

**UNITED STATES SENATE
FOREIGN RELATIONS COMMITTEE**

**June 9, 2004 Hearing
“Evaluating International Intellectual Property Piracy”**

**Statement of
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I. INTRODUCTION

Chairman Lugar, Senator Biden, and members of the Committee, I thank you for the opportunity to address issues related to international intellectual property theft and its devastating impact on the entertainment software industry. I appreciate the opportunity to testify again before this Committee on these important issues, as I did in February 2002, when then-chairman Biden released a very comprehensive and compelling report on the problem of international intellectual property piracy.

The Entertainment Software Association (ESA) serves the business and public affairs interests of companies that publish video and computer games, including games for video game consoles, personal computers, handheld devices, and the Internet. ESA members published more than 90 percent of the \$7 billion in entertainment software sold in the United States in 2003. In addition, ESA’s member companies produced billions more in exports of American-made entertainment software, helping to power the \$25 billion global game software market. The entertainment software industry is one of the nation’s fastest growing economic sectors, more than doubling in size since the mid-1990s and generating thousands of highly skilled jobs in the creative and technology fields.

Our industry makes a tremendous investment in its intellectual property. For an ESA member company to bring a top game to market, it often requires a team often exceeding one hundred professionals in size, including writers, animators, musicians, sound engineers, software engineers, and programmers, to create an end product which, unlike any other form of entertainment, is interactive, allowing the user to direct and control the outcome of the experience. On top of an average \$5 to 10 million in research and development costs, publishers may invest another \$5 to \$10 million to market and distribute the game, with some games totaling \$20-30 million in total costs. The reality is that only a small percentage of these titles actually achieve profitability, and many more never recover their front-end R&D costs. In this type of market, it is easy to understand how devastating piracy can be as it siphons the revenue required to sustain the enormously high creative costs necessary to produce successful products. If the profits from a hit game are stolen by pirates, the games—and the jobs—subsidized by those profits are jeopardized.

In this testimony, I will review the many international intellectual property piracy challenges we face today. I will also look back to the recommendations we made two years ago in our testimony before this Committee, as well as some of the recommendations in Senator Biden's report, to assess the progress made on these to date, and suggest further steps the government can take to ensure greater protection of our industry and of one of this nation's most valuable assets—its intellectual property.

II. THE PIRACY PROBLEM

Due in part to the immense popularity of video games, entertainment software piracy is a widespread problem in most countries throughout the world. Piracy of entertainment software spans a wide range of activities in all types of venues, both public and private. For ease of analysis, however, we classify such activities into two general categories: hard goods piracy (involving production and distribution of physical copies) and Internet piracy (involving the reproduction and transmission of copies in digital form). As pirate activities involving game software continue to multiply, billions of dollars worth of pirated entertainment software products circulate freely in markets abroad, preempting the possibility of legitimate distribution channels taking root and growing into healthy environments for ESA members' games.

Hard Goods Piracy

Entertainment software programs are produced for a number of different platforms, diverse in nature and technology, including video game consoles, personal computers, handheld devices, and the Internet. Hard goods piracy covers a variety of activities, the most pernicious involving the illegal manufacturing of 1) counterfeit optical discs for use in personal computers (PCs) and game consoles such as Microsoft Xbox and the Sony PlayStation2, and 2) counterfeit game cartridges for handheld devices such as the Nintendo Game Boy and Game Boy Advance.

Large-scale manufacturing of pirate games, whether in optical disc or cartridge form has been a particularly damaging type of piracy because of the involvement of organized crime, which has facilitated the export and distribution of the pirate products in countries around the world. The components of game cartridges (circuit boards, plastic casings, counterfeit labels, packaging) are often each manufactured separately in small discrete workshops in China and other countries in southeast Asia, and then shipped abroad, either to be assembled in workshops in the country where the games are to be sold, or in countries where they are subsequently shipped in assembled form to other countries where the games are then sold.

Optical media piracy is a particularly significant problem for the industry, as it impacts games published on at least three platforms: PCs, Xbox and PlayStation2. In many parts of the world, especially Malaysia, China, Thailand, and Russia, pirate optical disc factories produce huge numbers of illegal copies of popular games. In its Special 301 report to the Office of the U.S. Trade Representative (USTR) this February, the International Intellectual Property Alliance (IIPA) (of which ESA is a member) reported

the unrelenting growth in the number and capacity of optical disc production lines across the globe, particularly in Southeast Asia. In addition to large-scale replication of optical discs, the game industry has been confronted with an explosion in the number of small-scale operations involving the “burning” of games or copying on CD and DVD burners, not only in Asia, but in Europe and Central and South America as well. Although each burning operation makes pirate copies on a much smaller scale than an optical disc replication line, a growing swarm of pirate burning centers in an individual market can cumulatively have an equally devastating effect in elevating local piracy levels.

Hard goods piracy for game consoles is facilitated materially by “mod chips”¹ and other circumvention devices which, when used or installed, are designed to bypass the technological protection measures in game platforms that limit their use to legitimate games. Mod chips for the Xbox and PlayStation2 and the Flash Advance Linker and similar devices for Game Boy and Game Boy Advance games are routinely marketed in countries around the world to enable the use of pirate games on these game systems. Many of these devices (as well as installation services there for) are marketed and sold in the same venues that offer the pirate game copies whose use they are intended to permit. As described below, these circumvention devices also contribute to increasing online piracy involving game software.

As noted earlier, criminal enterprises have become deeply involved in the manufacture and global export and distribution of pirate games. In its 2004 Special 301 report released in February, the IIPA reported that because of the immense profits that pirates can make by stealing intellectual property, criminal organizations have taken over pirating operations in many countries, including Malaysia, Taiwan, Russia, Mexico, and Spain. Such mass counterfeiting activity requires relatively little capital investment, enjoys substantial profit margins on each counterfeit product and poses little risk of arrest or imprisonment as criminal sanctions for intellectual property violations are rarely as severe as those for other kinds of criminal activity. This is especially true compared to the risks associated with trafficking in other forms of contraband, such as guns or narcotics.

Indeed, pirate enterprises seek out countries offering “friendly” host environments in which to base their counterfeit manufacturing operations. These countries typically have outdated intellectual property laws, few enforcement resources (if any) devoted to intellectual property, a lack of understanding of intellectual property among police, prosecutors and judges, and no provision for deterrent penalties for intellectual property violations. In addition to the “protection” afforded by a weak intellectual property enforcement regime, the organizations are often well-entrenched in these host countries, enjoying a fair measure of social and political influence at the local level. In some countries, these large pirate enterprises operate in the open, raking in millions in illegal profits. For example, Professor Daniel Chow of Ohio State University said in recent congressional testimony that the intellectual property piracy problem in China

¹ “Mod chips” are a particular type of circumvention device that are installed into video game consoles chiefly for the purpose of rendering the console capable of playing pirated games.

has reached a crisis level, with virtually the entire economy of the Chinese city of Yiwu in Zhejiang Province now based on the trade of pirated products.

Once the pirate product is manufactured, the global movement of such illegal items across international borders is one of the general strengths of organized crime, as they are often well-practiced in distributing other kinds of illegal products. These organizations are able to export not only to countries within their region but also to countries in regions on the other side of the world. Malaysian pirates are among the most efficient exporters of counterfeit optical disc products, as we have seen their pirate games turn up throughout the Western hemisphere from Canada to Argentina, as well as South Africa, Western Europe and Australia. Russian pirates are expert at moving illegally replicated product across borders and into nearby Eastern European markets, including Poland. China is home to a number of enterprises exporting pirate Game Boy and Game Boy Advance products.

The cumulative harm caused by organized crime's global trade in illegal game products is staggering, with billions of dollars spent annually on pirate copies of games instead of the legitimate versions. These organizations are able to use illegal versions of games downloaded from the Internet within days of a legitimate game's release in Japan or the U.S. to manufacture and export thousands of copies to countries where the game has not even yet been released. It is not uncommon to see pirate copies of a game available on the streets of many Southeast Asian cities within the first week of the game's release. Needless to say, such activity has destroyed any chance for the establishment of legitimate distribution channels in many countries throughout the world, forcing game software publishers to rely on a restricted number of markets from which to earn back their investment in the games they release. Moreover, piracy's effective pre-emption of legitimate distribution in many countries effectively serves to exacerbate the U.S. trade deficit as U.S. game publishers are unable to export their products to these markets.

Even with the high rate of piracy in many countries, ESA members are not letting the absence of an equitable intellectual property enforcement environment preempt efforts to get into these markets. Instead, they are endeavoring, against difficult odds, to introduce legitimate game product into these local markets, as they understand the importance of the availability of legitimate product in the fight against game pirates. However, such market entry efforts can only be sustained for a limited period of time without being complemented and supported by legal and enforcement regimes that deter pirate activity through the swift and effective application of meaningful penalties.

Internet Piracy

Internet piracy of game software is very damaging to the entertainment software industry as it frequently serves to accelerate the access of pirate manufacturers and replicators to the latest releases of games. Generally, interactive game piracy originates on the Internet through the activities of one or more online groups, commonly known as "warez" groups, which are usually composed of individuals spread across not only

different countries but different continents. A number of warez groups exist and function with a special focus on game software products.

The pattern for a typical warez group's pirate activities is as follows: A member of the group will purchase a game the first day of its release, first thing in the morning – if they haven't already obtained a pre-release beta version. As soon as they're back home, they run a program that produces a mirror copy of the CD, perhaps a 10-15 minute process. The group member will then transmit this mirror copy, usually through a broadband line, to another person in the group, known as a "cracker." Within an hour or two of release, the cracker is hard at work breaking the technological protection measures placed on the game which, depending on his or her skill, can be completed within 12 hours or less. The cracked game is then ready for distribution via download and use without an original disk. By late evening of the release day, IRC and newsgroups are advertising the cracked game's availability to Internet users across the world. Depending on demand, the cracked game may also be sold to pirate manufacturers for anywhere from a few thousand dollars to considerably more. Thus, frequently within 24 hours of a game's release, the pirate replication factories I described earlier may be stamping out tens of thousands of illegal copies for shipment throughout the world, with thousands of additional downloadable copies of the game available on hundreds of Internet sites across the world.

Although Internet piracy has been a serious problem for several years, two technological factors have exacerbated the use of the Internet for the reproduction and distribution of pirate games: 1) the explosive growth of broadband access to the Internet and 2) the emergence and popularity of peer-to-peer (P2P) networks.

While broadband Internet communication has created tremendous opportunities for consumers to enjoy high-speed communication and entertainment, it has also been a boon to pirates. High-speed Internet has given pirates the ability to readily distribute entertainment software around the globe. As digital files of games are large (600-900 megabytes), downloading game files over dial-up access to the Internet requires days of uninterrupted connection, as dial-up permits receipt of only a small amount of digital information at a time. However, with the advent of broadband connections, download times for such files are dramatically reduced, with the ability to download entire game files in a matter of hours as opposed to days. In part, this explains why we have seen a high incidence of downloadable game files on university networks, as the great bandwidth available to students facilitates their accessing their favorite games at no cost to them. Compounding the accessibility and ease of downloading offered by broadband access has been the astronomical increase in the number of households enjoying such access across the world.

The accelerating spread of broadband access to the Internet has been paralleled by the increasing use of P2P networks by larger segments of the global population. P2P networks, such as KaZaA, eDonkey and DirectConnect, have become active interchanges for the flow of pirate game files among network users. The use of such networks for transmission of music and movie files is rapidly expanding to include the

copying and downloading of the latest pirate game releases, many of which originated in the warez group channels. Although warez group communication channels are usually tightly controlled with restricted access, it does not take long for the latest pirate game files to trickle out of these environments onto P2P networks where the versatility and efficiency of these networks fosters the rapid copying and dissemination of files among their users. In addition, over the past year, new distributed network technologies, such as BitTorrent, have further enhanced the ability of networked users to access and download pirate game files and other illegal content. Use of BitTorrent for illegal file transmissions is particularly damaging as it functions as an unusually powerful and efficient P2P system, making download times shorter.

Although pirate game files are available on a number of different Internet protocols, such as the World Wide Web, ftp sites, IRC channels, auction sites and Usenet newsgroups, the incidence of game files on P2P networks has far surpassed these. In the more than two years that have passed since this Committee last convened a hearing to review the global intellectual property piracy situation, our online investigators have seen astronomical growth in the incidence of illegal game files on P2P networks. In one month earlier this year, based on a limited number of game titles, our online monitoring service reported more than 477,000 new cases of P2P piracy (involving more than one million infringing files) as compared to just over 12,000 new cases on all other protocols combined.

In addition to fostering and featuring the downloading of pirate game files, there are a number of other ways in which the Internet is used to facilitate piracy of entertainment software products. The Internet is also used as an advertising vehicle for services that offer sales of pirated hard copies of disc and cartridge-based games, circumvention devices, and circumvention services. As noted above, installation of such circumvention devices in PlayStation2 and Xbox consoles allow people to obtain their pirate PlayStation and Xbox games through illegal downloads and then burn these onto CD-Rs or DVD-Rs for use in the chipped consoles.

Internet Cafés

There has also emerged another rapidly growing global trend that effectively represents a convergence of the parallel problems of hard-goods and Internet piracy. Countries throughout the world have seen an explosion in the number of Internet cafés, establishments that offer for a fee the temporary use of computers on their premises to access the Internet or any other applications resident on these computers, including game software. It is clear that the ability to play games on computers is an important attraction for these businesses as game-playing attracts a great number of consumers who may not be able to play games at home for a number of reasons. Moreover, as the computers in Internet cafés are usually connected to the Internet (frequently via a broadband connection) these offer the additional benefit of being able to play games online against other Internet users. Unfortunately, the operators of these establishments are frequently engaged in infringement themselves, either loading pirate versions of games onto their computers, or buying one legitimate copy of a game and

loading that one copy onto the fifty computers in their café (instead of buying fifty legitimate copies). In addition, many café operators turn a blind eye to customers who use their facilities to commit further infringements, such as burning software and other copyrighted works onto CDs. Internet cafés are multiplying quickly in a number of countries in Asia, Eastern Europe and Central and South America. In China, there are estimated to be more than 200,000 Internet cafés in operation, many housing between 100 and 300 seats. This emerging form of piracy should be addressed by these countries at both policy and operational levels, as these cafés are likely to be, for the foreseeable future, the way that much of the world obtains access to the Internet.

III. GOVERNMENT RESPONSES TO THE PROBLEM

More than two years ago, when this Committee held a hearing on the topic of global intellectual property piracy, ESA (then IDSA) presented a number of recommendations on possible government action for the Committee's consideration. In addition, Senator Biden issued a report which also offered a number of recommended solutions to help address the problem. Some of these solutions have been pursued, while others have not. We think it would be useful to review all of these recommendations and offer our assessment as to which of these still have relevance and deserve the Committee's continued consideration and support and which of these have been overtaken by other developments and therefore require re-examination and modification.

One of ESA's principal recommendations at that time was the renewal of the GSP trade benefit program, as, at that time, the GSP program had not been renewed, jeopardizing the trade leverage offered by the possibility withholding of GSP benefits from countries that fail to provide adequate intellectual property protection. This concern was consistent with Senator Biden's recommendation that the U.S. government take maximum advantage of existing trade mechanisms to motivate U.S. trading partners to improve their intellectual property protection efforts. Fortunately, last year, Congress renewed the GSP program, reinstating the availability of such leverage for the U.S. government. Currently, there are a number of GSP beneficiary countries under active review which are scheduled for resolution in the coming year, including Brazil, the Dominican Republic, Kazakhstan, Lebanon, Russia and Uzbekistan. We continue to believe that the withholding of GSP benefits can serve as a primary motivator for countries to make serious efforts to reduce local intellectual property piracy and therefore should be used purposefully to obtain material improvements in the results of our trading partners' intellectual property enforcement efforts.

Another recommendation in Senator Biden's report regarding the use of free trade agreements (FTAs) to obtain country commitments to elevate their levels of intellectual property protection has proven to be prescient as the past two years have seen substantial efforts and progress achieved on this front. The U.S. has since signed free trade agreements with Singapore, Chile, Morocco, Australia and most recently Bahrain and the countries of Central America, all of which contain specific commitments for the countries to elevate their intellectual property laws and enforcement efforts to the

highest levels. Although in most cases these commitments have yet to be implemented, we believe that these will have very beneficial results in the near future, particularly if the U.S. can supplement these with training and resources, as described below. These FTAs have also helped advance another of ESA's earlier recommendations regarding getting countries to adopt statutory notice-and-takedown provisions with respect to online piracy, under which Internet Service Providers (ISPs) will be subject to notices from rights holders regarding the infringing activities of their subscribers. All of the FTAs negotiated by the U.S. have included a commitment to adopt such a system, which will thereby facilitate rights holders' own efforts to try and police Internet piracy in these countries. We want to commend Chairman Lugar for all the support that he has provided to augment the efforts to negotiate these productive trade instruments.

Going forward, ESA would support efforts to negotiate an increasing number of FTAs as these will greatly accelerate important upgrades of the intellectual property protection environment in signatory countries. The increased incidence of FTAs and the improved intellectual property environments that these will produce will enhance the interest of neighboring countries to take steps to improve their legal and enforcement regimes for copyright and trademark, even in advance of negotiating an FTA with the United States, as they will want to compete for foreign investment in their local markets.

Another recommendation that was included in both ESA's hearing statement and Senator Biden's report two years ago was to increase U.S. government provision of training and resources for intellectual property enforcement to foreign countries. Improving the quantity and quality of on-the-ground enforcement efforts is a critical factor in being able to make a significant dent in both hard goods and Internet piracy. There has been good progress in this direction over the last two years. We want to thank Senator Allen for his work as the lead sponsor on a bill last year which, along with Senator Alexander, he fought for to obtain State Department funding for non-OECD (Organisation for Economic Co-operation and Development) countries to strengthen anti-piracy efforts. The Allen-Alexander Amendment, supported by Chairman Lugar and others on this Committee, provided important funding for equipment and training programs for foreign law enforcement officials, including importantly judges and prosecutors, and assistance in complying with intellectual property enforcement obligations under various treaties and obligations. Senator Allen has long taken a leadership role in fighting intellectual property theft and we specifically want to applaud his efforts and those of Senator Alexander with respect to obtaining State Department funding for this purpose.

However, we believe that much more can and should be done in terms of providing such training on a systematic and rational basis. We are concerned that there seem to be different programs overseen by different agencies aimed at providing training and training materials to foreign countries' law enforcement groups operating independently of one another. We recommend that there be coordination among such programs in order to optimize the allocation of U.S. government resources for these purposes. We also recommend that U.S. government resources for training and

education about intellectual property be expanded to include judges, as these individuals play a crucial role in dispensing justice with respect to intellectual property violations and are generally insulated from political or trade pressure than are other officials, making a training approach productive in elevating their understanding and appreciation of intellectual property.

IV. NEW RECOMMENDATIONS

Looking beyond the recommendations made two years ago, we would like to suggest two additional areas for the Committee's consideration based on certain trends and developments that arose since that hearing. The first urges strengthening the position of USTR so that, in addition to negotiating increased commitments from trading partners regarding intellectual property protection and enforcement, it is also more completely monitoring and enforcing countries' compliance with these obligations. Our second recommendation calls for catalyzing formulation of a unitary enforcement effort by U.S. law enforcement agencies against major international syndicates which includes active involvement in investigative and enforcement operations overseas. We have great faith that this Committee, under the leadership of Chairman Lugar, will understand the intended benefits of such recommendations and be able to obtain their adoption and implementation in an appropriate fashion and time frame.

A. STRENGTHENING USTR'S POSITION IN MONITORING/ENFORCING INTELLECTUAL PROPERTY COMMITMENTS

In recent years, the USTR has done a tremendous job of successfully negotiating free trade agreements that raise intellectual property protection standards to the highest levels. However, with the increasing burden of broadening the free trade sphere, USTR has not had the resources or personnel to devote to an equally important mission: monitoring compliance with and enforcing U.S. trade law and bilateral trade agreements.

USTR relies on personnel from other federal agencies to perform its monitoring duties. Moreover, intellectual property rights issues are currently included in an office within USTR that also covers services and investment issues. Given the enormous importance of intellectual property to our economy, ESA recommends the creation of a stand-alone intellectual property office with dedicated and adequate staff to conduct multilateral and bilateral negotiations and also to ensure that our trading partners comply with their intellectual property-related obligations to the United States. Additional consideration should be given to creating a special ambassador for intellectual property and provide that official with adequate staff and resources dedicated to the enforcement of existing agreements. We can not overstate the importance of dedicating additional government resources to the objective of enforcing FTAs and other trade agreements containing commitments regarding intellectual property protection as we can not rely on most countries to fulfill their treaty obligations without such oversight.

Whatever approach is taken, the addition of new staff dedicated to enforcement of agreements will materially strengthen USTR's ability to monitor WTO/TRIPS compliance, and to fulfill the potential of the Special 301 program through more aggressive use of out-of-cycle reviews. Similarly, dedicated intellectual property staff could help ensure that the GSP program is used as effectively as possible to induce foreign nations to better protect intellectual property rights. As noted above, ESA sees reinvigoration of the GSP review process and the prospect of losing tariff-free trade benefits that reach into the billions for certain nations as one of the best incentives for countries to improve intellectual property protections.

In addition, the Special 301 process has been used to great effect by USTR in encouraging other countries to improve intellectual property protections and enforcement practices. We appreciate the Senate's continuing support of Special 301 -- particularly its efforts to keep it an up-to-date and powerful trade tool through improvements contained in the Senate's version of the Miscellaneous Tariff Bill that was passed by this body in early March. We urge the Senate to appoint conferees to meet with the House to move early adoption of the important legislation for the copyright industries.

B. ACTIVATING U.S. LAW ENFORCEMENT AGENCIES AGAINST OVERSEAS PIRACY

The U.S. Government has, in recent years, continued to elevate the priority it attaches to combating intellectual property crime. While scoring some critical successes in this area, agencies like Justice, the FBI, and Customs, despite their diligent efforts, are understandably pulled in many different directions, most recently to the war on terrorism. Moreover, the impact of these enforcement efforts has been blunted by the inability to press the campaign against pirates overseas.

In contrast, over the years, the Drug Enforcement Administration has proven how effective a focused, single-minded approach to attacking global drug production and smuggling can be, particularly when dealing with a problem which largely originates in foreign lands. We should consider a similarly focused effort on intellectual property crime. We know that there have been recent efforts to enhance coordination and cooperation among various government agencies engaged in the war on piracy. However, we believe that the problem is so large and complex that it requires more than simply better coordination. Given the enormous costs to our economy from piracy, given the increasing evidence that terrorists are involved in intellectual property crimes as a way to finance their operations, and given the fact that America's copyright industries year-after-year represent more than 5 percent of the nation's GDP, serious consideration should be given not just to improved coordination and cooperation, but to pooling our government's investigative and enforcement resources into a centrally directed campaign against international pirate operations.

Moreover, the criminal organizations that are deeply involved in hard goods piracy are generally located in countries where local law enforcement officials are less

willing or able to target them in any meaningful way. We believe it is time to give clear and unambiguous guidance to America's law enforcement community to pursue investigation of and enforcement against pirate syndicates operating beyond our borders when a determination has been made that local law enforcement is not up to the task. Such an approach means that America's top law enforcement agencies may need to become more actively involved in the investigative operations at the local level that are required to bring pirate enterprises to arrest and detention. At the same time, such active involvement will help establish an important foundation for local law enforcement officials from an experience and training standpoint so that they can eventually acquire the necessary skills and understanding to mount future investigative and enforcement efforts against local pirates.

V. CONCLUSION

Mr. Chairman and members of the Committee, it is clear from my testimony that our industry has in the U.S. Government a strong and effective partner in the battle against global entertainment software piracy. Your Committee's resolve to combat piracy is well-established. We are grateful for your commitment, especially at a time when our nation faces so many other threats to our security. But it is equally clear that the global piracy problem remains deeply entrenched, and that it directly endangers America's economic security as U.S. companies see viable potential markets closed-off due to the proliferation of pirated and counterfeit products. We need your continued help, and we appreciate the opportunity to share some ideas on additional steps that can be taken to protect America's greatest export: our creative and intellectual property. Working together, I believe we can fight piracy to protect what is one of America's most dynamic and fastest growing creative industries.