
KCC Plan for 2011



**KOREA
COMMUNICATIONS
COMMISSION**

1. Establishing Basis for the Smart Era

1-1. Strengthening Competitiveness of Broadcasting and Communications Contents

- ◆ [Plans for 2011] Improving global competitiveness of contents industry by increasing vitality of broadcasting and communications contents market, strengthening production infrastructures and supporting entry into overseas markets, etc.

□ Improving Market Vitality

- **(Strengthening Production Capacities)** Contents production capacities will be increased by adjusting independent production quota per drama and non-drama genre.
 - Expanding the basis for independence of small-scale non-drama production companies to recycle films not used in the non-drama fields, such as documentaries
- **(Improving Broadcasting Market Regulations)** Limitations in the subscription broadcasting business will be alleviated in order to activate contents market and to expand the broadcasting program production and distribution capacities.
- **(Investing in Broadcasting and Communications Contents)** Investment fund management for mobile · broadcasting contents is operated
 - Extensively investing in promising small and medium-scale mobile contents and mobile advertising venture businesses by using KIF (Korea IT Fund)

- Establishing public - private broadcasting contents investment fund and therefore investing in large-scale documentaries for export, 3D broadcasting contents and convergence contents
- o **(Implementing Integrated App Store)** Integrated app store service will be commenced to develop and use contents regardless of mobile communications service providers and operating system(OS) (June 2011).
- Securing global compatibility through link with WAC (Wholesale App Community) in order to prepare the basis for global market entry by outstanding domestic contents

□ **Strengthening Production Infrastructures**

- o **(Supporting Production)** Production of high-quality broadcasting contents, such as premium documentaries, will be supported.
 - Supporting production of contents to strengthen competitiveness of broadcasting service providers, public contents · contents for public interest and creative · practical convergence contents
 - Improving the existing method of supporting broadcasting service providers and therefore supporting production of programs planned by consortium between one-person creative groups (independent PDs and script writers) and broadcasting service providers
- o **(Developing Production Personnel)** Activation of one-act program production by broadcasting service providers will be supported in order to increase the opportunities of developing new actors, PDs and script writers

- Specialized and customized education for broadcasting production personnel, such as PDs, script writers, technicians, reporters, voice actors and announcers
- o **(Building Supporting Center)** A composite facility will be built to provide one-stop support to the entire value chain of broadcasting contents planing, production, transmission and distribution (to be completed in 2012, jointly promoted by Korea Communications Commission and the Ministry of Culture, Sports and Tourism)

< **Outline of Digital Broadcasting Contents Support Center** >

- ◇ Scale: Site Area - 10,702m², Total Floor Area - 55,952m²/ 18 ground levels, 4 underground levels
- ◇ Facilities: Studios (1 large, 1 medium, 4 small), OB van (1), editorial offices (16)
- ◇ Target: Program providers (PP), independent production companies, one-person creative groups, etc.

□ **Supporting Overseas Market Entry**

- o **(Developing New Markets)** Showcases will be organized to develop new broadcasting contents markets in Central · South America and Eastern Europe. Support for inter-governmental cooperation and overseas marketing activities will be strengthened.
 - ※ Promoting showcases in 5 Central · South American countries and 4 countries in Islamic or the former Soviet Union regions during 2011
- o **(Expanding Entry into Overseas Market by Broadcasting Channels)** To spread Korean Wave (Hallyu), national support for the overseas market entry by major broadcasting channels, such as news, cultural, entertainment and music channels, will be increased.
 - ※ Promoting joint program production and training of production personnel

< Status of Overseas Market Entry by Broadcasting Channels >

Classification	Arirang TV	KBS WORLD	CJ Media
Asia	23 countries	15 countries	8 countries*
North America	1 country	3 countries	
Central · South America	18 countries	15 countries	
Europe · CIS	14 countries	12 countries	
Middle East · Africa	2 countries	24 countries	
Oceania	5 countries	6 countries	
Total	63 countries	75 countries	8 countries

* Japan, Taiwan, Hong Kong, Philippine, Singapore, Thailand, Cambodia, Myanmar

- **(Supporting Korean Language Broadcasting Stations)** For broadcasting stations abroad that provide services in Korean language, access to Korean culture by Korean residents and foreigners will be enhanced through broadcasting production personnel training and supporting the televising right of domestic broadcasting programs.

※ Korean Language Broadcasting Stations Abroad: 96 broadcasting stations in 17 countries (as of Sep. 2010)

1-2. Expanding Broadcasting and Communications Advertising Market

- ◆ Resolving stagnation and rigidities of the existing advertising market by improving regulations and encouraging competition and handling global competition and creating new markets by establishing the basis for smart advertising
 - Increasing the scale of domestic advertising market to 0.74% of GDP by 2011 and 1% of GDP by 2015

□ Promotion Background

- Advertising is shifting from mass media exposure type to effectiveness-centered advertising. Accordingly, the conventional

advertising is at a standstill, while new media advertising by global enterprises is continuously increasing.

- Growth of conventional media stagnated, while new media displaying a trend of significant growth

< Annual Average Growth Rate per GDP and Medium >

Classification	GDP	Terrestrial	Pay TV	Newspaper	Internet
Annual Average Growth Rate	6.3%	-0.3%	19.9%	-1%	31.5%

※ Annual Average Growth Rate (over 10 years from 2001 to 2010)

- Global enterprises of Google and Apple, etc. entering the advertising market in full scale by expanding the fields from Internet to mobile and smart TV

□ Alleviating Broadcasting Advertising Regulations

- **(Improving Regulations for Indirect Advertising and Sponsorship Notification)** Display of trademarks for production sponsorship and indirect advertising will be allowed as a win-win strategy for broadcasting stations and independent production companies and for strengthening contents production capacities.
- **(Alleviating Regulations on Items Prohibited of Advertising in Broadcasting)** Regulations to prohibit advertising of such items as drinking water and medical organizations will be alleviated through consultation with the related authorities.
- **(Improving Maximum Advertising Amount and Commercial Break Systems)** Improvement of the maximum advertising amount and commercial break systems will be promoted by considering the status of competition in advertising market and viewing right protection, etc.

□ **Enhancing Broadcasting Advertising Market Efficiency and Supporting Small-scale Broadcasting**

- **(Introducing Competition into Sellers' Market)** Competitive system will be introduced into broadcasting advertising sellers' market by establishing a government-invested public corporation and approving private advertising service companies.
- **(Enhancing Efficiency of Advertising Agency Market)** Market functions for the entire advertising market will be enhanced in terms of advertising rates, methods of sale and service charge compensation system, etc. (expanding long-term advertising items, benefits for large purchases, etc.).
- **(Supporting Small-scale Broadcasting)** Support for small-scale advertising, which has been customarily carried out under KOBACO system, will be systemized for advertising sales distribution, sales support and funding support, etc.

□ **Creating New Markets with Smart Advertising**

- **(Establishing Smart Advertising Ecosystem)** In order to efficiently handle the era of smart media, advertising ecosystem will be established in which broadcasting, communications and advertising industries will cooperate with each other.
 - Developing into digital creative industry by supporting production facilities and HR development
- **(Developing and Standardizing Advertising System)** Technologies for smart TV advertising system will be developed to efficiently link businesses and consumers. In addition, standardization of advertising production formats and specifications will be promoted.

- **(Measuring Effects of Digital-based Advertising)** Based on digital technologies, such as return path, a system will be implemented to measure advertising effects according to the characteristics of diverse advertising formats.
- **(Protecting Personal Information for Customized Advertising)** For the OBA-based customized advertising, guidelines will be prepared to ensure users' right to control their own information.
 - Based on the principle of user consent according to the current law, realistic guidelines to be proposed considering detailed methods of information use and risk of privacy invasion
 - ※ Customized Advertising: A new type Internet · mobile advertising that uses OBA (online behavioral advertising) and LBS (location-based service), etc.

1-3. Developing Strategic Services

◆ [Plans for 2011] Developing strategic services, such as 3DTV, cloud, M2M communication and N-screen services, and establishing the basis for continuous growth of broadcasting and communications market by developing and standardizing the emerging technologies of the future

□ **Securing the Basis for Commercial HD 3DTV Service**

- **(Expanding Experimental Broadcasting)** Experimental broadcasting will be implemented year-round for technological verification of high definition 3DTV and the IAAF World Championship Daegu 2011 (Aug. 27 ~ Sep. 4) will be experimentally broadcasted live.
 - Producing and broadcasting high definition 3D standard contents for experimental broadcasting (8 programs)

- Establishing guidelines to ensure 3D viewing safety
- o **(Developing Non-glass 3DTV Technology)** Non-glass 3D image transmission · playback and TV implementation technologies will be developed in order to enable 3D watching without glasses in various locations (views).

※ **R&D Plans**

Classification	General Resolution Non-glass 3DTV	High Resolution Non-glass 3DTV
Period	2011 ~ 2012	2013 ~ 2014
Resolution	640X480	1920X1080
Multi-viewpoint Characteristics*	Non-glass 3D implemented at as many as 9 locations	Non-glass 3D implemented at as many as 16 locations

* Unlike general TV, non-glass 3DTV displays 3D screen only at specific locations.

- o **(Leading International Standardization)** International standardization of domestic technologies will be supported in order to dominate the global market in advance with domestic 3D equipments.
- HD level 3D broadcasting technology of Korea drawing attention of MPEG (an international moving picture standard organization) and ATSC (a North American DTV Standard Organization)

※ Standard cooperation MoU concluded between TTA and ATSC (Apr. 2010), visit by ATSC President and Vice President (Nov. 2010)

< 3DTV Market Forecast >

o [International] In 2010, sale of approx. 4 million is estimated. In 2011, sale of approx. 13 million (conservative) ~ 18 million (optimistic) is forecasted.

※ Domestic household appliances companies (Samsung, LG) sold approx. 1.65 million from Feb. to Nov. 2010 (global market).

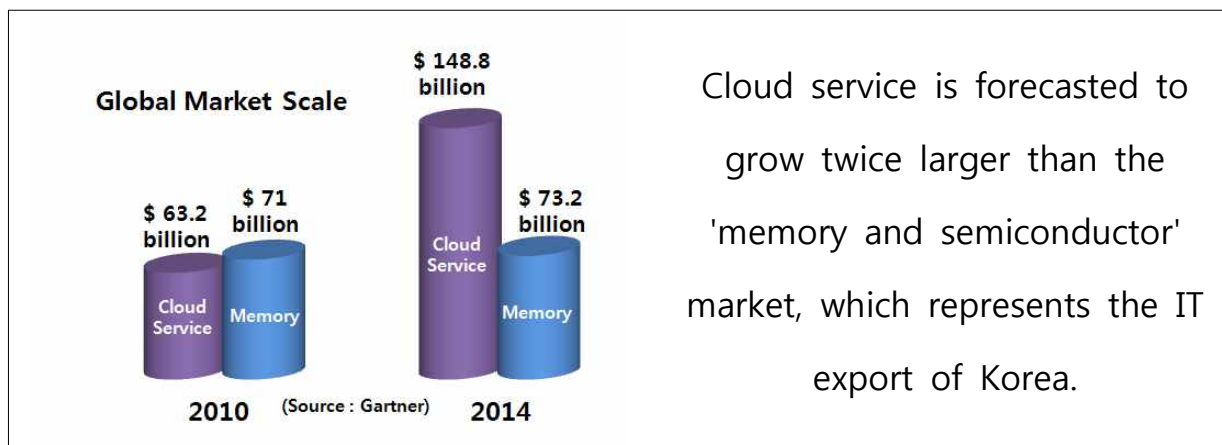
Classification	2010	2011	2012	2013	2014
3D TV (1 million)	4.2	12.9	27.4	43.5	60.5

(Source: iSuppli, May 2010)

o [Domestic] In 2010, sale of approx. 150,000 is estimated. In 2011, sale of approx. 400,000 ~ 500,000 is forecasted.

□ Securing Global Competitiveness of Cloud Service

- **(Globalization)** Cloud service will be developed as a global ICT brand based on the world's best ICT infrastructures and the world's lowest electricity rates, etc.
 - Promoting cloud data center development as global bases by spreading the 'conversion of IDC to cloud data center' in communications service providers and actively supporting the activities to attract overseas companies, etc.
 - Discovering competitive global business models by supporting mobile cloud pilot projects and operating cloud council meetings, etc.



- **(Outstanding Service Certification System)** Service · business quality, stability and security will be certified in order to resolve users' apprehension for cloud service and to promote increase of demand.
- **(Improving the Legal System)** SLA will be distributed and the related laws and ordinances will be improved in order to resolve apprehension for possible contract disputes and information leakage as well as to increase industrial competitiveness.

- **(Test Bed) Cloud service test beds will be expanded and implemented** so that small businesses can develop, test and validate cloud service models and solutions.

□ **Spreading M2M Intelligent Communication**

- **(Increasing Demand)** Presentations will be organized to spread and distribution service models targeting public organizations and local governments, the principal users of M2M communication service. In addition, lowering of spectrum fee will be reviewed.

※ Service Model Examples: Public facility management, weather monitoring, etc.

- **(Implementing Test Beds)** Test beds to test and validate M2M terminals and service technologies will be implemented and provided for free to small venture businesses.
 - Decreasing service development period and increasing service quality for small venture businesses by providing supports in terms of test environments and advices on technical issues and improvement, etc.

□ **Activating N-screen Service**

- **(Discovering Everyday Life Services)** Service models applied with N-screen technologies will be discovered and provided for the areas that are closely related to everyday living, such as transportation and tourism, etc.

- Developing service model by selecting a consortium jointly participated in by broadcasting · communications service providers, solution companies and service users through demand survey

※ N-screen Service: Service for seamless use of contents in various media, such as TV, PC and mobile devices

- **(Developing Inter-operable Technologies)** Core technologies will be developed to enable inter-operation of N-screen services between different networks and screens of various devices.
 - ※ Technological development for cooperative service between smart device screens will be promoted (2011 ~ 2013).
- **(Contents Link · Standardization)** Cooperation system will be established with which broadcasting · communications service providers and manufacturers can provide contents through inter-working.
 - Technological verification and service standard preparation by promoting pilot projects

□ **Developing Emerging Technologies for the Future**

- **(Investing in Technology Development)** For development of key technologies for broadcasting and communications service in the future, approx. KRW 300 billion will be extensively invested to the strategic fields over the next 2 years.

<Technology Development Budget per Broadcasting and Communications Field in 2011 (KRW 100 million) >

Broadcasting	Mobile Communication	BcN	Information Security	Radio Satellite	ETRI Support	Total
183	210	210	124	238	495	1,460

- **(Super HD TV)** Key technologies will be developed to provide super high definition broadcasting service that is four times clearer than the current HD TV (2011 ~ 2012).
- **(Smart TV)** Key technologies will be developed for the next-generation smart TV with which contents are enjoyed both in voice and motion (2011~2012).

- **(Future Internet)** Key technologies will be developed for the future Internet service, such as next-generation network technology ensuring quality (QoS) · mobility and real-time traffic control technology (2011~2012).

□ **Leading International Standardization**

- **(Leading 4G International Standard)** As the international standardization of 4G mobile communications is scheduled for final completion in Jan. 2012, standardization activities, such as cooperation with international standardization bodies, will be promoted in order to reflect international standards in the domestically developed technologies.

- Attending ITU 4G standard meeting (Mar., Jun., Oct. 2011) and strengthening cooperation with international mobile communications standardization bodies, such as IEEE and 3GPP

※ 3GPP: 3rd Generation Partnership Project (LTE Standardization Council)

※ IEEE: Institute of Electrical and Electronics Engineers (WiBro Standardization Council)

- **(Standardizing Korean Keyboard)** Standard specification will be selected from the conventional commercialized methods and therefore international standard establishment (first half of 2011) for and international standardization (second half of 2011) of Korean keyboard will be promoted.

※ Korean Keyboard Status: Cheonjiin (market share 54%), Naratgeul (22%), SKY(16%), others (8%)

- **(Preparing for ITU Plenipotentiary Conference)** For hosting of the ITU Plenipotentiary Conference of 2014 in Korea, preparation committee will be organized and the hosting city will be selected within 2011.

- With hosting of the ITU Plenipotentiary Conference, Korea's influence on the global ICT standard establishment will be increased by publicizing the advanced technological capacities of Korea and increasing appointment to the higher-ranking positions in international organizations.
- ※ ITU (International Telecommunication Union) Plenipotentiary Conference is the highest-ranking decision-making conference in the ICT field held every 4 years. The conference is attended by approx. 2,500 key personnel including ministers and vice ministers of 192 member states.

1-4. Implementing the World's Best Network

◆ [Plans for 2011] Implementing the world's best network through which the new services of smart TV, etc. are successfully provided by implementing next-generation wireless network, actively using the TV white space and establishing ultra wide band convergence network, etc.

□ Implementing Nationwide WiBro Network

- o WiBro network will be successfully implemented in 82 major cities nationwide and the major expressways in order to expand the service regions (final implementation test to be carried out in the first half of 2011).

< Domestic WiBro Investment Plans >

Classification	2006 ~ 2010	2011	Cumulative Total
K T	KRW 894.4 billion	KRW 148.7 billion	KRW 1043.1 billion
SKT	KRW 795 billion	KRW 30 billion	KRW 825 billion

- o Global market entry by domestic WiBro technologies and equipments will be continuously expanded.

※ Samsung Electronics exported the 4G (WiBro/ LTE) integrated devices to Sprint, U.S. (Dec. 2010).

□ **Implementing Next-generation Wireless Network (LTE)**

- To prepare for explosive wireless traffic increase and to dominate the future market, LTE will be introduced from the metropolitan regions in the second half of 2011. Network implementation will be expanded by stages in 2013 ~ 2014.

□ **Expanding Wi-Fi Network**

- To disperse the rapidly increasing data and to provide stable wireless Internet environment, wireless Internet Wi-Fi network implementation by communications service providers will be encouraged.

※ Wi-Fi zones to be increased by 2.5 times from 66,000 in 2010 to 165,000 in 2011 (plan by communications service providers).

□ **Continuously Implementing Ultra Broadband Convergence Network (uBcN)**

- **(Promoting Giga Internet Service Introduction)** Pilot service and commercialization bases will be implemented for introduction of Giga Internet service in 2012 that is 10 times faster than BnC.
 - Scale of Pilot Service in 2011: 1,500 households in 6 cities
 - Pilot introduction of wired · wireless convergence service to combine Wi-Fi and femtocell wireless technologies, discovering 3D multi-angle image and HD video communication killer contents
- **(Implementing Nationwide Broadband Network)** 100M level broadband implementation will be supported in rural regions of less than 50

households. In addition, it will contribute to alleviating the information gap between urban and rural regions.

- Scale of Support in 2011: Approx. 30,000 households in 800 administrative 'ri' areas
 - Discovering and supporting service models specialized to rural regions, such as remote crop monitoring and agricultural technology/medical/educational video consulting service
 - o **(Strengthening the Future Network Leading Basis)** Future network technology and service test environments will be implemented by advancing KOREN R&D network and international research network.
 - **Implementing future network test bed** by supporting development and application service commercialization of the next-generation ICT, such as future Internet, broadcasting convergence and smart service technologies
 - Establishing **TEIN Cooperation Center** as an ASEM-affiliated international joint research handling organization in Korea to secure leadership in achieving global cooperation for future network
- * TEIN Cooperation Center: An ASEM-affiliated organization for activation of international joint researches and operation · management of TEIN (Trans Eurasia Information Network), an international R&D network inter-linking 19 Asian countries and Europe

□ **Actively Using TV White Space**

- o **(Establishing Basic Plans)** Plans will be established to use TV white space within the TV band (54~698MHz) per region for various purposes, such as Wi-Fi service.
- ※ TV white space can be used from 2013 in which DTV switchover is completed.

- o **(Experimental Service)** Through demand survey, diverse service models for Wi-Fi and local information provision, etc. will be discovered. In addition, experimental service will be commenced through inter-working with small businesses and public organizations, etc.
 - TV white space covers a wider range than the conventional Wi-Fi. Therefore, it is more advantageous in implementing communications infrastructure in wide areas, such as rural regions, at a lower cost.
 - o **(TV White Space Utilization Plans)** Considering DTV switchover schedule and the time of TV white space utilization technologies commercialization,
 - Basic plans will be established and experimental service will be commenced (2011). Then, technological verification will be carried out and the related systems will be prepared (2012). Lastly, pilot and commercial service will commence (2013).
- ※ International standardization is scheduled for completion at the end of 2011. The related equipments will be commercialized around 2013.

< **Global Trend** >

- o **(U.S.)** In response to the rapid increase of Wireless Internet traffic, 'Super Wi-Fi' plans were announced to make use of TV white space for wireless communications (Sep. 2010).
 - ※ TV white space is lower in frequency in comparison to the conventional Wi-Fi zone (2.4GHz, etc.). The quality of radio frequency delivery is good and a wider area is covered. Therefore, it is called 'Super Wi-Fi'.
- o **(Japan)** Demand survey is carried out on local government, etc. In addition, diverse service models are being discovered and verified.
- o **(Europe)** In the U.K., detailed criteria for TV white space use after DTV switchover are being reviewed. Other countries are also actively reviewing utilization plans.

2. Advancing the Market

2-1. Promoting Digital Switchover in Full Scale

◆ [Plans for 2011] Promoting pilot project in Jeju (Jun. 29) and nationwide project in full scale based on the pilot projects in the three regions of Uljin, Gangjin and Danyang

* Recognition Rate/ Distribution Rate: (as of 2010) 70.8%/ 64.7% → (goal in 2011) 90%/ 80%

□ Digitalizing Broadcasting Facilities

○ **(Implementing Broadcasting Support Center)** Backbone broadcasting stations have completed digital switchover 100%. Broadcasting support centers for regional relay broadcasting will be implemented as 100% digital broadcasting facilities by June 2012.

※ Implementation of broadcasting support center will be attached as a condition for renewal of terrestrial broadcasting license on November 2010.

○ **(Expanding Digital Broadcasting)** The existing analog broadcasting production and transmission facilities will be digitalized and HD broadcasting production will be expanded.

- Increasing HD broadcasting ratio to 70% in 2011 and 75% in 2012

□ Protecting Viewing Right of the Underprivileged

○ **(Supporting the Underprivileged)** The low-income households (290,000) will be supported with DTV purchasing cost (or DTV converter). TV antennas of the low-income households will be repaired and improved.

- Supporting 70,000 households in 2011

○ **(Reception Status Survey)** In order to ensure the entire nation to

enjoy high-quality digital broadcasting regardless of geographical and environmental conditions, digital broadcasting reception status survey will be carried out on the underprivileged in 1.58 million households and around 400 island areas nationwide (Jun. 2011).

- **(Eliminating Fringe Areas)** The aged master antenna TVs will be improved. Also, satellite reception devices will be distributed to the areas where wave is not received in order to eliminate fringe areas of rural regions and back countries.
 - Installing 150 low-power repeaters and 358 master antenna TVs and distributing 262,000 satellite receivers from 2011 to 2012

□ **Creating Digital World Enjoyed by All**

- **(Implementing Support Center)** To promote the nationwide DTV switchover project in full scale, the national digital broadcasting switchover promotion headquarter and municipal · provincial digital broadcasting switchover support centers will be implemented.
 - Implementing and operating 9 and 25 municipal · provincial support centers in 2011 and 2012 respectively
- **(Nationwide Publicity)** Using mass media and tour vehicles, DTV switchover publicity to the nation will be strengthened.
 - Face-to-face publicity for those experiencing difficulties in information access, such as the elderly and the disabled
- **(Soft-test)** For DTV switchover pre-check and national publicity, soft-test to temporarily switch off analog broadcasting across the nation will be promoted.
 - ※ Analog broadcasting will be switched off for approx. 10 minutes through deliberation with terrestrial broadcasting service providers.

2-2. Activating Market Competition

- ◆ [Plans for 2011] Activating competition in broadcasting and communications market by advancing broadcasting industry, increasing the public functions of broadcasting, activating MVNO service, preparing politic measures for network neutrality and converting consumptive marketing expenses to future investment, etc.

□ Accelerating Broadcasting Industry Advancement

- **(Activating New Broadcasting Services)** For successful broadcasting commencement by general and news program provider, competition status will be continuously assessed and the standard of regulations will be improved.
 - Politic measures for terrestrial multi-channel broadcasting service
 - ※ Preparing plans to improve the related laws in terms of operating entity, licensing type and channel formation, etc. (when necessary)
 - ※ Terrestrial Multi-channel Service: Broadcasting service simultaneously transmitting SD, audio and data broadcasting in addition to HD within broadcasting frequency band (6MHz) by using data compression technology
 - Possible to increase from the single channel (Ch 1) as of present up to 4 channels (Ch 1-1, Ch 1-2, etc.)

□ Developing Domestic Broadcasting Equipments Industry

- **(Joint Technology Development by Industrial - Academic - Research Sectors)** The next-generation broadcasting equipments market will be dominated by developing new technologies of 3DTV, UHDTV and AT-DMB and transferring the technologies to the industry.

- **(Encouraging Preferential Purchase of Domestic Equipments)** It will be promoted (through deliberation with the Ministry of Knowledge Economy) to include products certified by Broadcasting Equipments Testing and Certification Center (a subsidiary of TTA (Telecommunications Technology Association)) in the list of broadcasting equipments subject to preferential purchase of products manufactured by small businesses.
 - Deciding whether the category of contribution to broadcasting equipments industry activation will be included in selecting and assessing government-supported projects and for broadcasting business regulations, such as issuing (renewal) of broadcasting license
- **(Extended Operation of Certification Center)** In order to ensure reliability and stability of broadcasting equipments by third-party verification on quality and specifications, the target of verification by Broadcasting Equipments Testing and Certification Center will be expanded.

< **Plans to Expand Broadcasting Equipments Testing and Certification Targets** >



□ **Increasing Public Functions of Broadcasting**

- **(Increasing the Role of KBS as National Backbone Broadcasting)** The public service of KBS, a national backbone broadcasting, will be expanded and management efficiency will be enhanced.
 - Providing high-quality broadcasting service by strengthening high-quality broadcasting contents production, eliminating

digital broadcasting fringe areas and offering prompt · accurate disaster broadcasting

- **(Lowering the Cost of Private Education Centering on EBS)** Drastic reduction of private education cost will be achieved by providing educational programs through the new media, such as smart phone, and expanding education programs for elementary · middle school students.

□ **Reforming the Laws in Line with Global Standards**

- **(Promoting the Integrated Broadcasting Act Establishment)** To actively respond to the smart media era, establishment of the Integrated Broadcasting Act that comprehensively integrates the Broadcasting Act and IPTV Act will be promoted.
 - Promoting to accommodate new types of broadcasting services through smart TV, etc. in the related laws and ordinances in order to support new service activation according to technology advancement
- **(Expanding Service Zones, etc.)** Service zones will be expanded and M&A activation will be promoted in order to strengthen competitiveness of domestic broadcasting industry and to establish the basis for market entry by global media enterprises
 - Alleviating regulations to prohibit affiliation between platform service providers and program providers and to restrict total sales amount in the broadcasting market and securing the economy of scale by increasing the narrow broadcasting service zones

□ **Preparing the Basis to Spread New Communications Services**

- **(Establishing the Basis for MVNO Service Activation)** Spreading new services and activating competition will be promoted by supporting MVNO (resale) service introduced in 2010 to settle in the market at an earlier phase.
 - Preparing the basis for estimating wholesale price of wireless Internet data service in order to activate wireless Internet service creation by MVNO (Jun. 2011)
 - Introducing bulk-purchase discount system considering the competition environment and market share of MVNO (Jun. 2011)
- **(Reviewing Politic Measures for Network Neutrality)** Politic measures for network neutrality will be reviewed in accordance with the introduction of new services, such as mobile Internet phone and smart TV.
 - Reviewing imposition of communications network charge to those triggering excessive network traffic and the necessity of traffic management by communications service providers, etc.
- **(Introducing ccTLD in Korean)** Korean ccTLD (country code top level domain) service will commence where entirely Korean Internet addresses can be used.

※ Currently, Internet addresses in English (kcc.go.kr) or Korean + English are used.

< Expected Benefits of Korean ccTLD >

- **(Increasing User Convenience)** The completely Korean language domain will increase Korean users' convenience and Internet accessibility.
- **(Creating New Internet Businesses)** Since the domain consists entirely of Korean language, business publicity is possible with the domain name only. This leads to a new form of Internet marketing and enables e-mail system implementation in Korean language.
- **(Enhancing National Image)** The excellence of Korean letters will be publicized in the global Internet environment. This will contribute to achieving informatization of Hanguk.

- **(Commencing IPv6 Conversion in Full Scale)** New allocation of the current Internet address (IPv4) will be suspended and conversion to the next-generation Internet address system (IPv6) will commence in full scale. In addition, inspection on implementation of ISP, etc. will be strengthened.
- **(Supporting Mobile Business Establishment)** For mobile application developers, Smart Mobile App Development Support Center (smac.or.kr) services will be enhanced. In addition, support for location-based service (LBS) will be strengthened.
 - Resolving difficulties experienced by smart mobile business founders, organizing contests for new LBS business ideas, supporting industrialization of the new LBS business ideas

Encouraging Investment for Future Growth

- **(Encouraging to Use Marketing Cost on Investment)** Consumptive marketing expenses of communications service providers will be drastically lowered. Accordingly, it will be encouraged to use the fund toward investing for the future, such as for network advancement and R&D.

<Marketing Cost vs. Investment Cost by Communications Service Providers>

(Unit: KRW trillion)

Classification	2008	2009	2010 (estimated)
Sales	37.1	36.3	37.3
Marketing Cost	8.3	8.6	8.2
Investment Cost	6.9	6.5	5.9

- **(Strengthening Restrictions on Unfair Practices)** Consumptive marketing competition will be suppressed by restricting unfair terminal subsidies or prize giveaways.
 - Checking market conditions at all times and increasing restrictions on service providers initiating market corruption by imposing penalties and suspending subscriptions

2-3. Establishing Environments for Fair Competition

- ◆ [Plans for 2011] Establishing environment for fair competition among service providers by achieving fair profit distribution between large enterprises and small businesses, improving terrestrial broadcasting re-transmission system, improving outsourcing system and strengthening support to small businesses

□ Fair Profit Distribution between Large Enterprises and Small Businesses

- **(Strengthening Criteria for Profit Distribution between SO and PP)** For the rate* of program charge payment by PP and the target of program charge (whether VOD is included), reasonable guidelines will be established and systemization will be promoted.

* At present, 25% of license fee by all PPs

- **(Fair Contents Profit Distribution)** Systematic basis will be prepared for fair trading between mobile communications service providers

and contents providers (CP) so that CPs are paid for their services fairly.

- Revising guidelines of profit distribution between mobile communications service providers and CPs by reflecting changes in the environment of mobile contents use, such as issues concerning profit margin distribution between app store and CP (Jun. 2011)

□ **Improving Terrestrial Broadcasting Re-transmission System**

- **(Resetting the Range of Mandatory Re-transmission Channels)** Resetting of the range of mandatory re-transmission channels (currently, KBS1 and EBS) will be promoted in order to ensure the viewing right of the nation.
- **(Systemizing Dispute Settlement for Broadcasting Stations)** Dispute settlement procedures and methods will be prepared, such as introduction of arbitration system, in order to establish substantial means of handling disputes concerning re-transmission.

□ **Improving Outsourcing System**

- (Outsourcing Acknowledgement Standard) Standard for outsourcing production acknowledgement will be prepared by reflecting the degree of input in production elements, such as planning and direction, etc. Accordingly, competent production companies will be developed.
- (Protecting Persons Participating in Outsourcing Production) Persons participating in outsourcing production will be protected by continuously checking the status of 'del credere insurance' policy holding agreed upon by the 3 broadcasting stations and drama productions in November 2010.

□ **Strengthening Support to Small Businesses**

- **(Introducing Home Shopping Channel for Small Businesses)**
Competent home shopping PPs will be selected that will protect the rights and interests of viewers and support small businesses.
- **(Strengthening Support to Small Businesses)** Communications service providers will be encouraged to increase independent funding, technological and educational support to small businesses.

3. Creating User-friendly Environment

3-1. Realizing Safe Internet Society

- ◆ [Plans for 2011] Actively preparing for cyber attacks, improving cyber security competencies and increasing safety awareness in order to realize safe Internet society

□ Actively Preparing for Cyber Attacks

- **(Public - Private Simulation Training)** Public - private simulation training participated in by ISP, vaccine companies, mobile communications companies and security experts, etc. will be increased (once a year to four times a year) in order to ensure prompt handling of cyber attacks.
- **(Preventing Zombie PC)** Spreading of zombie computers will be prevented, which are used as a means of cyber attack, such as malicious program distribution, DDos attack and hacking.
 - When a zombie computer infected with malicious code is reported · detected, it will be notified to user and 'infected PC alarm and vaccine treatment system' will be operated.
 - During national cyber crisis, Internet connection by zombie computers used for cyber attack will be suspended. As such, the related laws will be modified to prevent damages by zombie computers.
- **(Handling Rumors)** The autonomous review and deliberation function will be strengthened of the private sector on clearly

false information and rumors spread online for the purpose of disturbing peace in society.

- When an authoritative interpretation is necessary on the status of breaching the law, it will be promptly handled through close cooperation with the related organizations, such as Korea Communications Commission.
- **Handling of overseas illegal websites will be strengthened** by developing technologies to block out websites that distribute illegal and harmful information to locals with servers located abroad.

□ **Strengthening Cyber Security Competencies**

- **(Increasing Malicious Code Check)** The number of websites subject to daily malicious code check will be increased from 1 million as of present to all websites in Korea (approx. 1.8 million).
- **(Cyber Emergency Shelter)** 'Cyber emergency shelter' will be operated for small-scale businesses experiencing difficulty in equipping DDoS defence system.

※ DDoS attack traffic is sorted and blocked. Only the normal traffic is delivered.

- **(Mobile Security)** Capacities to handle new security threats generated by distribution of new terminal devices, such as smart phone and smart pad, will be strengthened.

- Distributing guidelines for smart phone vaccine use, developing · distributing smart phone security self-check tools, strengthening capacities to verify security threats of smart devices, etc.

- **(Improving Security Budget, HR and Organization)** Improvement and supplementation of budget, HR and organization for information security, privacy and prevention of illegal · harmful information will be promoted to realize safe Internet environment.

□ **Uplifting Cyber Security Awareness**

- **(Expanding Prevention · Publicity Activities)** Information security forecast and publicity activities will be diversified using various familiar media, such as TV, Internet and smart phone applications.
- **(Increasing User Knowledge)** For digital privacy protection and prevention of illegal · harmful information distribution, education of Internet users for knowledge development will be increased.
 - Expanding Internet knowledge education programs (20-200-2000 Smartizen Program, etc.), increasing nationwide 'Create Beautiful Internet World' activities
 - Establishing mid to long-term master plan for personal information security education, developing educational programs for local communities, organizing mobile personal information security education courses

3-2. Creating Happy Environment for Broadcasting and Communications Service Use

- ◆ [Plans for 2011] Creating happy environment for broadcasting and communications service use by continuously lowering communications service rates, protecting the rights and interests of broadcasting and communications service users and caring for the socially vulnerable

□ Lowering Communications Service Rates

- **(Improving Smart Phone Rate System)** Improvement of rate system will be encouraged in order to alleviate the burden of smart phone rates increasing in accordance with the activation of wireless Internet use.
 - Encouraging introduction of rate system for the youth · elderly and expansion of free calls, etc.
- **(Activating Prepaid Rate System)** Plans to activate prepaid rate system will be prepared in order to alleviate the burden of communications service rates for the small amount users, such as the youth · elderly.
 - ※ Prepaid rate system is advantageous for small amount users since it does not involve subscription fee and basic rates.
- **(Promoting Internet Phone Use)** Using wired Internet phone of lower cost will be encouraged in order to lower the burden of household communications expenses.

□ Protecting Users' Rights and Interests

- **(Smart Phone Voice Quality Evaluation)** Quality improvement will be encouraged by conducting quality evaluation in the densely populated areas.
 - Measuring voice call quality in various situations and between diverse terminals (general phone ↔ smart phone, smart phone ↔ smart phone, etc.) (Jun. 2011)
 - ※ Various Situations: While terminal is on the move · at a standstill, during data use · no use, etc.
 - Analyzing causes of call drop and proposing improvement

plans based on the measured data, etc. (Oct. 2011)

- **(Increasing Relief Measures for Users Suffering Damage)** Substantial relief measures will be prepared for damages occurring on users due to violation of the prohibited acts (Sep. 2011).
 - In case monetary damage can be calculated in detail, systematic measures will be devised to order service providers for damage compensation .
 - In case a service provider in violation made compensation to a user prior to correction measures, the amount of compensation will be deducted from the penalties to be imposed in the future.
- **(Assessing User Protection Level)** By assessing broadcasting · communications service providers' user protection level, voluntary competition for customer satisfaction among service providers will be encouraged (first half of 2011).
 - Major service providers will be assessed per communications and paid broadcasting field. Then, outstanding service providers will be awarded as an incentive.
- **(Improving the Class of Broadcasting)** In order to improve the class of broadcasting programs, broadcasting language will be purified and protection of children · adolescents will be strengthened.
 - Strengthening autonomous deliberation by broadcasting service providers, increasing efficacy of post-deliberation sanctions

Protecting the Socially Vulnerable

- **(Guaranteeing the Equal Access to Broadcasting)** Support will be increased to enable equal broadcasting access by the disabled

and the non-disabled without discrimination.

- Distributing broadcasting receivers to as much as 80% of the disabled in the low-income class
- Increasing the count of broadcasting stations supporting production of programs for the disabled, such as closed captioning, sign language and descriptive video services, to 50 or more and achieving the rate of closed captioning programs in 4 terrestrial broadcasting stations to be 96% or higher

< **Support for Production of Programs for the Disabled (2006 ~ 2011)** >

Classification	2006	2007	2007	2009	2010	2011
Count of Broadcasting Service Providers to Offer Broadcasting Service for the Disabled	9	22	28	37	41	50 or more

- o **(Smart Device Education)** Abilities of using smart devices will be enhanced by offering education to the socially neglected, such as the disabled and multi-cultural families.
- Smart device experience programs in Community Media Center, education using smart devices (90 times a year)

3-3. Establishing Basis for Communication Society

◆ [Plans for 2011] Creating the advanced user culture by spreading smart work system, establishing · promoting strategies for productive social platform use and changing the way we work and communicate

□ **Spreading Smart Work System**

- o **(Pilot Project)** Distribution models will be developed and used

through pilot projects specialized to the fields, such as small businesses, in which smart work has a great ripple effect.

- Developing distribution-type smart work model to be used at low cost
- Developing smart TV and Giga Internet-based home office service models, test application of the models developed
- o **(Spreading Exemplary Cases) Smart work leaders will be discovered** and exemplary cases will be spread by organizing education programs customized to users, such as CEO, and awarding the outstanding cases of smart work system introduction, etc.
- o **(Developing Future-oriented Models and Technologies)** Next-generation core technologies, such as the future-oriented smart work model (Smart-Pot), will be developed.
- o **(Guidelines)** For companies preparing to introduce smart work system, smart work introduction · operation guidelines are distributed that outline preparations per smart work type and organization · operation procedures (Jan.).
- Preparing · distributing smart work information security guidelines by considering the apprehension for information leakage and security issues associated with smart work introduction

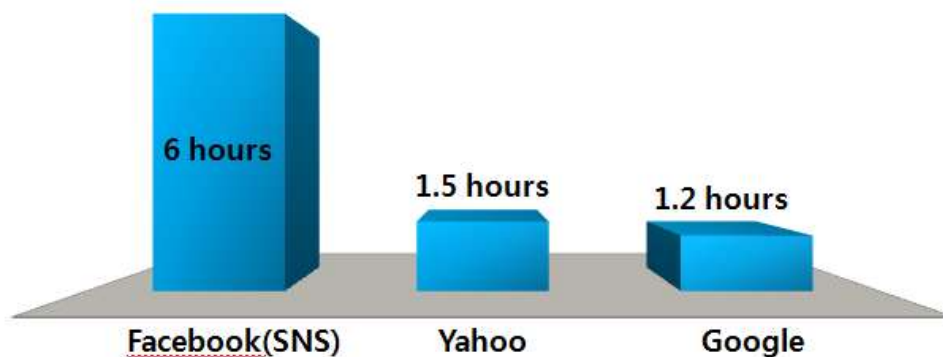
< Smart Work Information Security Guidelines >

Classification	Contents
Administrative Security	Information handling and incident handling procedures for smart work service use
Technological Security	Smart work terminal, network infrastructures and application security, etc.
User Security	Smart work user security education, information asset handling · management, etc.

□ Promoting Productive Social Platform Use

- **(Promotion Background)** The social and economic influence of social network services (SNS, social commerce and social game, etc.) is increasing.
- ※ Social platform has become the basic structure of contents · media distribution and advertising. In addition, social platform has surfaced as the core infrastructure of communication for the government and businesses.

< Time of SNS Use Overtaking Web Portal >



(Source: nielsenwire, 2010)

- **(Establishing Utilization Strategies)** Strategies for productive use of social platform as a new communication (social browser and social KMS, etc.) and business (social commerce and social game) infrastructure will be established.
- ※ In 2009, Direct of Digital Engagement was installed in the U.K. Accordingly strategic plans to strengthen communication with the nation was promoted.
- **(Researching Key Technologies)** Researches will be conducted on the next-generation social platform implementation technologies, such as user-customized real-time search and information reliability analysis technologies.

- Study on the social influence and economic ripple effect of social platform and the plans to use social platform
 - ※ It is necessary to secure core technologies of the new services, such as social browser, social search and social TV.
- o **(Establishing Mature User Culture)** Mature user culture will be established by offering education on social platform use and conducting studies on the self-purification system to prevent inaccurate information, etc.
- Preparing plans to apply personal information security regulations to achieve harmony between user privacy protection and service activation, encouraging overseas companies to abide by domestic standards