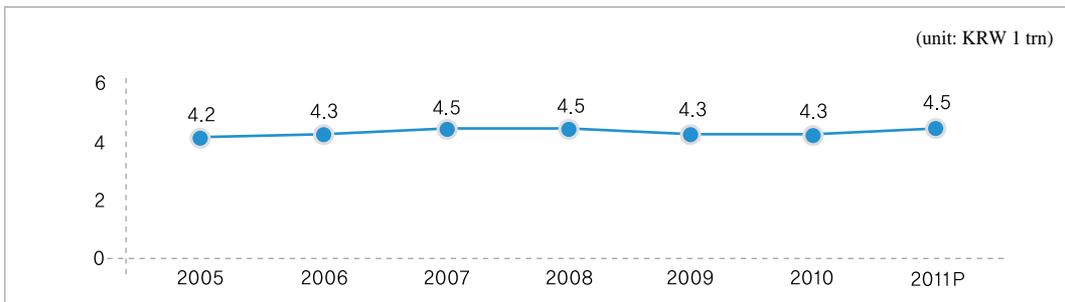
Local Telephone Service Revenue



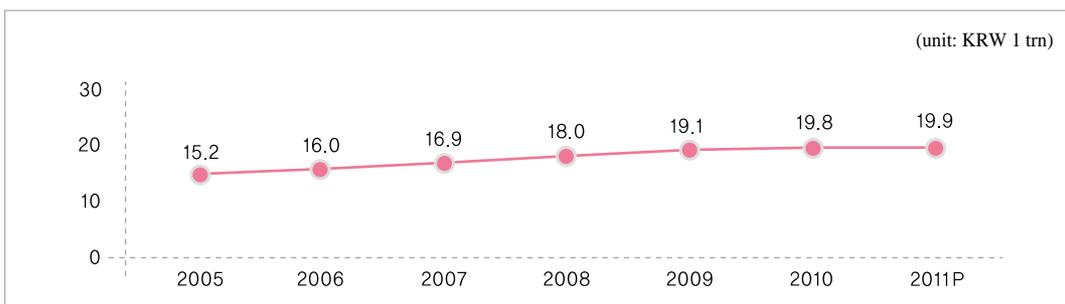
Internet Telephone Service Revenue



Broadband Internet Access Service Revenue

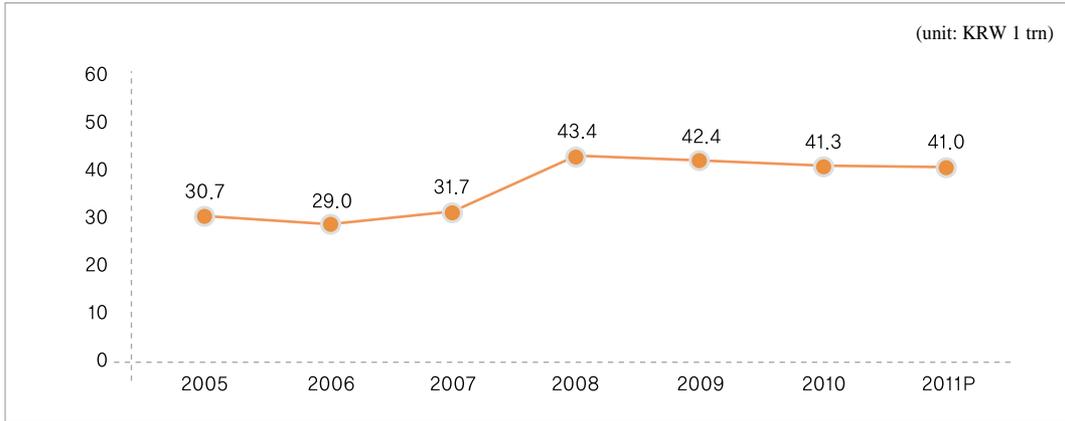


Mobile Service Revenue

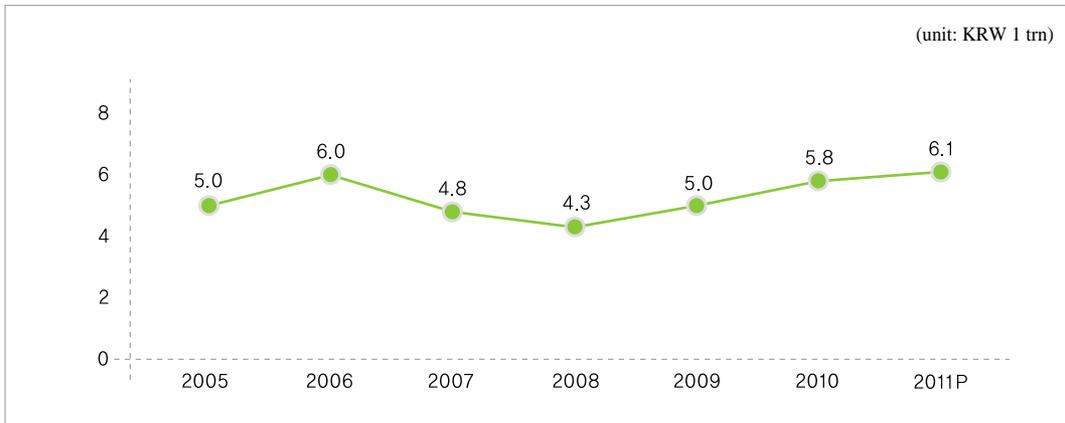


※ The wireless network connection charge has been excluded from mobile service revenue

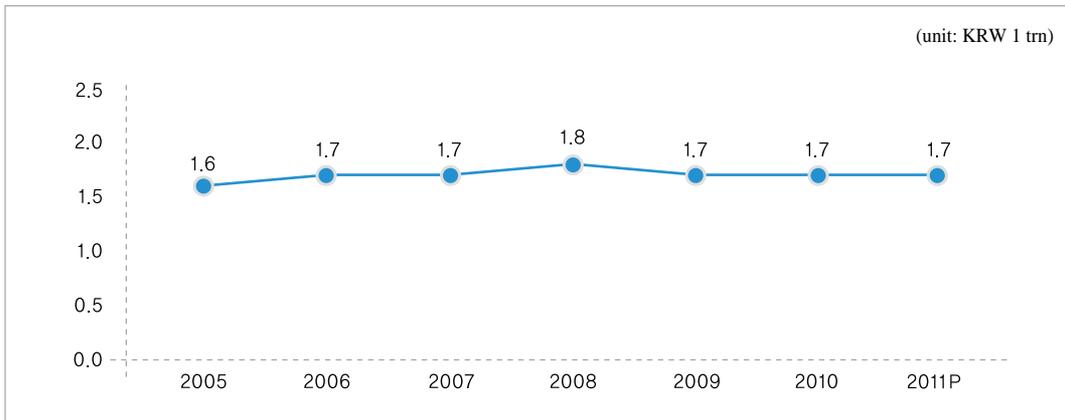
Portable Device Sales



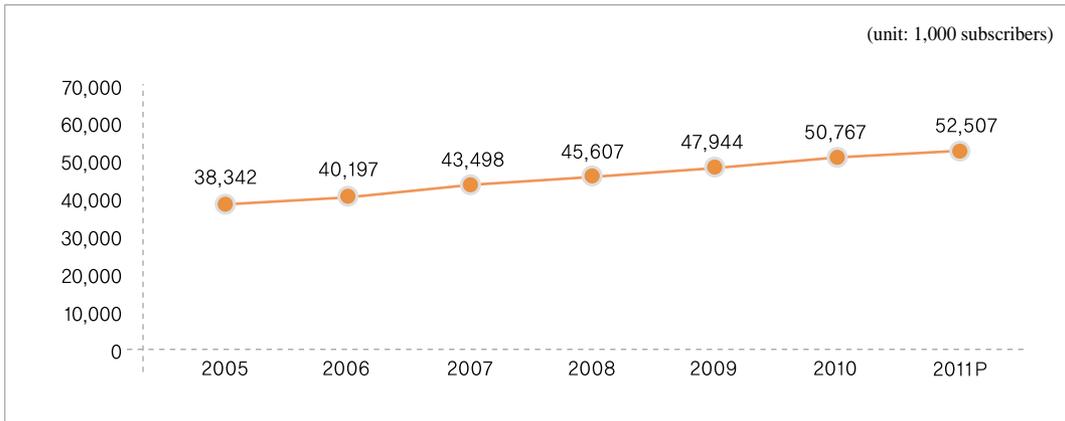
DTV Sales



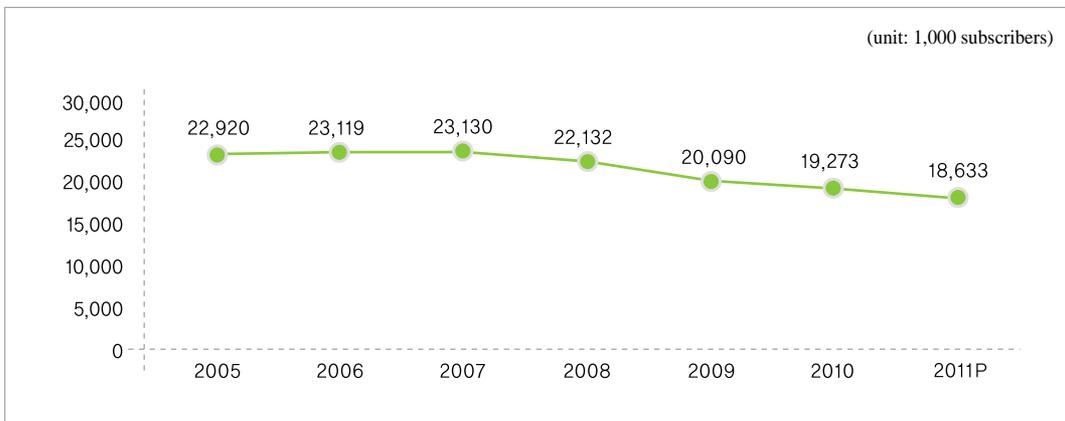
Set-top Box Sales



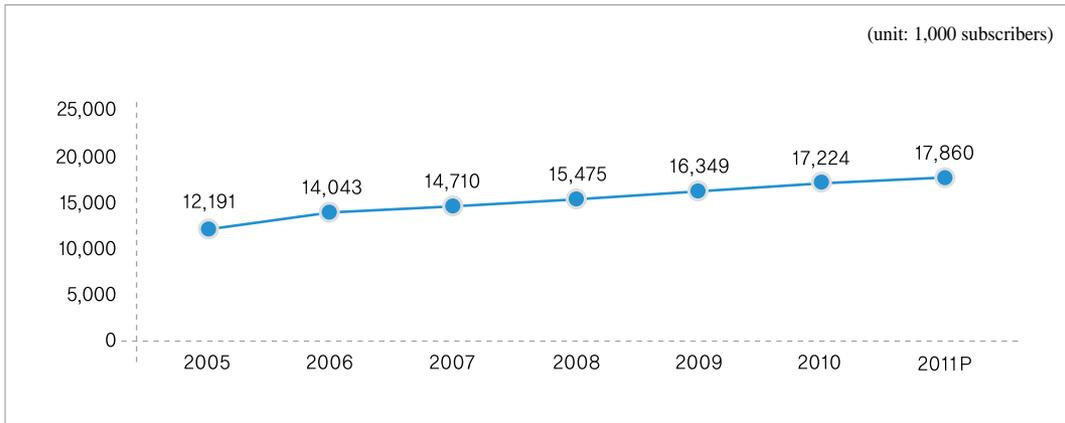
Number of Mobile Subscribers



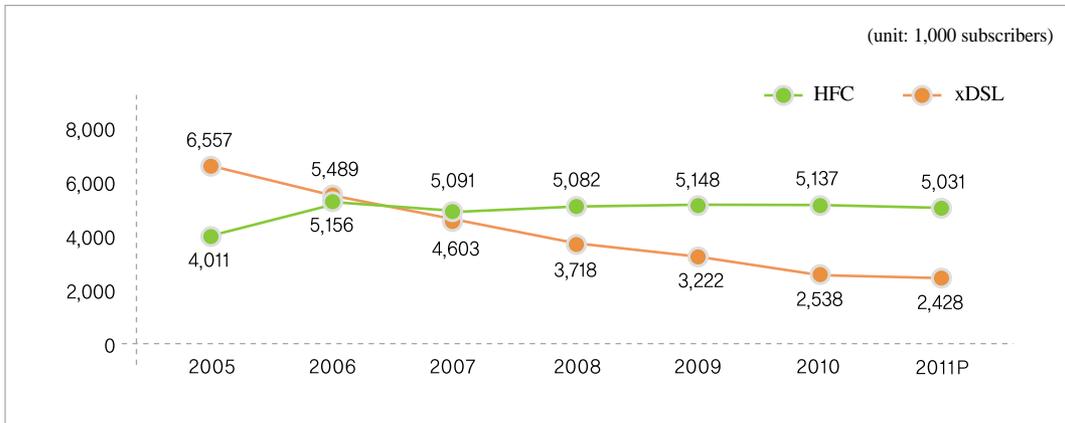
Number of Local Telephone Subscribers



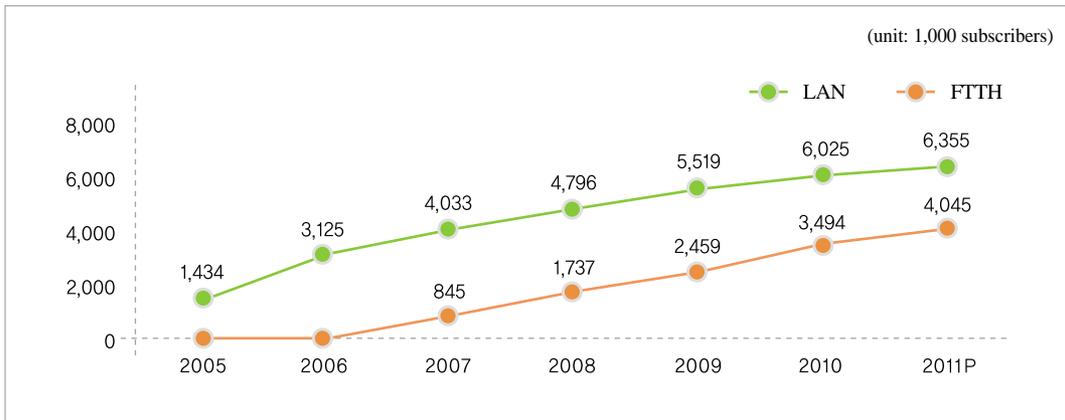
Number of Broadband Internet Subscribers



Number of Broadband Internet (xDSL, HFC) Subscribers



Number of Broadband Internet (LAN, FTTH) Subscribers



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