

White Paper Series

IP Rights and Broadband Development in South Korea

LESSONS LEARNED FOR THE UNITED STATES

Introduction

Over the last several years, South Korea has built a vibrant Internet and communications environment that many countries around the world view as a paragon of broadband technology. The country ranks fifth globally when it comes to broadband access, and the number of users on the peninsula continues to grow. The path Korea took to get there, however, has not been without its bumps and turns. Most notably, the lack of intellectual property (IP) rights protection in Seoul's broadband build-out early on hampered the growth of IP-intensive industries including the motion picture, recording, business and entertainment software industries as Internet piracy skyrocketed. This has forced the government to revisit its broadband policies in an effort to address copyright infringement and other IP vulnerabilities that were—and still are in some ways—harming Korean creativity, job creation, and economic growth.

The Korean government has responded with changes to its legal code, new enforcement agencies, a more aggressive approach to IP infringement, and creative strategies for combating Internet piracy. While the government now recognizes that comprehensive and sustained action is required to secure IP rights and prevent the obvious downsides of piracy, Seoul faces real difficulties in overcoming past neglect of IP rights. Indeed, Korea is still working to get the Pandora of IP theft back in the box, enforcing copyright, trademark, and other IP rights on its broadband network to protect digital content such as movies, music and software, and the many workers and communities that depend on these industries.

The challenges faced by Korea serve as a case study for the United States as the Obama Administration works to increase broadband access in America. There are valuable lessons for Washington to learn from Seoul's experience, especially critical since America's economy is 10 times the size of Korea's, with a population 6 times larger.

This case study of Korea's broadband development and the explosion of Internet piracy that ensued, gives real effect to Ben Franklin's famous maxim, "An ounce of prevention is worth a pound of cure."

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The Success of Broadband in Korea's Economic Development

Over the last decade, the Korean government has consistently made major investments in broadband and Internet infrastructure; three national initiatives stand out. The *CyberKorea 2001* project started in 1999 targeted these areas: funding and human resource development for building information and communications technology (ICT) networks; establishing a nationwide fiber-optic network; and, deregulating markets for telecommunication companies to compete as Internet Service Providers (ISPs). Next, the *E-Korea* initiative, undertaken in 2002, focused on expanding Korea's ICT infrastructure and capacity, including promotion of e-commerce activities. Finally, the *IT 839* program launched in 2004 included strong advocacy of mobile broadband and digital multimedia.



In the short time since its establishment, Korea's broadband network has given Internet users of all stripes remarkable access and capabilities. It has proven extremely valuable for Korean businesses and the government. For example, the Ministry of Education, Science and Technology, provincial offices of education, as well as the Korea Education and Research Information Service use Web-based programs to produce online educational materials¹. This is extremely important as the Ministry of Education works to accomplish its goal of addressing every school subject with a variety of multimedia content and ensuring that at least 20% of all classroom activities are related to ICT.

Broadband connections are also critical to the country's healthcare system. Korea's Health Review Insurance Agency processes more than 600 million medical claims per year, with more than 80% of those claims transmitted electronically. The ability to abandon paper submissions in favor of electronic claims has made the system much more efficient for patients—resulting in speedier payments and fewer errors—and less expense for taxpayers. This success has affirmed Seoul's commitment of ensuring broadband coverage and linkage for all government agencies, businesses, and consumers.

Not surprisingly, the government's commitment to broadband expansion has dramatically driven up Internet usage rates, transforming and modernizing the economy in the process. In 2008, for example, total e-commerce activities grew by 22% from 2007, with Internet shopping alone growing $10.7\%^2$. Korea also experienced an explosion in online communities and other noncommercial activities, reflecting a broader social use and an adoption of the Internet that has linked the nation closer together.

IP Violations and the Korean Response

Yet, while Korea's efforts to expand broadband access have been successful in spurring economic growth, improving government efficiency, and connecting people in new ways, the neglect of IP protections online has created serious problems for businesses and consumers.

As network speeds have increased, so has piracy. Recent data indicates that from 2007 to 2008, music piracy increased 52%, movie piracy 312%, and printed material piracy 276%, with this online theft estimated to cost those industries in excess of \$1 billion annually.³ The International Intellectual Property Association estimates losses of more than \$800 million for just business and entertainment software alone.⁴

Recognizing the damage piracy that is doing to Korea's artists, entertainers, authors, publishers, distributors, technicians, and others involved in copyright-related industries—the government has been working overtime to craft IP policies that increase liability for service providers in a reasonable way, while making Internet piracy a much higher priority for law enforcement. At the same time, the government adopted digital rights management software tools as a way to prevent digital theft through technical means.

In 2005, the Korean government created the Copyright Protection Center (CPC), which consolidated several enforcement agencies into a single body charged with protecting IP. Three years later, the Copyright Protection Team (CPT) was created to supplement and provide the CPC with judicial enforcement authority over the Copyright Act and Computer Program Protection Act. These enhanced enforcement efforts—for the first time—empowered government authorities to act on their own initiative to enforce Korea's IP laws. In 2009, Korea further strengthened the Copyright Act by including a "three strikes" provision that gives greater authority for law enforcement to curtail illegal online activities.

All these various actions by the government in Seoul made major strides in strengthening the country's IP laws and improving enforcement efforts in a way that not only protected rights holders, but incentivized them to continue contributing to the economic and social development of the country. These enhanced IP protections were also instrumental in getting Korea removed in 2009 from the United States' Special 301 report—an annual report to Congress that identifies those countries the administration believes are not honoring their international IP obligations or not adequately defending/enforcing IP rights at home.

As these changes were taking place to remedy Korea's lack of IP protection at the beginning of its broadband build-out, the country's efforts have been met with mixed feelings. Not surprisingly, changing public perception of IP and piracy is proving difficult. Public education campaigns have become a staple of Korea's new IPR protection efforts. The strong, negative reaction in some public quarters to the government's measures illustrates the challenges of changing attitudes, expectations, and acceptable behavior as time wears on.

While hindsight is nearly always 20/20, all these factors—interwoven and connected at various points—show that Washington can surely benefit from Korea's experience as we begin our march down this same path.

Internet Use and Online Piracy in America

In the United States, the very industries that are producing this content and helping drive broadband adoption are vulnerable in a non-friendly IP environment. Copyright industries are increasingly important to the U.S. economy as a whole, representing more than 11% of GDP and more than 8% of the U.S. workforce—and growing at a rate that is twice that of the U.S. economy as a whole⁵. Copyright industries provided more than 22% of the nation's total real growth from 2006 to 2007,⁶ and in 2007 alone, these industries provided 5.6 million jobs to the U.S. economy⁷.

The economic losses due to online piracy mean fewer jobs, less money to reinvest into the company or industry, and less tax revenue for the government. The annual 2007 compensation paid to core copyright workers (\$73,554) exceeded the average annual compensation (\$56,817) paid to all U.S. workers by nearly 30%. The average compensation paid to employees of the total copyright industries (\$66,498) exceeded the U.S. average by nearly 18%8. For an industry example, an estimated \$422 million in tax revenues are lost annually due to sound recording piracy9. As a whole, piracy and IP theft inhibit the development of new content and platforms that fuel the demand for broadband. Successful broadband deployment in many ways hinges on our ability to combat IP theft online.

Recommendations for U.S. Policymakers

Given what happened in Korea, American officials should learn from Seoul's experience as they begin to chart a path forward on expanded broadband development in the United States. It is clear that IP rights need to be protected at the outset. As with the Korea example, this may require changes in law, policy, regulations, law enforcement, and other activities to protect rights holders while promoting maximum access and freedom. The United States is an enormous broadband market, and if respect for IP rights is not at the core of its expansion, then fixing preventable mistakes later will be extremely difficult as piracy creates a drag on economic growth.

There are currently many technologies and cooperative agreements under development to help improve the Internet user experience in the United States. while limiting unlawful and unwanted activities on broadband networks. To avoid Korea's challenges, the Obama administration should consider the following in adopting the National Broadband Strategy:

- Preserve the right of ISPs to manage their networks, in a responsible and efficient manner to prevent the unlawful transfer of content, such as copyrighted materials.
- Formally acknowledge that reasonable network management practices include the use of technology to prevent the distribution of unlawful content.
- Support and foster the development of technology that can effectively target unlawful content while avoiding overly prescriptive policies and regulations that may stunt the development of these technologies.
- Encourage cooperation and collaboration between ISPs and content creators on solutions to prevent the distribution of unlawful content.

These and other measures, especially if developed collaboratively between business and government, can ensure that broadband expansion fulfills its potential while diminishing the scale of online piracy which would otherwise have a tremendous impact on workers, creators, and consumers.

Beyond the National Broadband Strategy, the Obama administration should work with stakeholders and think creatively about how to address this serious threat to the American economy. Whether through increased enforcement, new enforcement strategies, business-to-business solutions, or regulatory changes—more needs to be done to combat online counterfeiting and piracy.

Conclusion

Korea's robust development and aggressive support of broadband have clearly strengthened and reshaped the country's economy and improved the quality of life for many of its citizens. At the same time, through the government's initial neglect of IP rights as a core pillar of Korea's broadband development allowed a cascade of illegal activity on the Internet to flourish that harmed the economy, hurt copyright-dependent industries, and affected job creation. Rampant IP theft has hampered the Korean government, businesses, and consumers. Worse, the attitudes and behaviors that emerged in the online environment in those early days have proven increasingly difficult to turn around.

The United States is a country that prides itself on its ingenuity and creativity. Indeed, America leads the world in its production of movies, music, books, software and other forms of copyrighted content. These works are the product of talented artists, authors, programmers, and actors—and those who support and benefit from their efforts. Their works provide great value to our economy, employing millions of people and generating billions in revenue, and their creations have improved our personal lives and our professional livelihoods. They have also conveyed American life, culture, and values to people around the world.

Given the value of these works to every facet of our lives, and the importance of those who create them to our country, it is critical that protections for intellectual property are incorporated—if not strengthened—as the United States looks to expand broadband to all corners of the country.

Endnotes

- 1. "Broadband Korea: Internet Case Study", International Telecommunications Union, March 2003, pg. 40
- 2. 2008 E-Commerce Figures, Statistics Korea, http://kostat.go.kr/
- 3. James Ashton, "Digital revolution fast tracks piracy", UK Times Online. March 2009.
- **4.** USTR 2009 Special 301Decisions, Korea 2007-2008 Estimated Trade Losses Due To Copyright Piracy, International Intellectual Property Association. June 2009.
- 5. Siwek, Stephen E. Copyright Industries in the U.S. Economy: The 2003-2007 Report. International Intellectual Property Alliance, July 20, 2009.
- **6.** Stephen Siwek, Copyright Industries in the U.S. Economy 2003-2007, IIPA, 2009.
- 7. Ibid, 5.
- 8. Ibid
- 9. Siwek, Stephen E. The True Cost of Sound Recording Piracy to the U.S. Economy. Institute for Policy Innovation, 2007.